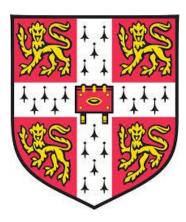
The roles of empathy, shame, and guilt in violence decision-making



Institute of Criminology, University of Cambridge

Neema Trivedi-Bateman

Darwin College

October 2014

Supervised by Professor Per-Olof Wikström

This dissertation is submitted for the degree of Doctor of Philosophy

Research summary

Objective

The roles of shame and guilt, and their relationships to empathy, have not been modelled adequately as key factors in moral decision-making in the study of violence. This research will test the different roles of empathy, shame, and guilt in violence decision-making using a Situational Action Theory perspective.

Method

Data taken from the Peterborough Adolescent and Young Adult Development Study (PADS+), a longitudinal study with a large representative sample, provides quantitative questionnaire indices to enable comparison of a persistent and frequent violent offender subsample with the remaining PADS+ study sample. In addition, qualitative in-depth interviews were carried out with the violent offender subsample in order to explore the role of moral emotion in specific real-life violent events.

Results

A striking majority of violent offenders do not think it is wrong to commit violence, and do not care about it, i.e. they lack shame and guilt, and report that violence comes as a morally acceptable and natural action alternative. Furthermore, violent offenders do not register the predicament of their victims; there is a distinct lack of empathy. Persistent offenders report significantly lower levels of empathy, shame and guilt on the quantitative indices, and weak empathy, shame, and guilt in their detailed recollections of specific acts of violence, e.g., "there's not much guilt involved in the whole situation to be honest" (Sam, interview 39).

Conclusion

Individuals with weak empathy, shame, and guilt are more likely to commit acts of violence. These study findings give insight into the real world, situational application of empathy, shame, and guilt, and provide strong support for the role of weak morality in violence decision-making.

- This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text.
- It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University of similar institution except as declared in the Preface in the text.
- It does not exceed the prescribed word limit for the relevant Degree Committee.

Signed: Date:	
---------------	--

I am thankful to many people for their help, support, and generosity. Thank you to my supervisor P-O; I've been fortunate to learn from your expertise and experience and hope I continue to do so. Even after 7 years, I can't think of another workplace that would enthuse and excite me as much as PADS+. Thank you to the young people of Peterborough; spending time with you interviewing has without a doubt been the most enjoyable experience of the entire PhD. Thank you to the Economic and Social Research Council (ESRC) who have provided full financial support, and Darwin College and the Institute of Criminology for providing additional funding. Thank you to my unofficial supervisors and close friends Beth Hardie and Kyle Treiber for your consistent generosity and genuine interest in my work; I value your support very much. The City of Cambridge has provided a beautiful working environment and will always be special to me; I have been deeply inspired both personally and academically. Thank you to my parents and brother for giving me everything I could hope for and for letting me use the excuse 'but I'm still a student' almost daily for a total of 8 years through three universities. And thank you to my love, my recently acquired husband, Jamie Trivedi-Bateman. Here's to the future!

Cambridge, UK, October 2014

To Dhara, gone too soon but never forgotten

Contents

Research summary i
Prefaceii
Acknowledgements iii
Table of Content vi
List of Tables xi
List of Figures
List of Appendices xvi
Introduction
Section 1- Theoretical considerations: executive summary
Chapter 1
The specific role of moral emotion in crime involvement in Situational Action Theory
1.1.Situational Action Theory (SAT): a general introduction
1.1.1. Action occurs when person and setting meet 10
1.2. Individual morality: moral emotions and moral rules
1.3. The specific role of moral emotion in crime involvement
1.3.1. The relationship between ability to exercise empathy and the possibility to feel shame and guilt: a novel contribution to Situational Action Theory
1.3.2. The different roles of empathy, shame, and guilt in crime decision-making
1.4. The specific role of moral emotion in violence
1.4.1. Habitual violence
1.4.2. Sensitivity to provocation in violence
1.5. Chapter summary: The specific role of moral emotion in crime involvement in Situational Action Theory
Chapter 2
The neglect of moral emotion and morality in the study of crime
2.1. A summary of the role of moral emotion and morality in crime involvement
2.2. The neglect of moral emotion and morality in the study of crime
2.3. Existing criminological theory and research examining the role of moral emotion in crime involvement
2.3.1. Existing criminological theory and its shortfalls
2.3.2. Existing research and its limitations

2.3.2.1. The relationship between shame, guilt, and crime involvement	41
2.3.2.2. The relationship between empathy and crime involvement	43
2.3.3. Key insufficiencies of existing criminological theory and research	46
2.4. Testing moral emotion and morality in the current study using Situational Action Th	leory
2.4.1. Key research questions	48
2.5. Chapter summary: The neglect of moral emotion and morality in the study of crime	
Chapter 3	51
The contributions of empathy, shame, and guilt to individual morality	51
3.1. Empathy, shame, and guilt	53
3.1.1. Ability to exercise empathy: understanding and feeling emotional congruence w another person's viewpoint	
3.1.2. Ability to anticipate shame: a negative feeling experienced in the presence or consideration of others	55
3.1.3. Ability to anticipate guilt: a negative feeling experienced inwardly as a result of particular action	
3.2. Empathy, shame, guilt, and morality: relationships to one another	57
3.2.1 Comparison of the concepts of shame and guilt	57
3.2.2 The relationship between cognitive empathy, affective empathy, and shame and	guilt
3.2.3. Existing research and its limitations: The relationship between empathy and sha and empathy and guilt.3.2.4. Existing research and its limitations: The relationship between empathy, shame,	ime 62
guilt, and individual morality/moral behaviour	
3.2.5. Neuroscientific research: the role of moral emotion in morality	
3.2.5.1. The role of emotional intuition in habitual action	72
3.3. The great battle: the roles of emotion and reason in morality	75
3.3.1. Background: emotion research	75
3.3.2. The debate: to what extent do emotion and reason contribute to moral decision- making?	
3.3.3. Theory: the roles of emotion and reason in moral decision-making	79
3.3.4. Conclusions: emotion and reason work together in moral decision-making	81
3.4. Chapter summary: The contributions of empathy, shame, and guilt to individual morality	82
Section 2- Methodological considerations: executive summary	83
Chapter 4	84
Testing the role of moral emotion in crime involvement: The Peterborough Adolescent and Young Adult Development Study (PADS+)	l
\mathcal{J}	

4.1. An introduction to The Peterborough Adolescent and Young Adult Development (PADS+)	-
4.2. Methodology and study design	
4.3. Data measures: the shame, guilt, moral rules, and crime scales	
4.3.1. The shame scale	
4.3.2. The guilt scale	
4.3.3. The moral rules scale	
4.3.4. Self-reported assault frequency and robbery frequency	
4.4. Development of the general empathy scale and the cognitive and affective empath	hy scale
4.5. Chapter summary: testing the role of moral emotion in crime involvement in the or study: The Peterborough Adolescent and Young Adult Development Study (PADS+).	
Chapter 5	102
Interviewing the violent offender: the situational application of moral emotion in real-lif violent events	
5.1. The in-depth interview methodology	103
5.1.1 Construction of the in-depth interview template	103
5.1.2. The merits of the in-depth interview methodology	106
5.2. The in-depth interview subsample	108
5.2.1. Sampling method	108
5.2.2. Subsample characteristics	110
5.3. Fieldwork and data collection	113
5.4. Chapter summary: Interviewing the violent offender: the situational application o emotion in real-life violent events	
Section 3- Data analysis findings: executive summary	115
Chapter 6	116
A comparison of the violent subsample and the rest of the sample: differences in empath shame, guilt, moral rules, and involvement in violence	
6.1. A comparison of the violent subsample and the rest of the sample: an overview	117
6.2. The components of moral emotion: empathy, shame, and guilt	120
6.2.1. Empathy	120
6.2.2. Shame	126
6.2.3. Guilt	130
6.2.4. Lost participants: shame and guilt	134
6.3. The relationships between empathy, shame, and guilt	
6.3.1. Correlations	
6.3.2. Do individuals with weak empathy report weak shame and weak guilt?	142

6.3.3. Summary: the relationships between empathy, shame, and guilt 144
6.4. Research question 1: Is there a relationship between empathy and shame and empathy and guilt?
6.5. Research question 2A: Is there a relationship between shame, guilt and moral rules in forming overall moral propensity to commit crime?
6.5.1. High moral propensity to commit crime: weak moral emotion and moral rules 147
6.6. Research question 2B: Is there a relationship between moral propensity to commit crime and crime, specifically violence?
6.6.1. Is there a relationship between moral emotion and violence?
6.6.2 Is there a relationship between moral emotion and prolific offending?
6.6.3. Is there a relationship between moral propensity to commit crime and violence? . 155
6.6.4. Interaction: weak moral emotions and weak moral rules together predict crime 160
6.7. Path analysis: the different roles of empathy, shame, guilt, and moral rules in violence
6.8. Chapter summary: A comparison of the violent subsample and the rest of the sample: differences in empathy, shame, guilt, moral rules, and involvement in violence
Chapter 7 168
'I ain't gotta feel bad for him, he's gotta feel bad for himself': Weak empathy, shame, guilt and in persistent violent offenders
7.1. The situational application of empathy, shame, and guilt in specific acts of violence 170
7.1.1. Overview: The situational application of empathy, shame, and guilt in specific acts of violence
7.1.2. Empathy, shame, and guilt at the time of and the day following the violence 172
7.1.2.1. Comparison of empathy, shame, and guilt at the time of and the day following the violence
7.1.2.2. Moderate-strong reports of moral emotion: unintended violent consequences 185
7.1.3. The relationship between shame, guilt, and moral rules: weak morality
7.1.4. Does individuals' general ability to anticipate moral emotion align with their situational application of moral emotion?
7.2. Situational violence: who, what, where, why, when?
7.2.1 Case study 1: Steven
7.2.1.1. The presence of peers
7.2.1.2. Evening city centre violence
7.2.2. Case study 2: Jay
7.2.2.1. Provocation
7.2.3. Case study 3: Tom
7.2.3.1. Alcohol consumption

7.3. Chapter summary: 'I ain't gotta feel bad for him, he's gotta feel bad for himself': Weak empathy, shame, and guilt in persistent violent offenders	
Conclusions: executive summary	14
Chapter 8	15
Summary and key conclusions: moral emotion plays an important role in the decision to engag in crime	
8.1. Summary of the current research study	16
8.2. Key conclusions: moral emotion plays an important role in the decision to engage in crime	18
8.3. Comparison of results to findings from existing literature	22
8.4. Strengths and limitations of the current research study	23
8.5. Applications to crime intervention: moral emotion development	24
8.5.1. Moral emotion development	25
8.5.2. Crime intervention	29
8.6. Future extensions to the current research study	33
8.7. Chapter summary: Summary and key conclusions: moral emotion plays an important rolling in the decision to engage in crime	
Appendices	51

List of Tables

Table 1-1: The interaction between individual and environment and crime conduciveness 13
Table 1-2: The combined roles of moral emotion and moral rules in the likelihood of crime 16
Table 2-1: Comparison of the theories that incorporate the role of emotion in crime
Table 2-2: Limitations of existing research: the role of moral emotion in crime
Table 3-1: Comparison of the concepts of shame and guilt
Table 3-2: The roles of cognitive empathy and affective empathy in the possibility to feel shame and guilt 62
Table 4-1: Key socio-demographic characteristics of the PADS+ sample (age 12). Source:(Wikström et al., 2012, p.57)88
Table 4-2: Data collection timeline
Table 4-3: Methodology and data measures used in the current study and corresponding research questions 90
Table 4-4: Shame scale descriptive measures 92
Table 4-5: Guilt scale descriptive measures 93
Table 4-6: Moral rules scale descriptive measures 95
Table 4-7: Assault frequency and robbery frequency descriptive measures
Table 4-8: General empathy scale descriptive measures 97
Table 4-9: Cognitive and affective empathy scale descriptive measures
Table 4-10: Existing standardised empathy scales
Table 5-1: In-depth interview data constructs
Table 5-2: Violent subsample inclusion criteria 108
Table 5-3: Violent subsample selection criteria by number of participants
Table 5-4: Comparison of the violent subsample and the rest of the sample: crime measures. 112
Table 5-5: Violent subsample: moral emotion and moral rules
Table 6-1: Comparison of mean scores for the violent subsample ($N=48$) and the rest of the sample ($N=607$) (wave 7): empathy, shame, guilt, moral rules, and crime 118
Table 6-2: Comparison of mean scores for the violent subsample (N=48) and the rest of the sample (N=607): general empathy scale items

Table 6-3: Comparison of the general empathy factor score means for the violent subsample(N=48) and the rest of the sample (N=607)123
Table 6-4: Comparison of mean scores for the violent subsample (N=48) and the rest of the sample (N=607): cognitive and affective empathy scale items
Table 6-5: Comparison of the cognitive and affective empathy factor score means for the violentsubsample (N=48) and the rest of the sample (N=607)125
Table 6-6: Comparison of the mean score for participants reports of how wrong it is to hurt an animal for the violent subsample ($N=48$) and the rest of the sample ($N=607$)
Table 6-7: Mean shame and guilt for lost participants
Table 6-8: Correlations (r & r ²) between empathy, shame, and guilt (N=655) 142
Table 6-9: Number of full PADS+ sample (N=655) participants with weak, medium, and strongempathy (wave 7), shame (waves 2-7), and guilt (waves 2-7)
Table 6-10: Regression predicting shame by general empathy for the full PADS+ sample (N=655)
Table 6-11: Regression predicting guilt by general empathy for the full PADS+ 145
Table 6-12: Regression predicting assault frequency (logged) by shame and guilt (model I) and shame, guilt, and moral rules (model II) (N=655)
Table 6-13: Correlations (r) between all key variables and assault frequency (unlogged) for thefull PADS+ sample (N=655)
Table 6-14: Regression predicting assault frequency (unlogged) by moral emotion and moral rules (model I) and moral emotion, moral rules, and their interaction (model II) (N=655) 163
Table 6-15: Summary of findings regarding the roles of empathy, shame, guilt, and moral rules in violence and total crime frequency
Table 7-1: Comparison of empathy, shame and guilt at the time of and the day following the violence 184
Table 7-2: The number of violent subsample participants with corresponding and opposingmoral rules and moral emotions (as reported in the in-depth interview)192
Table 7-3: Violence-conducive circumstances of the setting
Table 7-4: Steven's violent event
Table 7-5: Comparison of violent events in the STB and the in-depth interview
Table 7-6: Jay's violent event 205
Table 7-7: Tom's violent event
Table 7-8: Type of provocation by alcohol consumption 210

List of Figures

Figure 1-1: The components of individual propensity to commit crime
Figure 1-2: Simplified version of the key macro and micro mechanisms of crime
Figure 1-3: The perception-choice process that leads to crime
Figure 1-4: Simplified outline of the perception-choice process (Wikström, 2004) 12
Figure 1-5: The combined contributions of moral emotion and moral rules to overall individual morality
Figure 1-6: The relationships between empathy, guilt, shame, and morality
Figure 1-7: Empathy, guilt, and shame in the moral decision-making process that leads to an act of crime
Figure 1-8: The role of moral emotion in habitual action
Figure 2-1: Empathy, guilt, and shame in the moral decision-making process that leads to an act of crime
Figure 3-1: The relationship between cognitive empathy, affective empathy, and the possibility to feel shame and guilt
Figure 4-1: Theoretical relationships between the key data measures
Figure 5-1: Comparison of the ethnic composition of the violent subsample (right) and the rest of the sample (left)
Figure 5-2: Comparison of the family social position composition of the violent subsample (right) and the rest of the sample (left)
Figure 6-1: Confidence intervals for mean scores for the violent subsample [V] (N=48) and the rest of the sample [R] (N=607): shame, guilt, general empathy, and cognitive and affective empathy
Figure 6-2: Comparison of mean shame scores for the violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7)
Figure 6-3: Comparison of mean shame item scores for the violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7 summed)
Figure 6-4: Comparison of mean guilt scores for the violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7)

Figure 6-5: Comparison of mean guilt item scores for violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7 summed)
Figure 6-6: The relationship between guilt and shame (N=655) 137
Figure 6-7: The relationship between general empathy and guilt (N=655) 138
Figure 6-8: The relationship between general empathy and shame (N=655) 139
Figure 6-9: The relationship between cognitive and affective empathy and guilt (N=655) 140
Figure 6-10: The relationship between cognitive and affective empathy and shame (N=655) 141
Figure 6-11: Mean scores for all key variables by general empathy category (N=655) 147
Figure 6-12: The relationship between moral emotion and moral rules for the full PADS+ sample (N=655)
Figure 6-13: The relationship between moral emotion and assault frequency (logged) for the rest of the sample(N=655) (top) and the violent subsample (N=48) (bottom) 151
Figure 6-14: Comparison of mean assault frequency (unlogged) by strongest, strong, weak, and weakest moral emotion categories for the violent subsample (N=48) and the rest of the sample (N=655)
Figure 6-15: 4% of the sample that committed 50% of all crime for the violent subsample (N=48) and the rest of the sample (N=655) (waves 1-7)
Figure 6-16: Comparison of mean assault frequency (unlogged) by low, moderate, and high moral propensity to commit crime categories for the violent subsample (N=48) and the rest of the sample (N=655)
Figure 6-17: The relationship between moral rules, weak moral emotion, and assault frequency (unlogged) for the rest of the sample (N=655) (top) and the violent subsample (N=48) (bottom)
Figure 6-18: The relationship between moral rules, weak moral emotion, and assault frequency (unlogged) for the violent subsample (N=48) upon removal of the outlier
Figure 6-19: Interaction: mean crime frequency by moral emotion categories and moral rules categories in crime involvement for the violent subsample (N=48) and the rest of the sample (N=655)
Figure 6-20: Interaction: mean crime frequency by moral emotion categories and moral rules categories in crime involvement for the violent subsample (N=47) and the rest of the sample (N=655) upon removal of the outlier
Figure 6-21: Path model of general empathy, guilt, shame, moral rules, and violence (unlogged) with Beta coefficients (N=655)
Figure 7-1: Moral rules and moral emotions at the time of the violence and on the day following the violence (N=48)

Figure 7-2: Shame at the time of the violence	3
Figure 7-3: Guilt at the time of the violence	4
Figure 7-4: Empathy at the time of the violence	6
Figure 7-5: Shame on the day following the violence	8
Figure 7-6: Guilt on the day following the violence	9
Figure 7-7: Shame and/or guilt in front of others on the day following the violence	0
Figure 7-8: Empathy on the day following the violence	2
Figure 7-9: Stability in shame and guilt at the time of violence and the day following the violence	3
Figure 7-10: Moral rules at the time of the violence	9
Figure 7-11: Moral rules on the day following the violence	0
Figure 7-12: Stability in moral rules at the time of violence and the day following the violence 19	1
Figure 7-13: A comparison of the questionnaire data with the in-depth interview data: empathy 19	
Figure 7-14: A comparison of the questionnaire data with the in-depth interview data: shame194	4
Figure 7-15: A comparison of the questionnaire data with the in-depth interview data: guilt. 19:	5
Figure 7-16: A comparison of the questionnaire data with the in-depth interview data: moral rules	6
Figure 7-17: Comparison of mean shame item scores for the violent subsample and the rest of the sample (waves 2-7 summed)	2

List of Appendices

Appendix 4-1: Shame questionnaire scale	260
Appendix 4-2: Guilt questionnaire scale	261
Appendix 4-3: General empathy questionnaire scale	262
Appendix 4-4: Cognitive and affective empathy questionnaire scale	264
Appendix 4-5: Moral rules questionnaire scale	265
Appendix 4-6: Self-reported violence questionnaire scale (robbery and assault)	266
Appendix 5-1: In-depth interview instructions	267
Appendix 5-2: In-depth interview question template	268
Appendix 6-1: Population distribution for the general empathy scale (wave 7)	272
Appendix 6-2: Population distribution for the cognitive and affective empathy sca	le
(wave 7)	273
Appendix 6-3: Population distribution for the shame scale (wave7)	274
Appendix 6-4: Population distribution for the guilt scale (wave 7)	275

Introduction

The current study makes two novel contributions to advance knowledge in underdeveloped and poorly understood areas of research. First, this research develops a detailed explanation of the role of moral emotion in crime involvement, by i) exploring the role of general ability to anticipate empathy in the possibility to feel shame and guilt in particular circumstances, and ii) by exploring the contribution of shame and guilt to the strength of overall individual morality, which ultimately plays a role in whether crime is perceived for action. Second, this research explores the social psychology of situations in which real-life acts of violence occur, particularly with regards to the interaction between individual morality and the particular violence-conducive circumstances of the setting.

A full understanding of why crime occurs has not been accomplished. Over 70% of young people in the Peterborough Adolescent and Young Adult Development study sample report committing at least one crime and report 25 crimes on average per person from ages 12-21 (see also Wikström, Oberwittler, Treiber, & Hardie, 2012).¹ Such crime inevitably has emotional and financial consequences to victims and to society; making identification of the causes of crime a worthy research endeavour. Persistent, frequent, and versatile offenders commit a large proportion of total crime (Wikström et al., 2012); for example, 4% of the Peterborough Adolescent and Young Adult Development study sample are found to be responsible for half of all reported crimes across a 10-year period. Violence is one of the most common crime types; over half (58%) of the study sample report violent assault and/or robbery offences.

What is it about these individuals (and their lives) that leads them to commit crime? Wikström and colleagues have convincingly attempted to explain the mechanisms by which crime occurs; with an individual and environmental level explanation that is primarily centred around morality (Wikström et al., 2012; Wikström & Svensson, 2008; Wikström & Treiber, 2009a; Wikstrom, Tseloni, & Karlis, 2011; Wikström, 2005, 2006, 2009, 2010, 2014). The current study seeks to clarify the

¹ The average number of crimes per person is calculated by dividing self-reported crime frequency from ages 12-22 by the number of participants. Note: over a quarter of participants did not report any crime.

specific role of moral emotion within morality in crime involvement; to offer a comprehensive explanation of how i) ability to exercise empathy is related to the possibility to feel shame and guilt in particular circumstances, ii) shame and guilt contribute to strengthen or weaken morality, and iii) morality plays a role in whether crime is perceived as an action alternative.

This research will explore the different roles of empathy, shame, and guilt in violence decision-making. Morality has been largely ignored within criminological research; and furthermore, moral emotions have been relatively neglected in the study of morality. Criminological explanations of crime disregard the importance of decision-making in acts of crime; and when decision-making is accounted for, a rational, deliberative framework is erroneously adopted. The aim of this research is to contribute towards a better understanding of how empathy, shame, and guilt contribute to overall morality, and subsequently, crime decision-making. Data from the Peterborough Adolescent and Young Adult Development Study (PADS+) will be utilised to demonstrate support for the fundamental role of moral emotion within moral propensity to commit crime. This research is presented within the robust theoretical framework of Situational Action Theory, which proposes that all acts of crime are acts of moral rule breaking, and crucially, attempts to explain how individual factors such as moral emotion interact with environmental factors in the occurrence of crime.

More specifically, shame and guilt are hypothesised to contribute to the strength of morality; whether one feels shame or guilt regarding the moral act in question will strengthen or weaken the specific moral rule with regards to rule breaking behaviour. Therefore shame and guilt provide a measure of how much one cares about a moral rule, and when moral rules and moral emotions are combined, they form overall individual morality. Weak morality is translated as a high moral propensity to commit crime; these individuals are more likely to see crime as a morally acceptable action alternative.

Section 1 outlines the theoretical considerations of the current study and includes; a detailed outline of the roles of empathy, shame, guilt, and moral rules in crime using the Situational Action Theory perspective (chapter 1), specifies how moral emotion and morality have been neglected in criminological theory and research (chapter 2), and outlines the differences and similarities between empathy, shame, and guilt, and the relationships between empathy, shame, guilt, and moral behaviour (chapter 3). Throughout the thesis, it will be argued that weak empathy, shame, guilt, and moral rules play an important role in crime decision-making. Section 2 outlines the

2

methodological approaches utilised in the current study and includes; a detailed overview of the Peterborough Adolescent and Young Adult Development Study (PADS+), the questionnaire scale measures that have been administered, and the limitations of other existing standardised measures (chapter 4). This is followed by an outline of the in-depth interview methodology; including development of the interview question template, the sampling criteria, the subsample characteristics, and fieldwork and data collection practicalities (chapter 5). Section 3 presents the analysis of results and includes; a comparison of the violent subsample and the rest of the sample on questionnaire measures of the general ability to exercise empathy, ability to anticipate shame, guilt, moral rules and crime (chapter 6). This is followed by analysis of the situational application of empathy, shame, and guilt in real-life specific acts of violence, as well as detailed analysis of the particular circumstances (setting-level factors) under which the violence materialised (chapter 7). Both quantitative and qualitative data analyses will provide support for the propositions of the current study; persistent violent offenders report weaker empathy, shame, guilt, and moral rules than the rest of the PADS+ sample, and report weak empathy, shame, guilt, and moral rules in specific reallife acts of violence. Section 4 outlines a summary of the research, the key conclusions, the applications to crime intervention, and offers suggestions for future extensions to the current research study (chapter 8).

Section 1- Theoretical considerations: executive summary

This section develops and proposes theoretical considerations regarding the role of moral emotion in crime using Situational Action Theory (chapter 1), specifies how the role of moral emotion and morality in the explanation of crime has been neglected (chapter 2), and develops the different roles of empathy, shame, and guilt within morality and moral decision-making (chapter 3). It is argued that empathy plays an important role in the possibility to feel shame and guilt in particular circumstances, and shame and guilt make an important contribution to overall individual morality. Following the introduction of a theoretical context for the current study, a detailed outline of how moral emotions and morality have been overlooked in the field of criminology, and of key importance, why it is essential to consider their input to decision-making, is presented. Furthermore, the small body of existing research that explores the role of moral emotion and morality in crime involvement is presented with a particular focus on its limitations. Overall, the current study attempts to account for the lack of proposed mechanisms and processes by which empathy, shame, and guilt are hypothesised to be related to violence. In summary, this section calls upon neuroscientific, biological, and behavioural evidence to present a case for the important (but under researched) role of moral emotion in decision-making.

Chapter 1

The specific role of moral emotion in crime involvement in Situational Action Theory

Situational Action Theory (SAT) is a theory of moral action that attempts to explain all acts of crime as acts of moral rule-breaking. This chapter explores the role of moral emotion within the key causes and causal processes of crime (outlined by Situational Action Theory) to build a set of hypotheses for the current study. Weak shame and guilt, combined with weak moral rules, form weak overall individual morality; and this is the key component in the explanation of crime. A novel aspect of moral emotion is introduced to the theory framework; empathy, and how it is proposed to play a role in the possibility to feel shame and guilt in particular circumstances. This chapter begins with a brief general outline of the principles of Situational Action Theory (SAT) in order to provide a context for the current study of the specific role of moral emotion in crime involvement. The following sections outline propositions regarding the role of empathy in the possibility to feel shame and guilt in particular circumstances, and provide a detailed outline of the roles of shame and guilt (and moral rules) in moral propensity to commit crime. Finally, violence, which is the focus of the current study, is used as an example crime type to illustrate the particular role that moral emotion plays in habitual violence and in violence involving provocation.

1.1. Situational Action Theory (SAT): a general introduction

'...what all crimes (in all places, at all times) have in common is that they break moral rules (rules about what is right or wrong to do in a given setting)' (Wikström & Treiber, 2009a, page 406)

The theoretical framework adopted in the current study is Situational Action Theory (SAT), a relatively new theory which focuses specifically on explaining crime as moral action.² It is crucial that research which aims to provide an explanation (in the current study; an explanation of how moral emotion contributes to crime involvement) is based upon a strong theoretical framework. Strong theory posits relationships, and the mechanisms which create those relationships, which can be tested and, if necessary, falsified. In the current study, testing such mechanisms will enhance knowledge about how weak moral emotion contributes to overall morality, and how overall morality plays an important role in crime involvement. Situational Action Theory's explanation

² Situational Action Theory has been documented within the past decade (from 2004), making it a young theory in comparison to the other main criminological theories (for example, rational choice theory was first published in the 1980s and self-control theory was first published in the 1990s). However, Situational Action Theory was being continually developed prior to 2004.

of action is unique because it states that individuals are rule-guided actors rather than self-interested actors (Wikström, 2006); more specifically, the theory purports that people are guided by act-specific moral rules which are anchored to specific moral emotions.

Situational Action Theory accounts for downfalls of other criminological theories because it defines what crime is, incorporates the role of the individual and their environment (and most importantly, their interaction), and provides a causal mechanism as opposed to correlates to explain crime (Wikström, Oberwittler, Treiber, & Hardie, 2012). Situational Action Theory is particularly suitable for the current study of moral emotion because it is the only theory to adequately acknowledge and model the role of morality in crime, it can accommodate plausible mechanisms, and has testable implications (that most action theories, including those that attempt to explain criminal behaviour, do not).

Situational Action Theory provides a general theory of crime because all crime concerns rule breaking regardless of the type of act.³ Moral acts are defined as acts that are governed by what is right or wrong to do in a particular circumstance (Wikström & Treiber, 2009a; Wikström, 2006). Acts of crime are characterised as the breaking of moral acts as defined by law; that is, the law prescribes which acts are legally permissible. By defining crime as moral acts defined by law, judgements need not be made on whether the acts are good or bad, or right or wrong.⁴ By viewing acts of crime as moral acts, all acts of crime, in all places, at all times, can be explained. As will be outlined in this chapter, the role that moral emotion plays in the occurrence of crime is the same regardless of the crime type; therefore moral emotion is relevant to all acts of rule-breaking.

According to Situational Action Theory, the moral emotions that are relevant for an explanation of crime decision-making are guilt and shame; these moral emotions are widely recognised to be relevant to moral behaviour (Tangney & Fischer, 1995). Guilt is defined as a negative feeling, often experienced as a result of an action, which is felt

³ Situational Action Theory has been specifically applied to violence (Wikström & Treiber, 2009), terrorism (Bouhana & Wikström, 2008), shoplifting, theft from cars, and vandalism (Wikström, Tseloni, & Karlis, 2011) but crucially attempts to explain all types of crime with a unified theory.

⁴ This would entail a review of whether legislation in a particular country is appropriate, justified, or necessary; this is a very interesting area of research but goes beyond the scope of the current study.

inwardly towards oneself (Wikström et al., 2012). Guilt appears along a spectrum; strong guilt indicates that one cares very much, whereas weak guilt indicates that one does not care very much. Shame is defined as a negative feeling, not necessarily experienced as a result of an action, which is felt in the presence or consideration of others (Wikström et al., 2012). Shame also appears along a spectrum; strong shame indicates a perception that others care very much, whereas weak shame indicates a perception that others care very much.⁵ According to Situational Action Theory, an individual's propensity to commit crime is primarily determined by the strength of the moral rules and moral emotions (see figure 1-1.). In the current study, the focus will be on moral propensity to commit crime, i.e. the morality component of individual propensity, which is crucially important because it is relevant to all acts of crime.⁶

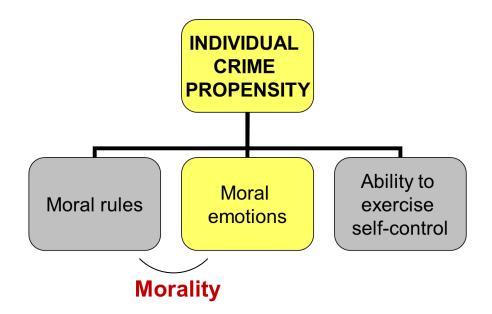


Figure 1-1: The components of individual propensity to commit crime

⁵ One of the primary differences between shame and guilt is that shame is often experienced as a global evaluation of the self, whereas guilt is often experienced with regards to a specific act. The differences and similarities between shame and guilt are discussed in more detail in chapter 3.

⁶ In contrast, self-control is important but only relevant under specific circumstances (see Wikstrom & Svensson, 2010; Wikstrom & Treiber, 2007).

In explaining crime, various macro (wider, social) factors as well as micro (proximal, situational) factors are relevant (as illustrated in figure 1-2.). The social model includes the conditions of an area, e.g. neighbourhood collective efficacy which can be used to predict area crime rates, as well as factors that cause people to choose to spend time in certain settings. The current study will focus on the situational model; which involves the crime event itself.

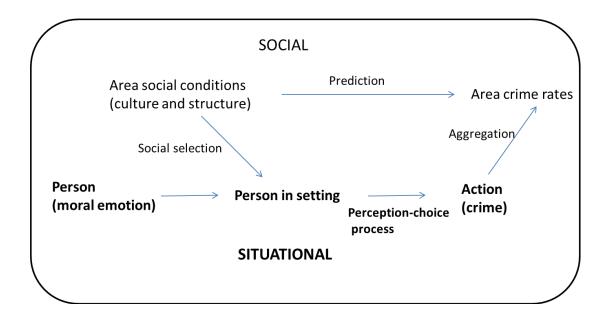


Figure 1-2: Simplified version of the key macro and micro mechanisms of crime

The premise of the situational model is that an individual, and their ability to anticipate moral emotion and associated moral rules, takes part in a setting; and via the interaction between these individual characteristics and setting characteristics, the resulting action outcome may involve crime. This interplay between personal morality and the moral context is fundamental in crime, i.e. the 'principle of moral correspondence is a cornerstone of the Situational Action Theory' (Wikström & Treiber, 2009b, p. 409) and is outlined in more detail in the following section. The focus in the current study will be on the individual-level; regarding the ability to anticipate shame and guilt and its contribution to the strength of morality, and more specifically, on the situational application of shame and guilt in real-life violent events.

In summary, Situational Action Theory identifies moral emotion within morality as a key factor in the explanation of crime (Wikström et al., 2012; Wikström, 2005, 2006, 2010, 2011), and to date, the role of moral emotion in crime involvement has not been as well developed as other parts of Situational Action Theory.⁷ Although the theory takes the role of guilt and shame seriously, further work is required in order to build a comprehensive explanation of the specific role of moral emotion in crime. The following section will introduce the causal mechanism proposed by Situational Action Theory by which weak moral emotion contributes to crime.

1.1.1. Action occurs when person and setting meet

'a particular person's encounter with a particular setting' is what leads to an act of crime (Wikström, Treiber, & Hardie, 2011, p. 6)

The crux of Situational Action Theory is the fundamental interplay between individual-level factors and environmental-level factors in the process, referred to as the perception-choice process, that leads to an act of crime. This interaction consists of an individual's propensity to commit crime (primarily moral rules and moral emotions) and the moral rules of the environment in which he or she operates, i.e. 'people do what they do because of who they are and the features of the settings in which they take part' (Wikström et al., 2012, p. 405). In the current study, the focus will be on the individuallevel; on moral emotions and moral rules, which when combined, form morality, or moral propensity to commit crime.⁸

The premise of the perception-choice process is that different people (with different levels of moral emotion) act in different environments, and their interaction is fundamental to explaining behaviour; including crime (see figure 1-3.). When

⁷ Professor Wikström and colleagues book, entitled 'Breaking rules: the social and situational dynamics of young people's crime' (Wikström et al., 2012), provides detailed moral rules and self-control findings from analysis of PADS+ data (from interview waves 1-5, ages 13-17).

⁸ More detail on the general role of individual propensity in crime causation using the Situational Action Theory framework has been published widely elsewhere (Wikström et al., 2011, 2012; Wikstrom & Svensson, 2008, 2010; Wikstrom & Treiber, 2007; Wikström & Treiber, 2009a; Wikstrom et al., 2011; Wikström, 2005, 2006, 2009, 2014). The theory is comprehensive and there are various other facets and considerations of the theory, particularly regarding the role of the environment (see Oberwittler & Wikström, 2009; Pauwels & Svensson, 2010; Wikström, Ceccato, Hardie, & Treiber, 2009; Wikström et al., 2011; Wikström & Sampson, 2003).

individual morality and/or the moral norms of the setting do not correspond with the law, crime is seen as an action alternative (see Wikström & Treiber, 2009a). The perception-choice mechanism involves a two part process; the perception of action options, followed by the selection (choice) of one of them to act upon. Moral emotion specifically influences the former: the perception-process.

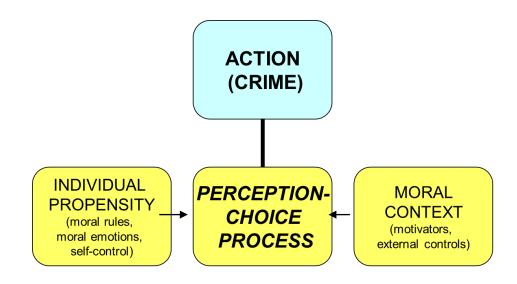


Figure 1-3: The perception-choice process that leads to crime

The perception-choice process can be summarised as follows; individual crime propensity (P) interacts with (X) criminogenic exposure in the environment (E) via the perception-choice process (\rightarrow), and results in an act of crime (C) (see figure 1-4.). Specifically of relevance for the current study, as outlined above, moral emotion plays a role in individual crime propensity (P), and the perception-process (\rightarrow) and these specific mechanisms will be examined in this research. ⁹ Although the role of the setting is introduced below and discussed in chapter 7, it is not the focus of the current study and has been published widely elsewhere.

⁹As displayed in figure 1-3., the perception-choice process is also influenced by self-control (specifically in cases where individual and environment do not correspond) and the nature of the motivator (Wikström et al., 2012).

The specific role of moral emotion in crime involvement in Situational Action Theory

 $\underline{PXE} \rightarrow C$

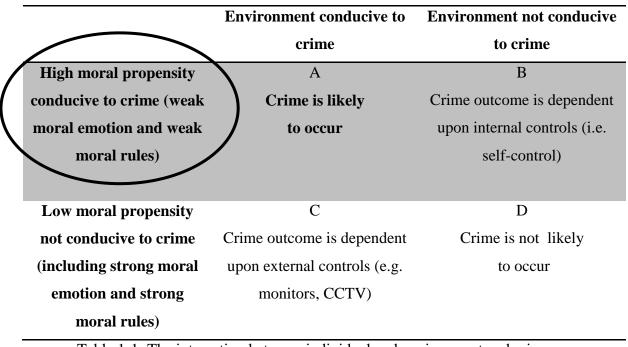
Figure 1-4: Simplified outline of the perception-choice process (Wikström, 2004)

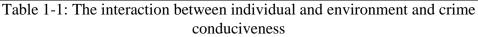
Person: weak moral emotion plays a role in weakening overall morality

Actions are seen as morally acceptable or unacceptable depending on the actspecific moral rule and the act-specific moral emotion. For example, if one feels it is wrong to break into a car and feels guilt and shame regarding breaking into a car, this action is not likely to be seen as morally acceptable, and therefore unlikely to be seen as an action choice. Therefore moral emotion contributes to the strength of morality, and morality determines whether crime is perceived as an action alternative. With regards to violence, how much an individual thinks it is wrong to hit someone, and how much they care about how much they think it is wrong to hit someone (how much guilt and shame they feel) will directly influence whether they will hit someone or not. Many people simply do not consider crime as a potential behavioural outcome and this is primarily determined by their strong moral emotions and moral rules; it follows logic that if crime is not perceived as an action alternative, crime will not occur.

Setting: a weak moral context coupled with weak morality plays a role in crime

The strength of morality interacts with the setting features in determining whether crime is perceived for action. There are 4 possible individual/environment scenarios (see table 1-1). If morality is weak and the environment is also conducive to crime, individual and environment correspond and crime is more likely to occur (see box A, table 1-1.). If morality is strong and the environment is also not conducive to crime, individual and environment correspond and crime is not likely to occur (see box A, table 1-1.). If morality is strong and the environment is also not conducive to crime, individual and environment correspond and crime is not likely to occur (see box B, table 1-1.) (Wikström, 2009a).





If individual and environment do not correspond, controls become relevant and determine whether crime occurs. If morality is weak, but the environment is not conducive to crime, deliberation will occur and the outcome will be dependent upon the internal control of the ability to exercise self-control (see box C, table 1-1.). If there is strong morality, but the environment is conducive to crime, deliberation will occur and the outcome will be dependent upon external controls (e.g. the presence of parents or teachers) (see box D, table 1-1.). The current study will focus on examining whether weak shame and guilt, when combined with weak moral rules, contribute to a high moral propensity to commit crime (circled in table 1.1.).

1.2. Individual morality: moral emotions and moral rules

'Whether or not one follows those rules will first and foremost depend on whether a person agrees with them (his/her personal moral rules) and cares about following them (his/her moral emotions)' (Wikström & Treiber, 2009a, p. 84)

According to Situational Action Theory, morality is one of the primary components in the explanation of crime. Moral rules are defined as whether one thinks something is right or wrong to do in a particular circumstance (Wikström, 2006). Moral emotions are defined as the extent to which one cares about their moral rules; therefore they determine the strength of the moral rules (ibid). The strength of an individual's morality is the degree to which they will feel moral emotion (guilt or shame) if considering violation of a particular moral rule. In the occurrence of crime, a weak moral rule is supported by weak shame and guilt, further weakening overall morality. Consequently, overall morality plays a key role in whether crime is seen as a morally acceptable action alternative. Therefore moral rules and moral emotions move people to act in certain ways (Wikström & Treiber, 2009).

The moral emotion in question is always specific to a particular moral rule; this forms the basis of the individual-level explanation of crime as proposed by Situational Action Theory. An individual's moral propensity is conducive to crime if moral rules and moral emotions are weak. For example, if one is aware that it is reasonably wrong not to recycle household waste (moderate moral rules) (see B, figure 1-5.), but does not care about breaking this rule, i.e. does not feel shame or guilt (weak moral emotions) (see A, figure 1-5.), overall individual morality will be reasonably weak (see C, figure 1-5.) and this may result in all household waste being thrown into the landfill bin.¹⁰ In this way, moral emotions serve a crucial supplementary function; both moral emotion and moral rules contribute to overall individual morality.

¹⁰ See, also, example 3 in table 1-2.

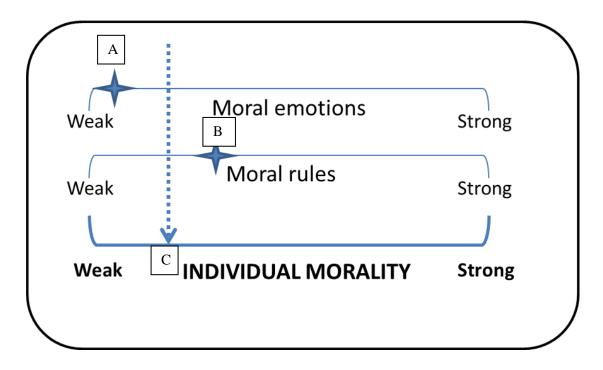


Figure 1-5: The combined contributions of moral emotion and moral rules to overall individual morality

Therefore the likelihood of crime is largely associated with the combined roles of moral emotion and moral rules (see table 1-2. for example situations). If a moral rule is weak (in most but not all cases), it is likely that the moral emotion specific to that rule will be weak; i.e. if one does not feel an act is wrong, it is unlikely that they will feel bad (guilt) or be concerned about the judgements others would make (shame) (see example 4, table 1-2.). The current study will specifically test whether weak moral emotions weaken overall individual morality in crime (particularly violence) involvement.

Example	Moral	Moral	Example situation	Likelihood of
	emotion	rules		crime
1	Weak	Weak	One does not think it is very wrong to steal something from a shop, and does not feel guilt and shame (does not care about breaking the rule)	Likely
2	Strong	Strong	One thinks it is very wrong to hit someone and would feel shame and guilt for hitting someone	Unlikely
3	Weak	Strong	One thinks it is very wrong to break a car wing mirror for fun, but does not feel shame and guilt (does not care about breaking the rule)	Dependent upon the moral context of the setting, and if relevant, self- control
4	Strong	Weak	[Unlikely situation – If one does not think it is very wrong to steal a phone from someone, they are unlikely to feel strong shame and guilt, i.e. to care about breaking the rule]	[Unlikely situation]

Table 1-2: The combined roles of moral emotion and moral rules in the likelihood of crime

1.3. The specific role of moral emotion in crime involvement

'The strength of a person's particular moral rules may be seen as reflected in the moral emotions he or she attaches to breaching a particular moral rule'

(Wikström et al., 2012, p. 14)

The specific role of moral emotion in crime involvement in Situational Action Theory

The key questions of interest in the current study can be split into two lines of enquiry: first, the role that empathy plays in the possibility to feel shame and guilt in particular circumstances (see section 1.3.1), and second the roles that shame and guilt play in strengthening or weakening morality (see section 1.3.2.).

1.3.1. The relationship between ability to exercise empathy and the possibility to feel shame and guilt: a novel contribution to Situational Action Theory

In the current study, the role of empathy has been developed and proposed within the Situational Action Theory perspective. The current study defines the ability to exercise empathy as an emotional process (as opposed to an emotion) of identifying (cognitive empathy) and feeling emotional congruence with (affective empathy) another person's viewpoint. A strong ability to exercise empathy is hypothesised to play a role in the increased possibility to feel shame and guilt before potential contemplation of the breaking of a moral act. Inversely, if an individual has a weak ability to exercise empathy, this is hypothesised to play a role in the reduced possibility to feel shame and guilt before potential contemplation of the breaking of a moral act (see figure 1-6).

This is because without consideration of the consequences of actions to others, or a perception of the judgment that others would make, feelings of shame and guilt may not arise. Therefore a personal evaluation that requires knowledge or perception of how others would view the act in question may be required in order to feel or imagine shame and guilt. Furthermore, it is important to note that cognitive and affective empathy may not correspond. If an individual has the ability to see (cognitive empathy) but does not have the ability to feel emotional congruence with (affective empathy) another person's perspective, it is hypothesised that they will also have a reduced possibility to feel shame and guilt in the breaking of a moral act, because solely identifying another person's perspective is not adequate to achieve full empathy.

17



Figure 1-6: The relationships between empathy, guilt, shame, and morality

Of interest in the current study are people who have a weak ability to exercise empathy, as well as people who have the ability to exercise cognitive empathy but lack emotional empathy specifically (as is well documented in violent psychopathic individuals), and how this plays a role in the possibility to feel shame and guilt before potential contemplation of the breaking of a moral act. The current study will explore whether empathy increases or reduces the possibility to feel shame and guilt in particular circumstances. As with guilt and shame, empathy is i) person-specific, i.e. individuals have a general ability to exercise empathy and ii) situation-specific, i.e. the situational application of empathy is dependent upon the circumstances. It is hypothesised that the latter, the situational application of empathy (and shame and guilt) is therefore experienced according to the former, the capacity of the general ability to empathise (or feel shame and guilt). This will be tested in the current study. A detailed outline of the definitions and concepts of empathy, shame and guilt (and their comparison and relationships to one another) is presented in chapter 3.

1.3.2. The different roles of empathy, shame, and guilt in crime decision-making

'...the lower the likelihood of offending, particularly if the individual has strong moral values (i.e. values associated with high levels of shame and guilt).' (Wikström & Treiber, 2009b, p. 409) Shame and guilt are important because they contribute to the strength of morality (see figure 1-6), which in turn plays a role in action decision-making. The primary theoretical proposition is that weak moral emotion associated with a weak moral rule contributes to weaken overall individual morality (see section 1.2). The key premise of the current study is that empathy plays a different role to guilt and shame in the decision-making process that leads to an act of crime. When the various hypotheses of the current study are placed together, a model is presented of i) the relationship between empathy and guilt and empathy and shame, ii) guilt and shame, and overall morality, and iii) morality and the perception of crime (see figure 1-7). ¹¹

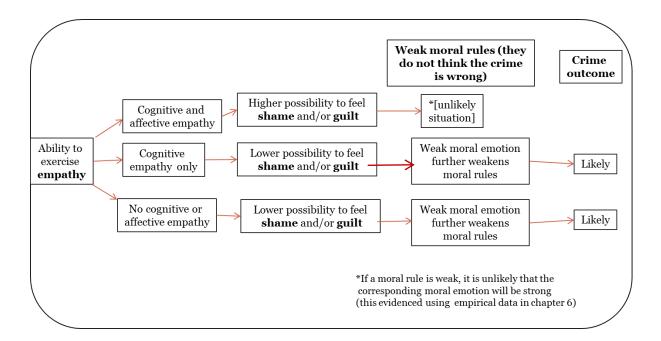


Figure 1-7: Empathy, guilt, and shame in the moral decision-making process that leads to an act of crime

¹¹ For the current study, figure 1-7. has been simplified to focus upon moral emotion; however, motivation, decision-making type, and controls also play a key role in this process (see Wikström et al., 2012).

Moral emotion has an influence before, during, and after every act of crime. Before the crime, it is hypothesised that a poor general ability to exercise empathy will reduce the possibility to feel shame and guilt. It is also important to note that in order to feel emotional congruence with another person's perspective, an individual must have the ability to identify what that perspective is, therefore it is not possible to feel (affective empathy) but not identify (cognitive empathy) another person's viewpoint (therefore this scenario does not feature in figure 1-7.).¹² Consequently, if the moral rule specific to the act in question is weak-moderate, weak shame and guilt serve to weaken overall morality, and weak morality allows crime to be seen as a morally acceptable and viable action alternative (as modelled in figure 1-7). For example, with regards to shame: significant others are self-selected and therefore offenders often spend time with other offenders in situations where the moral norms of the setting are weak, i.e. it is not viewed as wrong to commit an act of crime in such settings. In these situations, it is hypothesised that if it isn't considered wrong to commit an act of crime (or quite the opposite, that an act of crime generates 'street cred'), shame is not felt or imagined because one perceives that others do not care about the crime. As a result, morality is weakened and crime is more likely to be perceived as an option to act upon.

During the crime, it is hypothesised that poor situational application of empathy, and subsequently shame and guilt, can serve to generate somatic markers (positively or negatively valanced intuitive feelings) that will be recalled next time the individual finds themselves in the same situation, and therefore morality is repeatedly weakened and crime is repeatedly encouraged to be seen as an action alternative. As a result of this process, repeated exposure to similar situations is likely to aid development of habitual and persistent crime decision-making (and this will be detailed in section 1.4.1). After the crime, it is hypothesised that on reflection of the violent event, empathy, shame, or guilt will be marginally stronger than before or during the crime event itself. However, this moral emotion is likely to be short-lived and, for the most part, offenders are likely

¹² See chapter 3 for a detailed outline of the relationships between cognitive empathy, affective empathy, shame, and guilt.

to display weak moral emotion when they are subsequently faced with the same moral decision-making predicament.¹³

1.4. The specific role of moral emotion in violence

'People's personal morality may be conducive to violence if they do not think acting violently in a setting is wrong...and if their moral emotions do not deter violence (they do not feel shame or guilt for acting violently) or even support it (they feel righteous or virtuous for acting violently)' (Wikström & Treiber, 2009a, p. 84)

In order to illustrate the propositions regarding the role of moral emotion in crime involvement, violence has been selected as an example crime type. Since violence is one of the most common crime types among adolescents and young adults (Wikström et al., 2012), understanding its causes is fundamental for impacting upon crime prevention.¹⁴ Acts of violence are defined as 'acts intended to bring about physical harm to other beings' (Wikström & Treiber, 2009a, page 78). As with all intentional acts of crime under the Situational Action Theory perspective, acts of violence are moral actions; they are guided by what is right or wrong to do in a particular circumstance.¹⁵

Violence is perceived as a morally acceptable option when violence-relevant moral rules and moral emotions are weak, and often when the violence-relevant rules of the context or setting are also conducive to violence, such as the presence of criminogenic peers (Wikström & Treiber, 2009a; Wikström, 2009). Therefore acts of violence are committed because violence is perceived as an action alternative and either deliberately or most commonly habitually, violence is selected to act upon (see section 1.4.1.). In this section, the roles of empathy, shame, and guilt in all acts of crime that

¹³ The role of moral emotion before and after real life acts of violence will be analysed and tested in chapter 7.

¹⁴ It has proven particularly difficult to explain violence because there are so many variations in many different roles, contexts, and, situations. For example, physical aggression is permitted in a rugby match, but only when the referee signals that the match is in play (see Wikström & Treiber, 2009a).

¹⁵ Unintentional acts of crime (such as accidently harming someone) are not included in the explanation of crime in the current study.

have been outlined thus far are reiterated within a violence decision-making context. It is hypothesised that if one is aware that their subsequent action will cause emotional or physical harm to someone via a strong ability to exercise empathy, this increases the possibility to feel negative feelings of shame and guilt, and overall morality will be strengthened. In this case, violence will not be perceived as an action alternative because it is not seen as a morally acceptable behaviour; and violence will not occur. In the general population, most individuals have moderate-strong moral rules and moral emotion and this is primarily why most individuals do not commit crime. Of interest in the current study are the minority of individuals that report weak moral emotion and moral rules.

1.4.1. Habitual violence

'People who have weak moral emotions opposing violence may simply see violence as a useful tool for dealing with interferences, and no reason not to use it' (Wikström & Treiber, 2009a, p. 86)

All acts of crime are preceded by a decision process involving habit or deliberation. Habit is defined as the automatic perception of one action alternative and derives from repeated previous exposure to similar circumstances; therefore it is oriented towards the past. Moral emotion plays a particular role in habitual action; when acts of crime occur via habituation, weak moral emotion, associated to a weak moral rule is automatically recalled from previously encountered situations, and the act of crime is perceived as the only action alternative.¹⁶ Such habitual violence develops and persists when individuals with weak morality repeatedly spend time in settings that are conducive to crime (Wikström & Treiber, 2009) (see figure 1-8.). For example, an individual with weak morality (i.e. that one does not think violence is very wrong, and does not feel shame and guilt about violence) who spends time in pubs and clubs every Saturday night and often commits violence, gradually, week after week, may

¹⁶ See chapter 3 for detailed elaboration on the role of emotional intuition in habituation.

automatically perceive only one alternative for action when a potentially violent situation arises: to be violent.

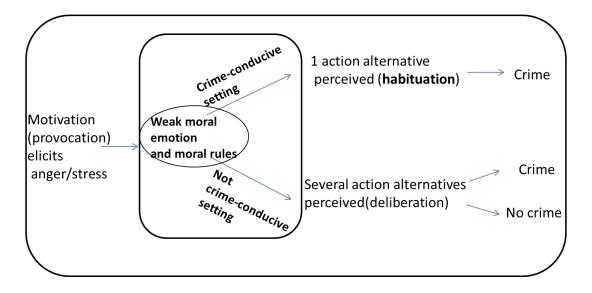


Figure 1-8: The role of moral emotion in habitual action

Once habituation occurs in one setting, this increases the likelihood of violence being seen as an action alternative in other settings (Wikström & Treiber, 2009). As a consequence of repeated habitual action, moral propensity to commit crime becomes particularly high, thus strengthening the perpetual cycle of violent behaviour. Development and testing of these theoretical propositions is imperative in order to investigate the processes by which persistent violent offenders continue to commit a large volume of violent crime, particularly with relevance to prevention efforts.

Conversely, in cases of violence that materialise as a result of deliberation, moral emotion also plays an important but different role. Deliberation involves the perception of several alternatives; it is a process of actively weighing up the pros and cons using rationality and it is therefore oriented towards the future. Deliberation occurs when individual and environment do not correspond, for example, in cases where moral emotion is weak, but the moral context of the setting is not conducive to crime, and this is likely to happen when an individual is unfamiliar with the setting (see figure 1-8.). In these cases, whether crime occurs is primarily dependent upon the ability to exercise self-control (Wikstrom & Svensson, 2010; Wikstrom & Treiber, 2007).

1.4.2. Sensitivity to provocation in violence

'the crucial question is why some people respond violently to a motivator, while others do not' (Wikström & Treiber, 2009a, page 81)

Emotions are particularly relevant to violence because violence is often preceded by an altercation or disagreement. Motivation is a necessary factor in initiating the action process and can be in the form of a friction, provocation, or commitment (see figure 1-8.). An act of crime cannot occur without a motivation, and motivators that have strong emotions attached have the most influence (Wikström et al., 2012). Such motivators to act often evoke non-moral emotions such as excitement, fun, and/or anger (Wikström & Treiber, 2009) and can be differentiated from moral emotions which play a specific role in strengthening or weakening morality.¹⁷

Provocation occurs when 'a friction (an unwanted external interference) makes a person annoyed or angry with its perceived source' (Wikström et al., 2012, p. 23; Wikström & Treiber, 2009a; Wikström, 2004). Provocation often leads to expressive violence as a means to harm the source of friction, or instrumental violence as a means of preventing the source of friction to continue. Provocation has a particular influence on violent action because it determines whether people are motivated to facilitate their perception of violence as an action alternative.

Not only does provocation elicit anger and provide motivation for action, different people have different sensitivities to provocation. Sensitivity is defined as 'the negative affect that he/she experiences' in response to provocation (Wikström et al., 2012; Wikström & Treiber, 2009a, p. 85). Frequent violent offenders are more sensitive

¹⁷ Therefore moral emotions serve a different function to non-moral emotions; shame and guilt are specifically related to rule breaking or following, in contrast to other negative non-moral emotions such as sadness (Eisenberg, 2000).

The specific role of moral emotion in crime involvement in Situational Action Theory

to provocations, i.e. more likely to view the provocation as a reason to initiate the action process, and this explains why they are more likely to respond violently. For example, a high moral propensity individual (with weak moral emotion) who spends time in pubs and clubs every Saturday night is more likely to be sensitive to provocation (e.g. someone accidently brushing past in a crowd) and gradually, week after week, may automatically perceive only one alternative for action when this happens: to be violent. Therefore sensitivity to provocation is closely associated to the development of habitual violence.

Therefore of key importance, criminogenic settings such as those involving provocation are not criminogenic for all young people; those with a low moral propensity to commit crime (including strong moral emotion) are 'situationally immune' to criminogenic settings (see chapter 8,Wikström et al., 2012). This causes an interaction effect whereby only individuals with a high moral propensity to commit crime (including weak moral emotion) are specifically influenced by features of the environment including provocation.

In summary, it is hypothesised that persistent and frequent violent offenders i) have weak moral emotion that contributes to weak personal morality, ii) have a higher sensitivity to provocation which provides motivation to initiate the crime-decision-making process, and iii) are likely to habitually perceive violence as the only action alternative (Wikström & Treiber, 2009).¹⁸

1.5. Chapter summary: The specific role of moral emotion in crime involvement in Situational Action Theory

Situational Action Theory has the scope to incorporate three novel contributions of the current study: i) the role of empathy in the possibility to feel guilt and shame in particular circumstances can be added to its model of moral decision-making, ii) the role

¹⁸ The current study proposes that the explanation for persistent crime involves the same key factors and processes as the explanation for all crime, i.e. Situational Action Theory is a general theory of crime that applies to all acts of crime (Wikström & Treiber, 2009b).

of shame and guilt in contributing to overall morality is already modelled but requires further development, and iii) the specific circumstances and respective social psychology of the situations in which real-life crime events occur can further the understanding of setting-level factors, and further, their interaction with individual-level factors. 'Crime-prone' individuals are defined as those with a high individual propensity to commit crime which primarily constitutes weak moral emotion and weak moral rules (Wikström et al., 2012; Wikström, 2006); Situational Action Theory and supporting empirical data has evidenced that the majority of crime is committed by those who are crime-prone in settings that are conducive to crime (Wikström et al., 2012).¹⁹ However, it is of critical relevance that even when crime-prone individuals take part in crime-prone settings, most of the time, crime does not occur. In order to establish under which specific circumstances crime does occur, more knowledge is required on the social psychology of specific crime events themselves; this is achieved in the current study.

This chapter has outlined: a general introduction to Situational Action Theory to provide a theoretical context for the propositions of the current study regarding the important contribution that shame and guilt make to morality, how morality plays a primary role in whether crime is perceived for action and therefore in the explanation of crime, and how weak empathy is hypothesised to play a role in the reduced possibility to feel shame and guilt before potential contemplation of the breaking a particular moral act. The chapter concludes by outlining the specific role of weak moral emotion in violence, particularly in habitual decision-making and in sensitivity to provocation. Chapter 2 will outline the neglect of moral emotion in the study of crime, present the little research that has examined the relationship between moral emotion and crime involvement, and formulate the key hypotheses of the current study.

¹⁹ 'Crime-conducive' settings constitute: the absence of monitors (for example, teachers or police officers), and/or the absence of deterrents (for example, CCTV), and/or the presence of frictions (for example, provocation). This forms the basis of the environmental-level explanation of why crime occurs.

Chapter 2

The neglect of moral emotion and morality in the study of crime

Morality plays a fundamental role in crime causation (Wikström et al., 2012) but has not been given due attention in criminological research. Furthermore, the role of moral emotion has been relatively ignored within the study of morality. This chapter specifies how moral emotion has been neglected in criminology, presents the small field of existing research that has examined the relationship between moral emotion and crime, develops the integral role that moral emotion plays in the Situational Action Theory of moral action, and formulates the key hypotheses of the current study. This chapter will place the current study in its criminological context by specifying how moral emotion and morality have been neglected in the study of crime, and provide rationale for the current study by presenting the limitations of the small field of existing theory and research that have examined the relationship between moral emotion and crime involvement. The theoretical components of the current study vary by chapter; chapter 1 was Situational Action Theory-specific and chapter 2 will be criminology-specific. Chapter 3 will be moral behaviour-specific; it will address the relationships between empathy, shame, and guilt, and furthermore, their relationships to morality, particularly by calling upon psychological literature. Taken together, the theoretical propositions from chapters 1-3 will build a case to implicate weak empathy, shame and guilt in the occurrence of violence.

2.1. A summary of the role of moral emotion and morality in crime involvement

Situational Action Theory is a theory of moral action that attempts to explain acts of crime by considering the interaction of individual features (primarily personal morality) with environmental features (primarily the moral context) (Wikström et al., 2012; Wikström, 2005, 2006, 2009). According to the theory, morality constitutes moral rules, defined as whether one thinks something is right or wrong to do in a particular circumstance, and moral emotions, which is the extent to which one cares about their moral rules (Wikström, 2006) and is measured by the extent to which one feels or imagines guilt or shame if considering violation of a particular moral act. Moral emotions, as opposed to non-moral emotions, are specifically related to moral behaviour, and moral behaviour encompasses acts that are governed by rules prescribing what it is right or wrong to do in a particular circumstance, including an act of crime.

Guilt is defined as a negative feeling, often experienced as a result of an action, which is felt inwardly towards oneself (Wikström et al., 2012). Guilt appears along a spectrum; strong guilt indicates that one cares very much, whereas weak guilt indicates that one does not care very much. Shame is defined as a negative feeling, not

necessarily experienced as a result of an action, which is felt in the presence or consideration of others (Wikström et al., 2012). Shame also appears along a spectrum; strong shame indicates a perception that others care very much, whereas weak shame indicates a perception that others do not care very much.

In the current study, ability to exercise empathy is defined as an emotional process (as opposed to an emotion) of identifying (cognitive empathy) and feeling emotional congruence with (affective empathy) another person's viewpoint. Ability to exercise empathy is hypothesised to play a role in the possibility to feel shame (an individual's perception of the negative judgement others would make) and guilt (the negative or bad feeling experienced in relation to a specific act) because without consideration of the consequences of actions to others, or the judgment that others would make, feelings of shame and guilt may not arise. In turn, shame and guilt contribute to the strength of morality and ultimately, morality plays a role in rule-breaking or rule-following decisions.

Rule breaking can occur when a weak moral rule is supported by weak shame and guilt; overall morality is weakened further, and crime is more likely to been as a morally acceptable and viable action.²⁰ Therefore moral emotions, combined with moral rules, move people to act in certain ways in particular circumstances (Wikström & Treiber, 2009). There are two processes under investigation in the current study: first, the relationship between weak empathy and the reduced possibility to feel shame and guilt in particular circumstances (hypothesis 1, which will be elaborated on in chapter 3), and second, the contributions of shame and guilt to the strength of morality; if the act-specific moral rule is weak, and if shame and guilt are weak, crime is more likely to be seen as morally acceptable behaviour (hypothesis 2).

²⁰ The majority of the general population has strong-moderate morality hence the societal 'norm' for moral acts is in correspondence with the law; this is the basis of the social order that enables societies to operate.

The relationship between morality and crime

Crimes are the 'grossest transgressions' from morality (Durkheim, 2002, p. 13)

Although the focus of the current study will be on developing an explanation of how i) empathy is related to the experience of shame and guilt and ii) how shame and guilt are related to morality, the proposed mechanisms and hypotheses centre around overall individual morality, and subsequently, how morality plays a key role in crime decision-making. Studies find consistent evidence for the existence of a relationship between morality and delinquency and will be presented below. Wikström and colleagues (Wikström et al., 2012; Wikstrom & Svensson, 2010; Wikstrom et al., 2011; Wikström, 2009, 2014), using empirical longitudinal data, find morality significantly predicts crime involvement. Bruinsma and colleagues measure morality and delinquency similarly to the current study, and report that morality is significantly negatively correlated with delinquency (-.28 correlation coefficient; Bernasco, Bruinsma, Pauwels, & Weerman, 2013), and weak morality is positively correlated to delinquency (.76 correlation coefficient; Pauwels, Weerman, Bruinsma, & Bernasco, 2011). There is further evidence of an association between weak morality and general delinquency (Svensson, 2004), for example, weak morality regarding downloading music illegally significantly predicts (a lower) frequency of illegal downloading behaviour (Wingrove, Korpas, & Weisz, 2011) and individuals with strong moral beliefs against computer hacking are less likely to be involved in computer hacking activities (Hu, Zhang, & Xu, 2012).²¹ Furthermore, adolescent offenders report less developed moral judgements when compared to non-offenders (Lardén, Melin, Holst, & Långström, 2006). The following section will outline the neglect of morality, and moral emotion specifically, in the study of crime.

²¹ Although computer hacking is very different crime type to violence which often involves different types of people, such IT specialists, of key relevance, morality is hypothesised to be equally relevant to all crime types and acts of moral transgressions.

2.2. The neglect of moral emotion and morality in the study of crime

'morality in human behaviour and its direct import for criminal behaviour' is 'a subject that, strangely, has been relatively neglected by criminologists' (Tittle, 2007, p. 484)

Some criminologists, such as Bottoms (2002, p. 24) have argued that 'If they are to be true to their calling, all criminologists have to be interested in morality', but it remains to be explored in depth in criminological research (Wikström et al., 2012, 2011; Wikström & Treiber, 2009a). It should be noted that there are a few criminological theories that do mention morality such as social bonding theory, in which one of the four elements of the theory is the moral values of society (Hirschi, 1969) and differential association theory, in which crimes are referred to as moral offences (Sutherland & Cressey, 1955). However, the main focus in these theories is not on morality; what is required is a comprehensive theory which takes into account all aspects of morality and explains how morality can be central in the explanation of crime. This is achieved by Situational Action Theory and this is why it is used as a framework for the current study.

Typically, criminological theories that have focused on individual or personlevel factors have ignored the role of morality (including moral emotion); rather, the focus has been on self-control (Gottfredson & Hirschi, 1990), strain (Agnew, 1985), and/or rational choice (Cornish & Clarke, 1986). However, there is evidence to suggest that morality is the most important and primary input to criminal behaviour. For example, although Gottfredson and Hirshi (1990) assert that having low self-control increases the probability that an individual will offend, in any situation, at any time, Wikström & Treiber (2007) find evidence that the role of morality is more important than self-control (which is only relevant under specific circumstances) in crime causation (see also Wikstrom & Svensson, 2010). Saltaris (2002, p. 733), in exploring the role of moral emotion in offending behaviour, argues that 'moral emotions have been somewhat overlooked, and deserve greater attention', and Martens (2002, p. 170) argues that 'a general agreement on the moral significance of emotions is missing'.

Not only do the main criminological theories neglect the role of moral emotion, they also fail to consider the decision-making process that precedes all acts, including acts of crime (See Gelder & Vries, 2013; Treiber, 2013).²² Moral emotion contributes to the strength of morality, and morality plays an important role in the decision-making process; criminal decision-making involves a moral judgement that requires input from moral emotions and moral rules (Treiber, 2011; Wikström & Treiber, 2009a), and this input is of key relevance for the current study. In criminology, a deliberative, rational decision-making framework, i.e. one that prizes the importance of reason and weighing costs and benefits in crime (Cohen & Felson, 1979) has long dominated and has led to a large under-estimation of the role of moral emotion in criminal decision-making. A purely rational view is unrealistic in real-life terms because emotions undoubtedly play a role in many everyday action tendencies (Damasio, 1994), to which criminal behaviour is no exception. Few theories have looked into the more intuitive, unconscious role of the moral emotions in crime decision-making (Treiber, 2011), despite the fact that crime is a type of action and is therefore always preceded by a decision-making process.

In the current study, Situational Action Theory is adopted because it can accommodate theoretical and testable propositions regarding the role of moral emotion in crime, and therefore combined with robust empirical data, an explanatory line of enquiry can be achieved, as opposed to a less fruitful correlational enquiry.²³ As will be outlined in the following section, there are no theories other than Situational Action Theory that comprehensively explain the process or mechanism by which weak moral emotion and weak morality play a role in involvement in crime. Furthermore, and as a consequence, most criminological research studies neglect the role of moral emotion

²² As Wikström & Treiber (2009b, p. 409) argue, 'most theories of crime involvement (if they even consider what moves people to action) focus solely on the process of choice, ignoring why individuals perceive crime as an alternative in the first place'; this is a crucial omission in the explanation of behaviour.

²³ The majority of criminological research studies identify 'risk factors' that show a statistical correlation to involvement in crime, but importantly, serve a descriptive rather than explanatory function (Murray, Farrington, & Eisner, 2009; Wikström, 2011); they do not explain the process or mechanism by which crime occurs, and therefore a comprehensive and unified explanation of criminal behaviour is not accomplished.

The neglect of moral emotion and morality in the study of crime

and morality in crime; the small body of existing research is outlined in the following section.

Although there is a general consensus among researchers that feelings of shame and guilt play important roles in rule-following behaviour, they emphasise the need for more robust research (Seiter & Bruschke, 2007). The current study will attempt to fill the void in the theory base by developing a detailed account of the role of moral emotion and morality in crime using Situational Action Theory, and consequently attempt to account for the dearth in the empirical research base by presenting robust, high-quality data to test the theoretical propositions. The current study will achieve clarity where it is lacking with regards to how moral emotions play a role in crime: for example, Stuewig & Tangney (2007) state that further work is needed to investigate what mediational or moderational processes may be at work between shame, guilt and crime.

2.3. Existing criminological theory and research examining the role of moral emotion in crime involvement

Shame and guilt 'have always been the province of the poet and the novelist, but rarely of the social scientist' (Campos, 1995, p. ix)

The role of moral emotion in crime involvement has not been adequately modelled or tested, i.e. there is a lack of an explanation of how and why weak moral emotions weaken morality and subsequently play a role in rule-breaking behaviour. Studies that have examined the relationship between morality and crime outcomes have generally used moral values or rules measures, and neglected to measure and incorporate moral emotions (Wikström & Svensson, 2010). This section will first outline criminological theories that have incorporated emotion or moral emotion into their frameworks, and, importantly, outline their limitations (section 2.3.1.). Second, although there is little empirical research, this chapter will present a critical outline of the small body of research that has examined the existence of a relationship between empathy, shame, guilt and crime (section 2.3.2.). The section will conclude by summarising and highlighting the key insufficiencies of existing criminological theory and the key shortfalls of existing research (section 2.3.3).

2.3.1. Existing criminological theory and its shortfalls

Other than Situational Action Theory, there are three existing criminological theories that partially incorporate the role of emotion or moral emotion in their explanations of crime; however, all three theories present key limitations (see table 2-1.).

Criminological	Key concept	Role of emotion/moral	Mechanism by
theory		emotion in likelihood of	which emotion plays
		crime	a role in crime
Strain theory ₁	Strains lead to anger and frustration	Less strain → less anger and frustration → crime is less likely *Non-moral emotions	Unclear
Reintegrative	Offenders require	Identification of shame \rightarrow	Undeveloped.
shaming	encouragement and	prevents alienation \rightarrow crime	Addresses post-
theory ₂	opportunity to identify shame	is less likely	offending rather than pre-offending, i.e. reaction to and prevention of crime, rather than the causes of crime.
Subcultural	Offenders hold	Anti-violence permissive	Emotion is not
theory ₃	values and norms that are permissive of violence	values and norms → crime is less likely	explicitly discussed
Situational	Strong morality	Strong shame and guilt	Perception process –
Action Theory ₄	(moral emotions and moral rules) prevent crime being seen as	contribute to and strengthen overall morality → crime is less likely	moral emotion contributes to the strength of morality;
	an action alternative		morality mediates the

moral filter which determines whether crime is seen as a morally acceptable behaviour

1 (Agnew, 1985), 2 (Braithwaite, 1989), 3 (Cohen, 1955), 4 (Wikström, 2006)

Table 2-1: Comparison of the theories that incorporate the role of emotion in crime

First, strain theory (Agnew, 1985, 2001, 2014) posits that when individuals cannot obtain success in their goals (such as gaining money, or status in school) they experience strain or pressure, to which they respond with crime. Of relevance for the current study, strain theory argues that crime is a more likely response to strain when negative affect is experienced, such as anger and frustration. However, strain theory fails to fully incorporate the role of emotion; first, it narrows its focus to non-moral emotions such as anger which prompt initial motivation to act (Wikström & Treiber, 2009a), and are necessary but not sufficient in explaining crime decision-making. For example, anger may be experienced in response to a provocation (such as being pushed in a pub), which may prompt a person to consider whether they view violence as an action alternative, i.e. whether they think that hitting someone is wrong and experience imagined shame and guilt for the act. Ultimately, whether violence occurs is dependent on the latter process rather than the former. The proposed theory in the current study is that moral emotions weaken or strengthen morality; however the direct mechanism proposed in strain theory between non-moral emotion and moral behaviour is not entirely clear.²⁴

Second, although Agnew (2014) acknowledges the importance of empathy in crime causation by arguing that empathy is integral to improving 'social concern', an explanation of how empathy is linked to crime is not developed. The proposed mechanism in the current study is that ability to exercise empathy is related to the possibility to feel shame and guilt in particular circumstances, and in turn, shame and

²⁴ See chapter 3 for further elaboration on the differences between moral and non-moral emotions.

guilt strengthen or weaken morality, which filters whether criminal behaviour is seen as morally acceptable. Third, it is difficult to ascertain which strains (of many potential life strains, and by which processes) specifically lead to negative emotions, and the theory does not account for individual differences in response to the same strains. For example, it is unlikely that lack of status at school acts as a strain for all individuals equally, and regardless of this, it is unclear by which specific mechanism this leads to crime. Finally, strain theory doesn't account for the decrease in crime involvement from adolescence to adulthood which is demonstrated by the age-crime curve (Farrington, 1986; Hirschi & Gottfredson, 1983; Sampson, 2003). Adulthood is a time period in which there are likely to be the same, if not more strains than during the adolescent period (for example, due to family and work responsibilities).

The second theory that attempts to incorporate the role of emotion in crime is reintegrative shaming theory (Braithwaite & Braithwaite, 2001; Braithwaite, 1989, 2000; Sherman, 1993). This falls under the umbrella of restorative justice theories and is primarily intended to inform crime prevention programmes (Harris, Walgrave, & Braithwaite, 2004). The theory posits that encouraging offenders to identify emotions, specifically shame, will deter them from reoffending; the authors state 'shame seems inevitable to the way we regulate ourselves and to our regulation by others' (Braithwaite & Braithwaite, 2001, p. 315). Braithwaite (1989) distinguishes between stigmatizing shaming which increases reoffending, and reintegrative supportive shaming which reduces reoffending. According to the theory, the social shame of committing crime is the most powerful deterrent and giving offenders opportunity and encouragement to identify their shame prevents alienation and further crime. One of the merits of the theory is that it encourages people to admit that they have committed a bad act (i.e. crime) without suggesting that they are bad people themselves.

Unlike strain theory, reintegrative shaming theory does partially incorporate the role of moral emotion (as opposed to non-moral emotion) in crime, however it provides an insufficient account because: first, it focuses specifically on shame, neglecting the role of guilt in crime (Tangney, Stuewig, & Hastings, 2011). The current study proposes that it is difficult to separate guilt about an act of crime, and shame about others perceptions of oneself regarding an act of crime, and both are hypothesised to be fundamental to crime involvement. Svensson et al., (2013) emphasise the importance of

36

guilt as well as shame and introduce the concept of 'guilting' in rule-following behaviour. There is a plethora of evidence that suggests that shame and guilt are the key moral emotions that play a role in rule-following behaviour (see chapter 3 for detailed elaboration). Although Braithwaite & Braithwaite (2001) more recently acknowledge the importance of guilt in crime, they do not elaborate on mechanisms. Reintegrative shaming theory also neglects the role of empathy, i.e. the ability to identify another person's viewpoint is likely to lead to an increased possibility to i) ascertain whether others would make a negative judgment of one regarding the act (shame) and ii) ascertain whether one ought to feel bad inwardly for the act (guilt).

Second, there is too much emphasis on shaming practices, as opposed to the emotion of shame itself. Focus is placed on the nature of restorative justice conferences, such as who is present, and how the shaming practice will prevent alienation of the offender, but little attention is paid to the concept of shame and the mechanism by which shame plays a role in rule-following behaviour. Therefore the theory does not provide fully detailed explanations of how shame reduces reoffending. One suggested mechanism is that by recognising shame, it is inhibited from being displaced into anger (Ahmed, Harris, Braithwaite, & Braithwaite, 2001), but it remains unclear whether the authors believe that anger is the key contributor to crime, and if so, how. Others argue that shaming practices are old fashioned and dubious (Van Stokkom, 2002). In summary, reintegrative shaming theory recognises the importance of a link between shame and morality, arguing that what is required is 'shaming of specific moral failures' and shaming will 'develop a positive identity for the moral self' (Braithwaite & Braithwaite, 2001, p. 16). However, this relationship between shame and morality is not elaborated upon and features in the periphery.

The third theory that attempts to incorporate the role of emotion into its framework is the subcultural theory of crime (Cohen 1955) which posits that the majority of violent crimes are emotionally charged events, as opposed to actions that are carried out with reason and rational thought (see also Athens, 1997).²⁵ The theory purports that pro-violent norms and values are assimilated and lead to a violent

²⁵ There is a large array of published literature on subcultural theory; research specific to violence will be presented in the current study.

subculture (see also, Wolfgang & Ferracuti, 1967). Most people in society adopt the main culture or the 'parent' culture, the values of which are in accordance with the law, but those that commit violence are members of the 'subculture'. As in the current study, the authors argue that violent behaviour is carried out without guilt, but for different reasons; they propose lack of guilt is associated with self-protection, survival, and maintenance of status and honour. However, Cohen focuses on the dynamic in groups of offenders, i.e. the subculture (Cohen & Short, 1958), rather than focusing on individuals and their moral emotion that is specific to moral acts, as is achieved in the current study. Others have extended subcultural theory to identify bleak inner-city environments as key factors in crime (Anderson, 1999), however Situational Action Theory models such factors as features of the poor moral context that interact with individual morality, i.e. as criminogenic features that are only relevant for those with weak individual morality.

For the reasons listed, neither of these theories is suitable for use in the current study. The current study will strive to overcome their limitations by using the Situational Action Theory perspective (see chapter 1 for a detailed theoretical outline of the role of moral emotion in Situational Action Theory). In summary, there is no existing criminological theory that has fully modelled the role of moral emotion in crime; although strain theory, reintegrative shaming theory, and the subcultural theory do partially acknowledge the role of emotion in crime, a higher level of specificity is required on the relevant processes and mechanisms linking emotions to rule-following or breaking behaviour.

2.3.2. Existing research and its limitations

The following sections present behavioural research to illustrate evidence of a link between weak moral emotion and varying degrees of delinquent behaviour, ranging from antisocial to criminal behaviour. Although the current study examines the role of moral emotion in violence specifically, the hypothesised processes are applicable to all crime types; therefore crime research will be outlined as well as specific violence research. The existence of a correlational relationship between moral emotion and crime is replicated across various studies. However, this is insufficient; the application of a more explanatory theoretical model beyond correlational analyses is required. Consideration of existing research is useful to provide an indication that the subject area is worthy of the further explanatory research endeavour that is attempted in the current study.

Existing research studies are often vague in their interpretations of their research findings, therefore further clarification is required. Many of the research studies do not specifically define empathy, shame, and guilt; in particular, different definitions of shame and guilt have been employed and will be specified and discussed in section 2.3.2.1. Furthermore, criminological and psychological studies often use different and inconsistent definitions. These differences in definitions could account for differences in study findings, making comparison of studies and establishment of firm conclusions regarding the role of shame and guilt in crime a complicated endeavor. The terms shame and guilt are often used interchangeably (see Tibbetts, 2003), for example, Grasmick and colleagues (Grasmick, Blackwell, & Bursik, 2003) carried out a study in which they claimed to find support for a relationship between shame and the intention to commit crime, using a measure of what most psychologists and criminologists define as guilt.²⁶

Existing research has been categorised and framed alongside the theoretical propositions of the current study, and most importantly, its limitations have been identified (see table 2-2.). First, research examining the link between shame, guilt and crime is presented. Second, although in the current study empathy is hypothesised to have an indirect relationship to crime via the possibility to feel shame and guilt in particular circumstances, replicated empirical evidence for the existence of the relationship between empathy and crime is presented nonetheless. Research that explores a link between empathy, shame, guilt, and moral behaviour can also be used as evidence for the hypotheses of the current study (this will be presented in chapter 3). Neuropsychological research aids further understanding of the importance of moral emotion in moral decision-making by providing an outline of where the empathy, shame, and guilt faculties reside in the brain and emotional and behaviour outcomes when such faculties are dysfunctional (this will also be presented in chapter 3).

²⁶ See section 2.1 for the definitions of empathy, shame, and guilt used in the current study.

Independent	Outcome	Relevant	Limitations of existing
variable(s)	variable (s)	to	research according to the
		hypothesis	current study
		1/2	
Shame, guilt	Criminal	2	The majority of these studies
	behaviour		lack a theoretical model
			(correlational, not
			explanatory), but are useful to
			provide base evidence for the
			current study
Empathy	Criminal	1	The relationship between
	behaviour		empathy and crime is
			hypothesised to be mediated
			by the possibility to feel
			shame and guilt in particular
			circumstances, i.e. there is no
			direct theoretical relationship
			between empathy and crime
Shame, guilt	Moral behaviour	2	The majority of these studies
			lack a theoretical model
			(correlational, not
*See chapter 3			explanatory), but are useful to
L			provide base evidence for the
			current study
Neuropsychological	Empathy, shame,	1 & 2	Brain dysfunction is by no
functioning	guilt task		means the sole and direct
	performance		contributor to crime
*See chapter 3			(correlational, not
, ,			explanatory), but is useful to
			provide base evidence

Table 2-2: Limitations of existing research: the role of moral emotion in crime

2.3.2.1. The relationship between shame, guilt, and crime involvement

'shame and guilt are emotions with special relevance to the field of criminology' (Tangney et al., 2011, p. 1)

This section outlines research exploring the relationship between shame, guilt and crime. The current study hypothesises that weak shame and guilt contribute to and weaken individual morality and morality plays a role in whether crime is seen as a morally acceptable action alternative. Along with moral rules, shame and guilt are viewed as the fundamental individual-level factors in crime involvement. Findings from the Peterborough Adolescent and Young Adult Study, which was specifically designed to test Situational Action Theory, provide the only large scale, robust, extensive and conclusive evidence of a link between shame, guilt, morality, and crime (Wikström et al., 2012; Wikström & Svensson, 2008). Related research testing Situational Action Theory also reveals that shame and guilt are key contributors to the decision-making process that leads to an act of crime (Treiber, 2013). These studies use the same definitions of shame and guilt that are adopted in the current study.

Existing research confirms shame and guilt to be of crucial importance in the explanation of offending, even further, they are found to mediate the effects of other variables (such as parental monitoring) in explaining crime (Svensson, 2004; Svensson et al., 2013). Wikström & Svensson (2008) found that both in an English and Swedish sample weak shame predicted violence, and other research finds that weak shame predicts antisocial behaviour (Olthof, 2012). Weak guilt and shame are correlated to aggression (Pornari & Wood, 2010; Roos, Salmivalli, & Hodges, 2011) and the intention to engage in a deception (Seiter & Bruschke, 2007), and have 'presumed roles in inhibiting immoral, socially undesirable behaviour and in fostering altruistic, prosocial behaviour' (Tangney et al., 2011, p. 1). However, not all research finds evidence of a link between shame and crime; some contrasting research findings state that shame does not play a role in rule-following behaviour because it motivates

devaluation, defensiveness, anger, and aggression (Tangney & Fischer, 1995). However, these contrasting findings may be explained by the nature in which Tangney and colleagues frame the concept of shame; contrary to the current study, they argue that shame is dysfunctional because it leads to difficulty in dealing with others and thereby prevents amelioration of rule-breaking behaviour. In addition, Muris & Meesters (2014) carried out a review of various studies that have explored the role of shame and guilt in aggression and delinquent behaviour, and comparison of the effect sizes reveal a positive effect of guilt, but a negative effect of shame.²⁷ Although these findings are in the minority and oppose the theoretical propositions of the current study, they highlight that the relationship between shame and crime may be more complex than the relationship between guilt and crime.

The relationship between guilt and offending behaviour has received more research attention than shame. Weak guilt is found to predict violence (the Pittsburgh longitudinal study, Beyers, Loeber, Wikström, & Stouthamer-Loeber, 2001; Krettenauer, Campbell, & Hertz, 2013; Tibbetts, 2003).²⁸ Weaker guilt is reported by individuals with antisocial personality disorder compared to matched controls (Dinn & Harris, 2000), and individuals with weak guilt are more likely to engage in unethical behaviour and delinquency (Cohen, Panter, Turan, Morse, & Kim, 2013; Malti, Gasser, & Buchmann, 2009; Sobhani & Bechara, 2011), in risky and illegal behaviours, have more time spent in prison, more criminal convictions (Tangney et al., 2011), and engage in substance use and criminal behaviour (Tangney & Fischer, 1995). Children that commit rule-breaking behaviour are found to lack guilt from 3-4 years of age (Frick, Ray, Thornton, & Kahn, 2013) and furthermore, feelings of guilt about past violence have been found to prevent subsequent involvement in violence (Bowes & McMurran, 2013). Malti & Krettenauer (2013) carried out a meta-analysis of 42 studies (over 8,000 participants) and found that guilt in particular plays a significant role in the moral behaviour (including antisocial behaviour) of children and adolescents. In summary, the

²⁷ Again, inconsistencies between findings from such literature and the hypotheses of the current study (as well as findings from other studies that adopt the same definitions of shame and guilt adopted in the current study) are likely to be partially explained by the different definitions (and therefore data measures) of shame and guilt employed across studies.

²⁸ The Pittsburgh study is a longitudinal study with a sample of approximately 1,500 males, primarily designed to explore antisocial and delinquent behaviour from childhood to early adulthood (Loeber et al., 1998).

The neglect of moral emotion and morality in the study of crime

link between guilt and various levels of delinquent behaviour has been replicated using various methodologies, including hypothetical scenarios (Krettenauer, Asendorpf, & Nunner-Winkler, 2013) and self-reports and observer reports of guilt (Cohen et al., 2013).

However, methodologies adopted in the studies that have been introduced, in most cases, measure the general ability to anticipate shame and guilt; the current study, as well as analysing a longitudinally measured general questionnaire scale measure, has also collected detailed information on the situational application of guilt, shame, and empathy in real-life violent events. The key criticism of the existing research studies is that moral emotion, if modelled or theorised at all, has been modelled inadequately. For example, shame and guilt are viewed as deterrents in crime prevention (Braithwaite, 1989), rather than as key contributors to the strength of overall morality that informs whether acts of crime are viewed as morally acceptable. The current study models shame and guilt clearly within the theoretical framework of Situational Action Theory (see chapter 1).

2.3.2.2. The relationship between empathy and crime involvement

'empathy emerges as an important predictor of criminal behaviour' (Posick, Rocque, & Rafter, 2012, p. 1).

The role of empathy in crime has attracted attention in recent years (Posick et al., 2012); in his 2010 American Society of Criminology presidential address, Francis Cullen urged criminologists to 'recognize the importance of examining not only negative but positive emotions, such as empathy' (Cullen, 2011, p. 314). Many researchers agree that 'empathy is a core concern in understanding criminality' (Hepper, Hart, Meek, Cisek, & Sedikides, 2013, p. 2), however the role of empathy has rarely been modelled in criminological theory and research. As with shame and guilt research, the majority of empathy studies are correlational and furthermore, many do not offer an explanatory model. The current study hypothesises that the relationship between empathy and crime is indirect because it is mediated via the possibility to feel shame and guilt in particular circumstances; the exploration of this proposition will provide a

novel contribution to Situational Action Theory's core framework. However, existing research exploring a link between empathy and crime has not been framed in this (or, in many cases, any other alternative) theoretical model. Nonetheless, this research is presented to illustrate evidence of a link between weak empathy and criminal behaviour. Research directly corresponding to the hypothesis of the current study is outlined in chapter 3, i.e. the relationship between empathy and the possibility to feel shame and guilt in particular circumstances.

Empathy has been found to be a key factor in distinguishing between prosocial behaviour and non-prosocial behaviour, including offending (Baron-Cohen, 2011; Frick & Morris, 2004; Hoffman, 2000; Malti et al., 2009; Marshall, Marshall, Serran, & O'Brien, 2009; Miller & Eisenberg, 1988; Posick et al., 2012; Spinella, 2005). Furthermore, offenders with higher empathy are more successful in reducing aggression and delinquency (Crockett, Clark, Hauser, & Robbins, 2010). Weak-moderate correlations are found between empathy and antisocial behaviour (Day, Casey, & Gerace, 2010; Jolliffe & Farrington, 2004; Miller & Eisenberg, 1988), including substance abuse and involvement in crime (Jolliffe & Farrington, 2006a).

Lack of empathy is renowned to be the central characteristic of violent psychopathic behaviour (Blair, Mitchell, & Blair, 2005; Farrington, 2005; Fine & Kennett, 2004).²⁹ The link between lack of empathy and violence is found to be particularly strong compared to other crime types (Bock & Hosser, 2014; Jolliffe & Farrington, 2004). It is particularly relevant to note that even if individual general empathy may not be weak, the situational application of empathy in the violent event, dependent upon setting-level circumstances, may be (Marshall et al., 2009), and this will be tested in the current study. The situational application of empathy has been found to be particularly impaired in violent situations in which non-moral emotions such as fear and anger can lead to an increase in self-focus and a corresponding

²⁹ The definition of psychopathy is very complex and its disentanglement is beyond the scope of this study; 'psychopathy' research is used to illustrate the lack of moral emotion displayed by persistent violent offenders because they 'are responsible for a disproportionate amount of crime, and are among the most violent and persistent of offenders' (Anderson & Kiehl, 2012; Saltaris, 2002, p. 731). As Blair et al., (2005, p. 59) argue, 'there are strong indications of impairment in moral reasoning in psychopathy' (also see Aharoni, Antonenko, & Kiehl, 2011). However, it is important to note that there are individuals diagnosed as 'psychopaths' that do not commit violence, therefore the relationship is not causal.

decrease in other-focus, i.e. in empathy and shame (Barnett & Mann, 2013). This aligns with the theoretical perspective of the current study which states that weak empathy lowers the possibility for shame and guilt to be felt or imagined in particular circumstances.

Delving further into the relationship between empathy and crime, studies have explored the existence of a distinction between cognitive empathy and affective empathy. In the current study, cognitive empathy is defined as the ability to identify another person's perspective, and affective empathy is defined as the ability to feel emotional congruence with another person's perspective. Studies exploring differences in both types of empathy between offenders and non-offenders have found inconsistent and contradictory results. For example, offenders have been found to have lower affective empathy specifically (Brouns et al., 2013; Hepper et al., 2013), however others have found this link to apply specifically for males only (Dadds et al., 2009). The lack of empathy characteristic of antisocial behaviour is found to be cognitive, whereas the lack of empathy characteristic of psychopathy is found to be affective (Lockwood, Bird, Bridge, & Viding, 2013). Jolliffe & Farrington (2004) in a meta-analysis of 35 studies examining the link between empathy and offending, find that low cognitive empathy is strongly related to offending, whilst low affective empathy is weakly related to offending. In the current study, the roles of general empathy, as well as cognitive and affective empathy as distinct concepts will be measured and explored further.

As aforementioned, much of this research does not address how or why empathy plays a role in crime. However, these findings can be interpreted in support of the hypothesis of the current study that a strong ability to exercise empathy plays an important role in preventing crime; the current study specifies that weak empathy in isolation cannot predict crime involvement, but rather the relationship exists because empathy is required for an increased possibility to feel the emotions of shame and guilt that play a role in rule-following behaviour in particular circumstances. In summary, this section has outlined evidence of an empirical relationship between weak empathy and crime which serves as useful base-level evidence in support of the propositions of the current study.

45

2.3.3. Key insufficiencies of existing criminological theory and research

In summary, existing criminological theory does not fully model the role of moral emotion in crime; although strain theory, reintegrative shaming theory, and subcultural theory do partially acknowledge the role of emotion, often they do not elaborate or provide detailed mechanisms by which a link to crime exists. The current study will make a theoretical contribution to the criminological arena by developing a theory of the role of moral emotion in crime.

Although existing research convincingly illustrates that there is a link between empathy, shame, guilt, and crime, it is proposed that this link requires further explanation and clarification. Existing research often fails to address various issues: first, studies identify a relationship between empathy, or shame, or guilt and offending, but do not elaborate on the processes or mechanisms by which this relationship exists; second, studies explore one or two emotions in isolation but do not account for the role of the remaining moral emotions; third, many studies lack a robust empirical testing method, studies carry out (for the most part) correlation analyses, rather than path analyses which are more informative by way of ordering influences and can correspond to a more sophisticated theoretical model; fourth, studies do not delve into a detailed discussion or interpretation of their findings; and finally, studies fail to discuss the proposed relationship between moral emotions and other key variables (for example, moral rules) in explaining crime. In the current study, these shortfalls will be addressed and a unique explanation of the role of moral emotion in crime will be examined and tested using robust, empirical, longitudinal data.

2.4. Testing moral emotion and morality in the current study using Situational Action Theory

The current study purports to: identify the process by which empathy plays a role in the possibility to feel shame and guilt in particular circumstances, identify the

process by which guilt and shame contribute to the strength of morality (and subsequently the perception of crime), explore the relationship between moral emotion and moral rules in forming overall individual morality, use robust qualitative and quantitative data, and importantly, offer a detailed interpretation of the study findings.

Situational Action Theory has been introduced as the current study's theoretical framework in chapter 1.³⁰ Although the theory takes the role of moral emotions seriously, focusing on guilt and shame which are the most relevant moral emotions to rule-following or breaking behaviour (Eisenberg, 2000), the role of moral emotion in crime involvement has not yet been as well-developed as other parts of Situational Action Theory. Therefore, further work is required in order to build a comprehensive explanation of the specific role of moral emotion in crime. Situational Action Theory is particularly suitable for the current study of moral emotion: first, it is the only theory to sufficiently acknowledge the role of shame and guilt in crime; and second, it can accommodate plausible and testable mechanisms regarding the role of moral emotion in contributing to the strength of morality, and furthermore, crime decision-making. The current study will focus upon violence as an example crime type to illustrate that moral emotion predicts involvement in violence. Violence is selected because it is one of the most commonly occurring crime types (Wikström et al., 2012) and violent situations are often emotionally salient.

Although Situational Action Theory and its supporting empirical data have evidenced that crime is committed by crime-prone individuals in settings that are conducive to crime (Wikström et al., 2012), it is of critical relevance that even in these particular situations, crime does not always occur. ³¹ In order to establish under which specific circumstances crime does occur, more knowledge is required on the social psychology of the crime events themselves (as emphasised by Wikström et al., 2012). The current study attempts to achieve this by using qualitative data containing detailed information of the events preceding and surrounding real-life violent incidents.

³⁰ Situational Action Theory is one of the most upcoming theories of crime today, and has been very well-received (see, for example, Messner, 2012; Webb, 2013; Agnew, 2014; Smith, 2013).

³¹ 'Crime-prone' individuals are defined as those with a high individual propensity to commit crime (primarily weak moral emotion and weak moral rules) (Wikström, 2006). 'Crime-conducive' settings constitute: the absence of monitors (for example, teachers or police officers), and/or the absence of deterrents (for example, CCTV), and/or the presence of frictions (for example, provocation).

2.4.1. Key research questions

There are two processes under investigation in the current study: first, the relationship between the ability to exercise empathy and the increased or reduced possibility to feel shame and guilt in particular circumstances (hypothesis 1, see chapter 3), and second, the role of shame and guilt in contributing to the strength of morality; if shame and guilt are weak, and the associated moral rule is weak, crime is more likely to be perceived as morally acceptable behaviour (hypothesis 2).

Research question 1: Does general ability to exercise empathy play a role in the possibility to feel shame and guilt in particular circumstances?

'future research should incorporate measures of empathy when seeking to understand individual feelings and behaviours as they relate to important facets of criminology' (Posick et al., 2012, p. 1).

Empathy is important but plays a different role to shame and guilt; the strength of empathy is related to an increased or reduced possibility to feel shame and guilt, which in turn contributes to the strength of morality, which in turn plays a role in action decision-making (see figure 2-2.). Exploration of this research question will provide a novel contribution to Situational Action Theory's core framework; of interest in the current study are people who have a weak ability to exercise empathy, and people who have the ability to exercise cognitive empathy but lack emotional empathy specifically, as is well documented in violent psychopathic individuals.

Research question 2: Do the strength of shame and guilt make an important contribution to the strength of overall morality in predicting violence?

Shame and guilt contribute to the strength of morality; and ultimately, morality plays a role in whether rule-breaking or rule-following behaviour is perceived for action. If a moral rule specific to an act in question is weak, weak guilt and shame will serve to further weaken overall individual morality, and weak morality prescribes that crime is more likely to be seen a morally acceptable action alternative. If a moral rule is weak, it is in most but not all cases, unlikely that the moral emotion specific to that rule will be strong, i.e. if one does not feel an act is wrong, it is unlikely that they will feel very bad (guilt) or be very concerned about the judgements others would make (shame) for considering committing the act. Research questions 1 and 2 are incorporated into a unified model which outlines the relationship between empathy, shame, guilt, and weak moral rules, in the perception of crime as a morally acceptable action (see figure 2-2.).

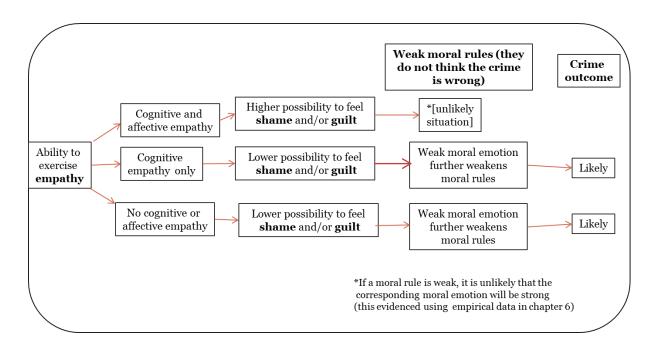


Figure 2-1: Empathy, guilt, and shame in the moral decision-making process that leads to an act of crime

2.5. Chapter summary: The neglect of moral emotion and morality in the study of crime

'Rather than treat moral emotions as one aspect that is independent of other aspects (e.g.

moral cognitions, behaviours), it is the interplay of these various processes that

command the attention of much of this research'

(Lapsley & Carlo, 2014, p. 2)

This chapter has: specified how moral emotion and morality have been neglected in the study of crime; presented the little existing theory and research that has explored the relationship between moral emotion and crime, added insights and attempted to highlight particularly relevant aspects which are lacking, and finally, turning to the current study, proposed the mechanisms by which moral emotion is hypothesised to play a role in contributing to the strength of morality using the Situational Action Theory perspective. The chapter concluded by formulating the research questions and hypotheses of the current study. In summary, the fundamental theoretical propositions of the current study are that a poor general ability to exercise empathy reduces the possibility to feel shame and guilt, and weak shame and guilt, combined with weak moral rules, constitute weak overall morality, which plays a role in crime involvement because crime is more likely to be perceived as a viable action alternative. Chapter 3 will address the definitions, differences, and relationships between empathy, shame, and guilt, and furthermore, their relationships to morality, particularly calling upon psychological literature. Specifically, chapter 3 will develop the theoretical propositions that first, empathy is related to the possibility to feel shame and guilt, and second, guilt and shame each make an essential contribution to the strength of individual morality.

Chapter 3

The contributions of empathy, shame, and guilt to individual morality

'several emotions, including guilt, shame, and empathy, have been viewed as playing a fundamental role in morality'

(Eisenberg, 2000, p. 666)

This chapter outlines empathy, shame, and guilt as separate concepts and discusses their relationships to one another, and their individual contributions to overall morality. Psychological and neuropsychological literature exploring the relationship between moral emotion and morality will be presented to build further evidence for the hypotheses of the current study. Finally, existing evidence on the longstanding debate surrounding the contributions of emotion and reason to moral decision-making is presented as a base framework for the current study of moral emotion.

'the domain of moral begins where the domain of the social begins' (Durkheim, 2002, p. 60)

This chapter will present empathy, shame, and guilt research from the social sciences, particularly using psychological research to build an understanding of i) the different functions of empathy, shame, and guilt and their relationships to one another, and ii) the role of moral emotion in morality and moral decision-making. Chapter 1 outlined the role of moral emotion in Situational Action Theory, and specifically outlined how individual differences in morality, which partly constitutes moral emotion, predict involvement in crime. Chapter 2 specified how the role of emotion in criminology is poorly understood and under-researched, and outlined evidence in support of a relationship between empathy, shame, guilt, and delinquent behaviour, including crime, and outlined the proposed testable hypotheses of the current study. Delving further into the role of empathy and an increased or reduced possibility to feel shame and guilt in particular circumstances.

Moral behaviour has captivated philosophers, anthropologists, psychologists, criminologists, and many scholars from various fields for decades, for example, 'morality is a subject that interests us above all others' (Hume, 1738). Despite the attention that morality has received, there is no clear consensus on the definition of morality and how and which moral emotions play a role in morality. In the current study, morality first, constitutes moral rules, defined as whether one thinks something is right or wrong to do in a particular circumstance, and second, constitutes the moral emotions of shame and guilt (Wikström et al., 2012; Wikström, 2006). The current study proposes that moral emotion plays an essential role in morality and although this has been empirically supported in existing research (Bafunno & Camodeca, 2013; Malti & Latzko, 2010; Tangney, Stuewig, & Mashek, 2007; Treiber, 2014), it remains to be fully incorporated into the explanation of crime. Social information processing theory, which has been developed in the domain of psychology, draws parallels to the Situational Action Theory perspective and may be useful to explore further. For

The contributions of empathy, shame, and guilt to individual morality

example, social information processing theory can be used to enhance knowledge of how moral understanding leads to behavioural responses in actual social interactions (Arsenio & Lemerise, 2010; Malti, Gasser, & Buchmann, 2009). The purpose of this chapter is to highlight that since acts of crime are severe forms of moral transgressions, emotion moral behaviour research can further the understanding of the role of emotion in morality, and subsequently build upon the explanation of criminal behaviour developed in the current study.

3.1. Empathy, shame, and guilt

'Moral emotions are powerful motivational forces which help us to distinguish between right and wrong'. (Fourie, Kilchenmann, Malcolm-Smith, & Thomas, 2012, p. 1)

In the current study, empathy is hypothesised to play a key role in the possibility to feel shame and guilt in particular circumstances and shame and guilt are hypothesised to be central to rule-following and rule-breaking; and each will be discussed in turn below.³² There is contention in the literature concerning several issues which will be addressed and clarified in the following sections: which moral emotions are of key importance, definitions of empathy, shame, and guilt (which are often poor or omitted), the differences and similarities between shame and guilt (see section 3.2.1), where and how empathy plays a role (see section 3.2.3), and measurement of moral emotion (see chapter 4). The developmental processes of empathy, shame, and guilt in childhood and adolescence will be discussed in chapter 8.

³² Other moral emotions have not been found to be as closely linked to moral behaviour, e.g. embarrassment (Eisenberg, 2000; Tangney et al., 2007) and are therefore not incorporated into the current study. Haidt identifies 4 types of moral emotions; self-conscious emotions (e.g. shame, guilt), emotions related to suffering of others (e.g. empathy), emotions concerning others (e.g. rage), and emotions relating to praise of others (e.g. fear) (Garcia and Otrosky, 2006).

3.1.1. Ability to exercise empathy: understanding and feeling emotional congruence with another person's viewpoint

'empathy itself is the *most valuable resource* in our world' (Baron-Cohen, 2011, p. 42, author emphasis)

Empathy is an emotional process as opposed to a moral emotion; in the current study, it is defined as the ability to identify and feel emotional congruence with another person's viewpoint (Jolliffe & Farrington, 2004). Cognitive empathy is defined as the ability to understand or identify another person's perspective and feelings and affective or emotional empathy is defined as the ability to feel emotional congruence with another person's perspective and feelings. Cognitive empathy is primarily housed in the 'theory of mind', which involves understanding another person's perspective in order to construct social reality, understand social situations, accomplish social interaction and aid moral development (Decety & Michalska, 2010). A lack of empathy, i.e. a poor ability to identify another person's perspective is found to be apparent early in childhood from as young as ages 2-3 (Saltaris, 2002).

Empathy is hypothesised to play a role in the possibility to feel shame and guilt in particular circumstances because these self-evaluative feelings may not arise without consideration of the consequence of actions to others, or a perception of the judgment others would make. As empathy is often experienced automatically (Hoffman, 2002), it is an efficient tool for acquiring knowledge about subsequent interactions with others (de Vignemont & Singer, 2006). As with shame and guilt, empathy is measured along a spectrum. The empathy spectrum is far from straightforward because individuals may experience cognitive empathy whilst simultaneously lacking emotional empathy, as is often the case with psychopaths (Raine, 2013).

Baron-Cohen (2011) states that empathy is the most valuable resource in the world because he believes that a lack of empathy plays a fundamental role in the occurrence of many of the unimaginable acts from human history, including persistent and prolific acts of violence (for example, the killing of hundreds of thousands of people in Nazi Germany). Baron-Cohen categorises particular individuals with no empathy as 'zero-negative', specifically individuals for which the consequences may be negative, such as involvement in crime, difficulties in social situations, or building

54

relationships with others (Baron-Cohen, 2011).³³ 'Zero-negative' categories include psychopaths, those with borderline personality disorder, and those with narcissistic personality disorder. Baron-Cohen's ideas align with the proposed ideas in the current study that poor empathy is likely to play a role in moral transgressions (including acts of crime), but also serves as a reminder that empathy is by no means a causal factor in crime; this is evidenced by individuals with autism who lack empathy but may have never been involved in any crime.

Of interest in the current study are individuals that report weak general empathy and individuals that report moderate-strong cognitive empathy and simultaneously report weak affective empathy (also known as emotional empathy deficit disorder, or EEDD, Gonzalez-Liencres, Shamay-Tsoory, & Brüne, 2013). Furthermore, as opposed to a direct link between empathy and moral behaviour or crime, the research focus will be on the role that empathy plays in increasing or decreasing the possibility to feel shame and guilt in particular circumstances. There is less existing evidence that empathy plays a role in the possibility to feel shame (compared to guilt, see section 3.2.3), and this will be explored using empirical data in the current study.

3.1.2. Ability to anticipate shame: a negative feeling experienced in the presence or consideration of others

Shame is 'the experience of being exposed to a real or imagined rejecting audience, followed by a tendency to hide or disappear' (Fontaine, 2006, p. 274)

Shame is defined as a negative feeling, not necessarily experienced as a result of an action, which is felt in the presence or consideration of others (Wikström et al., 2012). This definition is used in the current study, and is elaborated upon: shame is a social sanction rather than an internal sanction, it has a negative global or whole-self

³³ Those with Asperger's syndrome and autism are categorised as 'zero- positive', because in these cases, the consequences may be positive (e.g. heightened memory or mathematical capabilities).

focus, it is associated with feelings of powerlessness and incompetence, involves a fear for social exclusion, and a desire for improvement of unwanted aspects of the self (Fontaine, 2006). The function of shame is considered to be analogous to pain; pain is a warning that physical harm ensues, and shame is a warning that a relationship may be disrupted. Both pain and shame serve as a negative signal to stop or avoid the act in question (Elison, 2005). The concept of 'solitary shame' is applicable to situations whereby the viewpoints of others are considered but those others are not necessarily physically present in the situation; for example, an ex-smoker may feel shame upon smoking a cigarette after a period of successful abstinence upon consideration of the viewpoint of a spouse. The shame explored in the current study refers to an individual's general ability to anticipate shame as well as the situational application of shame at the time and after a specific act of crime. Section 3.2.4. will outline evidence that shame is linked to morality and subsequently to rule-breaking behaviour.

3.1.3. Ability to anticipate guilt: a negative feeling experienced inwardly as a result of a particular action

'Guilt proneness is a key aspect of moral disposition' (Cohen, Panter, & Turan, 2012, p. 357)

Guilt is defined as a negative feeling often experienced as a result of an action, which is felt inwardly towards oneself (Wikström et al., 2012). This definition is used in the current study, and is elaborated upon: guilt is an internal sanction for the violation of personal expectations or moral norms and obligations (Jackson, Blackburn, Tobolowsky, & Baer, 2011), it concerns concrete behaviour, a sense of agency, and a tendency to repair (Fontaine, 2006). Guilt-proneness (referred to as a strong-moderate ability to anticipate guilt in the current study) is a dispositional tendency to imagine negative feelings about personal wrongdoing, even when the wrongdoing is not publicised (Cohen et al., 2012). In a court of law, when suspected offenders enter a plea bargain they claim to be 'guilty' or 'not guilty'; they are referring to whether they committed the crime or not as opposed to whether they feel the emotion of guilt. In

contrast, the guilt explored in the current study refers to an individual's general ability to anticipate guilt as well as the situational application of guilt at the time and after a specific act of crime. Section 3.2.4. will outline evidence that guilt is linked to morality and subsequently to rule-breaking behaviour.

3.2. Empathy, shame, guilt, and morality: relationships to one another

By exploring shame and guilt, the research aim is to develop a deeper understanding of which emotional processes and mechanisms are uniquely specific to morality. The current study proposes that criminal offenders are likely to have a weak general ability to exercise empathy, and weak general ability to anticipate guilt and shame. If an individual does not think it is wrong to commit a particular act of crime, i.e. has weak moral rules, weak shame and guilt contribute to further weaken individual morality. Consequently, it is those individuals who are more likely to see crime as a morally acceptable and viable action alternative. This section examines the various relationships between the main concepts examined in the current study; first, the differences between shame and guilt, second, the specific relationships between cognitive empathy, affective empathy, guilt and shame, third, the relationships between general empathy and guilt and general empathy and shame, and fourth, the relationship between general empathy, shame, guilt, and morality. Finally, neuropsychological research exploring the importance of the role of moral emotion in morality will be outlined.

3.2.1 Comparison of the concepts of shame and guilt

'Feelings of shame make us want to undo who we are, whereas feelings of guilt make us want only to undo what we have done' (Lickel, Schmader, & Spanovic, 2007, p. 361)

In the current study, shame and guilt are selected as the key moral emotions because there is evidence to support the proposition that they have a strong link to moral behaviour, for example, Tangney & Fischer (1995) state that shame and guilt play a key role in fostering moral behaviour and in inhibiting all types of moral transgressions (see also Svensson, 2004). There are inconsistent and contradictory theoretical and empirical accounts regarding the functions of shame and guilt, which is not surprising considering the lack of consensus over their definitions (see Elison, 2005) and the existence of cultural differences in their interpretations (Fontaine, 2006; Krettenauer & Jia, 2013; Markus et al., 1991). For example, in China, guilt is linked to interpersonal relationships, and shame has many various descriptive words, whereas in the USA, guilt is more tightly linked to legal and moral norm breaking and shame is less frequently acknowledged and labelled (Fontaine, 2006; Shaver, Shelley, & Schwartz, 1992). The Ancient Greeks had one word for shame and guilt; *aidos* (Williams, 2008), indicating that they did not view them as distinct concepts. In contrast to this, the current study proposes that shame and guilt have erroneously been used interchangeably (Tibbetts, 2003) and presents evidence for their treatment as distinct concepts, and furthermore for their different roles in relation to morality (see table 3-1.).

Comparison	Shame	Guilt		
Self Vs specific	Associated with wrong in	Associated with a wrongful action		
action	oneself (1,2) - negative	(1,2) - negative evaluation is		
	evaluation is directed towards	restricted to ones actions (3),		
	the self (3), personal	action devaluation (4)		
	devaluation (4)			
Circumstance	Response to disapproval by others (5)	Response to violation of internal norms (5)		

Level of exposure to others	More exposure, a desire to hide (6)	Less exposure, not necessarily a desire to hide (6)
Link to empathy	Not as closely linked to empathy (7)	Closely linked to empathy (7)
Evolution/origin	A need to be attractive to others (8)	An empathic desire to look after others (8)
Link to anger	Closely linked to anger (7)	Not as closely linked to anger (7)
Amends	It may not necessarily be possible to make amends (1)	It may be possible to make amends (1)

1 (Joyce, 2007), 2 (Eisenberg, 2000), 3 (H. Lewis, 1971), 4 (Elison, 2005), 5 (Leary, 2000), 6 (Wicker, Payne, & Morgan, 1983), 7 (Tangney et al., 2007), 8 (Gilbert, 1997)

Table 3-1: Comparison of the concepts of shame and guilt

'People are ashamed or guilty because they assume that someone (self and/or other) is making a negative judgement about an activity or characteristic of theirs' (Tangney & Fischer, 1995, p. 4)

First, shame and guilt differ in their focus of evaluation. Guilt is associated with a wrongful action where amends may be made, i.e. 'How could I have *done that*?', whereas shame is associated with wrong in oneself where amends may not necessarily be made, i.e. 'How could *I* have done that?' (Braithwaite & Braithwaite, 2001; Joyce, 2007; Lewis, 1971). Second, guilt is more closely linked with empathy but less so with anger; shame is less closely linked with empathy but more so with anger (Tangney et al., 2007). Furthermore, anger is a cause of guilt, i.e. feeling angry about a particular action can cause feelings of guilt, but a consequence of shame, i.e. feeling shameful about oneself can cause feelings of anger because the integrity of the self is threatened (Carnì, Petrocchi, Del Miglio, Mancini, & Couyoumdjian, 2013). In his comparison of

shame and guilt in the aptly titled 'A hundred years of apples and oranges', Elison (2005) reiterates that shame and guilt have been poorly understood historically and require clarification as separate concepts. Other researchers also outline that shame and guilt are based on different mechanisms (Svensson, 2004).

Third, although both shame and guilt occur in private as well as public settings, people's negative self-evaluations of their public transgressions are more indicative of shame, whereas people's negative behaviour-evaluations of their private transgressions are more indicative of guilt (Wolf, 2009). Unlike guilt, shame is more strongly associated with a desire to hide or withdraw from the situation following a transgression (Bafunno & Camodeca, 2013; Tangney & Dearing, 2002). Table 3-1 summarises the key differences between shame and guilt.

Empirically, guilt and shame are highly correlated, but crucially they emerge as separate factors in exploratory and confirmatory factor analyses (Cohen, Wolf, Panter, & Insko, 2011). In sum, converging evidence suggests that guilt and shame are distinct concepts which are experienced under different circumstances (Dearing, Stuewig, & Tangney, 2005; Ghorbani, Liao, Çayköylü, & Chand, 2012; Leith & Baumeister, 1998; Svensson, 2004; Tangney & Dearing, 2002; Tangney, Miller, Flicker, & Barlow, 1996; Tangney, 1991). In conclusion, there are differences between shame and guilt with regard to personal norms and expectations, the perceived reaction of others (relevant to shame), ability to control the situation (relevant to guilt), the classification of behaviour as bad and morally reprehensible (relevant to guilt), and feelings of weakness and incompetence (relevant to shame).

The current study explores whether it is possible to feel guilt-free shame and shame-free guilt. It is proposed that in the main, guilt and shame are experienced simultaneously, but that it is possible to feel guilt-free shame (i.e. to feel a negative feeling about the self as whole, without feeling bad about a specific action) and shamefree guilt (i.e. to feel bad about a specific action, without feeling a negative feeling about the self as whole) in the crime decision-making process. It is also hypothesised that the majority of people will have a strong-moderate ability to weak general ability to weak general ability to anticipate both guilt (a bad feeling for a wrongful action) and shame (a bad feeling of the self upon consideration of a significant other's disapproval of the situation) when contemplating an act of crime. However, it is individuals who

60

feel weak shame and guilt that will provide the key focus; the primary question is whether those individuals, as a consequence of having overall weak individual morality, are more likely to see crime as a morally acceptable action alternative.

3.2.2 The relationship between cognitive empathy, affective empathy, and shame and guilt

Both cognitive empathy and affective empathy are hypothesised to contribute to the possibility to feel shame and guilt in particular circumstances, prior to the moral decision-making process (see figure 3-1.).

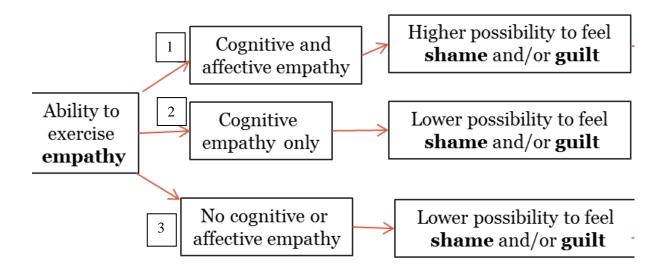


Figure 3-1: The relationship between cognitive empathy, affective empathy, and the possibility to feel shame and guilt

If cognitive and affective empathy are moderate-strong, there is an increased possibility to experience guilt and shame in particular circumstances (see figure 3-1, row 1). Ability to feel vicarious emotional congruence with another person's viewpoint (affective empathy) is not possible without the ability to identify another person's

viewpoint (cognitive empathy).³⁴ However, if cognitive empathy is experienced but affective empathy is not experienced, there is a reduced possibility to feel guilt and shame in particular circumstances because 'full' empathy is not experienced (see figure 3-1, row 2). An ability to exercise cognitive empathy alone can be advantageous in the commission of violence; for example, offenders may deceive victims by connecting socially to lure them in, without the experience of an emotional barrier regarding the predicament of their victims, as is often seen with psychopathic acts of violence. Deceptive behaviour of this kind has been found to correlate to a high functioning 'theory of mind' (Raine, 2013), i.e. very strong specific cognitive empathy. Finally, if both cognitive and affective empathy are weak, as is the case with poor general empathy, it is hypothesised that there will be a reduced possibility to feel guilt and shame in particular circumstances (see figure 3-1, row 3). The roles of cognitive and affective empathy in the possibility to feel shame and guilt in particular circumstances have been summarised below (see table 3-2.) In sum, both cognitive and affective empathy are hypothesised to be required for an increased possibility to feel shame and guilt in particular circumstances, and this will be tested using empirical data in the current study.

		Cognitive empathy			
		Y	Ν		
Affective	Y	✓	-		
empathy	N	×	×		

Table 3-2: The roles of cognitive empathy and affective empathy in the possibility tofeel shame and guilt

3.2.3. Existing research and its limitations: The relationship between empathy and shame and empathy and guilt

³⁴ In order to feel another person's perspective, an individual must have the ability to identify what that perspective is; therefore it is not possible to experience affective empathy without cognitive empathy.

'although Wikström does not discuss empathy at length, empathy would seem to be an important element in SAT. Of particular importance is the impact of empathy on decision-making, for it enables us to understand the intentions, beliefs, and emotions of others'

(Posick et al., 2012, pp. 7-8).

The following section outlines existing research that has investigated the existence of a relationship between empathy and shame and empathy and guilt. Whilst shame and guilt reflect inward beliefs and intentions of an individual, empathy reflects intentions and beliefs of others. Empathy has been linked to shame and guilt both theoretically (Hoffman, 1982; Lewis, 1971) and empirically. However, many of the research studies leave some unanswered questions; they often find inconclusive results due in part to variations in conceptualisation and measures of empathy, shame, and guilt adopted (Leith & Baumeister, 1998), and identify difficulties in measuring situational moral emotion (e.g. shame, see Turner, 2014). The current study will attempt to account for these difficulties with the use of general and situational measures. Furthermore, many existing research studies do not offer an interpretation or explanation of the possible mechanisms that link empathy to guilt and empathy to shame, as well as their relationships to delinquency (Fraser, 1996), which will be attempted in the current study. Nonetheless, existing research (presented below) provides initial evidence to support the hypotheses of the current study.

Studies investigating the link between empathy and shame are scarce, however a few studies provide evidence that empathy is more strongly related to guilt than to shame (Basil, Ridgway, & Basil, 2008; Tangney, 1991), i.e. that both theoretically and empirically, if an individual has weak empathy they are more likely to experience weak guilt than shame (Tangney et al., 2007) in particular circumstances. However, positive correlations are found for empathy and guilt as well as empathy and shame that range from .15-.49 (Silfver, Helkama, Lönnqvist, & Verkasalo, 2008) and indicate that a link between empathy and guilt and empathy and shame does exist. ³⁵ Delving further,

³⁵ However, these correlations are found for females only. The current study proposes that moral emotion plays an important role in a general theory of crime for all individuals regardless of gender, race, age or other demographic variables. That is not to say that these factors do not play a role in the development of and capacity to experience moral emotion but that they are not causes of crime.

cognitive empathy has been found to be more strongly related to guilt and affective empathy has been found to be more strongly related to shame (Leith & Baumeister, 1998) and this will be explored in the current study.

As proposed in the current study, Hoffman (1982), a leading empathy researcher, states that individuals with weak empathy may not have the capacity to experience guilt (see also Roberts, Strayer, & Denham, 2014; Silfver-Kuhalampi, 2008), and furthermore that empathy is necessary for strong morality. Beyond the situational level, it is hypothesised that the development of guilt originates in empathy; empathy and guilt develop as early as ages 2-3 and share a common developmental core (Tangney & Fischer, 1995). Harris (2001, 2003) reports that shame and guilt predict higher empathy towards victims in a sample of 720 drink drivers. However, the direction of this relationship is counter to that proposed in the current study that empathy comes before shame and guilt in chronological sequence. Harris found that shame arises when moral rules are moderate or uncertain, which also opposes the hypotheses of the current study which state that shame is more likely to be strong when the act-specific moral rule is strong. In conclusion, there is very little existing research exploring a link between empathy and shame and empathy and guilt and results are mixed and contradictory.

In sum, although based on limited research, studies indicate that an ability to exercise empathy is required for an increased capacity to feel shame and guilt in particular circumstances; therefore consideration of all three factors may be required in order to provide an explanation of moral emotional input to moral decision-making. Moving on from empathy, shame, and guilt as separate components and the relationships between them, the following section addresses the importance of shame and guilt in strengthening or weakening overall individual morality, and the role of weak morality in crime decision-making, specifically in filtering whether crime is perceived as a morally acceptable action (see chapters 1 and 2 for elaboration).

64

3.2.4. Existing research and its limitations: The relationship between empathy, shame, guilt, and individual morality/moral behaviour

'Serious persistent deviation from moral and societal standards is thought to reflect a fundamental impairment in the capacity to experience shame and guilt'

(Tangney et al., 2011, p. 1)

It is important to note that the current study does not hypothesise that lack of empathy, shame, and guilt in isolation directly or solely plays a role in moral transgressions or crime involvement. Rather, it is when weak shame and guilt are combined with weak moral rules, within a setting that is also conducive to crime, that crime is more likely to occur (see chapter 1 for elaboration). Therefore the role of moral emotion is very important when other key factors are aligned, for example weak moral rules (Jaarsma, 2013). As Wainryb & Recchia (2012, p. 24) state, 'to understand the role of emotions in moral life, we may need an approach to conceptualizing the relation between emotions and morality that allows variation within individuals and flexibility across situations'. The explanation for moral transgressions not defined by law (for example, queue jumping) is the same as the explanation for moral transgressions defined by law (i.e. crimes); therefore moral behaviour research is valuable to build evidence for the current study's propositions.³⁶

Several conclusions can be inferred from the various relationships identified in existing research. First, although the current study proposes that empathy plays a role in moral behaviour via the role of shame and guilt in strengthening morality (see also Muris & Meesters, 2014), there is evidence to support a direct link between empathy and prosocial behaviour (Basil et al., 2008; de Vignemont & Singer, 2006; Eisenberg & Morris, 2001; Mcdonald & Messinger, in press.; White, 2014), and furthermore evidence to support stability of empathy across adulthood (Eisenberg, Hofer, Sulik, & Liew, 2014; Hühnel, Fölster, Werheid, & Hess, 2014). As Martens (2002, p. 173) states, 'Empathy is a very important emotional dimension of morality'. Durkheim (2002, p. 207) identifies attachment to social groups as one of the key elements of morality

³⁶ See chapter 2 for an outline of existing research that has explored the relationships between empathy, shame, guilt, and crime specifically.

development which he emphasises 'is of course in our faculty of empathy'. Convergent evidence from psychometric tests and magnetic resonance imaging (MRI) studies reveal that empathy is found to motivate appropriate moral development (Decety & Michalska, 2010; Spinella, 2005). Furthermore, studies exploring the different roles of affective and cognitive empathy in moral behaviour reveal mixed results, although they particularly emphasise the importance of the former (Aaltola, 2014). All in all, existing research confirms the current study's propositions that empathy alone does not play the key central role in moral behaviour, and other emotions such as guilt are equally, if not more, important (Prinz, 2007).

Second, the research presented below outlines evidence for a particular link between empathy, guilt, and moral behaviour. Children with higher empathy and guilt are found to be more likely to follow rules and this is distinguishable from as early as 3-4 years of age (Aksan & Kochanska, 2005). John Stuart Mill (Mill, 1869; Wright, 1994, p. 361) termed empathy and guilt the 'ingredients of morality'. Hoffman (1982) developed a theory regarding the role of empathy in moral development in which he states that empathic distress leads to guilt, and eventually through habituation, guilt is generated on contemplation of action. This directly supports the propositions of the current study that weak empathy reduces the possibility to feel guilt (and shame) and this is particularly relevant for the development of habitual action and can offer a plausible explanation for the occurrence of persistent crime. Anticipation of guilt for a moral transgression has been found to prevent people from acting unethically (Leith & Baumeister, 1998), for example, from making unethical business decisions in the workplace (Cohen et al., 2012).³⁷ Other research also demonstrates a firm a link between guilt and moral behaviour (Bracht & Regner, 2013; de Hooge, Nelissen, Breugelmans, & Zeelenberg, 2011; Olthof, 2012), for example, 45% of those with weak guilt are found to carry out a moral transgression (lying) for monetary gain, compared to 20% with strong guilt (Stuewig & Tangney, 2007). The emotion of guilt is

³⁷ Although moral transgressions in the workplace are different actions to, for example, acts of violence, the explanation of why the act is committed remains the same; weak morality enables the act to be perceived as a morally acceptable action.

believed to provide an important mechanism for moderating ones moral conduct, and believed to be central to the moral conscience (Joyce, 2007).³⁸

Third, there is a distinct lack of research specifically exploring how shame contributes to individual morality. Elster (1998) discusses the emotional complexities and emotional changes that occur in the human mind and describes shame as a deeply human emotion that has explanatory relevance for social situations (of relevance for the current study, this could be applied to situations involving moral transgressions or acts of crime) (see also, Beardman, 2004). Elster views the emotion of shame as being the primary support for adherence of social norms, which supports the propositions of the current study. Cohen, Panter, Turan, Morse, & Kim (2013) note that although shame proneness plays a role in morality, it is not as central to moral character as guiltproneness. In summary, there is ample evidence to implicate empathy and guilt in moral behaviour, however there is little research exploring the relationships between shame and moral behaviour.

3.2.5. Neuroscientific research: the role of moral emotion in morality

'the VMPFC shows an...association with personal morality, particularly moral emotions' (Treiber, 2013, p.10)

Why consider neuroscientific research in the study of crime?

Although the current study will not empirically test any neuroscientific hypotheses, there is no action without the brain (Treiber, 2011); therefore understanding of the brain is essential in the study of any behaviour, including crime. Everything that humans think, say, and do is guided by brain processing. Neuroscientific research supports the interpretations of moral emotion within individual propensity to commit crime. The roots of the current research study (and any other research that explores

³⁸ The incorporation of guilt in psychological theory is not a new concept, for example, it features in Freud's psychoanalytical theory (Freud, 1910).

human action) can be explored using neuroscientific research. Neuroscience can support and inform the propositions of the current study regarding the role of emotion as a key contributor to morality, and subsequently as a key contributor to moral judgement (Fourie, Thomas, Amodio, Warton, & Meintjes, 2014; Young & Dungan, 2012). There is ample empirical behavioural evidence to support the importance of morality in crime within the Situational Action Theory framework (see chapter 2, also see Wikström et al., 2012; Wikström & Treiber, 2007; Wikström, 2009), and this can be further corroborated with how the brain works, specifically to include the role of moral emotion (Treiber, 2013).³⁹

The brain contributes to the ability to control or experience emotion; its lesion and dysfunction can reveal how and where the moral emotions operate (Rushby et al., 2013) and the powerful role they play in moral decision-making (Moll & de Oliveira-Souza, 2007). There is no gene for morality, nor one brain area for morality (Damasio, 2003; Greene & Haidt, 2002; Joyce, 2007; Young & Dungan, 2012), but rather, a subset of various brain areas (primarily the ventromedial prefrontal cortex, or VMPFC) are responsible for morality, therefore attempts to link the brain to morality result in a complex picture. Shame and guilt are found to share some neural networks but also have independent areas of activation (Michl et al., 2014; Wagner, N'Diaye, Ethofer, & Vuilleumier, 2011).

The role of the ventromedial prefrontal cortex (VMPFC)

The VMPFC is not conceived as a moral emotion centre per se because it liaises with other brain areas such as the limbic system that support moral behaviours but are not dedicated to rule-following behaviour exclusively, however it is the key area implicated for moral emotional processing.⁴⁰ The VMPFC resides in the prefrontal cortex in the frontal lobes, located at the front of the brain above the eyes (Goldberg,

³⁹ The neurobiology underlying habit (a decision-making type in which moral emotion plays a particular role) and deliberation has already been explored in relation to Situational Action Theory and supports the suppositions of the theory (see Treiber, 2008, 2014; Wikström & Treiber, 2007). This is discussed in more detail in chapter 1.

⁴⁰ For example, these areas are also dedicated to biological regulation, memory, non-moral decisionmaking, and creativity (Damasio, 2003).

2001). It has been well established that this area is responsible for emotional moral processing, including integrating moral knowledge with emotional cues and empathy (Glenn & Raine, 2009; Goldberg, 2001; Sobhani & Bechara, 2011; Treiber, 2011). Patients with deficits in this area reveal an inability to feel guilt (Greene et al., 2001; Greene, Nystrom, Engell, Darley, & Cohen, 2004), shame, to empathise with others (Damasio, 2003; Raine & Yang, 2006) regarding moral transgressions, and an insensitivity to future consequences of their actions (Bechara, Tranel, & Damasio, 2000). Therefore when the VMPFC is damaged, it prevents normal functioning in moral emotional processing (Raine, 2013).

Moral emotions produce increased activity in areas associated with social and emotional processing, whereas basic non-moral emotions produce increased activity in areas responsible for working memory (Greene et al., 2001).⁴¹ Greene (Greene, Sommerville, Nystrom, Darley, & Cohen, 2001) and Damasio's (Damasio et al., 2000; Damasio, 1994) brain scanning studies are particularly valuable because they demonstrate the specific importance of moral emotion at the time of a moral judgement. Greene (2007) demonstrates the specific role of moral emotion in personal moral judgements (typically those that evoke emotion, such as deciding whether to physically kill one person in order to save 5 people), compared to impersonal moral judgements (typically those that evoke less emotion relatively, such as deciding whether to pull a lever to kill one person in order to save 5 people); which reveal activation in different brain areas (see also Navarrete, McDonald, Mott, & Asher, 2012, in which these findings are replicated in a virtual reality environment).

When emotion is evoked (in the personal condition), it is found to 'drive moral disapproval' (Greene, 2007, p. 322) and this explains why most people select to pull a lever rather than physically harm someone in the scenario example above (Greene & Haidt, 2002; Moore, Clark, & Kane, 2008). Most normal controls feel uncomfortable about intervening, despite saving more lives. However, VMPFC patients are more likely to intervene and act rationally, demonstrating a distinct lack of moral emotion (Thomas,

⁴¹ Other moral emotions, e.g. disgust, also guide moral judgements. If an individual feels disgust, e.g. if they feel dirty when asked to fill out a questionnaire on a dirty desk, or smell something foul in an interview area, they make harsher moral judgements (Schnall, Haidt, Clore, & Jordan, 2008). However, such moral emotions are not relevant to the general theory of crime proposed in the current study.

Croft, & Tranel, 2011). Therefore this provides evidence that irregular functioning of the VMPFC, characterised by lack of guilt and shame, plays a role in moral decision-making; and this can be extended to apply to rule-breaking behaviour. This provides evidence that the majority of people avoid the negative emotional consequences of a moral transgression. If people acted entirely rationally, the responses for both scenarios would be equal, i.e. there would be no emotional barrier to physically pushing someone as opposed to pulling a lever.

This research indicates that the brain has distinct networks involved in the processing of personal emotional material in moral judgement, and furthermore, that emotion plays an important role in the potential behavioural outcome. Acts of crime often involve the former ('personal' situations), particularly acts of violence, because they often involve altercations with other people (sometimes familiar others) and are therefore often emotionally salient. Of key relevance, there is evidence that individuals that display abnormal moral reasoning have deficits in such personal emotional neural correlates. Other neural systems are not found to compensate for this damage by taking over their role, therefore dysfunctional moral capabilities appear to be permanent (Anderson, Bechara, Damasio, Tranel, & Damasio, 1999).⁴² Damasio (2003) states that weak moral emotion may lead to adaptation of moral neural circuits as a result of abnormal chemical signalling on a genetic basis and/or social and educational factors.

Of relevance for the current study, neuroscientific research demonstrates that violent offenders are found to lack the ability to experience moral emotion that prevents the breaking of moral acts, i.e. 'some of the brain impairments that are observed in antisocial individuals disrupt moral emotion and/or decision making, thereby predisposing individuals to rule-breaking, antisocial behaviour' (Glenn & Raine, 2014, p. 60). Much of the neuroscientific work exploring emotion and crime, particularly with regards to lack of empathy and guilt, has involved psychopaths that have committed persistent violent behaviour. There is evidence for a specific link between lack of moral emotion, as opposed to a lack of emotion *per se*, and psychopathy (Blair et al., 2005; de Oliveira-Souza et al., 2008; Harenski, Kim, & Hamann, 2009; Reniers et al., 2012;

⁴² For example, studies with individuals with language centre defects have shown that other brain areas can be recruited in order to achieve language competency. However, this is not the case for moral reasoning (Anderson et al., 1999).

Yang & Raine, 2008). Furthermore, general offenders reveal reduced functioning in the brain areas (such as the postcentral gyrus) involved in empathy (Bertsch et al. 2013) and even show atypical brain activity during empathy tasks (e.g. when viewing others in pain, Decety, Chen, Harenski, & Kiehl, 2013; Marsh et al., 2013) providing evidence that offenders have atypically weak empathy. Furthermore, the neural substrates that support the 'theory of mind' that has been coined the faculty for cognitive empathy (Young & Dungan, 2012), as well as the neural substrates of affective empathy (Bzdok et al., 2012) are believed to constitute an important part of the moral brain.⁴³ Offenders also reveal reduced functioning in physiological measures, such as low resting heart rate and skin conductance (Wahlund, Sorman, Gavazzeni, Fischer, & Kristiansson, 2010), that have been linked to a lack of empathy (Moffitt, Ross, & Raine, 2011).

Raine's (2013) functional neuroanatomical model of violence posits that various brain areas (the amygdala, hippocampus, insula, cingulate, and superior temporal areas), when dysfunctional, influence affective empathy, moral judgement, expression of guilt, and production of affective states. This dysfunction is likely to lead to various processes relevant to crime decision-making; including a disregard for rules, a disregard for others feelings, and a reduction in the uncomfortable self-evaluative emotions associated with moral transgressions (i.e. shame and guilt). These propositions align with the ideas of the current study and can be explored in more detail in future neuroscientific research.

Implications of neuroscientific research for the current study

In the current study, the proposition is not that every individual that displays weak empathy, guilt and shame has undiagnosed brain damage; rather that empathy, guilt, and shame appear along a continuum and individuals with weak moral emotion may have a malfunction or inefficiency in the various brain correlates. Addressing where the moral emotion faculties originate and reside and taking into consideration the evidence that poor functioning of such emotional mechanisms is likely to play a role in rule-breaking behaviour can shed light on the role of moral emotion in acts of crime. However, all neuroscientific results should be interpreted with caution because PFC

⁴³ Specifically, the neural substrates of cognitive empathy include the right-temporal parietal junction (Young & Dungan, 2012).

dysfunction does not necessarily lead to involvement in crime (i.e. it is correlational, not causal). This is a potential avenue for future research to build upon the key propositions of the current study. In conclusion, neuropsychological evidence aligns with the hypotheses of the current study; poor moral emotional responsivity can contribute to a poor ability to make rule-following judgements. The following section develops the role of moral emotion in habituation by outlining the role of emotional intuition in the development of habitual action choices.

3.2.5.1. The role of emotional intuition in habitual action

Intuition is emotional input that is automatic, rapid, and plays a powerful role in decision-making; this section outlines evidence for the function and role of intuition in habituation. Intuition is relevant for the current study because emotional input is hypothesised to play a key role in the development of habitual action, such as habitual (frequent and persistent) acts of violence. Human minds are constantly reacting intuitively to everything they perceive and action responses are based upon these reactions. Haidt (2001) advocates that emotions are the driving force behind the concept of morality, for example, he states that emotions are 'in control of the temple of morality' (p.866) (see also Greene & Haidt, 2002) and defines moral intuition as the sudden appearance of conscience in a moral judgement, including an affective valence, without any conscious awareness of having gone through steps of searching, weighing evidence, or inferring a conclusion. Affect contributes to perception; this affective intuition comes before other cognitive or rational processes and therefore plays a powerful role in what people think and do (Haidt, 2013). ⁴⁴ In a decision-making scenario, poor affective reactions (such as a lack of shame and guilt) weaken overall morality and encourage crime to be perceived as morally acceptable and therefore viable (see chapter 1 for elaboration on the

⁴⁴ For example, a subtle flash of positive feeling is evoked upon reading the word 'happiness'. Wundt, the founder of experimental psychology, documented this concept in the 1980s (see, for example, Knutson & Greer, 2008).

perception of action alternatives). This section specifically outlines how such poor affective reactions can develop to become automatic, intuitive, and repetitive.

Haidt (2012) illustrates the importance of moral emotion (and its intuitive nature) in decision-making with the concept of 'moral dumbfounding', defined as an inability to verbally explain what one knows intuitively, i.e. feeling an act is just wrong, but not being able to explain why (see also, Woodward & Allman, 2007). This supports the theoretical ideas of Situational Action Theory adopted in the current study that strong individual morality prescribes that some people simply do not and would not under any circumstances view crime as an option, even if they cannot always explicitly explain why. The role of emotion in complex decisionmaking has been assessed using the Iowa Gambling Task (IGT), which tests the intuitive feeling that certain decks of cards give more favourable monetary returns than others (Bechara et al., 2000), and furthermore, that emotion-based skills are specifically required in order to be intuitively successful (Turnbull, Evans, Bunce, Carzolio, & O'connor, 2005). The IGT was administered in the Peterborough Adolescent and Young Adult Development Study (PADS+); data shows a correlation to moral emotion (guilt and shame) measures (see Treiber, 2013), providing support for the link between moral emotion and intuition. Furthermore, individuals with lower scores on this task (indicating poorer intuition) are more likely to be involved in crime (Treiber, 2013).

Automatic emotion regulation is the process by which emotion plays a role in rule-following behaviour (Mauss, Bunge, & Gross, 2007), for example, strong shame and guilt strengthen overall morality and therefore rule-breaking action is not perceived as an action choice. However, if this process is dysfunctional, rulebreaking behaviour is more likely to be perceived. LeDoux (2002), in his research investigating brain synapses, states that emotions must play a major role in shaping behaviour because daily emotional experiences continually adapt neural circuits; this provides further evidence that previous feelings and actions increase the future likelihood of the same feelings and actions. In the same vein, the phenomenon of 'affective primacy' states that if a stimulus is encountered again, i.e. if the individual finds themselves in the same situation, the same feelings are likely to be experienced again (Lai, Hagoort, & Casasanto, 2012).

Zajonc's (1984) experiments reveal that the brain tags familiar stimuli as positive. ⁴⁵ This occurs with almost everything that an individual processes in the world around them and is applicable to involvement in crime; if offenders repeatedly find themselves in the same 'familiar' situation, if intuitive gut feelings are weak, morality will subsequently be weakened. Inversely, for law-abiding individuals, if guilt and shame materialise during a moral-decision making process, when that individual faces the same decision process in the future (with the same stimuli, or environmental features), they are more likely to habitually encounter guilt and shame, and repeatedly strengthen overall morality and be deterred from viewing crime as an action alternative. The neurobiological theory of moral intuition (Woodward & Allman, 2007) states that guilt and empathy activate the frontoinsular and anterior cingulate cortex (in the limbic system) which along with their associated circuitry enable reduction of complex social and cultural input into intuitive, rapid processing for decision-making.⁴⁶ Therefore, as in the current study, guilt and empathy are hypothesised to be required to process the information available and play a role in aiding individuals to proceed to make action decisions.

In conclusion, habitual action develops as a consequence of repeated and automatic emotional input in a particular situation. There is a specialised brain network for the generation of moral emotions that is continually adapted based on experience (Funk & Gazzaniga, 2009). In this way, the interaction between individual and environment on a situational level adapts neural pathways and future experience of moral emotion adapts accordingly (referred to as habituation, see chapter 1). This supports the propositions of the current study that if an individual with weak moral rules and weak moral emotion repeatedly finds themselves in a potentially violent situation, the decision to commit violence becomes habitual, i.e. less effortful, and critically, repetitive. For example, if an individual has weak shame and guilt regarding hitting someone in a pub on a Saturday night, with repeated experience week by week, weak moral emotion is more likely to be experienced automatically and efficiently, repeatedly weakening morality.

⁴⁵ This is termed the 'mere exposure effect' and is a basic principle of advertising.

⁴⁶ Specifically, a specialised class of large bipolar cells (the Von Economo neurons) are responsible for this, also known as the 'mirror neurons' (Corradini & Antonietti, 2013; Woodward & Allman, 2007).

This section has outlined an explanation of intuitive emotional input and its role in the development of habitual action. The following section will summarise the ongoing emotion versus reason debate to build further evidence for the importance of emotion in the moral domain.

3.3. The great battle: the roles of emotion and reason in morality

'disruption to both affective and cognitive components of morality may predispose to the rule breaking' (Raine & Yang, 2006, p. 203)

The quote above illustrates that there is an affective component (moral emotion) as well as a cognitive component (moral rules) that contributes to individual morality and predisposes rule-breaking (see also Shamay-Tsoory, 2014). Moral emotions are critically important in understanding peoples behavioural adherence to their moral rules (Tangney et al., 2007; Wikström et al., 2012; Wikström & Treiber, 2009). Therefore moral emotions are of primary importance in contributing to the strength of an individual's morality, as Sousa (2001, p. 124) states, 'true moral progress is emotional progress'. Despite this, an agreement across the board on the moral significance of emotions is missing (Martens, 2002).

3.3.1. Background: emotion research

'Without exception, men and women of all ages, of all cultures, of all levels of education, and all walks of economic life have emotions, are mindful of emotions of others, cultivate pastimes that manipulate our emotions, and govern their lives...by... the avoidance of unpleasant emotions'. (Damasio, 1991, p. 35)

Philosophers have aired contrasting opinions on the importance of emotion within the context of rule-following behaviour for centuries (Sousa, 2001); Kant denied

emotions had any moral worth (Oakley, 1990), Hume argued that specific moral emotions play a role in behaviour and everything goes to ruin when the passions (emotions) dysfunction because reasoning cannot be sustained without them (Shaw, 1992), and Aristotle claimed that all emotions are intrinsically relevant to rule-following behaviour (Sadler, 2007).⁴⁷ Darwin associated feelings of shame with a desire for a good reputation and claimed that natural selection gave us minds preloaded with moral emotion (Joyce, 2007; Wright, 1994).⁴⁸

Emotion research in Psychology is a more recent phenomenon. In the 1950s, psychologists generally adopted a behaviourist approach. The 1960s and 1970s saw a cognitive revolution (see Miller, 2003) led by renowned researchers such as Piaget and Chomsky, leaving the study of affect to the wayside. During the emergence of cognitive science, emotion research declined; it was not trusted, it was viewed as too subjective, elusive, and vague, as (Damasio, 1991, p. 39) states, 'not only was emotion not rational, even studying it was probably not rational'.⁴⁹ The 1980s welcomed primary emotion research in the form of facial and vocal expressions (Campos, 1995).

As the 21st century approached, advances in technology facilitated advances in neuroscience and ignited interest in emotions.⁵⁰ For example, development of fMRI brain scanning equipment enables exploration of specific areas that are more active when processing emotional material (Knabb, Welsh, Ziebell, & Reimer, 2009). In recent years, emotion has become a popular topic for research, starting with animal studies which have a limited scope because they measure emotional behaviour rather than emotional feelings and their input to behaviour. As the research field progressed further,

⁴⁷ Studying human behaviour in the 19th century, William James claimed that emotions were nothing more than bodily changes, and that emotion resulted from bodily responses, i.e. an individual does not run from a bear because they are afraid, but they feel afraid because they run (Stoklosa, 2012). This has since been refuted widely following evidence that emotional responses inform behaviour rather than vice versa. ⁴⁸ This has interesting implications for the origins and evolution of moral emotion but goes beyond the

⁴⁹ Emotion researcher Joseph Le Doux's grant proposal got rejected accompanied with the statement:

^{&#}x27;emotions can't be studied scientifically' (Johnson, 2004).

⁵⁰ See Schirmann (2014) for a review of the historical development in the use of electroencephalography (EEG) to measure morality.

human research developed and facilitated an emergence of the field of 'affective neuroscience' (Canli & Amin, 2002; Haidt, 2013).⁵¹

3.3.2. The debate: to what extent do emotion and reason contribute to moral decisionmaking?

'people are not perfectly rational'...'their actions are also influenced by factors ...such as moral beliefs and emotions'

(Agnew, 2014, p. 3)

The historical lack of emotion research has been mirrored in the history of moral decision-making research; in line with Kohlberg and Piaget's pioneering work in the field of moral judgement, the focus has been upon the rational and reasoning perspectives (Blasi, 1999; García & Ostrosky-Solís, 2006). This has resulted in a dearth of research on emotions, despite them having a key role in decision-making (Treiber, 2011; Van Gelder, Elffers, Reynald, & Nagin, 2014). In the mid-1990s, an alternative approach to morality emerged with emotion as its foundation and researchers began to take emotion seriously, for example, 'emotions are inseparable from the idea of good and evil' (Damasio, 1991, p. 55) and 'good moral cognition is shot-through with emotion' (Casebeer & Churchland, 2003, p. 188; De Haan & Vos, 2003; Eisenberg, 2000; Haidt, 2013; Keefer, 2013; Vélez García & Ostrosky-Solís, 2006). Researchers began to recognise the reawakening interest in moral emotions, i.e. 'important examples include work on empathy, the new approaches to shame and guilt...' (Blasi, 1999, p. 1).

The long standing reason versus emotion debate essentially begs the question – how, and to what extent, do emotion (i.e. moral emotion) and reason or rationality (i.e. moral rules) contribute towards an individual's morality? The former has been termed the 'hot' executive functioning, involving passion, energy, and automatic intuition (Treiber, 2008). The latter has been termed the 'cold' executive functioning, involving rational, structured, cognitive deliberation (ibid). The questions of interest are whether

⁵¹ There have been more publications in affective science in the past few years than all previous years combined and this research is increasingly being published in the top tier journals. In addition, the Society for Affective Science was founded in 2012, the first society of its kind (Gross & Barrett, 2013).

both play equal roles in decision-making, whether they are competing or complimentary roles, and whether they are supported by distinct neural correlates. In the current study, this will be further extended to ascertain not only how reason and emotion play a role in moral decision-making, but how this can be applied to the crime-decision making process.

The traditional perspective within moral psychology emphasises the role of reasoning in action decision making (Greene et al., 2001). In criminology as well as psychology, the majority of theories adopt the rational choice angle (see, for example, Cornish & Clarke, 1986) which focuses on the process of choosing between predetermined alternatives. However, the current study adopts the perspective that individuals are rule-guided actors (i.e. they make decisions and act based on their personal rules), not rational choice actors (i.e. they don't weigh up their options by thinking solely on a rational level) (Wikström & Treiber, 2009a; Wikström, 2006), and should be studied as such. Therefore the viewpoint adopted in the current study begins with the perception of alternatives, guided primarily by personal morality which constitutes moral rules and moral emotions. In recent decades, it has been widely accepted that moral judgment comprises of an emotional element as well as a reasoning or rule-based element (Jeurissen, Sack, Roebroeck, Russ, & Pascual-Leone, 2014), which has been aptly described as 'moral thinking and feeling' (Raine & Yang, 2006; Yang & Raine, 2009).⁵² Situational Action Theory defines the emotion and reason distinction with 'moral rules', whether one thinks something is right or wrong to do in a particular circumstance, and 'moral emotions', how much one cares about a moral rule, or experiences or imagines guilt and shame about breaking a specific moral rule (Wikström, 2006).

The following section will present existing research which suggests that automatic and emotional (habitual) as well as rational (deliberate) processes are at play in the process of choosing which alternatives to act upon (Haidt, 2001; Pascual, Rodrigues, & Gallardo-Pujol, 2013; Wikström et al., 2012; Wikström & Treiber, 2009a; Wikström, 2010), indicating that both reason and emotion play a role in decision-

⁵² Other researchers account for both reason and emotion using different terminology, for example; Laible, Eye, & Carlo (2008) distinguish between 'moral cognition' (involving reasoning) and 'moral affect'(involving the emotions), both of which make up the 'moral conscience'.

making. In conclusion, a purely cognitive view of brain functioning that overlooks the role of emotions simply isn't sufficient (Le Doux, 2002), for example, 'The heart has it reasons which reason knows nothing of' (Pascal, 1660).

3.3.3. Theory: the roles of emotion and reason in moral decision-making

'emotion is a significant driving force in moral judgement' (Greene & Haidt, 2002, p. 522)

Consequentialist theories of moral decision-making favour rationality and reason which result in the outcome of utilitarian responses, i.e. responses with an outcome of the greatest good for the greatest number of people (Koven, 2011; Woodward & Allman, 2007). Deontological theories of moral decision-making favour emotion and intuition and result in the outcome of a personal-level response, i.e. responses with an outcome of the least personal wrongdoing (Crockett, 2013; Greene et al., 2004). Crockett, Clark, Hauser, & Robbins (2010) challenge consequentialist theory and find evidence for the role of emotion in moral judgement; they find that serotonin specifically modulates emotional intuition and in turn plays a role in moral judgement and behaviour. Several other theories on the role of reason and emotion in morality have been developed. One theoretical perspective is that the prefrontal cortex supresses or inhibits emotion or rationality (Moll & Schulkin, 2009); therefore the two processes are integrated rather than in competition. The model adopted in the current study is the dual-process view; which outlines that there is a conflict between emotional and rational functioning (Greene, 2007; Treiber, 2014; Zajonc, 1984). Therefore according to this view, moral emotion and moral reasoning involve separate processes and each process makes moral judgements alone and in competition. Treiber (2013) empirically tests the dual process model and concludes that Situational Action Theory is consistent with the view that both rational and affective processes aid optimal decision making (see also Jeurissen et al., 2014).

Haidt (2012) has made a significant empirical and theoretical contribution investigating the role of moral emotion within moral judgement. In his view, emotions

are in fact a subset of the broader category of cognition (he uses examples of contrasting rain with weather, or cars with vehicles) therefore the two are not in competition, but rather work very closely together. His social intuitionist model of moral judgement states that intuitions come first and strategic reasoning comes second (Haidt, 2012). Haidt developed the model to challenge 'rationalist delusion', and illustrates the social intuitionist model with an analogy of the elephant as emotion and its rider as reasoning. 'Reasoning-why' is the controlled rider who looks ahead to the future and acts as spokesperson, but is there to serve the elephant. 'Seeing-that' is the elephant that represents automatic, intuitive, emotion. The rider and elephant work together smoothly; the rider is only interested in which direction the elephant looks. Therefore Haidt's work strongly emphasises the importance of emotional input to moral decisionmaking, supporting the hypotheses of the current study.

Damasio is a pivotal emotion neuroscientist and has pioneered the idea that emotions guide good decision-making rather than lead people astray. He advocates the role of emotion in decision-making in his book entitled 'Descartes Error' (Damasio, 1994). ⁵³ Damasio's somatic marker hypothesis (SMH) states that one creates emotional valences of positive and negative affect in various situations in order to inform them for future decision making. These somatic markers are generated when one contemplates a difficult decision or action and serve to flag negative outcomes from past experiences (Bechara, Damasio, & Damasio, 2000). Therefore, of relevance for the current study, if the somatic marker system is inefficient or dysfunctional, experience of negative affect such as shame and guilt may be poor. Those who lack a somatic marker system or have impairments in emotion processing areas are overly and solely rational beings; this can be advantageous at times but for the most part can cause great difficulty in everyday life (an extreme example of which is involvement in criminal behaviour).

In summary, the theoretical models of decision-making strongly emphasise the importance of the role of emotion (Greene et al., 2001; Sommer et al., 2010) and provide further evidence and support for the hypotheses of the current study.

⁵³ Damasio (1994) states that Descartes made a fundamental error in believing that the mind is separated from the body, for example, of relevance to the current study, emotions in the mind cannot be separated from the body (i.e. behavioural action).

3.3.4. Conclusions: emotion and reason work together in moral decision-making

Moral judgement and subsequently action comes from a complex interaction of cognitive and emotional mechanisms, and there is evidence to show that emotion processing in the ventromedial prefrontal cortex (VMPFC) is a stronger predictor of criminal behaviour than rational processing in the dorsolateral prefrontal cortex (DLPFC) (Treiber, 2013). The 'reason' and 'emotion' circuits each play a role in the decision to engage in crime. Decision making cannot be completely understood within the framework of 'cold' cognitive processes alone and consideration needs to be paid to the role of 'hot' affective processes (Carlo, McGinley, Davis, & Streit, 2012; Decety, Michalska, & Kinzler, 2012; Plodowski, 2009; Steinberg, 2005); both work in tandem to provide the most efficient and well-informed moral judgment (Treiber, 2011). As Paxton & Greene (2010, p. 525) state, 'when it comes to making moral progress, the 'head' may be no less indispensable than the 'heart'.

The emotion circuits involve the limbic structures of the 'old' brain working in concert with the prefrontal lobe (mainly the VMPFC) to attach emotions to specific behaviours (Tancredi, 2005), and those that lack normal VMPFC functioning demonstrate a 'myopia for the future', i.e. they are entirely insensitive to the consequences of their actions to others (Bechara, Tranel, et al., 2000). The medial frontal cortex serves as an interactive interface between cognitive and emotional systems, for example, by allowing cognitive information processing in the prefrontal cortex to communicate with emotion processing in the amygdala and vice versa (LeDoux, 2002).

In decision-making, cognition requires emotion; and emotion requires cognition. When emotion does not (or cannot) contribute to moral judgement, this results in overly rational moral decision-making. This can be advantageous (for example, when a decision benefits a group of colleagues rather than a favourite colleague, see also Osumi & Ohira, 2010) but for the most part, and in cases of crime, disadvantageous (for example, cases of severe violence, including psychopathic violence; see chapter 2). Both the emotion and reason systems are required to best serve every action decision, and this fascinating research area is complicated and worthy of future research endeavour, as Goldstein et al. (2007, p. 1027) state, 'although the neurocircuitry of

81

emotion has long been studied, mechanisms of the interaction of emotion and cognitive control are only recently being explored, revealing complex neural interactions'.

Despite evidence for its importance in moral decision-making, the role of emotion has been neglected in social science research, and of key relevance for the current study, in criminology. Although some criminologists acknowledge the importance of emotion, for example, 'emotional impulses often overwhelm rational cognition' (Sherman, 2003), the current study seeks to develop and empirically test an account of the role of emotion within a general theory of crime.

- 3.4. Chapter summary: The contributions of empathy, shame, and guilt to individual morality
- 'It is one's concern for morality that determines both moral actions and moral emotions' (Blasi, 1999, p. 16)

This chapter began with an outline of empathy, shame, and guilt as distinct concepts, and second, this was followed by an outline of existing research investigating the relationships between empathy and shame, empathy and guilt, and guilt and shame to build further evidence for the hypotheses of the current study. Third, this chapter presented research exploring the contributions of empathy, shame, and guilt to morality, and fourth neuropsychological research exploring the role of moral emotion in morality, and identified the neural substrates of moral emotion as further interdisciplinary evidence for the propositions of the current study. Fifth, an outline of a specific explanation of intuitive emotional input and its role in habitual action was presented. The chapter concluded with a summary of the long standing debate surrounding the roles of reason and emotion in moral decision-making. All of the evidence presented provides firm evidence for the hypotheses of the current study: for the role of empathy in the possibility to experience shame and guilt, and for the role of shame and guilt in morality, moral decision-making, and consequently, moral behaviour.

Section 2- Methodological considerations: executive summary

This section outlines how the role of moral emotion in crime within the Situational Action Theory perspective can be empirically tested; by using questionnaire scale measures taken from the Peterborough Adolescent and Young Adult Development Study (PADS+) study sample (chapter 4) and carrying out in-depth qualitative interviews with a persistent and frequent violent offender subsample (chapter 5). The Peterborough Adolescent and Young Adult Development Study (PADS+) is introduced and followed by a detailed description of the general empathy, cognitive and affective empathy, shame, guilt, moral rules, and crime measures (chapter 4). This precedes a detailed outline of the in-depth, qualitative interview method adopted in the current study (chapter 5). Detailed, qualitative interviews were carried out with a subsample of persistent and frequent violent offenders; in order to gain a richness of information regarding the situational application of empathy, shame, guilt, and moral rules in recent, real-life violence, and other relevant information (including presence of peers, violence location, substance use, and many other variables). This chapter also outlines the construction of the interview template, the sampling method, and the subsample characteristics, and an outline of the fieldwork and data collection procedures. Therefore in conclusion, the questionnaire scales measure general ability to exercise empathy, general ability to anticipate shame and guilt; and in-depth interview data supplements this quantitative data with unique detailed information on the participants' situational, real-life application of empathy, shame, and guilt.

Chapter 4

Testing the role of moral emotion in crime involvement: The Peterborough Adolescent and Young Adult Development Study (PADS+)

This chapter provides an introduction to the Peterborough Adolescent and Young Adult Development Study (PADS+); a longitudinal study that follows 700 young people from the age of 12 into adolescence and adulthood and was designed specifically to test the role of morality (amongst other things) in crime involvement. A structured questionnaire has been administered and includes: guilt, shame, empathy, moral rules, violence and total crime scales, all of which will be described in detail in this chapter. This chapter also presents an outline of the development of the general empathy and cognitive and affective empathy scales which were designed specifically for the current study.

4.1. An introduction to The Peterborough Adolescent and Young Adult Development Study (PADS+)

The Peterborough Adolescent and Young Adult Development Study (PADS+) is a longitudinal study that follows approximately 700 young people from the age of 12 into adolescence and adulthood. PADS+ is based at the Institute of Criminology at the University of Cambridge, Cambridgeshire, UK. The study site is the medium sized 'new town' city of Peterborough which is also located in Cambridgeshire, UK and has a population of under 184,000 (Census, 2011). The study began in 2003 and Peterborough was selected as the study location because it satisfied several of the criteria for generaliseability in order for the results to be extrapolated to the rest of the country and beyond. These reasons include that Peterborough is a typical UK city with a typical crime rate, there is variation in area deprivation, i.e. it contains areas of high and low disadvantage, and there is a mixed ethnic composition within the population. In addition, its proximity to the study base in Cambridge achieved cost and time efficiency.⁵⁴

PADS+ was designed by Professor Wikström to specifically measure and examine the interplay between individual factors (particularly morality) and environmental factors in crime involvement; this is the crux of Situational Action Theory. The study sought to collect longitudinal, robust, high quality data to test the propositions of Situational Action Theory. Of specific relevance for the current study, PADS+ longitudinal morality data reveals that it is a significant factor in young people's crime involvement (Wikström et al., 2012). In order to explore the role of morality, the moral rules, shame, and guilt measures have been collected longitudinally (see section 4.3.). In addition to the shame and guilt measures collected, for the current

⁵⁴ Peterborough is also an ideal study site to successfully capture young people's activity fields, which is one of the primary aims of the PADS+ study. This is because it is a contained city built around a main transport parkway (surrounded by rural fenland, and with distinct industrial, residential, and commercial areas) which dictates people's movements to be within the city and allows for analysis of the different settings and circumstances under which crime occurs.

study, two empathy scales were constructed (see section 4.4.) in order to analyse the role that empathy plays in the increased or reduced possibility to feel shame and guilt in particular circumstances.

The PADS+ sample was selected in 2001 using the Peterborough state school sampling frame, independent school lists, and lists of individuals that were either home-schooled or in alternative education; a third of all 11-year olds that lived in Peterborough were randomly selected to be approached for inclusion in the study. ⁵⁵ The PADS+ study interview waves were specifically scheduled in order to capture the rise, peak, and decline in criminal involvement that is well replicated throughout and adolescence and young adulthood and is referred to as the 'age-crime curve' (Farrington, 1986; Hirschi & Gottfredson, 1983; Sampson, 2003).

High data quality is absolutely imperative in achieving good research; any subsequent data analyses (and therefore conclusions) are rendered useless if the original raw data is of poor quality. The quality of the data collected for the current study is exceptionally high because full-time dedicated researchers (with a strong university educational background in a social or behavioural science) are employed, a strong emphasis is placed upon diligent and standardised researcher training, rapport and trust has been built with participants to gain accurate and valid information, vigorous missing data checks (both during and post fieldwork) are carried out, participants are actively encouraged to answer questions with precision and accuracy throughout the guided questionnaire (for example, if asked how many times they had committed a crime in a year, they were reminded that once monthly would equate to 12 annually), and consistency checks are carried out across various interview records to ensure data accuracy.

⁵⁵ The sampling frame consisted of 2349 young people: of these, 991 (randomly selected) families were contacted, and either due to refusal to take part or a variety of other reasons such as uncontactable families, 710 parents consented for their children to participate.

The PADS+ study sample

The PADS+ sample is particularly suitable for use in the current study because: there are equal numbers of male and female participants, there was no composition bias for those who did and didn't agree to take part in the study (see chapter 2, Wikström et al., 2012) and the retention rate is exceptionally high at 92% in the study's 10th year. Therefore conclusions derived from analysis of this data can be generalised to the population as a whole. The sample distribution for several sociodemographic characteristics demonstrates satisfactory variation (see table 4-1.), and the distributions are also found to correspond with general population figures taken from the 2001 census (see Wikström et al., 2012); therefore the sample is representative of the general population.

Characteristics	Characteristic groups	Number	%
	Male	357	49.9
Sex	Female	359	50.1
	White	594	83.0
Family ethnicity	Asian	73	10.2
	Black	6	0.8
	Mixed	43	6.0
	Lower working	157	22.0
Family occupational	Working	276	38.7
	Lower middle	241	33.8

social class ^a Household tenure	Upper middle/upper	40	5.6
	Owner	496	69.3
	Renting from a private landlord	53	7.4
	Renting from a council/a social authority	165	23.0
	Other	2	0.3

Table 4-1: Key socio-demographic characteristics of the PADS+ sample (age 12).Source: (Wikström et al., 2012, p.57)

^a Family occupational social class is categorised according to level of skilled work

4.2. Methodology and study design

One of the fundamental requisites of good research is the use of robust methodology. When combined with a second requisite of sound theoretical propositions (outlined in chapter 1), hypotheses can be tested empirically and if necessary, falsified. Although most of the data presented in the current study was collected at wave 7 in 2012 when participants were aged 21, the shame, guilt, moral rules, violence, and total crime scales have been collected longitudinally (see table 4-1.).⁵⁶

⁵⁶ The shame and guilt scales were administered for 6 waves from 2005-2012. The moral rules, violence, and total crime scales were administered for 7 waves from 2004-2012. Empathy measures were newly developed for the current study and were administered in 2012.

Wave	1	2	3	4	5	6	7
Year	2004	2005	2006	2007	2008	2010	2012
Age	13	14	15	16	17	19	21
Number of	716	707	703	703	693	685	656
participants		(98.7)	(98.2)	(98.3)	(96.9)	(95.7)	(91.6)
(retention rate %)							
*General empathy	×	×	×	×	×	×	✓
*Cognitive and	×	×	×	×	×	×	✓
affective empathy							
Shame	×	✓	✓	√	✓	✓	✓
Guilt	×	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Moral rules	✓	✓	✓	√	✓	✓	✓
Violence age of onset	✓						
Violence prevalence	✓	✓	✓	√	✓	✓	✓
and frequency							
Total crime	\checkmark	✓	\checkmark	\checkmark	√	✓	\checkmark
prevalence and							
frequency							
Violent offender	×	×	×	×	×	×	✓
subsample interviews	Table 4-2: Data collection timeline						

*= scales were developed specifically for the current study

The current study's methodological approach and its corresponding research questions are summarised in table 4-3.; empathy, shame guilt, moral rules, violence, and total crime scales that have been administered in the structured, researcher-led questionnaire, and qualitative in-depth interviews have been carried out with a persistent

and frequent violent offender subsample.⁵⁷ Therefore as well as the general ability to anticipate shame, guilt, and general ability to exercise empathy, the current study will also focus upon the situational application of moral emotion in real-life acts of violence (see chapter 5).

Method	Data type	Research question
Structured, researcher-led questionnaire	Shame, guilt, moral rules, violence, total crime scales (quantitative)	Do shame and guilt, combined with moral rules, contribute to overall morality and predict involvement in violence?
Structured, researcher-led questionnaire	The general empathy scale and the cognitive and affective empathy scale (quantitative)	Does empathy play a role in the possibility to feel shame and guilt in particular circumstances? Is the relationship between empathy and violence mediated by shame and guilt?
In-depth interviews with violent offender subsample (see chapter 5)	Detailed data about recent, real-life violent events (qualitative)	Do persistent and frequent violent offenders report weak empathy, shame, and guilt in real-life violent events? Do persistent and frequent violent offenders report distinctly weaker empathy, shame, and guilt than the rest of the sample? What are the common violence-conducive circumstances and how do they interact with moral emotion?

Table 4-3: Methodology and data measures used in the current study and corresponding research questions

⁵⁷ The young person's questionnaire was tested and developed in the pilot Peterborough Youth Study with 1,957 participants in 2001 (see Wikström & Butterworth, 2006).

4.3. Data measures: the shame, guilt, moral rules, and crime scales

The young person's questionnaire was administered in small groups with a maximum of 4 participants. Participants were seated so that their answers could not be seen by others, and if required, partitions were used. Participants were supervised by a researcher throughout the questionnaire and reminded that all of their answers would remain entirely confidential and would not be passed on to anyone else, including parents, teachers, the police, or anyone else. Before each questionnaire subscale was completed by the participant, a qualified researcher read instructions aloud to explain what the questions were about, clarify how the questions such be answered, and if required, define particular terminology, in order to achieve consistency of responses.⁵⁸ Upon completion of the questionnaire, all questionnaires were checked for missing data; therefore there is almost no missing data in the current study. This section will introduce each questionnaire scale used in the current study.

4.3.1. The shame scale

The current study posits that weak shame weakens overall individual morality and therefore contributes to the likelihood of crime being perceived as a morally acceptable option. The shame scale constitutes six items for which participants report how ashamed they would feel (in front of parents, teachers, or best friends) if they were caught shoplifting or breaking into a car. For example, 'If you were caught shoplifting and your parents found out about it, would you feel ashamed?'. The full shame scale can be found in appendix 4-1. The response options are 'No, not at all', 'Yes, a little', and 'Yes, very much'. Although the items on the shame scale specifically include

⁵⁸ For example, for the items regarding parents in the shame scale, young people were reminded that 'parents' encompassed any guardians including step-parents, foster parents, or other adult guardians.

shoplifting and car crime as example crime types, the total scale score is assumed to represent 'general' shame for all participants. The shame scale was developed in 2004 by Professor Wikström (Director of the Peterborough Adolescent and Young Adult Development study) and administered in waves 2-7 (see table 4-1). Table 4-4 presents descriptive statistics for the total shame scale (summed for waves 2-7). It indicates that there is variation in the data and that the internal consistency of the scale is very high and that the scale items are closely related.⁵⁹

Shame scale descriptive measures			
Mean 56.5 (of 72)			
Range	68 (4 to 72)		
Standard deviation	13.4		
Cronbach's alpha	.94		

Table 4-4: Shame scale descriptive measures

4.3.2. The guilt scale

The current study posits that weak guilt, as with weak shame, weakens overall individual morality and therefore contributes to the likelihood of crime being perceived as a morally acceptable option. The guilt scale constitutes six items for which participants report how guilty they would feel for committing various acts, including moral transgressions not defined by law (legal acts), as well as acts of crime (illegal acts). For example, 'Would you feel guilty if you broke into a car and stole something?'. The full guilt scale can be found in appendix 4-2. The response options are 'No, not at all', 'Yes, a little', and 'Yes, very much'. The guilt scale was developed in 2004 by Professor Wikström (Director of the Peterborough Adolescent and Young

⁵⁹ The shame scale alpha was calculated by creating 6 total scale item scores for all waves.

Adult Development study) and administered in waves 2-7 (see table 4-1). Table 4-5 presents descriptive statistics for the total guilt scale (summed for waves 2-7). It indicates that there is variation in the data and that the internal consistency of the scale is reasonably high and that the scale items are closely related.⁶⁰ Compared to the shame scale descriptives, the mean guilt score is lower, but there are no large differences in the range and standard deviation.

Guilt scale descriptive measures			
Mean 50.7 (of 72)			
Range	66 (6 to 72)		
Standard deviation	13.2		
Cronbach's alpha	.88		

Table 4-5: Guilt scale descriptive measures

Due to contention in the literature regarding the similarities and differences between shame and guilt (see chapter 3), construction of distinct scales for guilt and shame were guided by the theoretical definitions of shame and guilt that are used in the current study. The development of guilt and shame scales required careful consideration because emotion scale items can often be too abstract to answer with ease (Harris, 2003). As Tangney & Fischer (1995) state, emotions such as shame and guilt were once relegated to the realm of poet and novelist because they were thought to be too complex and difficult to measure. Several shame and guilt measures have been developed and used in existing research (see Robins, Noftle, & Tracy, 2007 for a detailed summary of existing measures), however, the measures constructed for use in the PADS+ study were deemed suitable for use in the current research study.

⁶⁰ The guilt scale alpha was calculated by creating 6 total scale item scores for all waves.

4.3.3. The moral rules scale

The current study posits that weak moral rules, combined with weak shame and guilt, constitute weak overall individual morality and therefore contribute to the likelihood of crime being perceived as a morally acceptable option. The moral rules scale constitutes sixteen items for which participants report how right or wrong they think certain acts (of differing severity) are in particular circumstances. As with the guilt scale, the item acts include moral transgressions not defined by law (legal acts) as well as acts of crime (illegal acts). For example, 'How right or wrong do you think it is to smash a street light for fun?'. The full moral rules scale can be found in appendix 4-5. The response options are 'Not wrong at all, 'A little wrong, 'Wrong', and 'Very wrong'. The moral rules scale is a modified version of the Pittsburgh Youth Study prosocial values scale (Loeber, Farrington, Stouthamer-Loeber, Moffitt, & Caspi, 1998); it was developed in 2001 by Professor Wikström (Director of the Peterborough Adolescent and Young Adult Development study) and administered in waves 1-7. Table 4-6 presents descriptive statistics for the total moral rules scale (summed for waves 1-7). It indicates that there is variation in the data and that the internal consistency of the scale is reasonably high and that the scale items are closely related.

Moral rules scale descriptive measures			
Mean 184.4 (of 339)			
Range	233 (47 to 280)		
Standard deviation	36.2		
Cronbach's alpha	.8890 ⁶¹		

⁶¹ The Cronbach's alpha values for the moral rules scale items vary by wave from .88-.90.

 Table 4-6: Moral rules scale descriptive measures

4.3.4. Self-reported assault frequency and robbery frequency

Violence prevalence (waves 1-7), frequency (waves 1-7), and age of onset (wave 1) data has been collected for two violent crime types; assault and robbery. All violence questions can be found in appendix 4-6. The prevalence of assault was 58% in waves 1-7 combined (n=373), i.e. 58% of participants had committed at least one act of assault in waves 1-7 combined. The prevalence of robbery was 14% in waves 1-7 combined (n=88). Table 4-7 presents descriptive statistics for assault and robbery frequency (summed for waves 1-7). The descriptive data indicates that there is variation in the data.

As the robbery prevalence and frequency are reasonable low (see table 4-7), assault frequency only was used as a measure of violence in the analyses carried out in the current study (the correlation between assault and robbery is .29). However, the frequency of robbery was taken into account when selecting the violent subsample.

Assault frequency		Robbery frequency	
Mean	7.2	Mean	0.6
Range	624 (0 to 624)	Range	86 (0 to 86)
Standard deviation	28.9	Standard deviation	3.9

Table 4-7: Assault frequency and robbery frequency descriptive measures

It is generally agreed that self-reported crime is more reliable than official crime records as it provides the best and closest approximation to young people's crime

involvement because officially recorded crime has a high dark figure (i.e. a lot of unreported crime) and a low clearance rate (i.e. the offender is often unknown).⁶² In the PADS+ sample, 96% of those with an official record have self-reported their crimes in PADS+ interviews (Wikström et al., 2012), providing evidence that the study has been successful in harbouring trust, and therefore achieving truthful participant reports. However, conversely, many of the self-reported crimes are sanctioned by the police, providing further rationale for the use of self-reported crime data for analysis in the current study.

4.4. Development of the general empathy scale and the cognitive and affective empathy scale

The current study posits that empathy is required in order to increase the possibility to feel guilt and shame in particular circumstances, i.e. it is difficult to make a negative self-evaluative judgment without first identifying the viewpoint of another person, particularly with regards to a specific act. Two empathy scales were constructed in order to explore the role of empathy in morality; first, to explore its role in the increased or reduced possibility to feel guilt and shame in particular circumstances, to explore its (indirect) relationship to violence, and to investigate any differences between cognitive empathy and affective empathy. These scales were unique in that they were developed specifically for the current study (the remaining scales were developed at the start of the PADS+ study and collected longitudinally).

The general empathy scale constitutes 17 items using examples from specific, everyday occurrences. For example, 'Other people's problems are theirs, not mine'. The

⁶² The dark figure is found to be exacerbated for specific crime types, whereas self-reported crime is more consistent across crime type. For example, arson often goes unreported to the police as it is carried out in sparsely populated parks and green spaces.

full general empathy scale can be found in appendix 4-3. These situations range from small embarrassments to more serious or emotionally painful situations. Table 4-8 presents descriptive statistics for the general empathy scale (summed for waves 1-7). It indicates that there is variation in the data and that the internal consistency of the scale is reasonably high and that the scale items are closely related.

General empathy scale descriptive measures				
Mean 33.5 (of 51)				
Range	42 (8 to 50)			
Standard deviation	6.6			
Alpha	.81			

Table 4-8: General empathy scale descriptive measures

The cognitive and affective empathy scale constitutes 8 items that aim to measure any distinction between cognitive empathy (identifying another person's viewpoint) and affective empathy (feeling emotional congruence with another person's viewpoint). The two subscales constitutes 4 items, for example, 'I can often tell if other people are sad' (cognitive empathy), and 'I can often feel happy if a friend is happy' (affective empathy). The full cognitive and affective empathy scale can be found in appendix 4-4. Table 4-9 presents descriptive statistics for the cognitive and affective empathy scale (summed for waves 1-7). It indicates that there is variation in the data

and that the internal consistency of the scale is reasonably high and that the scale items are closely related.

Cognitive and affective empathy scale
descriptive measuresMean19.2 (of 24)Range17 (7 to 24)Standard deviation3.5Alpha.86

Table 4-9: Cognitive and affective empathy scale descriptive measures

Construction of the empathy scales developed for the current study involved detailed consideration of the merits and limitations of existing standardised empathy scale measures which have been developed and used in existing research (see table 4-4).

Empathy measureReason(s) for unsuitability in the current			
Interpersonal Reactivity	• 'Empathic concern' subscale resembles sympathy		
Index (IRI) ¹	rather than affective empathy		
Basic Empathy scale²	Superflous language		
The Balanced Emotional	• Primarily measures affective empathy only		
Empathy scale (BEES) ³			
The Empathy Quotient ⁴	• Includes 20 'filler' statements – time-intensive.		
The Toronto empathy	Superflous language		
questionnaire ⁵			

1 = (Davis, 1983), 2= (Jolliffe & Farrington, 2006b), 3= (Mehrabian, Epstein, & Angles, 1973), 4= (Allison, Baron-Cohen, Wheelwright, Stone, & Muncer, 2011), 5= (Spreng, Mckinnon, Mar, & Levine, 2009)

Table 4-10: Existing standardised empathy scales

However, existing standardised empathy scales were inadequate for one or more of several reasons; they only measure cognitive or affective empathy rather than both, they contain obscure scale items that do not match the current study's conceptual definition of empathy, they have been tested with undergraduate Psychology students and are therefore unrepresentative of the general population, they are too lengthy, they measure factors that are related to empathy but do not measure empathy directly, for example, they measure sympathy rather than empathy (particularly with regards to affective empathy), items are not presented uniformly in one direction (for instance, 'I can tell', rather than 'I cannot tell', which increases the risk of misreading or misinterpretation by participants, researchers confuse cognitive empathy for perspective taking, and they use outdated terminology. Other researchers have also acknowledged that existing self-report empathy measures are inadequate in measuring a uniform and consistent concept of empathy (Baldner & McGinley, 2014).

In order to avoid these issues, two empathy scale measures were created with a particular focus upon: the theoretical research questions and the definition of empathy used in the current study, similarity to the items which have been found to hold validity and reliability in existing scales, and the adoption of appropriate terminology, including the use of carefully chosen wording to avoid socially desirable responding , including the avoidance of common phrases regarding emotions which have pre-existing connotations, and the avoidance of sophisticated synonyms for emotions. The newly developed scales focus on the avoidance of any abstract items and incorporate very specific situations in which people may or may not empathise with others.

4.5. Chapter summary: testing the role of moral emotion in crime involvement in the current study: The Peterborough Adolescent and Young Adult Development Study (PADS+)

This chapter has outlined the importance of using high quality robust data taken from a large and representative participant sample. The current study attempts to meet these requirements by using data from the Peterborough and Adolescent Young Adult Development Study (PADS+). Quantitative shame, guilt, and empathy measures were collected to measure the general ability to anticipate moral emotion, as well as a qualitative measure (see chapter 5) to measure the situational application of moral emotion in real-life violent events. All data measures have been introduced in correspondence with relevant research questions to emphasise the theory-led nature of the current study. This chapter has introduced the questionnaire scale measures in detail and outlined the limitations of other existing standardised measures.

In summary, moral rules are measured by asking participants how right or wrong they think it is for someone of their age to commit various moral transgressions or acts of crime. This is achieved by using a scale of various items of differing severity, for example, 'steal a pencil from a classmate', 'hit someone who makes a rude remark to you', and 'break into a car to steal something'. Moral emotions are measured by asking participants how ashamed they would feel if they were caught shoplifting or breaking into a car, and how guilty they would feel for carrying out various moral transgressions and acts of crime. Empathy is measured by asking participants how strongly they agree or disagree with various general and specific questions about people (and animals) in need. The theoretical relationships between the questionnaire scale data measures (see chapter 1 for elaboration) can be combined as follows (see figure 4-1):

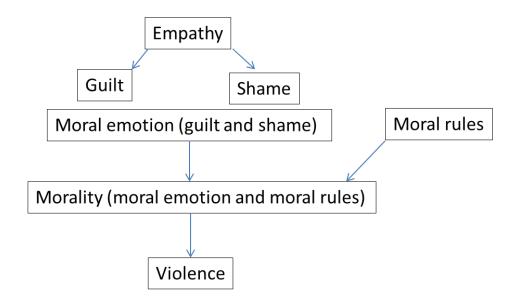


Figure 4-1: Theoretical relationships between the key data measures

Chapter 5

Interviewing the violent offender: the situational application of moral emotion in real-life violent events

This chapter outlines the in-depth interview methodology that has been developed and administered in the current study. The in-depth interview methodology was the most important research tool utilised in the current study because it served the fundamental aim of gaining a deeper understanding of specific real-life acts of violence. Interviews were carried out at wave 7 in 2012 with a subsample of 48 young people that were classed as 'violent offenders' based on their self-reported violence from the preceding 6 PADS+ interview waves. The interview consisted of an informal but structured, qualitative discussion regarding the participants' most recent violent offence, particularly with regards to the situational application of empathy, guilt, and shame. The interview also included comprehensive questions surrounding the circumstances of the violent event: including where they were, who they were with, events preceding the violence, alcohol use, and provocation experienced. This chapter will outline the development of the interview question

template, emphasise the merits of the interview method, outline the sampling criteria and subsample characteristics, and outline the fieldwork practicalities.

5.1. The in-depth interview methodology

The current study focuses on violence because it is one of the most commonly occurring crime types (Wikström et al., 2012) and violent situations are often emotionally salient. In the current study, in-depth qualitative data will build upon the quantitative questionnaire data collected from a large representative participant sample. Findings from the PADS+ space-time budget indicate that violent crime is likely to be carried out by individuals with weak moral rules in settings which are conducive to crime. Therefore the rationale for the in-depth interview method was specifically to permit exploration of the specific circumstances under which persistent and frequent violent offenders commit violence, and whether this subsample demonstrate a weak general ability to exercise empathy, a weak general ability to anticipate shame, and guilt, and furthermore, a poor situational application of empathy, shame, and guilt, in real-life specific acts of violence. One of the key pillars of Situational Action Theory is to analyse what kinds of young people (i.e. those with weak morality) commit acts of crime in particular kinds of settings, and this unique data can explore this interactional relationship.

5.1.1 Construction of the in-depth interview template

'What is required is in-depth information about the violence itself' (Dobash, 1979, p. 12)

To inform construction of the interview template, existing qualitative methodologies that have been adopted with violent offenders were assessed. The primary objective was to focus upon detailed information of specific violent events, the circumstances preceding the violence, the physical nature of the violence itself, location,

presence of others, injuries, and feelings (i.e. moral emotion) (as outlined in Athens, 1997; and Dobash, 1979). Therefore the interview method involved a very detailed discussion of the participants most recent act of violence including the empathy, shame, and guilt both at the time of and the day following the violence, where they were, the events preceding the violence, the presence of others, any arguments or conversations preceding the violence, provocation, injuries, weapon carrying, severity of the violence, substance use, and various other information.

The interview questions were tailored specifically to test the theoretical ideas proposed in the current study regarding the role of weak moral emotion in the decision to engage in violence; and secondary to that, how other individual factors (such as moral rules) and other setting circumstance factors (such as provocation, substance use, and presence of peers) influence individual-level factors such as moral emotion. The interview questions were developed with the intention to engage and guide the participant through a detailed discussion in chronological order; this achieved a time sequenced, researcher-led, open-ended discussion of the violent event. The interview approach adopted was to be specific and concrete as opposed to abstract, for example, 'the more general and abstract the approaches to interpersonal violence become, the less useful they are in the understanding of violence' (Dobash, 1979, p. 25). A contextspecific approach allows for a fuller explanation, 'to an understanding of the meaning the violent act has to the individual in everyday settings' (Dobash, 1979, p. 30), and therefore to achieve an understanding of human behaviour in the settings in which it occurs (Athens, 1997). The data constructs covered in the interview are listed below (see table 5-1.), and the interview question template can be found in appendix 5-1.

Data construct Interview questions			
	Violence location		
Setting/environment	Witnesses		
	How long ago the event took place		
	Weekday/weekend		
Violent offence information	Day/night		
	Group/individual violence		
	Violence duration		
	Activity before violence		
Activity before violence	Witnesses		

	YP with whom
	Alcohol
	Drugs
	Felt intoxicated
	Substance use influenced violence
	Who approached who
	One/two sided
	Argument before violence
	Who hit first
	Provocation/harassment
	At what point did YP consider violence
Nature of the violent	Violence type from YP towards violence recipient
offence	Violence type from violence recipient towards YP
	Weapon YP
	Weapon violence recipient
	Injury YP
	Injury violence recipient
	Reason violence ended
	Police involvement
Information regarding	Same gender as YP
violence recipient	Other known to YP (if so, how)
-	React the same way again in same situation
Reflection after violence	Violence typical for YP
	Main reason for violence
Shame	Shame at the time of the violence
	Shame the day following the violence
Guilt	Guilt at the time of the violence
	Guilt the day following the violence
Shame and guilt	Shame and guilt when others found out on the day
	following the violence
Empathy	Empathy at the time of the violence
- ·	Empathy the day following the violence
Moral rules Moral rules at the time of the violence	
	Moral rules the day following the violence
*VD	, ,

*YP=young person

Table 5-1: In-depth interview data constructs

Development of the interview methodology gained insights from the PADS+ space-time budget which is a novel method which involves collection of a detailed retrospective account of young people's lives, including the events preceding and surrounding acts of crime (see Wikström et al., 2012). Across 5 data collection waves

from 2004-2008, 74 (of approximately 700) participants reported 141 crimes, the majority of which were violent crimes. ⁶³ The STB provides novel insight into patterns of time, day, location, events surrounding the violent event, time spent in areas of poor neighbourhood collective efficacy and time spent with criminogenic peers (which will be compared to the in-depth interview data in chapter 7).⁶⁴ However, this methodology is not able to capture the details of the situation, including the reason for the offence, the personal dynamics of the situation, how the violence ended, and, specifically for the current study, the offender's moral emotion and moral rules at the time of and the day following the specific act of crime. The current study attempts to capture this detail in the in-depth interviews to provide further evidence in support of the study propositions.

5.1.2. The merits of the in-depth interview methodology

'We think it is important to allow people to place their experiences, subjective assessments, and recall in contexts that have relevance to them, and a face-to-face, indepth interview is the best method for achieving this goal.' (Dobash, 1979, p. 38)

By asking participants about a specific violent event, it provides an understanding of both the structure and dynamics of violence (Dobash, 1979). There are numerous advantages to adopting this methodological approach including: the researcher can reassure participants at any time if concerns were raised regarding confidentiality, the researcher can ensure the discussion is relevant and reasonably focused upon the violent event and the circumstances, the researcher can harness the trust and rapport built not only during the preceding 90 minute PADS+ interview, but also over the previous 10 years of participation in the study. The importance of trust has also been recognised by other key violence researchers such as Dobash (1979), who states that continual contact with the participants developed considerable trust between

⁶³ This calculates as an average of 1 crime every 10 days per person.

⁶⁴ However, the STB does not measure the involvement of peers in the ongoing action, whereas the indepth interview data does.

the interviewers and the participants, which often corresponds to good rapport during the interview.

There are further merits of this methodology, including: the researcher is able to clarify any information that is vague, unclear, or contradictory, participants are given time and space to feel at ease to answer in detail and at their own pace, the researcher is able to ask them about their action itself rather than their motives which has been found to maximise response accuracy (Bennett & Brookman, 2009), and the researcher was able to prompt if participants cannot recall full details of their activities. Furthermore, the researcher can adopt a friendly, open, non-judgemental approach to allow participants to share information freely rather than be subjected to questions that may seem harsh, artificial, unclear, or irrelevant (Dobash, 1979).

Participants were encouraged to use free narrative to answer questions; this natural method is preferable because it reduces processing biases and limits socially desirable responding (Wikström et al., 2012) and participants are able 'to answer questions in their own words with minimal control and direction from the interviewer' (Bennett & Brookman, 2009, p. 4). Most importantly, a successful interview is one that is tailored towards the individual, i.e. some participants talk freely and inadvertently answer all of the interview questions whilst others need more input from the researcher. It is necessary to adhere to this whilst treating the interview in a systematic manner to maintain data comparability.

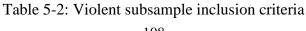
The difficulties that may have ordinarily been experienced whilst administering this particular methodology include: building rapport with and gaining the trust of the participants, and being able to successfully contact the participants and gain their consent to participate. However, due to the contact maintained with the participants as part of the PADS+ longitudinal study, very few methodological difficulties were encountered.

5.2. The in-depth interview subsample

5.2.1. Sampling method

Participants were selected for inclusion in the subsample if they had reported violence (assault and/or robbery) in the preceding interview wave (wave 6, 2010, aged 19) and exceeded 2 or more of the criteria thresholds regarding violence frequency, violence duration, and violence age of onset (listed in table 5-2). Early age of violence onset (onset before age 11) was included in the sampling criteria because existing PADS+ findings state that early age of onset offenders, compared to late onset offenders, are responsible for the majority of crimes from interview waves 1-5, are more likely to continue offending as they get older, and are more likely to offend with a higher frequency (Wikström et al., 2012). The objective was to sample participants who were likely to actively engage in violence at the time of the interview in 2012 to satisfactorily gain detailed information regarding a recent violent offence, as well as to capture the most prolific violent offenders from the full PADS+ sample. In order to increase the likelihood that most active violent offenders had been captured in the subsample, participants with medium-high violence (violence frequency of 10+, N=5) in the immediately preceding waves (interview waves 5 and 6) were also added to the sample.

Subsample criteria	Inclusion threshold
Violence frequency	15+ violent crimes
(6 waves, 2004-2010)	
Violence duration	5+ interview waves
(6 waves)	
Violence age of onset	< age 11



The number of participants that met each of the inclusion criteria are listed below (see table 5-3.); 23 participants (48%) met all 3 subsample criteria.

High	High	Early age	Medium-high	Ν
violence	violence	of onset	violence	
frequency	duration		frequency	
			(waves 5 &	
			6)	
\checkmark	\checkmark	✓		23
·	·	·	-	23
\checkmark	✓	×	-	15
✓	×	\checkmark	-	4
×	\checkmark	\checkmark	-	6
×	×	×	~	5
	T	OTAL		53

Table 5-3: Violent subsample selection criteria by number of participants

In summary, 53 participants were selected for inclusion in the violent subsample. 48 participants (91%) took part in the study and the remaining sampled participants were either uncontactable or refused to take part. A sample size of this number is common in qualitative research and 'usually thought sufficient to reach saturation on the major response categories' (Bennett & Brookman, 2009, p.5).

5.2.2. Subsample characteristics

Demographic characteristics

The majority of the participant sample was male (39 male, 9 female) because there are more frequent and persistent violent male offenders than female offenders in the full PADS+ sample.⁶⁵ However, the male-dominated sample is not considered to pose a significant methodological issue for the current study as the Situational Action Theory perspective adopted proposes that the factors that lead people to crime are the same regardless of gender, i,e. that the key factor in the explanation of crime is the individual-level factor of morality, irrespective of gender.⁶⁶

There is no significant association between ethnicity ($x^2(1) = 1.3$, p > .05) or family social position ($x^2(4) = 6.4$, p > .05) and the violent subsample and the rest of the PADS+ study sample (see figures 5-1 and 5-2).⁶⁷ This finding is expected as the current study proposes that demographic factors such as ethnicity, family social position, and gender by no means cause crime; rather, the direct individual-level cause of crime is hypothesised to be morality.

 $^{^{65}}$ The composition of the full PADS+ sample is almost equal by gender; 47% are males and 53% are females.

⁶⁶ The proposition of Situational Action Theory is that if more males commit crime, it is likely to be because they have a weaker morality than females; this raises fascinating questions regarding gender differences in moral development but goes beyond the scope of this study.

⁶⁷ The 'white' ethnic group is compared to 'other' racial groups because the numbers in the 'other' groups are too small for individual category testing. Family social position is a composite measure of parental income, parental education, and parental employment.

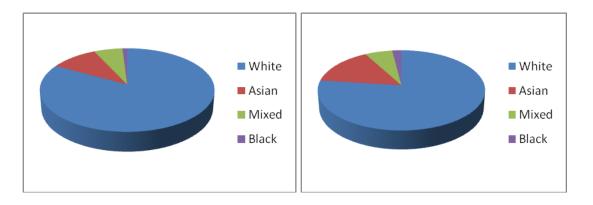


Figure 5-1: Comparison of the ethnic composition of the violent subsample (right) and the rest of the sample (left)

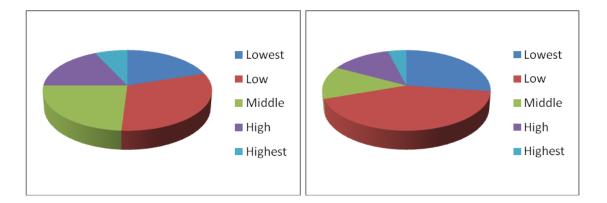


Figure 5-2: Comparison of the family social position composition of the violent subsample (right) and the rest of the sample (left)

However, as expected with respect to the sampling criteria, there is a significant difference in crime (see table 5-4); for example, the violent subsample report an average of 31 violent crimes for the 10-year study period compared to an average of 3 crimes reported by the rest of the sample (t=-4.2, df=47, sig=0.000).⁶⁸

 $^{^{68}}$ For total crime, t=-4.0, df=46, sig=0.000.

Mean	Violent	Rest of sample	Significance	
	subsample (N=48)	(N=598)	level	
Total crime	189.4	14.4	.00	
Assault	50.0	3.8	.00	
Robbery	4.5	0.3	.03	

Table 5-4: Comparison of the violent subsample and the rest of the sample: crime measures

The significant differences between the two sample groups for the various crime measures provide evidence that the subsample is a persistent and frequent offender sample. Since Situational Action Theory offers a general theory of crime which is applicable to all acts of crime, selection of the persistent and frequent violent offender subsample for interview provides a method to investigate recent violent events, but crucially, the explanations of crime derived from these interviews are theorised to be applicable to all crime. Therefore conclusions made regarding the role of moral emotion will be based upon persistent and frequent violent crime but can be extrapolated to all offenders.

Morality characteristics: moral emotion and moral rules

The subsample have been compared to the rest of the sample on various questionnaire scale measures; of most relevance for the current study, 98% of the subsample participants have weak-moderate moral rules and weak-moderate moral emotions (shame and guilt); therefore almost all subsample participants do not think crime is very wrong and report weak shame and guilt for various moral transgressions and acts of crime (see table 5-5). 40% of the violent subsample report both weak moral rules and weak moral emotions. These findings provide strong support for the theoretical propositions of the current study which state that offenders are likely to report weak moral emotion and weak moral rules, which constitute weak overall

individual morality, and this serves as the key explanation for why crime is seen as a morally acceptable action alternative.

		Moral emotion			
		Strong	Medium	Weak	
	Strong	0%	0%	0%	
Moral rules	Medium	2%	42%	8%	
	Weak	0%	8%	40%	

Table 5-5: Violent subsample: moral emotion and moral rules

5.3. Fieldwork and data collection

All of the in-depth interviews were carried out from February-August 2012. Participants were contacted to arrange a convenient interview date, time, and location. Contact was made using various methods; including phone calls, text messages, emails, Facebook messages, and postal letters. Once participants were booked in for an interview, a reminder letter was posted to them and a text message reminder was sent to them on the morning of the interview. The majority of interviews took place from Monday to Friday. Interviews were held at various locations; the majority were public venue interviews (83%), followed by phone interviews (10%) and home interviews (4%).⁶⁹ Phone interviews were offered to participants who had moved to locations outside of a reasonable travelling distance from Cambridgeshire, or were particularly reluctant to take part in the study. Home interviews were offered to participants who did not have the means to travel to and from a public location due to health or financial constraints. The full PADS+ interview was carried out (including administration of the questionnaire), followed by the in-depth qualitative interview (which ranged from 5 to

⁶⁹ Public venue interviews included libraries, conference centres, and college buildings. Phone interviews were conducted on a speakerphone to enable audio-recording. 1 interview (2%) was carried out in prison.

20 minutes in duration). ⁷⁰ At the end of the interview, all participants were given a gift of ± 20 for their time and participation.

All participants gave consent for their interviews to be audio recorded; throughout the interview emphasis was placed on the confidentiality of all of the participants responses. The advantage of recording interviews have been emphasised by other leading qualitative violence researchers, for example, Dobash (1979) states that the use of tape recorders allowed for a more conversational style of interviewing and allowed the researcher to concentrate on the discussion and the development of specific issues rather than on the recording of answers. Subsequently, all audio recordings were transcribed verbatim with the exception of disfluencies (for example, 'erm'). ⁷¹ Finally, all information from the transcribed documents was coded and entered into SPSS for analysis.

5.4. Chapter summary: Interviewing the violent offender: the situational application of moral emotion in real-life violent events

This chapter has outlined the rationale for the development of, and selection of the content, and implementation of the in-depth interview methodology, and has emphasised the numerous advantages to adopting this methodology. This was followed by an outline of the sampling method and subsample characteristics, including a comparison of demographic characteristics, moral emotion, and moral rules between the violent subsample and the rest of the sample. All in all, it is argued that use of this methodology will i) allow for investigation of the situational application of empathy, shame, and guilt, and ii) permit a unique exploration of the specific circumstances under which real-life acts of violence occur.

⁷⁰ The full PADS+ interview took approximately 90 minutes; it involved a contact details form, the structured questionnaire, and the space-time budget.

⁷¹ During transcription, all participant names were anonymised and replaced with an ID number, and all other names were replaced with the relationship to the participant (for example, 'ID 125's girlfriend').

Section 3- Data analysis findings: executive summary

This section outlines all data analyses and their interpretations. They key objective is to present base evidence for the importance of the role of general ability to anticipate moral emotion in violence, using quantitative questionnaire data taken from the PADS+ sample (chapter 6) and to supplement this with depth and detail regarding the importance of the situational role of moral emotion using qualitative in-depth interview data taken from the persistent and frequent violent offender subsample (chapter 7). Chapter 6 presents a detailed comparison of the violent offender subsample and the rest of the sample on all key questionnaire constructs: results reveal that violent offenders report weaker general empathy, cognitive and affective empathy, shame, guilt, moral rules, and higher violence and total crime. Regression analyses (Ordinary least squares (OLS) regression using enter method) are also presented to provide evidence that empathy can predict guilt and shame (research question 1) and shame, guilt, and moral rules can predict violence (research question 2). Chapter 7 presents the results from the in-depth interviews regarding i) the weak situational application of empathy, shame, and guilt in real-life specific violent events, both at the time of and the day following violence, and ii) the specific circumstances of the setting that are particularly violence-conducive, including the presence of peers, provocation, and alcohol use. With regards to the primary research objective of the current study, violent offenders report weak general and situational empathy, shame, and guilt, providing evidence at the general person-level and the specific situation-level that empathy, shame, and guilt are key factors in the occurrence of violence.

Chapter 6

A comparison of the violent subsample and the rest of the sample: differences in empathy, shame, guilt, moral rules, and involvement in violence

This chapter presents a comparison of the violent subsample and the rest of the sample on all relevant questionnaire scale measures. Empathy, shame, and guilt scales are analysed descriptively as separate measures, followed by a series of correlational and regression analyses. Results provide evidence that empathy predicts shame and guilt (research question 1), and furthermore, shame, guilt, and moral rules (together referred to as moral propensity to commit crime) predict violence (research question 2). The results support both of the key hypotheses of the study and provide a firm context for the importance of the role of moral emotion in violence; subsequent analyses use qualitative in-depth interview data (chapter 7) to provide insight into the real life situational application of moral emotion in specific violent events.

6.1. A comparison of the violent subsample and the rest of the sample: an overview

This chapter will present various analyses to build a case for the importance of the roles of empathy, shame, and guilt in violence; the chapter format will mirror the various components and sub-hypotheses of the theoretical propositions of the current study. First, the relationships between empathy and shame and empathy and guilt will be explored, second, the relationship between moral emotion and moral rules will be explored, third, the relationship between moral emotion and violence will be explored, and fourth and finally, the relationship between moral propensity to commit crime and violence will be explored. For all analyses in the current study, the higher the empathy, shame, and guilt score, the stronger the empathy, shame and guilt reported; and the higher the moral rules score, the more young people think it is wrong to commit moral transgressions and acts of crime. In contrast, the higher the moral propensity to commit crime score, the lower the shame, guilt, and moral rules. Based on the theoretical propositions of the current study and the existing empirical evidence (presented in chapters 1-3) it is hypothesised that the violent subsample participants are more likely to report weaker empathy, shame, guilt, and moral rules than the rest of the sample.

The findings provide strong support for the hypotheses; the violent subsample participants report significantly lower mean scores for all empathy measures (with the exception of the cognitive empathy subscale), shame, guilt, and moral rules, than the rest of the sample (see table 6-1.).⁷² In addition, violent subsample participants report significantly higher mean scores for both assault frequency (unlogged) and total crime frequency (unlogged) than the rest of the sample. The estimates of effect size, or eta² (which measure the strength of the difference between the means for the two samples) are higher for shame and guilt than for the empathy measures.⁷³ This indicates that these

⁷² Table 6-1. reports moral emotion data from measures collected at wave 7 when participants were aged 21. The maximum scale score is reported in brackets next to each data measure. The assault frequency and total crime frequency measures are longitudinally collected summed measures (waves 1-7, ages 13-21).

⁷³ Estimates of effect size are included as a measure of the differences between group means because it is the default analysis returned when running an ANOVA test. Alternatively, cohen's d could be used as a measure of the differences between group means.

is a stronger difference between shame and guilt (compared to empathy) between the violent subsample and the rest of the sample and supports the hypotheses of the current study that empathy plays an indirect role in violence whilst shame and guilt are more proximal to an explanation of violent behaviour.

	Violent	Rest of	Difference	T-test	Eta ²
	subsample	the	between	significance	x 100
		sample	means		
General empathy (51)	29.4	33.8	-4.4	.000*	3
Cognitive and affective	18.2	19.3	-1.1	.024*	1
empathy (24)					
Cognitive empathy subscale	10.1	10.3	2	.315	0
(12)					
Affective empathy subscale	8.1	9.0	9	.005*	1
(12)					
Shame (12)	8.7	10.8	-2.1	.000*	6
Guilt (12)	7.3	9.7	-2.4	.000*	8
Moral rules (48)	25.5	30.1	-4.6	.000*	3
Assault frequency	50.7	3.8	46.9	.000*	18
(unlogged)					
Total crime frequency	192.3	14.5	177.8	.000*	18

Table 6-1: Comparison of mean scores for the violent subsample (N=48) and the rest of the sample (N=607) (wave 7): empathy, shame, guilt, moral rules, and crime

*Higher empathy, shame, guilt, and moral rules scores= stronger empathy, shame, guilt, and moral rules.

*=significant difference (p < .05)

*Eta² x 100 is reported to provide the percentage of variance explained for ease of interpretation.

For shame, guilt, and general empathy specifically, there is no overlap between the confidence intervals for the sample group means (see figure 6-1.). This can be interpreted with 95% confidence, as evidence that there is a significant difference between the sample group means (see also table 6-1. for t-test significance levels of .000). The exception is cognitive and affective empathy, for which the confidence intervals do overlap, and this can be interpreted with 95% confidence, as evidence that there is no significant difference between the sample group means (see also table 6-1. for t-test significance level of .024).

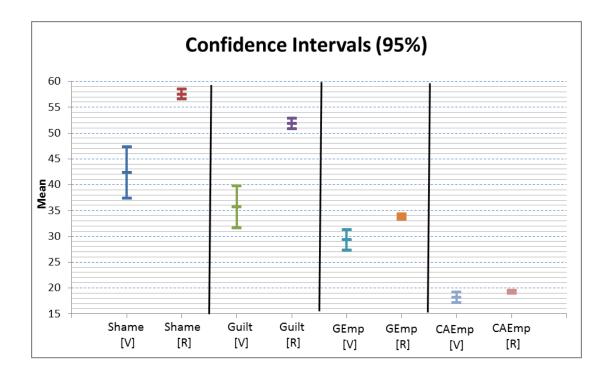


Figure 6-1: Confidence intervals for mean scores for the violent subsample [V] (N=48) and the rest of the sample [R] (N=607): shame, guilt, general empathy, and cognitive and affective empathy

In summary, the violent subsample participants report significantly lower general empathy, shame, guilt, and moral rules, and significantly higher assault frequency and total crime frequency, providing initial support for the hypotheses of the

current study. The following sections will provide more elaborate evidence for these initial conclusions and explore numerous facets of the relationships between all key measures outlined in the current study.

6.2. The components of moral emotion: empathy, shame, and guilt descriptive analyses

Before presenting analyses of the relationships between the key measures (section 6.3. onwards), this section will present a detailed descriptive comparison of the violent subsample and the rest of the sample for the moral emotion measures as distinct scales.

6.2.1. Empathy

The general empathy scale

The overall population distribution for the general empathy measure shows a normal distribution; indicating that there is variation in the responses from the participant sample (see appendix 6-1). Of interest in the current study are the minority participant group that report weak general empathy, and whether these individuals also report weak shame and guilt, and subsequently, report violence involvement. The mean scores for the general empathy scale items are reported for the violent subsample and the rest of the sample (see table 6-2; higher values represent stronger agreement with the item). The mean score ranges from 0 (no empathy at all) to 3 (very much empathy).

General empathy scale item	Rest of sample	Violent subsample	Sign. Diff.
Now and again I cry when I see a sad film	1.6	1.0	*
I sometimes get frightened when watching a scary film	1.6	1.6	
When I see someone badly treated in a film I often	1.6	1.0	*

feel upset			
Other peoples problems are theirs, not mine	1.7	1.5	
Other peoples problems are theirs, not mine	1./	1.5	
I don't care much about whether strangers I meet are happy or sad	1.7	1.6	
Homeless people only have themselves to blame	1.8	1.7	
It is important to give as much money as you can afford to help people in need	1.8	1.8	
I get angry when I see people being mistreated by the police	1.9	1.9	
I find it easy to feel others pain when they are hurt	2.0	1.6	*
People affected by tsunamis and earthquakes are not really my concern	2	1.8	
I like to help people less fortunate than me	2.1	1.8	*
I feel sad when I hear about lonely people without friends	2.1	1.6	*
It is easy for me to understand others viewpoints	2.2	2.3	
I feel sad when I see an animal being hurt or mistreated	2.3	2.0	*
Some films I watch make me very happy (in a good mood)	2.4	2.2	
I find it very upsetting when people get bullied	2.4	2.1	*
When a child gets abused or mistreated I feel really upset	2.7	2.5	

Table 6-2: Comparison of mean scores for the violent subsample (N=48) and the rest of the sample (N=607): general empathy scale items

*=significant difference (p < .05)

The violent subsample participants report weaker mean empathy on 13 of the 17 items and equal mean empathy on 3 of the 17 items; there is a significant difference between the means of the two groups for 7 of the 17 items (marked with an asterisk in

table 6-2.). ⁷⁴ 6 of these 7 items refer to others sadness and upset, indicating that the violent subsample participants do not empathise as much with others various difficulties; and this supports the hypotheses of the current study. Overall, for both samples, strongest empathy is reported for items regarding abuse or mistreatment (for example, 'when a child gets abused or mistreated I feel really upset'). These results are in the expected direction because abuse and mistreatment generally evoke consistent emotional reactions. Weakest empathy is reported for items regarding others viewpoints in films, i.e. fictional empathy (for example, 'now and again I cry when I see a sad film'). These results are in the expected direction because that feature in the remaining scale items.

A factor analysis of the general empathy scale items result in 4 factors; sad empathy (involving situations in which others are sad or upset), altruistic empathy (involving situations regarding whether participants would be willing to help others), stranger empathy (involving situations which feature unfamiliar strangers), and understanding empathy (involving situations regarding whether participants would understand another person's predicament). There are significant differences between the means of the factor scores for the violent subsample and the rest of the sample (see table 6-3) for factor 1 (sad empathy), factor 2 (altruistic empathy), and factor 4 (understanding empathy).⁷⁵ These significant differences provide further support for the hypotheses of the current study regarding the existence of significantly weaker empathy in violent offenders. There are no significant differences between the two groups for factor 3 (stranger empathy); a possible explanation for this is that whilst for the violent subsample, scores on all items are relatively low, the responses for the rest of the sample may have been lowest for the stranger empathy factor items, because they involve the predicament of strangers rather than familiar others, children, or animals, i.e. all participants, regardless of sample groups, answered with relatively weak empathy on the 'stranger empathy' items.

⁷⁴ The only scale item for which violent subsample participants report a higher mean score compared to the rest of the sample is 'It is easy for me to understand others viewpoints'; however, this is a small (non-significant) difference of .1.
⁷⁵ Table 6-3. reports results from a promax factor analysis. A varimax factor analysis identifies a

⁷⁵ Table 6-3. reports results from a promax factor analysis. A varimax factor analysis identifies a significant difference between the two sample groups for factor 1, i.e. sad empathy (F=24.4, sig .000, Eta² x 100 = 4) only.

General empathy factor	ANOVA F	ANOVA Sig	Eta ² x 100
Sad empathy	28.2	.000*	4
Altruistic empathy	6.2	.013*	1
Stranger empathy	3.7	.054	1
Understanding empathy	4.3	.037*	1

Table 6-3: Comparison of the general empathy factor score means for the violentsubsample (N=48) and the rest of the sample (N=607)

*=significant difference (p < .05)

The cognitive and affective empathy scale

The population distribution for the cognitive and affective empathy measure is negatively skewed; indicating that the majority of the participant sample report high cognitive and affective empathy, i.e. there is less variation in the responses than the general empathy scale (see appendix 6-2). The mean scores for the cognitive and affective empathy scale items are reported for the violent subsample and the rest of the sample (see table 6.4; higher values represent stronger agreement with the item). As with the general empathy scale, the mean score ranges from 0 (no empathy at all) to 3 (very much empathy).

Cognitive and affective empathy scale item	Rest of sample	Violent subsample	Sign. Diff.
I often feel upset if a friend is upset	2.0	1.7	*
I often feel sad if other people are sad	2.0	1.7	*

I often feel happy if a friend is happy	2.5	2.2	*
I can often tell if other people are sad	2.5	2.4	
I am often in a good mood if other people are in a good mood	2.5	2.5	
I can often tell if other people are in a good mood	2.5	2.5	
I can often tell if a friend is upset	2.6	2.5	
I can often tell if a friend is happy	2.7	2.7	

Table 6-4: Comparison of mean scores for the violent subsample (N=48) and the rest of the sample (N=607): cognitive and affective empathy scale items

*=significant difference (p < .05)

The violent subsample participants report weaker mean empathy on 5 of the 8 items, and report equal mean empathy scores on the remaining 3 items, compared to the rest of the sample. There is a significant difference between the sample groups for 3 of the 8 items (marked with an asterisk in table 6.4.), all of which measure affective empathy. Therefore, there are no significant group differences for the cognitive empathy subscale, and for the violent subsample, affective empathy is significantly weaker for 3 of 4 items. These findings provide support for the hypotheses of the current study which, based on existing evidence, state that offenders often lack affective empathy specifically and that this is hypothesised to explain why offenders lack the existence of an emotional barrier to cause harm to others. Furthermore, 2 of the 3 significantly different scale items refer to sadness empathy; this provides further evidence, along with the general empathy scale findings, that sadness empathy items specifically and significantly differentiate between the violent subsample and the rest of the sample.

Overall, for both samples, strongest empathy is reported for 2 of the 4 friend empathy items (for example, 'I often feel upset if a friend is upset'). These results are in the expected direction because the current study hypothesises that empathy is more likely to be higher towards friends than strangers, for example, in an altercation with a close or a familiar other than in an altercation with a stranger. Weakest empathy is reported for 2 of the empathy items that refer to sadness (for example, 'I often feel sad if

other people are sad'). These results are in the expected direction because feeling sad for another's predicament (as opposed to only identifying another's predicament) is likely to be required specifically in intense situations which are likely to be less common. This may also contribute to an explanation of why the strongest empathy was reported for 2 cognitive empathy items; because cognitive empathy may be less effortful and more relevant to common everyday situations.

A factor analysis of the cognitive and affective empathy scale items result in 2 factors; cognitive empathy and affective empathy. There is a significant difference between the means of the factor scores for the violent subsample and the rest of the sample (see table 6.5.) for factor 2 (affective empathy) only. Therefore in summary, as was interpreted from the comparison of mean scores, affective empathy significantly differentiates between the violent subsample and the rest of the sample, whereas the participant responses for the cognitive empathy items did not significantly differ for the violent subsample and the rest of the sample.⁷⁶

Cognitive and affective empathy factor	ANOVA F	ANOVA Sig	Eta ² x 100
Cognitive empathy	0.9	.350	0
Affective empathy	7.8	.005*	1

Table 6-5: Comparison of the cognitive and affective empathy factor score means for the violent subsample (N=48) and the rest of the sample (N=607)

*=significant difference (p < .05)

There is a significant difference between individuals with weak, moderate, and strong empathy in their responses of how important they think it is to never hurt an

⁷⁶ Table 6-5. reports results from a promax factor analysis. A varimax factor analysis also identifies a significant difference between the two groups for factor 2, i.e. affective empathy (F=8.1, sig .004, Eta² x 100 = 1).

animal (see table 6-6.).⁷⁷ This has interesting implications because hurting an animal is a notorious psychopathic trait (Dadds, 2008), and psychopaths are often involved in persistent and frequent violence (see chapter 2). The mean score for each empathy category indicates that there are no large differences between moderate and strong empathy for either of the sample groups, but individuals with weak empathy report significantly weak moral rules regarding hurting an animal (this is an average score of 1.3 per wave which is closest to the response category 'quite important' per wave). All in all, individuals with weak empathy in the violent subsample think it is less wrong to hurt an animal compared to individuals in the rest of the sample, which provides initial support for the relationship between empathy, moral rules regarding hurting an animal, and violent behaviour.

	Violent	Rest of
	subsample	sample
Weak empathy	8.9	11.2
Moderate empathy	12.3	12.2
Strong empathy	11.3	12.6
Significance level (difference between groups)	.002*	.000*

Table 6-6: Comparison of the mean score for participants reports of how wrong it is to hurt an animal for the violent subsample (N=48) and the rest of the sample (N=607)

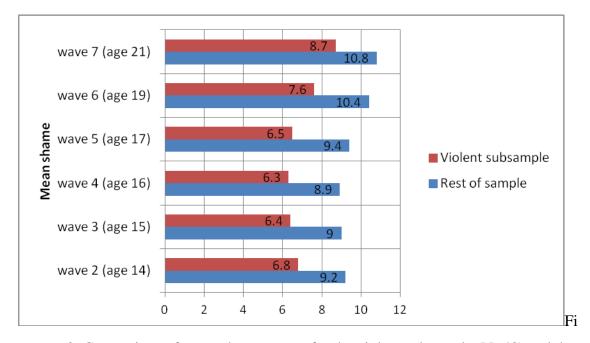
*=significant difference (p < .05)

6.2.2. Shame

The population distribution for the shame scale is negatively skewed; indicating that the majority of the participant sample report strong shame in response to carrying out hypothetical moral transgressions and acts of crime (see appendix 6-3). Of interest in the current study are the minority participant group that report weak shame, and

⁷⁷ These empathy categories are calculated based on standard deviation from the mean score (weak=below -1 standard deviation from the mean, moderate=-1 to 1 standard deviation from the mean, strong= above 1 standard deviation from the mean).

whether these individuals are more likely to report weak moral rules and subsequently be involved in violence. The hypothesised mechanism is that weak shame (as with guilt) weakens overall morality, and morality is the primary factor in the perception of whether crime is seen as a viable and morally acceptable action. The mean scores for the shame scale (by data collection wave) for the violent sample and the rest of the sample are presented below (see figure 6-2). The mean score ranges from 0 (no shame) to 12 (very much shame).



gure 6-2: Comparison of mean shame scores for the violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7)

The violent subsample participants report significantly weaker shame than the rest of the sample for all waves; this supports the hypothesis of the current study that persistent and frequent offenders are likely to have a significantly weaker general ability to anticipate shame.⁷⁸

⁷⁸ Independent samples t-tests (between groups) for all waves are significant (significance level is .000).

Age of weakest and strongest shame

Overall, for both sample groups, mean shame is lowest at wave 4 (age 16); violent subsample participants report an average of 1.0 per scale item which is equivalent to an average response of 'yes, a little' for all items, and for the rest of the sample participants report an average of 1.5 per scale item which is equivalent to an average response of in-between 'yes, a little' and 'yes very much' for all items. The age at which shame is weakest is in the expected direction because at age 16, young people are generally old enough to express their self-evaluative emotions but are still developing their understanding of right and wrong. In earlier adolescence, moral transgressions and acts of crime are generally viewed as more wrong and more worthy of shame and guilt. Overall, for both groups, mean shame is highest at wave 7 (age 21); violent subsample participants report an average of 1.5 per scale item, equivalent to an average response in-between 'yes, a little' and 'yes, very much' for all items, and for the rest of the sample participants report an average of 1.8 per scale item, closest to an average response of 'yes, very much' for all items. The age at which shame is strongest is in the expected direction because at age 21, young people have entered young adulthood, many are in full-time employment or at university, and have generally developed self-evaluative emotions in association with an established understanding of right and wrong.

Changes in shame across adolescence and young adulthood

For both samples, although there is a slight decrease in shame from ages 14-16, and a slight increase in shame from ages 16-21, shame is relatively stable in young adolescence.⁷⁹ Participants reports of stronger shame as they move into young

⁷⁹ For the rest of the sample, there is a significant decrease between waves 2 and 3 (sig 0.02) only, and a significant increase between waves 4 and 5, waves 5 and 6, and waves 6 and 7 (all sig .000). For the violent subsample there are no significant decreases between waves 2 and 3 and waves 3 and 4 and there

adulthood are likely to be due to a general increase in young people's maturity and understanding of right and wrong; and for many young people, this may be facilitated by the departure from compulsory education and the commencement of employment. Overall, mean shame is reasonably stable across the 8 year period; which indicates that the general ability to anticipate shame develops before adolescence and remains stable into young adulthood.

The shame scale items

The mean scores for the 6 shame scale items (summed for all 6 waves) are significantly lower for the violent subsample compared to the rest of the sample (see figure 6-3).⁸⁰ Two observations can be made: first, shame differs according to who finds out about the act of crime. Mean shame reported by participants is lowest in front of best friends, higher in front of teachers, and highest in front of parents. This result is unsurprising as parents are often the rule-makers who disapprove of crime, best friends are often peers or equals, and teachers often fall somewhere in-between in terms of their relationship to young people. Based on the finding that the majority of crime events take place in the presence of peers (Wikström et al., 2012), this has interesting implications for the relationship between peers and the reduced experience of shame, i.e. less shame is reported in the presence of peers, and this may be an important factor in whether overall morality is weakened and crime is seen as an action alternative (see chapter 7 for elaboration). The second observation is that shame differs according to severity of the crime type in question; it is stronger for all items regarding breaking into a car than for items regarding shoplifting.⁸¹ For all analyses carried out in the current study, a 'general' total shame scale measure is used which constitutes all 6 items.⁸²

is a significant increase between waves 5 and 6 (sig .012) and waves 6 and 7 (sig .042), but not waves 4 and 5 (sig .561).

⁸⁰ Independent samples t-tests (between groups) for all items are significant (significance level is .000).
⁸¹ For the rest of the sample, there are significant differences between all shoplifting items and breaking into a car items. For the violent subsample, there are also significant differences for all items with the exception of 'breaking into a car in front of best friends' and 'shoplifting in front of best friends'; both of which have relatively low scores.

⁸² Although there are no specific violence-related items in the shame scale, an assumption is made that the scale items will adequately differentiate between low and high shame participants and that subsequently, the total shame score can be applied to all crime types.

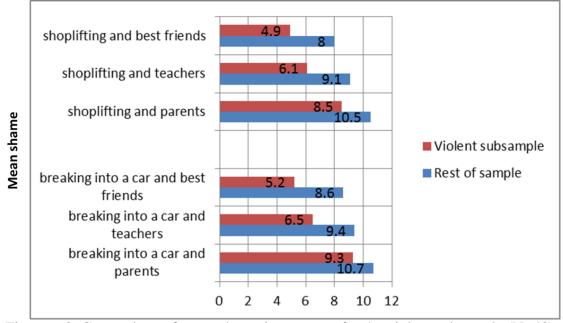


Figure 6-3: Comparison of mean shame item scores for the violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7 summed)

6.2.3. Guilt

The population distribution for the guilt scale shows a normal distribution; indicating that there is variation in participants' reports of guilt; and that the majority report moderate guilt in response to carrying out hypothetical moral transgressions and acts of crime (see appendix 6-4). Of interest in the current study are the minority participant group that report weak guilt, and whether these individuals are more likely to report weak moral rules and subsequently be involved in violence. As with shame, the hypothesised mechanism is that weak guilt weakens overall morality, and morality is the primary factor in the perception of whether crime is seen as a viable and morally acceptable action. The mean scores for the guilt scale (by data collection wave) for the violent subsample and the rest of the sample are presented below (see figure 6-4). The mean score ranges from 0 (no guilt) to 12 (very much guilt).

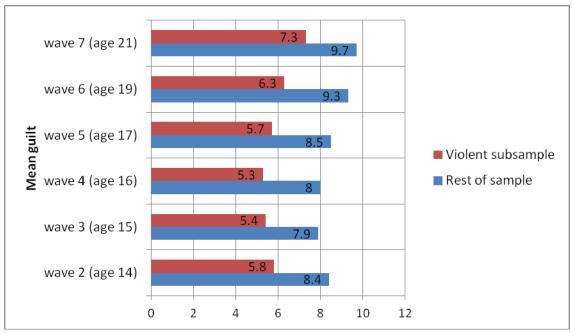


Figure 6-4: Comparison of mean guilt scores for the violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7)

The violent subsample participants report significantly weaker guilt than the rest of the sample for all waves; this supports the hypothesis of the current study that persistent and frequent offenders are likely to have a significantly weaker general ability to anticipate guilt.⁸³

Age of weakest and strongest guilt

As with shame, violent subsample participants report the lowest mean guilt at wave 4 (age 16) with an average of 0.9 per item which is equivalent to an average response of 'yes, a little' for all items. Participants in the rest of the sample report the lowest guilt at wave 3 (age 15) with an average of 1.3 per item which is equivalent to an average response of 'yes, a little' for all items. The age at which guilt is weakest is in the expected direction because at ages 15-16, young people are generally old enough to

⁸³ Independent samples t-tests (between groups) for all waves are significant (significance level is .000).

express their self-evaluative emotions but are still developing their understanding of right and wrong. For both sample groups, as with shame, mean guilt is highest at wave 7 (age 21); violent subsample participants report an average of 1.2 per item which is equivalent to an average response of 'yes, a little' for all items, and participants in the rest of the sample report an average of 1.6 per item which is equivalent to an average response of 'yes, very much' for all items. The age at which guilt is strongest is in the expected direction because at age 21, young people have entered young adulthood, many are in full-time employment or at university, and many young people have generally developed self-evaluative emotions in association with an established understanding of right and wrong.

Changes in guilt across adolescence and young adulthood

For both samples, although there is a slight decrease in guilt from ages 14-16, and a slight increase in guilt from ages 16-21, guilt is relatively stable in young adolescence.⁸⁴ As with shame, participants reports of stronger guilt as they move into young adulthood are likely to be due to a general increase in young people's maturity and understanding of right and wrong; and for many young people, this may be facilitated by the departure from compulsory education and commencement of employment. Overall, mean guilt is relatively stable across the 8 year period; which indicates that the general ability to anticipate guilt develops before adolescence and remains stable into young adulthood.

⁸⁴ For the rest of the sample, there is a significant decrease between waves 2 and 3 (sig 0.00) only, and a significant increase between waves 4 and 5, waves 5 and 6, and waves 6 and 7 (all sig .000). For the violent subsample there are no significant decreases across waves 2 and 3 and waves 2 and 4 and there is a significant increase between waves 5 and 6 (sig .049) and waves 6 and 7 (sig .003), but not waves 4 and 5 (sig .346).

The guilt scale items

The mean scores for the guilt scale items (summed for all 6 waves) are significantly lower for the violent subsample compared to the rest of the sample (see figure 6-5).⁸⁵ Of particular relevance for the current study of violence, when participants were specifically asked how they would feel for hitting another pupil that made a rude remark, those in the violent subsample report less than half the average guilt than individuals in the rest of the sample. This supports the hypotheses of the current study that individuals involved in frequent and persistent violence are more likely to report a weaker general ability to anticipate guilt.

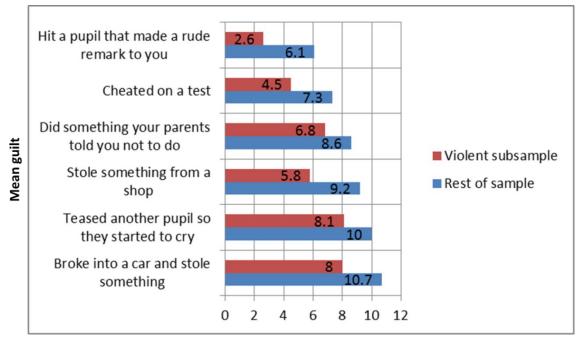


Figure 6-5: Comparison of mean guilt item scores for violent subsample (N=48) and the rest of the sample (N=607) (waves 2-7 summed)

Another key observation is that less guilt is reported for moral transgressions (legal acts) than for acts of crime (illegal acts), with the exception of the item 'teased

⁸⁵ Independent samples t-tests (between groups) for all items are significant (significance level is .000).

another pupil so they started to cry', for which participants reported the second highest mean guilt.⁸⁶ Therefore, as with the shame scale, for the most part, participants' reports of guilt reflect the severity of the act; the highest mean guilt score is for breaking into a car and stealing something which is the most serious crime item in the scale.⁸⁷ For all analyses carried out in the current study, a 'general' total guilt scale measure is used which constitutes all 6 items.⁸⁸

A promax factor analysis of all wave 7 shame and guilt scale items (6 shame scale items and 6 guilt items) indicates that there are 3 factors; 'general shame' (4 of the shame items loading above .4), 'general guilt' (5 of the guilt items loading above .4), and 'shame in front of parents' (2 parent shame items loading above .4).⁸⁹ The 'shame in front of parents' factor may have been returned because the majority of participants reported particularly strong shame when carrying out a crime in front of parents (as opposed to teachers or peers).1 guilt item ('Would you feel guilty if you broke into a car and stole something?') had a factor loading below .4 and was therefore not included in the interpretation. Therefore the factor analysis confirms that shame and guilt can be treated as distinct concepts; and this supports the propositions of the current study.

6.2.4. Lost participants: shame and guilt

Although most of the analyses in the current study use wave 7 data collected in 2012, there are some analyses for which the total shame and guilt scores summed for

⁸⁶ The moral rules scale also includes an item regarding teasing others for which participants report particularly strong moral rules; therefore for the majority, strong moral emotion and strong moral rules are reported for transgressions regarding teasing and this may be because adolescence is a particularly sensitive time window for bullying.

⁸⁷ For the rest of the sample, there is a significant difference between all items (all sig .000). For the violent subsample, there is a significant difference between all items (significance level ranging from .000-.025) with the exception of 'teased another pupil so they started to cry' and 'broke into a car and stole something' (significance level .961).

⁸⁸ Although there is only one specific violence-related item in the guilt scale, an assumption is made that the scale items will adequately differentiate between low and high guilt participants and that subsequently, the total guilt score can be applied to all crime types.

⁸⁹ A promax factor analysis was selected because it is hypothesised that the factors are likely to correlate.

several data waves (waves 2-7) are used. The retention rate for the full study sample has remained very high (92% at wave 7) across a 10-year period. Since there was a slight increase in overall shame and guilt reported from waves 4-7, exploration of whether the lost participants were unrepresentative of the remaining sample is not straightforward. Nonetheless, in order to provide evidence that the sample remains representative following attrition, mean shame and guilt are compared for individuals that took part in waves 2-3 only, waves 2-4 only, and so on (see table 6.7.). Lower shame and guilt are reported for lost participant groups than by participants that remain in the study (i.e. the waves 2-7 group).⁹⁰ However, the confidence intervals for all group means overlap, providing evidence at the 95% confidence level, that there are no significant differences between the group means. Therefore the sample remains representative with regards to shame and guilt.⁹¹

Lost participants					Participants all waves
	Waves 2-3 only (N=2)	Waves 2-4 only (N=11)	Waves 2-5 only (N=16)	Waves 2-6 only (N=31)	Waves 2-7 only (N=643)
Shame mean per wave	9.3	6.5	7.0	8.1	9.4
Guilt mean per wave	9.0	5.3	6.8	7.9	8.5

Table 6-7: Mean shame and guilt for lost participants

 $^{^{90}}$ For guilt, the highest mean score is reported by the waves 2-3 only group, but this is only based on 2 participants so should be interpreted with caution.

⁹¹ Note that the empathy measures were introduced at wave 7 only.

6.3. The relationships between empathy, shame, and guilt

The previous sections have introduced empathy, shame, and guilt as distinct measures with a specific focus on the comparison between the violent subsample and the rest of the sample. This section will outline the relationships between the key measures using wave 7 data for the full PADS+ sample.

6.3.1. Correlations

Guilt and shame

There is a strong correlation between shame and guilt ($R^2 = 0.45$, correlation .67, significance level 0.00) therefore individuals that report weak or strong shame are also likely to report weak or strong guilt, respectively (see figure 6-6). This finding supports the hypothesis of the current study that both emotions are often experienced simultaneously and that both emotions are relevant to moral behaviour; guilt is a measure of a negative feeling which is experienced before potential consideration of an action, and shame is a measure of a negative feeling directed towards the self which is based on the perception of how others would judge a potential action.

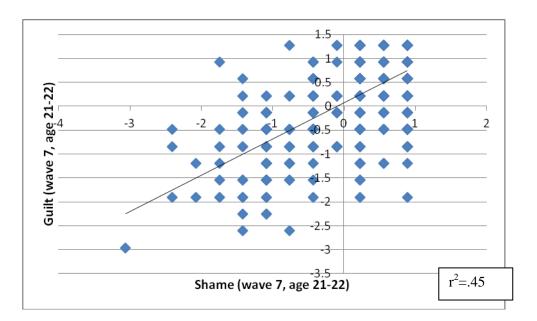


Figure 6-6: The relationship between guilt and shame (N=655)

For some of the analyses presented in subsequent sections, shame and guilt will be categorised together under 'moral emotion'; they are highly correlated therefore both contribute to the overall measure, but of fundamental importance, although they are related empirically, conceptually they do not measure the same construct.

General empathy and guilt

There is a moderate positive correlation between general empathy and guilt ($R^2 = 0.21$, correlation .46, significance level 0.00), therefore individuals that report weak or strong general empathy are more likely to report weak or strong guilt, respectively (see figure 6-7.). This finding supports hypothesis 1 of the current study which states that the ability to exercise empathy is related to a reduced or increased possibility to feel guilt in particular circumstances.

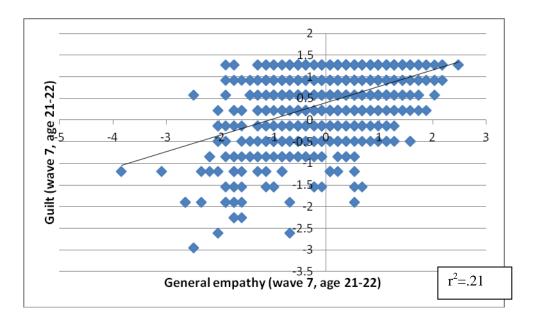


Figure 6-7: The relationship between general empathy and guilt (N=655)

General empathy and shame

There is a weak-moderate correlation between general empathy and shame $(R^2 = 0.12, \text{ correlation } .35, \text{ significance level } 0.00)$, therefore, as with guilt, individuals that report weak or strong general empathy are, in some cases, more likely to report weak or strong shame, respectively (see figure 6-8). The relationship between general empathy and guilt is stronger than the relationship between general empathy and shame. This finding aligns with existing evidence which states that the relationship between empathy and shame is somewhat unclear and inconsistent compared to the relationship between empathy and guilt (see chapter 3 for elaboration).

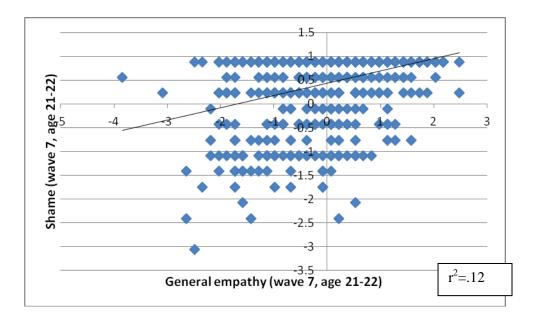


Figure 6-8: The relationship between general empathy and shame (N=655)

Cognitive and affective empathy and guilt

There is a weak but significant correlation between cognitive and affective empathy and guilt ($R^2 = 0.08$, correlation .27, significance level 0.00), therefore there is a weak correspondence between the cognitive and affective empathy that participants report and the guilt that participants report (see figure 6-9). Therefore this relationship is weaker than the relationship between general empathy and guilt (and general empathy and shame).

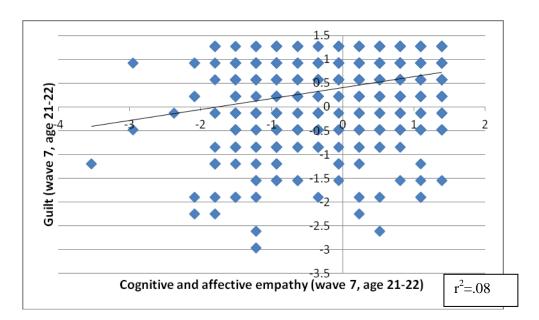


Figure 6-9: The relationship between cognitive and affective empathy and guilt (N=655)

Cognitive and affective empathy and shame

There is a weak but significant correlation between cognitive and affective empathy and shame ($R^2 = 0.04$, correlation .20, significance level 0.00), therefore the strength of cognitive and affective empathy that participants report has a weak correspondence to the shame that participants report (see figure 6-10). Of all of the key measures outlined in the current study, the relationship between cognitive and affective empathy and shame is the weakest.

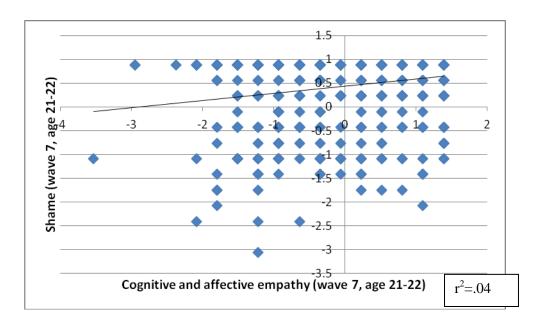


Figure 6-10: The relationship between cognitive and affective empathy and shame (N=655)

The finding that the general empathy scale demonstrates a moderate association to guilt and a weak-moderate association to shame whilst the cognitive and affective empathy scale demonstrates a weak association to both shame and guilt indicates that the cognitive and affective empathy scale has been unsuccessful in capturing an adequate measure of the cognitive and affective dimensions of empathy.⁹² Furthermore, the cognitive and affective empathy scale descriptive data looks unusual (high skew and consistent scores of 8 and 12), and the scale did not differentiate between the violent subsample and the rest of the sample. Therefore for most of the subsequent analyses, the general empathy scale measure will be used.

In summary, the strength of the correlational relationships between the key measures of the current study, for the full PADS+ sample, are listed in order (see table 6.8):

⁹² There is a moderate correlation between general empathy and moral emotion (guilt and shame standardised and combined) ($R^2 = 0.20$, correlation .45, significance level 0.00) and a weak correlation between cognitive and affective empathy and moral emotion (guilt and shame standardised and combined) ($R^2 = 0.07$, correlation .27, significance level 0.00).

Bivariate correlation		r	r ²
Shame	Guilt	.67	.45
General empathy	Guilt	.46	.21
General empathy	Shame	.35	.12
Cognitive and affective empathy	Guilt	.28	.08
Cognitive and affective empathy	Shame	.20	.04

Table 6-8: Correlations (r & r^2) between empathy, shame, and guilt (N=655)

Shame and guilt have the strongest relationship; although the current study posits that they are distinct concepts, they are modelled together in the theoretical propositions of the current study to play a similar role in contributing to the strength of morality (this will be explored in section 6.5.1.). Of the empathy measures, the strongest association is found between general empathy and guilt; this aligns with findings from existing evidence which indicate that there is a particular association between empathy and guilt specifically (see chapter 3). All empathy measures have significant correlations to guilt and shame to varying degrees; this supports the propositions of the current study that empathy is related to the possibility to feel guilt and shame (in particular circumstances).

6.3.2. Do individuals with weak empathy report weak shame and weak guilt?

Section 6.3.1. has provided evidence of a relationship (of varying strengths) between empathy and shame, and empathy and guilt. The number of participants that fall under the weak, moderate, and strong categories for all 3 measures are presented

below (see table 6-9).⁹³ The majority of participants with weak, moderate, or strong empathy report corresponding weak, moderate, or strong shame and guilt; this supports the hypotheses of the current study. There are very few outliers; of the 643 participants, there are 9 young people that report weak empathy and strong shame and/or guilt, and 7 young people that report strong empathy and weak shame and/or guilt (this totals to 2.5% of the participant sample).⁹⁴

	Shame		Guilt			
	Weak	Moderate	Strong	Weak	Moderate	Strong
Weak empathy	37	53	.5	41	46	
Moderate empathy	72	296	79	62	317	68
Strong empathy	5.	62	34	5	61	35

Table 6-9: Number of full PADS+ sample (N=655) participants with weak, medium, and strong empathy (wave 7), shame (waves 2-7), and guilt (waves 2-7)

It is apparent that the cases that initially appear to be outliers are in fact due to category grouping cut-off points; 20 of the 23 outlier cases are very close to the border cut-off for the adjacent category (less than 1.88 from the category border), therefore if these participants had reported 2 scores higher or lower on any of the scale items, they would be categorised in an adjacent category. Therefore overall, results provide overwhelming support for the hypothesised relationship between empathy and guilt and empathy and shame. Furthermore, there are no young people that report weak shame

⁹³ These categories are calculated based on standard deviation from the mean score (weak=below -1 standard deviation from the mean, moderate=-1 to 1 standard deviation from the mean, strong= above 1 standard deviation from the mean).

⁹⁴ 2 of the 16 'outliers' are in the violent subsample; they both report strong empathy and weak shame and guilt.

and high guilt or weak guilt and high shame; these findings support the hypotheses of the current study that shame and guilt can be classed together under moral emotion because although they are different measures conceptually, they are often experienced simultaneously. In conclusion, the overwhelming majority of the data supports the hypotheses of the current study; that weak empathy is related to a reduced possibility to feel shame and guilt, and strong empathy is related to an increased possibility to feel shame and guilt.

6.3.3. Summary: the relationships between empathy, shame, and guilt

This chapter has presented various correlations corresponding to the current study's theoretical propositions. The findings can be summarised as follows: first, although all key factors correlate significantly, both empathy measures are more strongly related to guilt than to shame. This mirrors findings from existing literature which state that the relationship empathy and shame is inconsistent and contradictory, and the relationship between empathy and guilt is more firmly established (outlined in chapter 3). Second, general empathy has a moderate correlation with cognitive and affective empathy and the affective empathy subscale, but a weak correlation to the cognitive empathy subscale, providing an indication that the 4 items selected for the cognitive empathy subscale were insufficient in adequately measuring empathy.⁹⁵ Third, cognitive and affective empathy has a lower correlation to shame and guilt than general empathy. This may be because the cognitive empathy subscale may not have captured an adequate measure and calls into the question the validity of the overall scale. Fourth, of the general empathy factors, factor 2 (altruistic empathy) has the strongest correlation to shame and guilt. This may be because the altruistic items tap into traditional empathy and may have provided the most valid measure of the construct of empathy. Fifth, of the

⁹⁵ For example, the population distribution for the cognitive empathy subscale looks unusually distributed; there is a peak at score 8 and score 12, indicating that participants may have responded consistently for all scale items (i.e. answered 'yes a little' for all items (score of 8) or 'yes very much' for all items (score of 12).

cognitive and affective empathy factors, factor 2 (affective empathy) has the strongest correlation to shame and guilt, when interpreted alongside the hypotheses of the current study, aligns with existing research which states that affective empathy is a key factor in violence (see chapter 2).

6.4. Research question 1: Is there a relationship between empathy and shame and empathy and guilt?

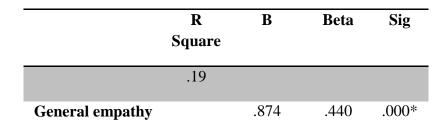
General empathy significantly predicts shame and accounts for 14% of the variance (see table 6.11).

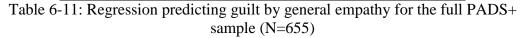
	R Square	В	Beta	Sig
	.14			
General empathy		.759	.376	.000*

Table 6-10: Regression predicting shame by general empathy for the full PADS+ sample (N=655)

*Ordinary least squares (OLS) regression using enter method *=significant difference (p < .05)

General empathy significantly predicts guilt and accounts for 19% of the variance (see table 6.12)





*Ordinary least squares (OLS) regression using enter method *=significant difference (p < .05)

These findings support the hypotheses of the current study; that general empathy plays a significant role in the possibility to feel shame and guilt.

A comparison of means for all key measures by general empathy category is presented below for the full PADS+ sample (see figure 6-11); shame (Eta² x 100=10) and guilt (Eta² x 100=17) significantly and progressively increase for participants according to whether they report weak, moderate or strong general empathy.⁹⁶ Although the current study does not specifically model the direct role of empathy in relation to moral rules and to crime, moral rules (Eta² x 100=8) significantly and progressively increase for participants according to whether they report weak, moderate or strong general empathy, and assault (unlogged) (Eta² x 100=5) and robbery (unlogged) (Eta² x 100=2) significantly and progressively decrease for participants according to whether they report weak, moderate or strong general empathy.⁹⁷ Subsequent sections of this chapter will explore the role of moral rules and more specifically, the combined roles of moral emotion and moral rules in self-reported violence.

⁹⁶ Note that the key variables cannot be visually compared directly (with the exception of shame and guilt) as they have different maximum scale scores (e.g. the shame and guilt measures have a maximum score of 12 and the moral rules measure has a maximum score of 48).

⁹⁷ Since the ANOVA comparison of means (F value) does not specify which categories are significantly different from one another, a post hoc test is necessary. Post Hoc tests (Tukey's) show that there is a significant difference between the weak and moderate (and weak and strong) empathy category means.

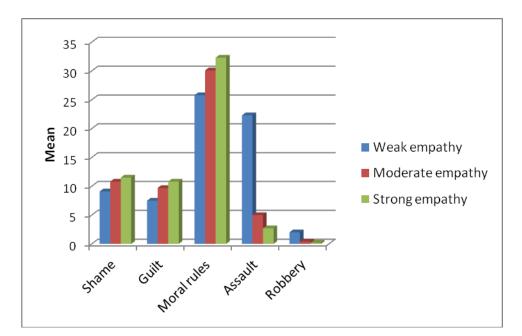


Figure 6-11: Mean scores for all key variables by general empathy category (N=655)

The key hypotheses of the current study focus upon i) the relationship between empathy and the possibility to feel shame and guilt, and ii) the roles of shame and guilt in moral propensity to commit crime, and subsequently, in violence. The previous sections of this chapter have presented results to provide evidence in support of hypothesis 1. A detailed outline has been presented of the relationship between shame and guilt, empathy and guilt, and empathy and shame. In the following sections of this chapter, the relationship between moral emotion, moral rules, and crime (particularly violence), will be outlined.

6.5. Research question 2A: Is there a relationship between shame, guilt and moral rules in forming overall moral propensity to commit crime?

6.5.1. High moral propensity to commit crime: weak moral emotion and moral rules

There is a strong positive correlation between moral emotion (shame and guilt) and moral rules for the full PADS+ sample ($R^2 = .55$, correlation .74, significance level

.000), therefore individuals that report weak or strong moral emotion are more likely to report weak or strong moral rules, respectively (see figure 6-12).⁹⁸

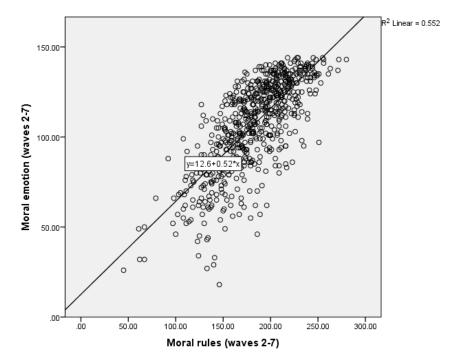


Figure 6-12: The relationship between moral emotion and moral rules for the full PADS+ sample (N=655)

Of all of the relationships between the key measures, the correlations between shame, guilt, and moral rules are the strongest; there is a highly significant relationship between shame and moral rules (.45) and guilt and moral rules (.60). Subsequent sections of this chapter will illustrate the importance of both moral rules and moral emotion in explaining violence, and specifically, provide evidence for an interaction effect between moral emotion and moral rules in predicting overall crime frequency. A high moral propensity to commit crime refers to a combination of weak shame, weak guilt, and weak moral rules.

⁹⁸ The correlation between moral emotion and moral rules is even stronger for the violent subsample participants ($R^2 = .66$, correlation .81, significance level .000).

6.6. Research question 2B: Is there a relationship between moral propensity to commit crime and crime, specifically violence?

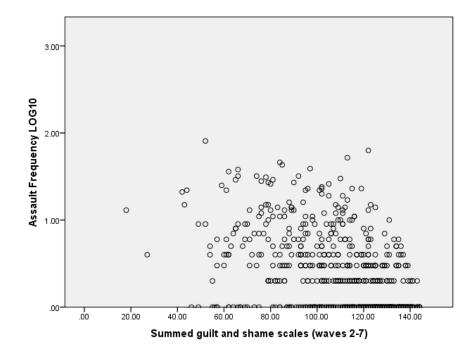
The current study proposes that moral rules and moral emotion, when combined, play a fundamental role in whether crime is perceived as an action alternative, and are therefore essential to consider in the explanation of crime. However, the specific focus of the current study is on the moral emotion element; on the different roles of shame, guilt, and empathy with regards to violence, and the primary objective is to develop and test this relationship. The following sections will explore the specific role of moral emotion in violence, and the chapter will conclude with analyses of the roles of both moral emotion and moral rules in predicting crime.

6.6.1. Is there a relationship between moral emotion and violence?

Logged assault frequency by moral emotion

Violence is one of the most common crime types committed by young people (see chapter 1) and violent situations are often emotionally salient, for example, violence is often preceded by an altercation or disagreement, therefore the study of emotional input is of particular relevance to violence. For the analyses carried out in the remainder of this chapter, longitudinal summed data measures are used. This section will present analyses to build support for the relationship between weak moral emotion and violence. A logged assault frequency variable is used because it accounts for a positively skewed distribution by performing a transformation of the data towards a more normal distribution, making it more suitable for analysis. This is particularly relevant for the assault variable because there are many zeros inherent in the data (i.e. there are many participants that report no assault). There is a significant negative correlation between moral emotion and assault frequency for the violent subsample ($\mathbb{R}^2 = .22$, correlation -.47, significance level .000) (see figure 6-13). For the violent

subsample in particular, there is a clear negative correlation, i.e. individuals with stronger shame and guilt report less self-reported assault.⁹⁹



⁹⁹ The assault frequency variable is logged to account for the high number of zeros (i.e. there are many participants in the sample that report no assault). Note that the x-axis scales are different in both graphs; the violent subsample report weaker shame and guilt.

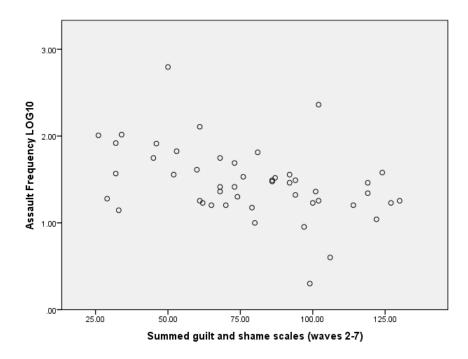


Figure 6-13: The relationship between moral emotion and assault frequency (logged) for the rest of the sample (N=655) (top) and the violent subsample (N=48) (bottom)

Mean assault frequency (unlogged) by moral emotion category

The strength of the relationship between moral emotion and violence can also be ascertained with a visual display of the mean assault frequency by the weakest, weak, strong, and strongest moral emotion categories, for the violent subsample and the rest of the sample, accompanied with an ANOVA test of the difference between the sample group means (see figure 6-14.). ¹⁰⁰ Individuals in the weakest moral emotion category and in the violent subsample report the highest mean assault frequency of 67 crimes, therefore the individuals that report the weakest guilt and weakest shame have committed a significantly higher number of violent crimes. Mean assault frequency

¹⁰⁰ The data is categorised based on standard deviation from the mean; the strongest moral emotion (above 1 standard deviation from the mean, N = 98), strong moral emotion (between the mean score and 1 standard deviation from the mean, N = 264), weak moral emotion (the mean score to -1 standard deviation from the mean, N = 171), and weakest moral emotion (below -1 standard deviation from the mean, N = 110).

becomes progressively lower for the weak moral emotion category (36 crimes) and the strong moral emotion category (21 crimes). Of key relevance and in support of the current study's propositions, of the 98 participants that reported the strongest moral emotion, they report an average of 1 self-reported assault over a 10-year period.¹⁰¹ For the rest of the sample, the same trend by moral emotion category can be observed; there is a significant difference between the category means (F=25.9, sig 0.00, Eta=0.34, Eta² x 100=12).¹⁰²

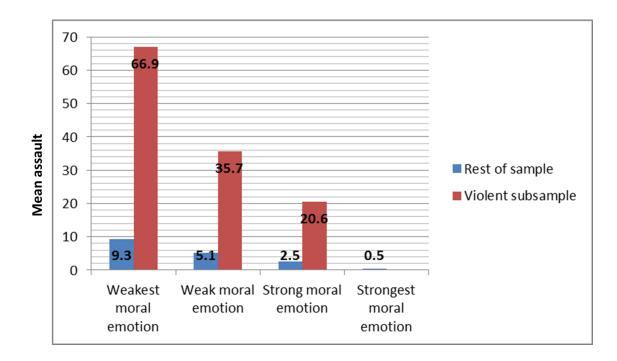


Figure 6-14: Comparison of mean assault frequency (unlogged) by strongest, strong, weak, and weakest moral emotion categories for the violent subsample (N=48) and the rest of the sample (N=655)

¹⁰¹ Despite the striking difference between average assault by moral emotion category, for the violent subsample, there is no significant difference between the category means because the sample sizes are relatively small (F=0.9, sig 0.41, Eta=0.17, Eta² x 100=4).

¹⁰² Post hoc tests reveal that there is one exception; there is no significant difference between the strong and strongest moral emotion categories (significance level .368).

Predicting logged assault frequency with shame, guilt, and moral rules

Correlational analyses and comparison of group means support the existence of a significant relationship between moral emotion and violence. Next, a regression analysis (Ordinary least squares (OLS) regression using enter method) will indicate the extent to which shame, guilt, and moral rules can predict violence involvement for the full PADS+ sample. Assault frequency has been logged to account for the positively skewed distribution, i.e. many participants report that they have committed no assault. Model I explains 31% of the variance in assault frequency (see table 6.13); guilt is a significant predictor (significance level 0.00), however shame is not a significant predictor (significance level .280).¹⁰³ Model II explains 34% of the variance in assault frequency; guilt is a significant predictor (significance level 0.00); however, shame, as with model I, is not a significant predictor (significance level .000).

This finding provides support for the hypotheses of the current study which state that the strength of the relationship between shame and violence is moderate and less significant than the strength of the relationship between guilt and violence. A significant correlation between shame and assault does exist; this indicates that the specific role of shame may not be as straightforward as the role of guilt, for example, although shame is not a significant predictor of violence on the quantitative scales, in contrast, shame is relevant for almost all young people in real-life acts of violence (see chapter 7). When moral rules are added to the regression model, the explained variance increases; therefore moral emotion should be explored in association with moral rules (as outlined in the theoretical considerations of the current study in chapter 1); this will be explored in more detail in the following sections.

¹⁰³ Since the correlation between shame and guilt is reasonably high (r=.67), mulitcollinearity diagnostics were carried out in SPSS to explore whether this was the reason that shame is not a significant predictor. The tolerance values are above .1 (.3) and the variance inflation factors are below 10 (3.0), therefore multicollinearity does not pose a problem for this analysis.

	R Square	В	Beta	Sig
Model I				
	.31			
Guilt		020	507	.000*
Shame		002	062	.280
Model II				
	.34			
Guilt		014	357	.000*
Shame		001	026	.645
Moral rules		003	238	.000*

Table 6-12: Regression predicting assault frequency (logged) by shame and guilt (model I) and shame, guilt, and moral rules (model II) (N=655)

*Ordinary least squares (OLS) regression using enter method

*=significant difference (p < .05)

6.6.2 Is there a relationship between moral emotion and prolific offending?

Although violence has been selected to focus on in the current study, the explanation of crime proposed in the current study is applicable to all crime types. One of the most striking findings from the longitudinal PADS+ data is that from 2002-2012, 24 young people (4% of the sample) committed 50% of total crime, indicating that a small group of young people are responsible for a majority of total crime. 75% of this prolific offender group report very weak moral emotion, and the remaining 25% report weak moral emotion (see figure 6-15.). Furthermore, 67% of the prolific offender group are in the violent subsample. Of key relevance for the propositions of the current study, 0% of the prolific offender group report strong moral emotion. This provides further support for the propositions of the current study which state that weak moral emotion plays an integral role in crime involvement.

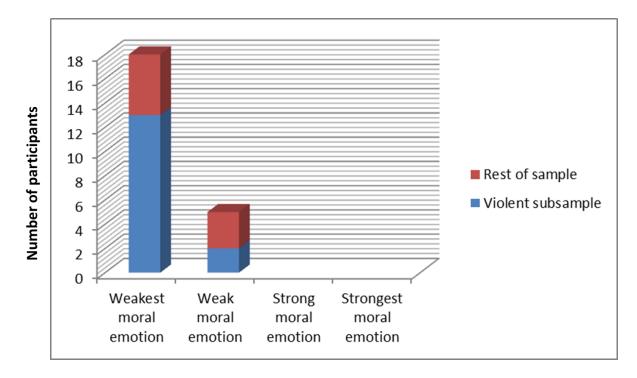


Figure 6-15: 4% of the sample that committed 50% of all crime for the violent subsample (N=48) and the rest of the sample (N=655) (waves 1-7)

6.6.3. Is there a relationship between moral propensity to commit crime and violence?

The theory of Situational Action Theory states that it is not moral emotion alone, but moral emotion in association with moral rules that provide a measure of overall morality and both are fundamental in contributing to an explanation of crime. Therefore for the remainder of the chapter, the role that moral emotion plays in association with moral rules (referred to together as moral propensity to commit crime) and their link to crime, and particularly violence, will be explored further. When all of the components of moral propensity to commit crime are assessed and interpreted in order of strength of correlation (see table 6-14), guilt has a stronger association to assault frequency than shame (-.29 compared to -.25). Shame does not appear to contribute greatly because when shame and guilt are combined, the strength of the association to assault frequency remains the same as the association to guilt (-.29).¹⁰⁴ Moral rules have an even stronger

¹⁰⁴ This aligns with the results from the regression analyses conducted (see table 6.13.)

association to assault frequency (-.31), and of key significance, moral propensity to commit crime has the strongest correlation to assault frequency (.32), i.e. the higher the moral propensity to commit crime, the higher the self-reported assault frequency, which indicates that there is a relationship between moral rules and moral emotions in relation to assault which warrants further exploration.

	Assault frequency (r)	Significance
Shame	25	.000*
Guilt	29	.000*
Moral emotion	29	.000*
Moral rules	31	.000*
Moral propensity to commit crime ^a	.32	.000*

Table 6-13: Correlations (r) between all key variables and assault frequency (unlogged) for the full PADS+ sample (N=655)

^a = moral rules + moral emotions (scale values reversed)

*=significant difference (p < .05)

Mean assault frequency (unlogged) by moral propensity to commit crime category

The mean assault frequency by the low, moderate, and high moral propensity to commit crime categories, for the violent subsample and the rest of the sample are presented below (see figure 6-16).¹⁰⁵

¹⁰⁵ The data has been categorised based on standard deviation from the mean; high moral propensity to commit crime (above 1 standard deviation from the mean, N = 106), moderate moral propensity to commit crime (the mean score to 1 standard deviation above the mean, N = 434), and low moral propensity to commit crime (the mean score to -1 standard deviation below the mean, N = 103).

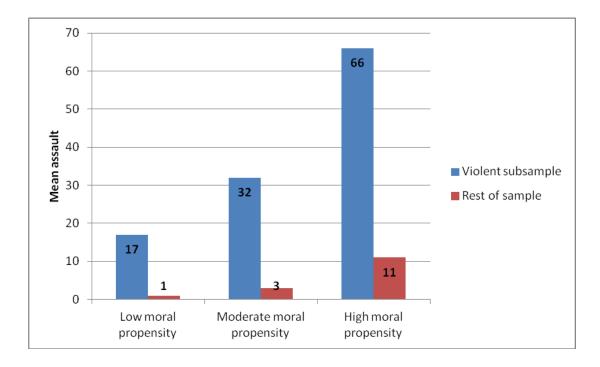
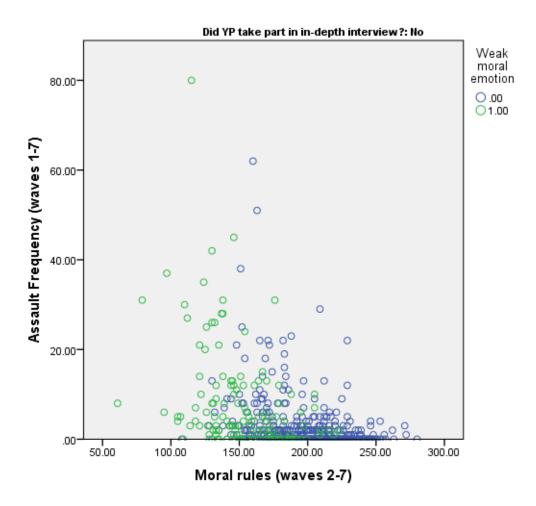


Figure 6-16: Comparison of mean assault frequency (unlogged) by low, moderate, and high moral propensity to commit crime categories for the violent subsample (N=48) and the rest of the sample (N=655)

Similarly to the direction of results with moral emotion alone, the result is striking; those in the high moral propensity to commit crime category and in the violent subsample report the highest mean assault frequency of 66 crimes. Mean assault frequency becomes progressively lower for the moderate moral propensity to commit crime category (32 crimes), the low moral propensity to commit crime category (17 crimes). ¹⁰⁶ Therefore for the violent subsample and the rest of the sample, the individuals that report weak moral rules (i.e. they do not think it is very wrong to commit moral transgressions and acts of crime), and weak guilt and weak shame (i.e. they would not feel bad about the act or care how others may perceive the act), have committed a significantly higher number of violent crimes. This directly aligns with the hypotheses of the current study.

¹⁰⁶ For the violent subsample, there is no significant difference between the category means because the sample sizes are relatively small (F=0.8, sig 0.45, Eta² x 100=4). For the rest of the sample, there is a significant difference between the category means (F=46.1, sig 0.00, Eta² x 100=14).

The combined roles of weak moral emotion and weak moral rules in assault frequency (unlogged) are illustrated below to provide a visual presentation (see figure 6-17); individuals that fall under the lowest quartile (score below 92) are categorised under the weak moral emotion category and appear in green. All other individuals that do not fall under the lowest quartile appear in blue, i.e. the remaining 75% of the sample. The green dots that represent participants with weak moral emotion appear on the left side of the graph, i.e. weak moral emotion corresponds with weak moral rules, and these participants report a higher assault frequency compared to the rest of the participants.



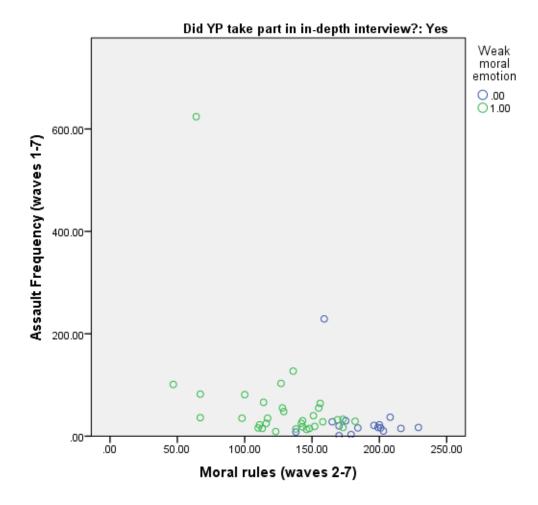


Figure 6-17: The relationship between moral rules, weak moral emotion, and assault frequency (unlogged) for the rest of the sample (N=655) (top) and the violent subsample (N=48) (bottom)

The graph (figure 6-17) indicates that there is an outlier; one participant has reported an assault frequency of 600+. Because this outlier may distort the visual representation in the graph, this has been replicated below (figure 6-18) with the removal of the outlier. The graph clearly shows that individuals with weak moral emotion and weak moral rules report a higher assault frequency.

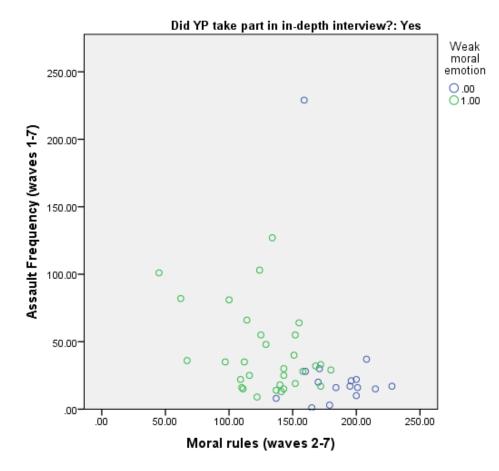


Figure 6-18: The relationship between moral rules, weak moral emotion, and assault frequency (unlogged) for the violent subsample (N=48) upon removal of the outlier

6.6.4. Interaction: weak moral emotions and weak moral rules together predict crime

The key question of the current study is: do moral emotions play a role in whether or not people break moral rules? And if the moral rules in question are defined by law, this refers to acts of crime. There is a significant interaction effect between moral rules and moral emotion in predicting crime frequency across the 10-year study period. Total crime frequency (unlogged), as opposed to assault frequency, has been used to illustrate the magnitude of the interaction (see figure 6-18).

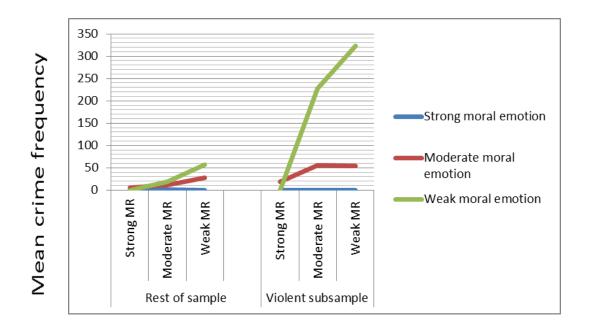


Figure 6-19: Interaction: mean crime frequency by moral emotion categories and moral rules categories in crime involvement for the violent subsample (N=48) and the rest of the sample (N=655)

The interaction between moral emotion and morality is especially relevant to individuals with weak moral rules. For example, the individuals in the violent subsample with weak moral rules and moderate moral emotion have a mean crime frequency of over 50. However the individuals with weak moral rules and weak moral emotion have a mean crime frequency of over 320. Therefore for those with weak moral rules, mean crime frequency increases by 600% or 6-fold for those participants that report corresponding weak moral emotion compared to those that report moderate moral emotion. This finding emphasises the importance of the role that moral emotion plays in further weakening individual morality, or increasing moral propensity to commit crime, and its association to crime involvement. In summary, the primary theoretical proposition of the current study is that weak moral emotion weakens morality, and weak morality allows crime to be seen as a viable and morally acceptable action alternative; this is supported with evidence presented in this chapter using longitudinally collected empirical data. This interaction effect is one of the key findings of the currently and has rarely been analysed or presented in other existing research.

The total crime frequency variable contains 2 outliers; two participants have reported a total crime frequency of1433 and 1903. Because these outliers may distort the visual representation in the graph, the graph has been replicated below (figure 6-20) with the removal of the outliers. The difference between the two graphs is that for the graph with no outliers included, individuals with weak moral emotion report the highest crime frequency compared to all other categories, regardless of whether they have weak or moderate moral rules. However, as with figure 6-19, the graph clearly shows that individuals with weak and moderate moral emotion and weak and moderate moral rules report a higher total crime frequency.

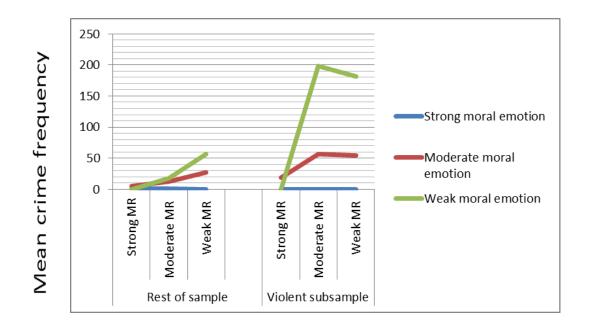


Figure 6-20: Interaction: mean crime frequency by moral emotion categories and moral rules categories in crime involvement for the violent subsample (N=47) and the rest of the sample (N=655) upon removal of the outlier

Turning to violence specifically, for the full PADS+ sample, regression model I analyses moral emotion and moral rules as predictors of assault frequency (unlogged)

and explains 11% of the variance (see table 6.15.).¹⁰⁷ Model II incorporates the interaction term, and the model is stronger with an explained variance of 17%. This increase in explained variance can be attributed to the interaction of moral rules with moral emotion. Of key relevance, when the interaction term is added, moral emotion is no longer a significant predictor of assault; this is because the interaction between both moral measures (i.e. moral emotion and moral rules) is the fundamental predictor of assault.¹⁰⁸ Therefore in conclusion, moral emotion alone does not predict crime; rather, it makes an essential contribution to moral propensity to commit crime, which is a key predictor of assault frequency.

	R Square	В	Beta	Sig
Model I				
	.11			
Moral emotion		131	114	.042*
Moral rules		183	230	.000*
Model II				
	.17			
Moral emotion		017	015	.784
Moral rules		164	207	.000*
Moral emotion*moral rules		007	288	.000*
(interaction)				

Table 6-14: Regression predicting assault frequency (unlogged) by moral emotion and moral rules (model I) and moral emotion, moral rules, and their interaction (model II) (N=655)

¹⁰⁷ The assault frequency variable has not been logged here as the interaction term has been included in the model. When the assault frequency variable is logged, moral rules and moral emotion explain a notably larger proportion of the variance (33%) in crime frequency.

¹⁰⁸ When the regression analyses are run after the removal of an outlier (assault frequency of 600+), model I explains 17% of variance and model II explains 22% of variance. Furthermore, in model II, moral emotion becomes a significant predictor of assault frequency (sig = .011).

*Ordinary least squares (OLS) regression using enter method *=significant difference (p < .05)

In conclusion, individual differences in moral propensity to commit crime can explain 17% of the variance in assault frequency. This data has been taken from a large representative sample; therefore firm conclusions can be made regarding the importance of moral emotions, in association with moral rules, as key considerations for the explanation of violence decision-making.

6.7. Path analysis: the different roles of empathy, shame, guilt, and moral rules in violence

Finally, a path model for the full PADS+ sample is presented to investigate the directions of influences presented in this chapter (see figure 6-19). The model has been calculated by running a series of multiple regression analyses for the various paths and selecting Beta coefficients for the path diagram, a procedure outlined by Wuensch (2013).¹⁰⁹ The e (error variance) values are calculated using the equation $\sqrt{(1-R^2)}$. Three key observations can be made: first, the strongest path is from general empathy, mediated by guilt, to violence. Therefore, the role that empathy plays in the possibility to feel guilt, and the role that guilt plays in violence, are key considerations in the explanation of crime. Second, general empathy has a stronger indirect effect through guilt, than a direct effect to violence. Therefore this supports the propositions of the current study that there is no theoretical reason to believe that empathy plays a direct role in violence, and its importance more accurately lies in the role it plays in increasing or reducing the possibility to feel shame and guilt. Third, although general empathy plays a role in the experience of shame, shame does not have a strong association to violence. Therefore although in the current study, the focus has been on both shame and

¹⁰⁹ Subsequently, AMOS path modelling software was used to run the path analysis to confirm the Beta coefficients were the same.

guilt as moral emotions, there is evidence to suggest that guilt has a stronger association to violence (this mirrors findings from existing evidence, see chapter 2). Overall, the path analysis provides supporting evidence for hypothesis 1 (regarding the role that empathy plays in the possibility to feel shame and guilt) and hypothesis 2 (regarding how guilt and shame, combined with moral rules, play a key role in violence) of the current study.

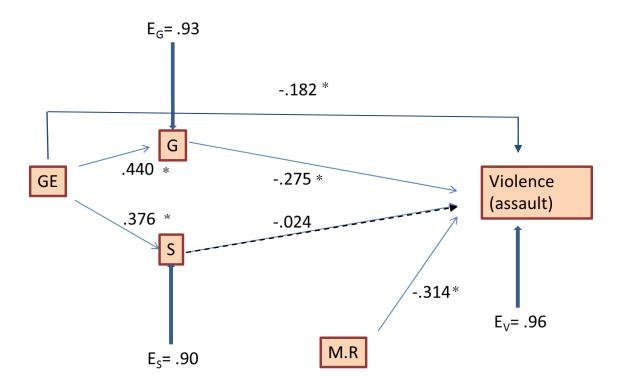


Figure 6-21: Path model of general empathy, guilt, shame, moral rules, and violence (unlogged) with Beta coefficients (N=655)

*=coefficients are significant at the .01 level.

6.8. Chapter summary: A comparison of the violent subsample and the rest of the sample: differences in empathy, shame, guilt, moral rules, and involvement in violence

This chapter has explored PADS+ questionnaire data; it began with a detailed descriptive analysis of the key measures of empathy, shame, and guilt, with a particular focus on the comparison between the violent subsample and the rest of the sample. Next, both cross-sectionally and longitudinally, evidence was presented for the

existence of significant relationships between all key measures outlined in the current study (see table 6.16).¹¹⁰ The relationships between the variables of interest are particularly apparent for the violent subsample when compared to the rest of the sample; this provides further support for the hypotheses of the current study regarding the role of moral emotion in violence.

Variables	Findings
Shame and guilt	Shame and guilt are highly correlated; therefore they are combined into a 'moral emotion' measure, although theoretically, they measure different constructs.
Empathy and guilt	General empathy is a better predictor of guilt than cognitive and affective empathy. Furthermore, empathy is more strongly related to guilt than shame.
Empathy and shame	General empathy is a better predictor of shame than cognitive and affective empathy. Furthermore, empathy is more strongly related to guilt than shame.
Moral emotion and violence	Weak moral emotion is associated with increased self-reported violence.
Moral emotion and crime	Weak moral emotion is associated with increased self-reported total crime frequency.
Shame, guilt, and moral rules	Shame, guilt, and moral rules are highly correlated and theoretically, constitute moral propensity to commit crime.
Moral propensity to commit	High moral propensity to commit crime is associated

¹¹⁰ Field (2013) was used as a useful data analysis guide for most of the analyses in the current study.

crime and violence	with increased self-reported violence.
Moral emotion and moral	The interaction between moral emotion and moral
rules (interaction) and total	rules illustrates the essential contributions of both
crime frequency	moral measures in predicting total crime frequency.

Table 6-15: Summary of findings regarding the roles of empathy, shame, guilt, andmoral rules in violence and total crime frequency

This chapter has provided empirical evidence to demonstrate that the violent subsample report weaker empathy, shame, and guilt compared to the rest of the sample. In conclusion, quantitative evidence provides strong support for the primary research questions of the current study; i) the relationship between empathy and the possibility to feel shame and guilt, and ii) the relationship between moral emotion, moral rules, and violence. The following chapter will present data from qualitative, in-depth interviews to provide more detailed evidence regarding the situational application of moral emotion in violence.

Chapter 7

'I ain't gotta feel bad for him, he's gotta feel bad for himself': Weak empathy, shame, guilt and in persistent violent offenders

This chapter will present evidence from in-depth qualitative interviews with a frequent violent offender subsample and demonstrate that a striking majority of violent offenders do not think it is wrong to commit violence, and do not care about doing so, i.e. they lack shame and guilt; therefore violence comes as a morally acceptable and natural action alternative. Furthermore, violent offenders do not register the predicament of their victims; they report a distinct lack of empathy. These findings provide an insight into the real world situational application of empathy, shame, and guilt in the context of young people's violent crime. Furthermore, in-depth interview data can allow for identification of the particular circumstances under which violence materialises, such as in the presence of peers and provocation. Exploration of both individual and setting level factors in real-life violent events support the suppositions of Situational Action Theory and can further the understanding of and explanation of violence.

Interviewer: 'OK and being in a violent situation like this, is it quite typical for you or is it quite unusual?'

Participant: 'Yeh when you go out, when you're out in town and stuff it is yeh, whenever we go out, I try not to go out that much...' (John, interview 41)¹¹¹

Chapter 6 presented a comparison of the persistent and frequent violent offender subsample and the rest of the PADS+ sample; the violent subsample report significantly weaker empathy, shame, and guilt on quantitative indices. This chapter will provide further evidence for these initial results by presenting detailed recollections of specific acts of violence as reported by 48 subsample participants in qualitative interviews. As one persistent offender stated, "there's not much guilt involved in the whole situation to be honest" (Sam, interview 39). The qualitative nature of this data enables a unique and deeper understanding of violence; young people were asked to recollect their most recent violent incident; including all of the events preceding the violence, who they were with, why the altercation occurred, and all other details regarding the event.

The rationale behind carrying out in-depth, qualitative interviews is that Situational Action Theory and its supporting empirical data have evidenced that the majority of violent events are carried out by crime-prone individuals when they take part in crime-prone settings (see Wikström et al., 2012).¹¹² However, of crucial importance, most of the time when crime-prone individuals take part in crime-prone settings, crime does not occur. Therefore, a deeper understanding is required of the social psychology of the situations in which violence occurs and the personal dynamics of these situations; what specifically causes violence to materialise? Detailed in-depth interview data regarding specific acts of violence can take first steps towards

¹¹¹ All participant names have been substituted with different names to retain anonymity.

¹¹² 'Crime-prone' individuals are defined as those with a high individual propensity to commit crime which primarily constitutes weak moral emotion and weak moral rules (Wikström et al., 2012; Wikström, 2006). 'Crime-conducive' settings constitute: the absence of monitors (for example, teachers or police officers), and/or the absence of deterrents (for example, CCTV), and/or the presence of frictions (for example, provocation).

understanding this question as well as provide further evidence for the propositions of the current study regarding the importance of moral emotion in violence decisionmaking.

The key research questions are; both at the time and the day following an act of violence, do young offenders feel that the violence is morally wrong, and do they feel empathy, shame and guilt for the violence? Second, does individual moral emotion interact with moral rules, and furthermore, with particular violence-conducive circumstances of the setting? Chapter 6 presented various analyses to provide evidence that moral emotion plays a significant role in involvement in violence. However, it is important to note that the questionnaire data is about generalised situations, such as 'if you hit someone who made a remark to you would you feel guilty', whereas the merit of the in-depth interview method is that it provides moral emotion data from specific, real-life events. If, upon triangulation of data methods, findings converge, firm conclusions can be made regarding the importance of the role of moral emotion in violence decision-making.

7.1. The situational application of empathy, shame, and guilt in specific acts of violence

Interviewer: 'OK, did you feel ashamed or guilty at all, at the time, when the fight was happening?'

Participant: 'No, I was totally focused on one thing and one thing only' (David, interview 17)

The current study hypothesises that weak empathy reduces the possibility to feel shame and guilt in particular circumstances, and weak shame and guilt weaken overall morality and allow crime to be seen as a morally acceptable action alternative. Chapter 6 evidenced that the general ability to exercise empathy, and general ability to anticipate shame and guilt, are significantly weaker in the violent subsample than the rest of the sample. This section will outline the situational application of empathy, shame, and guilt by the violent subsample participants in specific acts of violence.

7.1.1. Overview: The situational application of empathy, shame, and guilt in specific acts of violence

Participants were asked whether both at the time of the violence, and when they woke up on the day following the violence, they felt it was wrong to commit the violence, whether they felt shame or guilt, and whether they thought about how the violence recipient was feeling (i.e. empathy). The overwhelming majority of the participants did not feel the violence was morally wrong, did not feel ashamed, did not feel guilty, and did not feel empathy, both at the time of and the day following the violence (see figure 7-1.). These findings provide striking support for the hypotheses of the current study which state that weak empathy, shame, guilt, and moral rules are fundamental contributors to the explanation of violence.

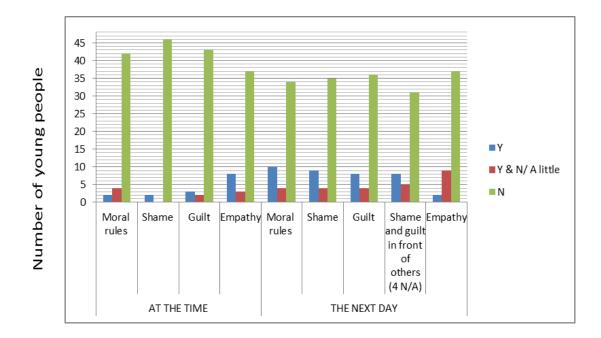


Figure 7-1: Moral rules and moral emotions at the time of the violence and on the day following the violence (N=48)

The following sections will present findings from and discuss each interview question in turn and illustrate the interpretations with participant quotes.

7.1.2. Empathy, shame, and guilt at the time of and the day following the violence

Shame at the time of the violence: 'Did you feel ashamed, at the time?'

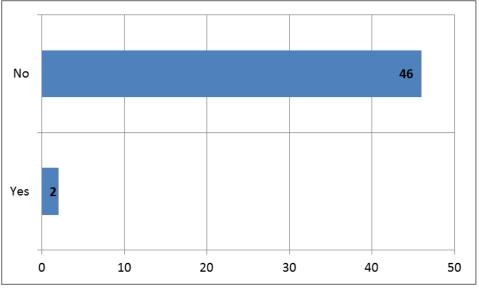
Participant: Not at the time, no (Sam, interview 6)

Participant: 'Er, cos I have a little girl, and I shouldn't-, I shouldn't have really put-, like, that could have been a lot worse, that bottle could have killed me, so' (Jade, interview 34)

> Participant: No (Carl, interview 42)

Participant: More ashamed than guilt, because I felt that he was-, he weren't helping himself out, so I didn't feel guilty for that necessarily, it was just a case I felt ashamed of myself that I even got myself into the situation where... I had to do it (Imran, interview 12)

46 participants (96%) report that they felt no shame at the time of the violence (see figure 7-2.). This aligns with the longitudinal questionnaire data which reveals that 65% of the violent subsample report weak shame when asked how they would feel regarding various moral transgressions and acts of crime (compared to 22% of the rest of the sample). This supports the theoretical proposition of the current study which states that shame, i.e. a negative feeling experienced in the presence or consideration of others, plays a fundamental role in contributing to violence decision-making (via its contribution to the strength of morality). If moral rules are weak (as will be evidenced in the section 7.1.3.), shame further weakens overall morality, and contributes to an explanation of why violence is perceived as a morally acceptable action.



Number of offenders (of 48)

Figure 7-2: Shame at the time of the violence

Guilt at the time of the violence: 'Did you feel guilty, at the time?'

Participant: Not at the time, no (Jordan, interview 2)

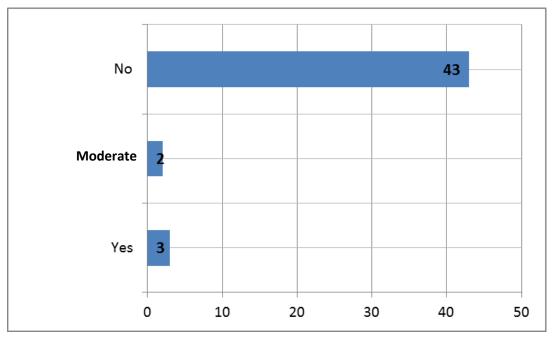
Participant: I did, when my mate pulled out a knife, do you know what I mean, and stabbed him (Paul, interview 39)

> Participant: No (Steve, interview 19)

Participant: A bit yeh. I felt like, guilty (Pat, interview 13)

Participant: Yeh, yeh, for a long time after actually (Fabio, interview 21)

43 participants (90%) report they felt no guilt at the time of the violence (see figure 7-3.). This aligns with the longitudinal questionnaire data which reveals that 69% of the violent subsample report weak guilt when asked how they would feel regarding various moral transgressions and acts of crime (compared to 22% of the rest of the sample). This supports the theoretical proposition of the current study which states that guilt, i.e. a negative feeling felt inwardly and often experienced as a result of an action, plays a fundamental role in contributing to violence decision-making (via its contribution to the strength of morality). If moral rules are weak (as will be evidenced in the section 7.1.3.), as with shame, guilt further weakens overall morality and contributes to an explanation of why violence is perceived as a morally acceptable action.



Number of offenders (of 48)

Figure 7-3: Guilt at the time of the violence

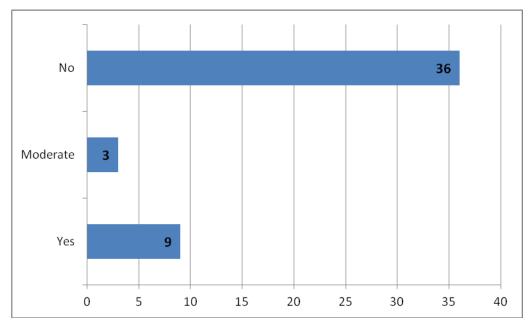
Empathy: 'At the time, did you think about how the other person was feeling?'

Participant: 'Er, nah cos I thought if he's-, if he hasn't got the feelings of not hitting me, then it shouldn't be the same the other way around' (Jake, interview 24)

Participant: 'Well I know how he felt cos I've had it to me before, not grabbed hold of people and been hit but I'd had people just come out and you know, blindside you and hit you all of a sudden, and er...I know for a fact he would have been shocked very very quickly'. (Sally, interview 45)

Participant: Ur, well yeh I did, and I was hoping it was hurting (laughs) (Craig, interview 22)

37 participants (77%) report that they felt no empathy at the time of the violence (see figure 7-4.). This aligns with the questionnaire data which reveals that 35% of the violent subsample report weak general empathy when asked how strongly they agree with various statements about other people's difficult predicaments (compared to 13% of the rest of the sample). This supports the theoretical proposition of the current study which states that empathy, i.e. the ability to identify and feel emotional congruence with another person's viewpoint, plays a fundamental role in the possibility to experience shame and guilt, and if empathy is weak, subsequent weak moral emotion weakens morality and forms an explanation of why violence is perceived as a morally acceptable action.



Number of offenders (of 48)

Figure 7-4: Empathy at the time of the violence

Furthermore, several participants clearly identified the violence recipients predicament but did not feel emotional congruence with it. Therefore participants were able to experience cognitive empathy whilst simultaneously demonstrating an absence of caring about it, i.e. whilst demonstrating weak affective empathy. This aligns with findings from the questionnaire empathy scale which provide evidence that violent offenders report significantly weak affective empathy than the rest of the sample, and aligns with existing literature that states that weak affective empathy is an important contributor to crime, particularly for psychopathic violence (see chapter 2). Participants also stated that the reasons that they did not think about how the other person was feeling (i.e. report weak empathy) were because they did not perceive the existence of any reciprocal empathy:

P: 'Haha (laughs), nah, I dunno, like, I did wake up and think, cor like, I bet you he's hurting, sort-of thing, I didn't think how he's feeling emotionally, like, whether he's like-, I've scarred him sort-of thing, or, is he gonna feel safe, none of that. Cos like, well, *I dunno about anyone else so I can't speak for anyone*

else, but as far as I know it, no-one my age sort-of thinks about that kind of stuff. Like oh yeh, I slapped someone the other day, I wonder if he's sitting at home now all depressed. Like, if he-, if he was div enough to stand in front of my face and try and tell me I'm a pussy, then.. when he got beat up...now, like, he's regretting it himself sort-of thing innit, I-, *I aint gotta feel bad for him, he's gotta feel bad for himself*, you shouldn't go around like starting on people and that if you're not gonna back it'

(Wayne, interview 4, emphasis added)

Shame on the day following the violence: 'When you woke up the next day, did you feel ashamed at all, for hitting him?'

Participant: 'Erm, I felt ashamed, but not guilty' (Shaun, interview 31)

Participant: Nope (Mo, interview 29)

Participant: I felt a bit ashamed more than guilty yeh (Orlando, interview 16)

Participant: No (Peter, interview 9)

Participant: Again, ashamed at the situation, that I was even in it (Dave, interview 18)

Participant: Both really, yeh [shame and guilt] (Susan, interview 33)

35 participants (73%) report that they felt no shame regarding the violent act on the day following the violence (see figure 7-5.). This provides further evidence for the role of shame in violence decision-making and will be discussed in section 7.1.2.1.

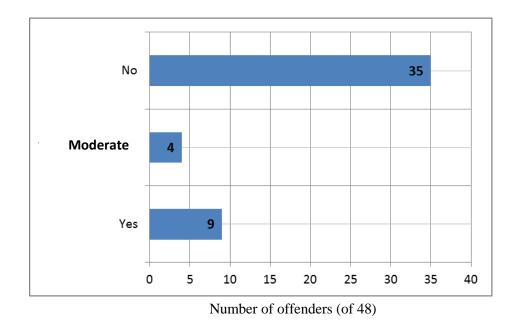


Figure 7-5: Shame on the day following the violence

Guilt on the day following the violence: 'When you woke up the next day, did you feel guilty at all, for hitting him?'

Participant: Err....more guilty, than anything, cos obviously I didn't want to do it, but he was ju-, drove me to do it (Nathan, interview 14)

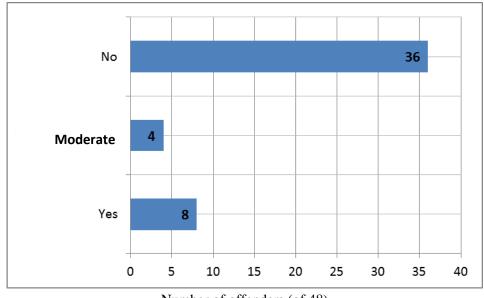
Participant: Er, yeh, a bit guilty (James, interview 23)

P: No (Mike, interview 32)

Participant: I felt guilty about other people cos...., to be honest, they didn't do anything, they were just stood up for the main guy (Dylan, interview 43)

> Participant: Nope (Isaac, interview 10)

36 participants (75%) report that they felt no guilt regarding the violent act on the day following the violence (see figure 7-6.). This provides further evidence for the role of guilt in violence and will be discussed in section 7.1.2.1.



Number of offenders (of 48)

Figure 7-6: Guilt on the day following the violence

Shame and guilt when others found out about the violence: 'When [your dad] found out, did you feel shame or guilt about the violence?'

Participant: No (Liam, interview 1)

Participant: Yeh my parents knew yeh. More my mum yeh. More ashamed yeh, definitely (Morgan, interview 18)

Participant: ...Still felt really guilty I suppose. But at the same time, I-, I felt at the time, and afterwards, that I had to do it (Victor, interview 19)

Participant:... I dunno really. Not-, not-, not bad, I mean, they trust me, they know I wouldn't have started it so (Robert, interview 22)

> Participant: Nothing. Felt alright. (Ben, interview 48)

31 participants (70%) of the participants that the question was applicable to (i.e. when someone else had found out about the violent act) report that they felt no shame or guilt regarding the violent act with regards to the person(s) that found out about the violence (see figure 7-7.). This data provides an additional measure of shame and guilt and provides further support for the importance of weak shame and guilt in violence.

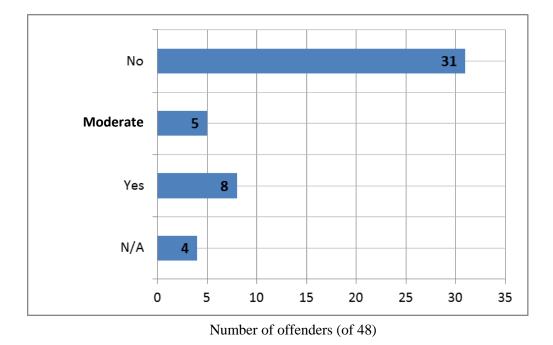


Figure 7-7: Shame and/or guilt in front of others on the day following the violence

Empathy on the day following the violence: 'When you woke up the next day, did you think about how the other person was feeling?'

Participant: Yeh (Stephen, interview 11)

Participant: No I didn't really care (Harry, interview 38)

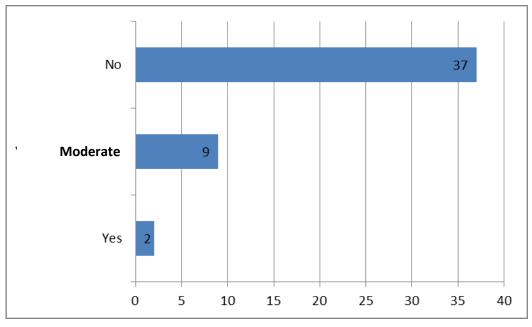
Participant: I dunno, just like how-, like..., what I'd done to him, and just, like...what sort of state he was in really (Parvi, interview 5)

> Participant: No, I didn't think of him whatsoever (Ross, interview 27)

Participant: ...In a way yeh, in a way I-, I felt like, if he was alright...., if his mum you know was alright, do you know what I mean? How it affected his family basically. So I just wondered about that (Damien, interview 35)

'Uh, kind of, but I was more worried about myself....to be fair' (Kelly, interview 4)

37 participants (77%) report that they felt no empathy on the day following the violence (see figure 7-8.). This provides further evidence for the role of empathy in violence and will be discussed further in the following section.



Number of offenders (of 48)

Figure 7-8: Empathy on the day following the violence

7.1.2.1. Comparison of empathy, shame, and guilt at the time of and the day following the violence

Although there are a number of young people, who on reflection of the violent event the following day, report empathy, shame, or guilt, this increase is minimal.¹¹³ 17% of participants report more shame the following day and 15% of participants report more guilt the following day. The majority of participants report stable empathy, shame, guilt from the time of the event to the following day (see figure 7-9.). However, almost no-one reported less shame and guilt the following day. This is an expected finding because if shame and guilt are already weak at the time of the violence, it is unlikely that they will become weaker on reflection of the event the following day, particularly in the absence of violence-conducive setting factors such as provocation, alcohol consumption, and time spent in the city centre.

¹¹³ For empathy, 6 participants (13%) answered no at the time and answered yes the following day.

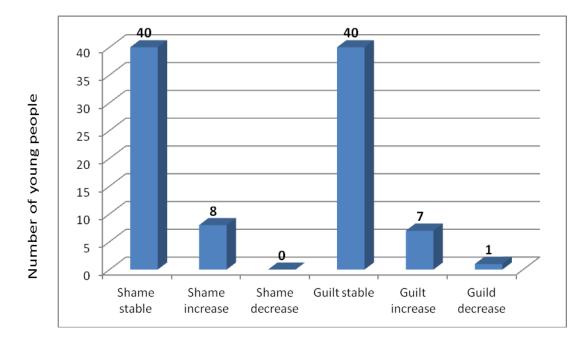


Figure 7-9: Stability in shame and guilt at the time of violence and the day following the violence

The number of participants that reported moderate-strong empathy, shame, and guilt are listed below (see table 7-1). ¹¹⁴ Several interesting observations can be made; first, although empathy appears to be largely stable, i.e. participants' reports of whether they considered the violence recipients viewpoint appear to be largely consistent at the time of and the day following the violence, 6 participants (13%) that report weak empathy at the time report empathy the following day, and 5 participants (10%) that report empathy at the time report no empathy the following day. As outlined above, shame reported at the time of the violence (4% of offenders) rises on the day following the violence (27% of offenders) and guilt reported at the time of the violence (10% of offenders) rises on the day following the violence (25% of offenders). Despite this, participants continue to engage in persistent and frequent violence; therefore although they may momentarily feel their previous day's violence was wrong and feel shame and/or guilt for the previous day's violence, they continue to commit violence when

¹¹⁴ These figures include participants that reported moderate or inconsistent moral emotion; therefore the table reports an overestimation of the strength of reported moral emotion.

faced with a potentially violent situation. Overall, the majority of participants do not report strong moral emotion, either at the time of the violence or the following day; therefore the hypothesis that weak moral emotion plays a key role in violence is strongly supported.

Moral emotion	At the time of the violence	On the day following the violence
Empathy	12 (25%)	11 (23%)
Shame	2 (4%)	13 (27%)
Guilt	5 (10%)	12 (25%)

Table 7-1: Comparison of empathy, shame and guilt at the time of and the day following the violence

It is important to note that retrospective emotions are not hypothesised to play the key role in subsequent violence, but rather, the current study models shame and guilt as key inputs to morality for the decision-making process, and crucially, are situation specific factors. This evidence opposes the majority of existing literature that has explored the roles of shame and guilt experienced after crimes as deterrents for future crime (Treiber, 2013).To further illustrate this point, some participants report that they thought the violence was wrong, and/or shame, and/or guilt on the day following the first violent event, but proceed to commit violence again on the same or following day, i.e. it is the moral emotion experienced at the time of the event that contributes to whether or not overall morality permits crime to be seen as an alternative for action.

Another interesting observation is that participants report that they felt empathy towards the violence recipient for almost a quarter of the violent events. The interview responses indicate that this refers primarily to cognitive empathy (identifying another person's perspective) rather than affective empathy (the ability to feel emotional

congruence with another person's perspective) which therefore explains the unexpected number of participants that report empathy. Furthermore, this aligns with the propositions of the current study that empathy does not play a direct role in violence, but rather is a more distal factor; it plays a role in the possibility to feel shame and guilt. Third, it is interesting to note that there is almost no shame reported at the time of the violence (4% of offenders) compared to guilt, for which more than double (10% of offenders) is reported. This may be because the majority of violent events were carried out in the presence of peers, and if peers do not think the violence is wrong, and therefore would not make a negative judgement of the participant for their involvement in the violence, shame is less likely to be experienced (this will be elaborated on in section 7.2.1.1.).

7.1.2.2. Moderate-strong reports of moral emotion: unintended violent consequences

This section explores the very small percentage of violent events in which participants reported that the act of violence was morally wrong, or reported shame or guilt at the time of the event. Whilst from initial interpretation it appears that these cases contradict the hypotheses of the current study, further investigation of these specific events reveals that the majority of them concluded with unintended consequences which were more severe than the participant had intended. For example, this interview extract illustrates that this young person did not think it was wrong to commit the violence per se, but only felt it was wrong when his friend stabbed the violence recipient:

Interviewer: 'So at the time, did you think it was wrong to hit him?' Participant: 'Well at the time, when he said stuff, it wasn't wrong, but when my mate just.., hit him with the knife, that was wrong, cos that shouldn't have happened'

Interviewer: 'Alright, did you feel ashamed or guilty at the time?' Participant: 'I did, when my mate pulled out a knife, do you know what I mean, and stabbed him'

Interviewer: 'Did you feel more of one than the other? Like shame, and guilt, or?' Participant: 'Just guilty man..., just guilty' (Carlos, interview 20)

Therefore in conclusion, the majority of the small handful of participants that reported that they had moderate-strong moral rules and moral emotions were first, referring specifically to the moment when the violence unexpectedly became more severe than they had intended, i.e. when there was interference between the intention and the outcome. Second, some participants were vague in reporting the strength of their moral rules and moral emotions, i.e. they sometimes lacked confidence in their answers, or weren't easily able to identify how they felt, or reported contradictory answers. For example, some participants answered the questions with 'a little', or 'yes and no'. These participants that report weak-moderate emotions have been categorised into the 'moderate' categories, and therefore may provide an overall overestimation, an example of which is illustrated below:

Interviewer: 'OK, so did you think it was wrong to get involved, did you think it was wrong for you to hit him?'

Participant: 'I think it was wrong in a way, but... at the end of the day, that was my brother. Even if my brother did break his windows, where was his proof, right, you don't go to somebody and grab them from their throat just like that, and then expect nothing you know....'

(Kerise, interview 3)

Interviewer: 'OK so at the time, did you think it was wrong to push the guy?' Participant: 'Yeh a little bit' (Jo, interview 40)

Interviewer: 'Ok and when you woke up the next day, did you feel guilty or ashamed, for pushing him?' Participant: 'Er, yeh, a bit guilty' (Dom, interview 20)

In conclusion, the majority of the interviews support the theoretical propositions of the current study regarding the importance of weak moral emotion in violence decision-making.

7.1.3. The relationship between shame, guilt, and moral rules: weak morality

In the current study, the theoretical and empirical focus has been on the roles of empathy, shame, and guilt in violence decision-making because it is an important but largely neglected, particularly in the field of criminology, aspect of moral decisionmaking. However, Situational Action Theory states that the roles of shame and guilt are to strengthen or weaken a specific moral rule regarding the act in question; therefore they are indicators of how much one cares about their moral rules. When shame, guilt, and moral rules are combined, they constitute overall individual morality; which is the fundamental contributor to the explanation of why crime occurs. This section will present the moral rules data from the in-depth interviews to provide evidence that moral rules, as well as moral emotion, are strikingly weak in a persistent and frequent offender subsample and to provide further support for the hypotheses of the current study.

Moral rules at the time of the violence: 'Did you think it was wrong to hit him at the time?'

Participant: 'No, definitely not (Kit, interview 7)

> Participant:no (Alvin, interview 30)

Participant: At the time I didn't think it was wrong (Carl, interview 8)

> Participant: No (Damien, interview 15)

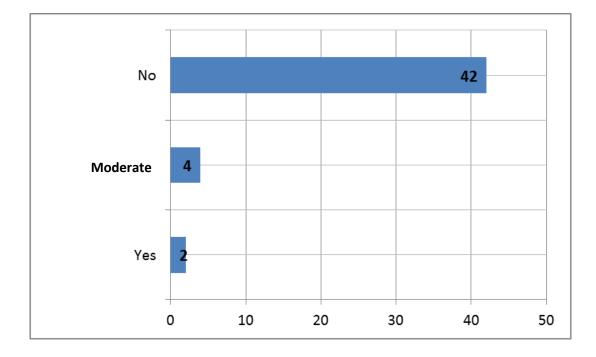
Participant: Yeh a little bit 187

(Gemma, interview 25)

Participant: Not at the time no (Pete, interview 47)

Participant: Er..., no (Faz, interview 37)

42 participants (88%) did not think it was wrong to commit the violent act at the time of the violence (see figure 7-10.). This aligns with the questionnaire data which reveals that 50% of the violent subsample do not think it is wrong to commit various moral transgressions and acts of crime (compared to 14% of the rest of the sample). This supports the theoretical proposition of the current study which states that moral rules, i.e. how right or wrong an individual thinks it is to carry out an act in a particular circumstance, play an important role in the explanation of crime. This is because every moral act, including every act of crime, has a moral rule associated to it; if moral rules are weak, and if shame and guilt are weak (both of which have been evidenced for the violent subsample offenders), overall morality is weakened and violence is more likely to be perceived as a morally acceptable action.



Number of offenders (of 48)

Figure 7-10: Moral rules at the time of the violence

Moral rules on the day following the violence: 'When you woke up the next day, did you think it was wrong to have hit him?'

Participant: 'Yeh probably yeh. Not at the time I didn't, but afterwards yeh' (Adam, interview 26)

Participant: In that situation, no (Tim, interview 46)

Participant: Er., I-, I thought it was wrong to hit other-, the other people I did hit, not the guy who hit me, I-, I was-(Candice, interview 28)

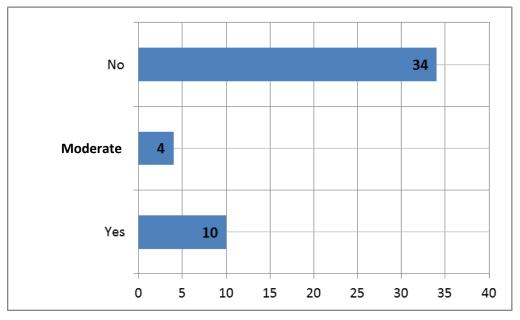
> Participant: No (Gordy, interview 44)

Participant: Yes I did yeh (Rory, interview 36)

Participant: No, definitely not (Shaun, interview 31)

Participant: 'Yeh probably yeh. Not at the time I didn't, but afterwards yeh' (Sam, interview 6)

34 participants (71%) did not think it was wrong to commit the violent act on the day following the violence (see figure 7-11.). This provides further evidence for the role of weak moral rules in violence.



Number of offenders (of 48)

Figure 7-11: Moral rules on the day following the violence

When moral rules are compared between the time of the violence and the day following the violence, the same trend is found as with shame and guilt; the majority of participants demonstrate stable (weak) moral rules from the time of the event to the following day (see figure 7-12.).

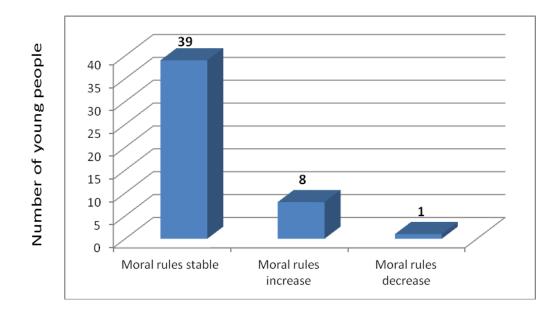


Figure 7-12: Stability in moral rules at the time of violence and the day following the violence

Analysis of the questionnaire scale data provides evidence that there is a strong correlation between moral emotion and moral rules (see chapter 6). The in-depth interview data provides further support for this relationship (see table 7-2); 84% of the violent subsample participants report weak moral emotion and moral rules in their detailed recollections of their most recent act of violence. Therefore both data sources provide support for the proposed ideas of the current study regarding the close association between moral emotion and moral rules in forming overall individual morality.

	Moderate-strong moral emotions ✓	Weak moral emotions ¥
Moderate-strong moral rules ✓	1 (2%)	4 (8%)
Weak moral rules ×	3 (6%)	40 (84%)

Table 7-2: The number of violent subsample participants with corresponding and opposing moral rules and moral emotions (as reported in the in-depth interview)

7.1.4. Does individuals' general ability to anticipate moral emotion align with their situational application of moral emotion?

'Essentially, humans have an empathy 'switch' that we can turn on and off given the immediate situation' (Posick et al., 2012, p. 5).

The current study has used two sources of data to investigate the roles of empathy, shame, and guilt in violence decision-making. This section explores the extent to which the questionnaire data corresponds with the interview data. First, of the violent offender subsample, 26 participants report a weak general ability to anticipate shame and guilt and 21 participants report a moderate general ability to anticipate shame and guilt (see figure 7-13).¹¹⁵ Of key evidence in support of the current study's conclusions,

¹¹⁵ Note that moral emotion is a composite measure of shame and guilt.

there are no participants that report a strong general ability to anticipate shame and guilt. Second, there are more offenders that report no empathy at the time of the violent event that also report weak shame and guilt on the questionnaire scales, therefore, although the group numbers are small, questionnaire responses align with interview responses, i.e. the general ability to anticipate moral emotion, reported across 6 years of adolescence and young adulthood, aligns with the situational application of empathy in real-life violence.

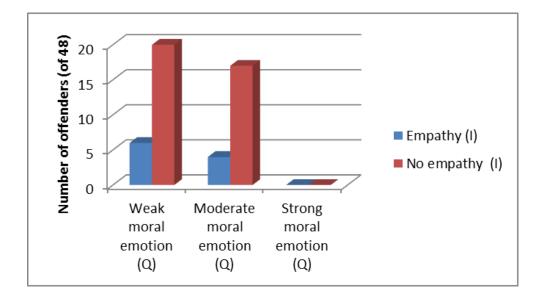


Figure 7-13: A comparison of the questionnaire data with the in-depth interview data: empathy

A correspondence between the moral emotion questionnaire scales and the reports of shame during the in-depth interview is apparent. For shame, there are more offenders that report no shame at the time of the violent event that also report weak shame and guilt on the questionnaire scales, therefore, although the group numbers are small, questionnaire responses align with interview responses, i.e. the general ability to anticipate moral emotion, reported across 6 years of adolescence and young adulthood, aligns with the situational application of shame in real-life violence.

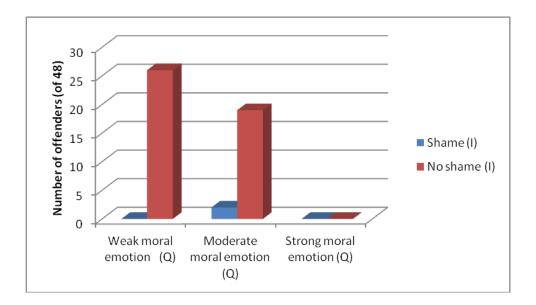


Figure 7-14: A comparison of the questionnaire data with the in-depth interview data: shame

A correspondence between the moral emotion questionnaire scales and the reports of guilt during the in-depth interview is apparent. For guilt, there are more offenders that report no guilt at the time of the violent event that also report weak shame and guilt on the questionnaire scales, therefore, although the group numbers are small, questionnaire responses align with interview responses, i.e. the general ability to anticipate moral emotion, reported across 6 years of adolescence and young adulthood, aligns with the situational application of guilt in real-life violence.

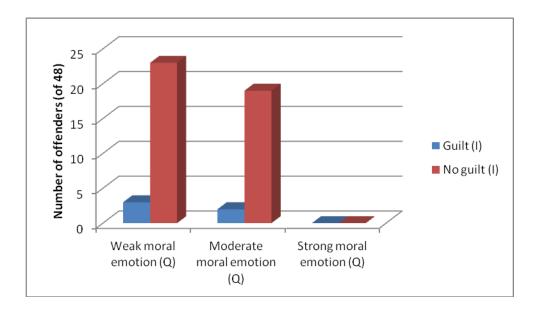


Figure 7-15: A comparison of the questionnaire data with the in-depth interview data: guilt

Finally, for moral rules, there are more offenders that report a weak moral rule at the time of the violent event that also report weak shame and guilt on the questionnaire scales, therefore, although the group numbers are small, questionnaire responses align with interview responses, i.e. the general ability to anticipate moral emotion, reported across 6 years of adolescence and young adulthood, aligns with the situational application of moral rules in real-life violence.

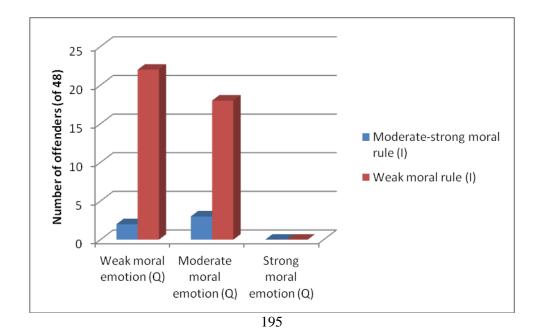


Figure 7-16: A comparison of the questionnaire data with the in-depth interview data: moral rules

This chapter has provided supplementary evidence, combine d with the questionnaire evidence presented in chapter 6, for the importance of the role of weak moral emotion in specific real-life acts of violence. In conclusion, the majority of young people did not feel their most recent act of violence was morally wrong, and did not feel shame, guilt, or empathy, both at the time of and the day following the violent event. These findings provide further support for the key hypotheses of the current study which state that weak empathy, shame, and guilt contribute to weak morality, and subsequently, to crime decision-making.

7.2. Situational violence: who, what, where, why, when?

'A greater understanding of violence will be achieved through a careful consideration of the nature of the social settings and the situations in which it occurs' (Dobash, 1979, p. 14)

The current study has evidenced that the violent subsample participants have a weak general ability to exercise empathy, a weak general ability to anticipate shame and guilt (chapter 6), and a weak situational application of empathy, shame, and guilt (see section 7.1.). Therefore the focus has been on the individual-level factor of moral emotion; however, an individual never commits an action without being in a particular setting, which according to Situational Action Theory also plays a key role in the explanation of crime. The crime-relevant characteristics of the setting can be split into 2 categories: first, the context, such as low levels of neighbourhood collective efficacy (Oberwittler & Wikström, 2009; Wikström et al., 2012), and second, the circumstances that are particularly conducive to violence, such as the factors listed below (see table 7.3). The remainder of this chapter will focus on the latter; this data can provide a unique insight into which aspects of the environment are particularly crime-conducive

because it involves rare and detailed information regarding specific, real-life violent events.

The setting is important because the casual mechanism proposed by Situational Action Theory that leads to violence (the perception-choice process) involves an interaction between personal morality and the setting. There are two key principles: first, individuals with weak moral rules and weak moral emotion spend more time in situations that are particularly conducive to crime (Wikström et al., 2012, 2011) and whilst this high moral propensity to commit crime allows crime to be seen as an acceptable action alternative, crime-conducive features of the setting also encourage crime to be seen as an acceptable action alternative (examples will be outlined below). Conversely, individuals with strong moral emotion are less likely to choose to spend time in criminogenic settings. Second, individuals with weak morality are more likely to be situationally vulnerable to particular features of the environment whilst individuals with a low moral propensity to commit crime are rendered situationally immune to setting features because they simply do not see crime as morally acceptable, regardless of whether the environment is crime-conducive. For example, if one thinks it is very wrong to break into a car and feels strong empathy towards the car owner, and strong shame and guilt, they are very unlikely to commit crime even if they walk past a car with the keys in the lock (Wikström et al., 2012).¹¹⁶

In summary, the majority of crime occurs when individuals with weak morality operate in weak moral contexts, therefore the rate of acts of crime is by far the highest when young people with a higher crime propensity take part in criminogenic settings (Wikström, Ceccato, Hardie, & Treiber, 2009). This chapter section will test this proposition and outline the common circumstances under which the in-depth interview violent events occurred; including who they were with (particularly peers), where they were (particularly evening entertainment settings), what triggered the violence (particularly provocation), and when violent events took place (particularly on weekend evenings).

¹¹⁶ This would be classed as a temptation, i.e. an opportunity in the environment. Criminological explanations of crime that focus on opportunity to explain crime are therefore problematic.

Setting circumstance	% of violent events (interviews)
Unstructured activities, i.e. socialising	94%
Unsupervised and not monitored	94%
Provocation	81%
Presence of peers	67%
High alcohol consumption	62%
Pub/club	42%

Table 7-3: Violence-conducive circumstances of the setting

The majority of the violent events took place in settings which were characterised by various crime-conducive circumstances; for example, in almost every violent event, the participant was unsupervised (i.e. not accompanied by someone is a supervisory role) and engaging in unstructured activities (i.e. not doing anything in particular other than socialising). This aligns with the PADS+ space-time budget (STB) analysis of the circumstances under which the majority of violent offences occur and therefore provides further support for the propositions of Situational Action Theory which state that supervision and activity structure are key setting-level contributors to an explanation of crime.¹¹⁷ In the following sections, three case studies that outline three of the in-depth interview violent events are presented to illustrate the commonalities across interviews, and to highlight particular crime-conducive circumstances for interpretation and discussion.

¹¹⁷ In the STB, 76% of crimes occurred when young people were unsupervised.

7.2.1 Case study 1: Steven

'Er, I was in the pub with.., about 20 lads that I know, and er...just drinking, having, just... general banter...(coughs), and then erm..., out of nowhere, someone rugby

tackled me to the floor, and er, I looked up and I had a-, a man on my chest sat one me, and a man either side of me trying to kick me...so, I was fighting to get my way back to my feet, got to my feet, and then, obviously started fighting back with them all, so'

Steven's most recent act of violence can be described as follows (see table 7-4): Steven was drinking and socialising with a large group of male friends in a pub on a Saturday night. The violence began when three unknown males rugby tackled Steven to the floor; Steven's friends intervened, and this led to the commencement of a group fight. The bouncer threw everyone out of the pub and the fight continued, involving upto 20 hits, kicks, and punches, until the police arrived. Steven had drunk approximately 31 units of alcohol, could not identify a reason for the fight, and answered that he would react the same way again if faced with the same situation.¹¹⁸

Violent event	Detail
characteristic	
When	A month before interview, Saturday night
Where	City centre pub
Events preceding violence	Drinking and socialising with 20 male friends
How did violence	3 unknown males rugby tackled Steven to floor
begin?	and kicked him, Steven's friends intervened and it became a group fight

¹¹⁸ Alcohol units have been calculated according to the guidelines published by an independent charity called Drinkaware. Men are advised not to regularly exceed 3-4 units (source: drinkaware.co.uk). Binge drinking is classed as over 8 units of alcohol for males, and over 6 units of alcohol for females.

Alcohol consumed	12 bottles of lager, 4 jugs of cocktails, 8 spirits
How did violence end?	All individuals were thrown out of the pub by the
	bouncer and the fight continued until the police
	arrived
Severity of violence	Upto 20 hits, kicks, punches. Injuries involved
	cuts from bottles and black eyes.
	·
Shame, guilt,	Weak
empathy, moral rules	
React the same way	Yes
again in same	
situation?	
Main reason YP gave	Reason unknown, protecting himself
for violence	

Table 7-4: Steven's violent event

Of key relevance, as with most participants, Steven reported weak empathy, shame, guilt, and moral rules, both at the time of and the day following the act of violence. The characteristics of this situation are typical of many of the interviews; including the pub location, the event taking place on a weekend evening, and the main activity of socialising and drinking alcohol with a group of males prior to the act of violence.

7.2.1.1. The presence of peers

Interviewer: And were they hitting you back? Participant: Er, some of them were, some of them weren't. You know, it was cos there was that many people fighting, it was just, sort-of, whoever wasn't your mate, you're hitting really.

(James, interview 23)

The presence of peers, which is relevant to 67% of the violent events, as illustrated in Steven's violent event, is hypothesised to be one of the key factors of the setting that encourages crime (see also Svensson, 2004). Peers contribute to a weak moral context because they 'exert a moral influence on an actor and his or her actions' (Wikström et al., 2012, p. 328). The proposition is that crime-prone peers will encourage crime, and furthermore, crime-prone individuals, such as those in the violent subsample in question, are more likely to have crime-prone peers. Traditionally, peer delinquency research lacks an ability to explore the dynamics at play between offenders and their peers in specific violent events.

The Peterborough Adolescent and Young Adult Development Study (PADS+) has collected and analysed two sources of data which confirms the importance of peers in crime involvement. First, questionnaire data reveals that 72% of offenders were with their peers the last time that they report violence in the annual questionnaire. Second, STB data reveals that 86% of offenders were with their peers during their violent crimes. Therefore crimes are much more likely to occur in the presence of peers and time spent with peers is 'uniquely criminogenic' (Wikström et al., 2012, p. 332). The indepth interview data provides a third methodology to illustrate the importance of peers; peers are present in 67% of the violent offenders' most recent acts of violence.

Based on the finding that the majority of crime events take place in the presence of peers (Wikström et al., 2012), this has interesting implications for the relationship between peers and the reduced experience of shame. Questionnaire data indicates that mean shame reported by participants is lowest in front of best friends, higher in front of teachers, and highest in front of parents (see figure 7-17). This result is unsurprising as parents are often the rule-makers who disapprove of crime, best friends are often peers or equals, and teachers often fall somewhere in-between in terms of their relationship to young people. The majority of violent events are carried out in the presence of peers; and if peers do not think the violence is wrong, and therefore would not make a negative judgement of the participant for their involvement in the violence, shame is less likely to be experienced.

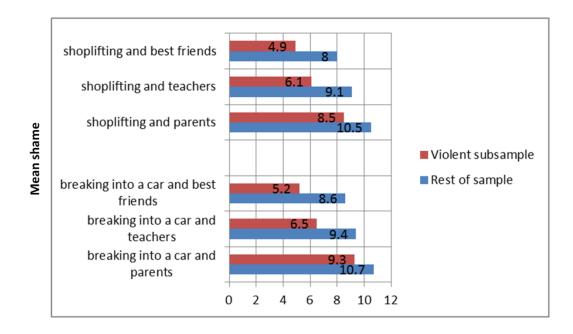


Figure 7-17: Comparison of mean shame item scores for the violent subsample and the rest of the sample (waves 2-7 summed)

Very little crime occurs during 'other-oriented' activities (including family, school, and work), according to the STB and the in-depth interview data (see table 7-5). This is because these settings are characterised by strong moral contexts such as the presence of monitors (e.g. a parent, teacher, or boss). In these strong contexts, even individuals with weak morality, are less likely to see and choose crime as an alternative for action (Wikström et al., 2012) because the moral context is not conducive to crime.

	STB crimes per 1,000 hours (% of total crime)	In-depth interview violent events (% of total crime)
Family	0.2 (4%)	3 (6%)
School	0.3 (6%)	3 (6%)

Work	0.2 (4%)	1 (2%)
Peers	3.7 (71%)	32 (67%)
Other	0.8 (15%)	9 (19%)

'I ain't gotta feel bad for him, he's gotta feel bad for himself': Weak empathy, shame, guilt in persistent violent offenders

Table 7-5: Comparison of violent events in the STB and the in-depth interview

7.2.1.2. Evening city centre violence

In-depth interview data regarding violence location and time of day also aligns with the findings from the PADS+ space-time budget (STB) (see Wikström et al., 2012); first, data collected in 5 data collection waves reveals that 1/8 of violence occurred within 2 small areas in the city centre (compared to 25% of the in-depth interview violence) which house the city's most popular pubs and clubs. Second, and related to the first point with regards to pub and club opening hours, violence is found to be temporal; it notoriously occurs in the evening hours, and furthermore, a considerable proportion occurs in the hour following the closure of pubs and clubs (73% of in-depth interview violent events occur in the evening). These findings have been replicated in previous violence research (Eisner & Wikström, 1999).

Although these findings may be important for targeting immediate and daily crime prevention, they do not provide insight into the causes of crime, i.e. being in the city centre during evening hours by no means directly causes crime to occur.¹¹⁹ However, exploration of the factors influenced by, for example, time spent in the city centre in the evening, can contribute to a plausible explanation of crime. For example, there is ease of accessibility into the city centre via particular road layouts and public transport routes and therefore it attracts many strangers that have no shared consensus regarding moral rules. Poor collective cohesion about moral rules represents a level of poor informal social control, i.e. people are less likely to intervene upon witnessing crime in these settings. Furthermore, this convergence of many strangers is likely to

¹¹⁹ Furthermore, crime prevention will be ineffective beyond the short-term unless the actual causes of crime are addressed, some of which are summarised in chapter 8.

lead to a higher risk of altercation and provocation, and provocation is one of the key motivators to initiate the violence decision-making process (see section 7.2.2.1.). Furthermore, the city centre houses the city's most popular pubs and clubs; pubs and clubs characterise weak criminogenic contexts because there are many different types of people arriving, leaving, and moving around, which makes monitoring (by police or nightclub bouncers) reasonably difficult, and there is often an abundance of alcohol use which increases sensitivity to provocation and may reduce situational morality (see section 7.2.3.1. for elaboration).

In conclusion, the majority of crime is not randomly distributed and is largely prescribed by time and place. For example, STB data reveals that 77% of crimes were committed within 500 miles of young people's home, school, best friends homes, local centres and city centre, and similarly, in-depth interview data reveals that 65% of the violent events were committed in these key locations.

7.2.2. Case study 2: Jay

'Well I was walking with my... boys, and some guy just come over and just shoved, pushed me and said to me, 'go back to your own country', and er, well next thing I see is my mate just punching him..., across the face, and while he was on the floor, my mate pulled out a knife, and threatened him, saying that 'we'll chop you into pieces',

and... well I did the same, while punching him, and kicking him. That's it.'

Jay's most recent act of violence can be described as follows (see table 7-6): Jay was walking through the city centre shopping centre with two male friends on a weekday afternoon. The violence began when a male stranger approached Jay and made a racial insult and pushed Jay. Jay and his friend punched and kicked him, and Jay's friend stabbed him in the arm before Jay and his friends ran away.

Violent event characteristic Detail

When	A day before the interview, weekday late afternoon
Where	City centre shopping centre
Events preceding	Walking through shopping centre with 3 male friends
violence	
How did violence	A male stranger racially insulted Jay and pushed him,
begin?	Jay's friend and Jay punched and kicked him, and Jay
	threatened the violence recipient with a knife
Alcohol consumed	No
How did violence	Jay's friend stabbed the violence recipient in the arm
end?	and Jay and friend ran away.
Severity of violence	Punching, kicking, stabbing in arm
Shame, guilt,	Jay didn't think it was wrong or feel guilt or shame-
empathy, moral rules	apart from the stabbing specifically. On the day
	following the violence, Jay felt it was wrong
	(specifically the stabbing as opposed to the violence),
	and felt a bit of shame and guilt
React the same way	Jay reports that it would depends on the situation but
again in same	'it's gonna kick off, obviously'
situation?	
Main reason YP gave	Being racially insulted
for violence	

Table 7-6: Jay's violent event

Although Jay reports moderate-strong moral rules regarding the act, he specifically states that he is referring to the stabbing as opposed to the act of violence per se. Although the characteristics of this situation are less typical of the interviews,

the setting factors still contribute to an explanation of crime; the city centre attracts a large volume of individuals with mixed moral rules and as a consequence, altercations are more likely to occur (see section 7.2.1.2.).

7.2.2.1. Provocation

'the results confirm theoretical expectations that situational factors can motivate people to engage in violence' (Willits, 2012).

Interviewer: 'OK and did you feel provoked or harassed by him?' Participant: 'Er...yeh, I mean I wouldn't have just hit him if he hadn't come upto me and started pushing me' (Carl, interview 3)

Interviewer: 'OK, what would you say was distinctive about this particular situation that made you act with violence?' Participant: 'He was right in my face.., and that wound me up' (Mohammed, interview 20)

The existence of provocation, which is relevant to 81% of the violent events, and illustrated in Jay's violent event, is hypothesised to be one of the key factors of the setting that encourages crime. This is because provocation acts as a common motivator to initiate the violence decision-making process (see chapter 1 for elaboration). The type of provocation experienced in the violent events ranged from verbal insults (psychological provocation) to mild physical provocation (e.g. pushing), to serious physical provocation (e.g. punching or kicking) (see table 7-8). Situational Action Theory states that individuals with weak morality have a higher sensitivity to provocation and are more likely to respond with violence, and this is supported by the in-depth interview data which reveals that individuals with weak general and situational morality do respond to provocation with violence (and furthermore, engage in frequent

and persistent violence). In conclusion, crimes are much more likely to occur in response to provocation because it elicits non-moral emotions such as anger and frustration which prompt individuals to call upon their morality to ascertain whether they crime as morally acceptable, and this has been replicated in other research, e.g. 'the idea that overwhelming emotion can precipitate violence was especially common' (Presser, 2004).

7.2.3. Case study 3: Tom

'Er, when-, last resort, last resort obviously, when he hit me, it was either I did that otherwise I got my head kicked in'

Tom's most recent act of violence can be described as follows (table 7-7): Tom was dancing, drinking alcohol, and socialising at his father's wedding on a Saturday night. The violence began when Tom saw his uncle try to hit someone else; Tom intervened, his uncle hit Tom, and Tom hit his uncle back.

Violent event characteristic	Detail
When	2 weeks before interview, Saturday night
Where	Dad's wedding at a hotel
Events preceding violence	Dancing on dance floor towards the end of the event
How did violence	Uncle was drunk and attempted to hit someone else,

begin?	so Tom restrained him and uncle hit Tom
Alcohol consumed	8 pints of beer
How did violence end?	Tom hit uncle and he fell to the floor unconscious
Severity of violence	One hit each way
Shame, guilt, empathy,	At the time – no. The next day, Tom did not think it
moral rules	was wrong, he felt guilty but felt driven to act
	violently, and felt guilty when others found out.
React the same way	No – wouldn't have let go when restraining uncle.
again in same	
situation?	
Main reason YP gave	Alcohol
for violence	

Table 7-7: Tom's violent event

Tom reports that he did not think it was wrong to hit his uncle, or feel shame or guilt at the time of the violence, but did feel guilty the following day. The characteristics of this situation are typical of many of the interviews; a private party held in an evening entertainment setting, the event taking place on a weekend evening, and the main activity of socialising and drinking alcohol with a group of others prior to the act of violence.

7.2.3.1. Alcohol consumption

Interviewer: 'What would you say was distinctive about this particular time that made you act with violence?' Participant: '.....the alcohol, definitely' (Bill, interview 48)

Participant: 'Alcohol probably. And obviously, that was the main thing. If it weren't for that it wouldn't have happened' (Alex, interview 19)

Participant: 'I was just, really angry, and it just happened, and I think the alcohol didn't, obviously didn't help either, because it wasn't, you know, it wasn't the best decision to make. And at the time it just sort-of happened' (Nina, interview 7)

NT: 'OK so do you think you feeling drunk influenced your decision to get involved in the violence?' Participant : 'Uh, yeh probably..., yeh (laughs)' (Craig, interview 31)

The level of alcohol consumption, which is relevant to 72% of violent events, and illustrated in both Tom and Steven's events, is hypothesised to be another relevant factor of the setting that is conducive to crime (Tryggvesson, 2005) (see table 7-8). Although alcohol is not a cause of crime, i.e. many people drink alcohol and do not commit violence and many acts of violence occur in the absence of alcohol, it is an important setting-level factor for consideration. Alcohol leads to a poorer ability to exercise executive functioning, for example, to exercise self-control.¹²⁰ Alcohol is a crime-conducive circumstance factor because it reduces inhibitions and is likely to reduce the capacity to experience empathy, shame, and guilt. It is hypothesised that the relationship between alcohol and moral emotion may not be linear, for example, empathy, shame, and guilt are likely to be heightened upon moderate intoxication but lessened upon severe intoxication. This is an interesting avenue to pursue for future research. Alcohol intoxication is also hypothesised to be associated with a higher sensitivity to provocation (see section 7.2.2.1), as the table below illustrates (table 7-8):

¹²⁰ Ability to exercise self-control is relevant in situations in which morality is weak and the moral context is strong, therefore in circumstances in which there is deliberation over whether to choose to act with crime.

Provocation leading to violent events	Total	Alcohol	No alcohol
Psychological (e.g. verbal insult)	19 (40%)	11	7
Moderate physical (e.g. pushed)	14 (29%)	8	5
Serious physical (e.g. hit or kicked)	4 (8%)	3	1
N/A (no provocation)	11 (23%)	6	5

Table 7-8: Type of provocation by alcohol consumption

7.3. Chapter summary: 'I ain't gotta feel bad for him, he's gotta feel bad for himself': Weak empathy, shame, and guilt in persistent violent offenders

This chapter has provided further and unique evidence for the importance of the roles of empathy, shame, guilt, and moral rules in violence, and illustrated key findings from case studies to identify particular features of the setting which are violence-conducive and may interact with individual moral emotion in violence decision-making. Weak individual morality, which constitutes moral rules and moral emotion, significantly predicts involvement in violence, as evidenced in chapter 6 (see also Wikström et al., 2012). In order to further tease apart the role of weak moral emotions, data regarding specific violent events collected in qualitative in-depth interviews has been presented. Very little is known about the dynamics of specific violent events; this chapter has identified the common circumstances that play a role in the materialisation of violent events.

This qualitative data is unique because it has provided detail of specific, real-life violent incidents including the situational application of moral emotion, the setting, the location, and the events preceding violence. Supplementary to quantitative questionnaire data that measured the general ability to exercise empathy, and the general ability to anticipate shame and guilt (see chapter 6), this qualitative data provides further evidence regarding the situational application of empathy, shame, and guilt in violence. The questionnaire measure is person-specific whereas the interview

measure is situation-specific; the general ability to exercise empathy, or the general ability to anticipate shame, or guilt, is applied to a specific situation (section 7.14 explores the correspondence between them).

The current study has evidenced that the strength of moral emotion plays a role in rule-following (strong moral emotion) and rule breaking (weak moral emotion) in a large representative sample (chapter 6) and provided further unique evidence for the role of weak moral emotion in the specific real-life violent events of persistent and frequent offenders (chapter 7). The key findings from analysis of the in-depth interview data can be summarised as follows (see table 7-9):

Key finding	Explanation of violence	Conclusion
	according to SAT	
The majority of	Weak empathy reduces the	Weak empathy plays a
participants report weak	possibility to feel shame	significant role in violence
empathy at the time of	and guilt in a moral	which is mediated by
and the day following	transgression situation.	shame and guilt
violent events		
	Shame and guilt are key	Weak shame and guilt
	moral emotions because	weaken overall morality,
The majority of	they contribute to weaken	and weak morality allows
participants report weak	overall morality; they are	crime to be seen as a
shame and guilt at the	associated to a moral rule	morally acceptable action
time of violent events	and indicate how much	
	one cares about the moral	
	rule.	
	Consistently weak shame	Weak shame and guilt
	and guilt the day following	following an act of crime
	the violence provides	may adjust somatic
	evidence that it is not	markers which are recalled
	transitory circumstances	the next time the

The majority of	(such as alcohol and	individual finds
	`	
participants report weak	provocation) that play the	themselves in a similar
shame and guilt on the	direct role in violence, but	situation. Crucially, shame
day following violent	rather morality	and guilt should not be
events		modelled as deterrents for
		crime, but should be
		modelled as key factors in
		decision-making prior to
		an act of crime
The majority of	Moral rules are essential to	Weak moral rules
participants report weak	the explanation of crime	contribute to weak overall
moral rules in violent	because they contribute to	morality and allow crime
events	weaken overall morality	to be seen as a morally
		acceptable option
	Pubs and clubs	
	characterise weak moral	
	contexts for several	
	reasons: including the	
The majority of violent	convergence of many	
events occur in/to/from	strangers with different	
pubs and clubs	moral rules, the increased	
	risk of altercation and	Specific circumstances of
	provocation, and the	the criminogenic setting
	interaction with alcohol	(and crucially, the
	consumption	processes by which they
	Peers have a criminogenic	interact with morality to
	influence because they	encourage crime) should
The majority of violent	may encourage violence	be addressed
events occur with peers	and may reduce the	
	likelihood to experience	
	shame	

	Alcohol is a crime-
	conducive circumstance
The majority of violent	factor because it reduces
events occur under the	inhibitions and is likely to
influence of alcohol	reduce the capacity to
	experience empathy,
	shame, and guilt
The majority of violent	Provocation acts as a key
events are initiated by	motivator to initiate the
provocation	violence decision-making
	process

Table 7-9: Summary of in-depth interview data analysis conclusions

Conclusions: executive summary

This section summarises the findings of the current study and makes three overarching conclusions:

- Violent offenders report a weak general ability to exercise empathy, a weak general ability to anticipate shame and guilt, and a weak situational application of empathy, shame, and guilt.
- 2) Weak empathy is related to a reduced ability to experience shame and guilt in particular circumstances (confirming hypothesis 1).
- 3) Weak shame and guilt make a significant contribution to overall individual morality in predicting violence (confirming hypothesis 2).

In summary, it is proposed that the current study makes a unique contribution to the criminological arena by i) identifying that moral emotions have been neglected in the study of the explanation of crime, ii) selecting a persistent and frequent violent offender subsample with which to carry out rare in-depth qualitative interviews, and iii) provides evidence of the different roles of empathy, shame, and guilt, and moral rules in violence decision-making, and identifies some key characteristics of the setting that are particularly conducive to crime and common in real-life acts of violence. This data is unique because it provides a rare insight into detailed recollections of specific violent events, and selection of a persistent and frequent violent subsample acts as a useful research tool whilst allowing for the extension of interpretations of the results to all offenders. This section also highlights the key merits and limitations of the current study, discusses potential applications to crime intervention based on moral development processes, and proposes future research avenues to extend the current research endeavour.

Chapter 8

Summary and key conclusions: moral emotion plays an important role in the decision to engage in crime

This chapter summarises the key pillars of this research study and reviews key interpretations from all data analyses. A marriage of the theoretical propositions and the empirical findings materialises in several firm conclusions regarding the importance of moral emotion in violence. Moral emotions support the moral rules in constituting overall morality; morality is the primary component in the explanation of whether crime is seen as a morally acceptable action. Furthermore, in explaining acts of crime, moral emotions are particularly important for individuals with weak moral rules. This chapter also outlines the various strengths and limitations of this study, develops applications to crime intervention, particularly with regards to moral development, and makes suggestions for future avenues of research as an extension to the quest to understand the role of moral emotion in violence decisionmaking.

- 8.1. Summary of the current research study
 - **Research question 1**: Does general ability to exercise empathy play a role in the possibility to feel shame and guilt in particular circumstances?

Research question 2: Do the strength of shame and guilt make an important contribution to the strength of overall morality in predicting violence?

The key research aim of the current study is to incorporate, develop, and test the different roles of empathy, shame, and guilt into an explanation of crime decisionmaking. Rationale is provided for the study objectives in a detailed account which specifies how moral emotion has been neglected in criminological explanations of criminal behaviour, and further, that in the rare circumstances in which moral emotion has been explored in empirical research, empathy, shame, and guilt have often not been theoretically modelled (see chapter 2).

In the current study, a novel theoretical framework for the study of moral emotion has been proposed and developed; Situational Action Theory can be used to develop propositions regarding the roles of empathy, shame, and guilt in moral decision-making (see chapter 1). This theoretical component of the research study is instrumental to ensure that empirical results are interpreted fully within an explanatory framework in order to identify mechanisms in the study of crime. The study further addresses contention surrounding the definitions, differences, and relationships between empathy, shame, and guilt in moral behaviour; aspects which have also been neglected and poorly understood in existing research (see chapter 3). Taken together, the theoretical considerations emphasise that moral emotion within morality can contribute to an explanation of the breaking of all moral acts, including crime. The study specifies and tests how the role of moral emotion can be modelled specifically for violence, particularly with regards to habitual violence.

With the various theoretical components of the study in place, empirical data is used to test the theoretical propositions. The Peterborough Adolescent and Young Adult Development Study (PADS+) provides high quality data taken from a large and representative participant sample (see chapter 4). To build upon the questionnaire data, in-depth qualitative interviews were carried out with a frequent and persistent offender subsample (see chapter 5). A detailed comparison of the violent subsample and the rest of the sample on quantitative indices demonstrates that the violent subsample participants report weaker empathy, shame, guilt, and moral rules than the rest of the sample. Furthermore, with regards to research question 1 which states that empathy plays a role in the possibility to feel shame or guilt in particular circumstances, the quantitative data enables analysis of the role of empathy in the possibility to feel shame and guilt. General empathy significantly predicts shame and guilt and this provides support for hypothesis 1. The quantitative data also demonstrates that weak empathy, shame, and guilt have a significant relationship to higher violence involvement (see chapter 6). Guilt specifically makes a significant contribution to overall morality, shame and guilt have a strong relationship to moral rules, and together morality significantly predicts violence (and total crime).

Whilst the questionnaire scales constitute items which refer to hypothetical situations, and therefore measure a general ability to exercise empathy, and a general ability to anticipate shame and guilt; the rationale behind collecting the in-depth interview data was that they explore, in much more detail and with much more specificity, the situational application of empathy, shame, and guilt in specific real-life violent events. Criminology suffers from a poor understanding of the specific personal dynamics and social psychology of violent events; for example, Situational Action Theory has neatly evidenced that the majority of crime events occur when crime-prone individuals spend time in crime-prone settings, but most of the time, when these individuals spend time in these particular settings, crime does not occur. Therefore the question remains; under which specific circumstances does violence materialise? The in-depth interview analysis i) makes first steps towards answering this question, and ii) provides strong support for the hypotheses of the current study regarding the importance

of the different roles of empathy, shame, guilt, and moral rules in violence (see chapter 7).

8.2. Key conclusions: moral emotion plays an important role in the decision to engage in crime

'It is impossible to conceive of a fully lived moral life, in which emotions do not play an important role' (Blasi, 1999, p. 16)

The primary conclusions of the current study can be summarised as follows:

- Quantitative questionnaire data provides evidence that offenders report weak general ability to exercise empathy, weak general ability to anticipate shame, guilt, and moral rules, and these factors play an important role in i) overall individual morality, ii) violence, and iii) total crime involvement.
- Qualitative in-depth interview data provides strong evidence that offenders report weak situational application of empathy, shame, guilt, and moral rules in real life violent events.

'This form of analysis of violence has rarely been attempted, primarily because social scientists have not been able to observe interpersonal violence or to conduct in-depth interviews with participants in violent events. Yet, an analysis of this nature is crucial if we are to understand the dynamics of violence' (Dobash, 1979, p.97)

The in-depth interview methodology was the most important research tool utilised in the current study because it served the fundamental aim of gaining a deeper understanding of specific real-life acts of violence. In-depth

qualitative data was collected with the intention to build upon the quantitative questionnaire data collected from a large representative participant sample. One of the key pillars of Situational Action Theory is to analyse what kinds of young people (i.e. individuals with weak morality) commit acts of crime in particular kinds of settings, and this unique data can explore this interactional relationship. More specifically, findings from the PADS+ space-time budget indicate that violent crime is likely to be carried out by individuals with weak moral rules in settings which are conducive to crime. However, of crucial importance, most of the time when crime-prone individuals take part in crime-prone settings, crime does not occur. Therefore, a deeper understanding is required of the social psychology of the situations in which violence occurs and the personal dynamics of these situations; what specifically causes violence to materialise? Detailed indepth interview data regarding specific acts of violence can take first steps towards understanding this question as well as provide further evidence for the propositions of the current study regarding the importance of moral emotion in violence decision-making.

Therefore the rationale for the in-depth interview method was to permit exploration of the specific circumstances under which persistent and frequent violent offenders commit violence, and whether this subsample demonstrate a weak general ability to exercise empathy and a weak general ability to anticipate shame and guilt in the general hypothetical scales in the questionnaire, and furthermore, a poor situational application of empathy, shame, and guilt, in reallife specific acts of violence. Since Situational Action Theory offers a general theory of crime, i.e. a theory which is applicable to all acts of crime, selection of the persistent and frequent violent offender subsample for interview provides a method to investigate recent violent events, but crucially, the explanations of crime derived from these interviews are hypothesises to be applicable to all crime. Therefore conclusions made regarding the role of moral emotion are based upon persistent and frequent violent crime but can be extrapolated to contribute to an explanation of all crime.

219

3) In exploring violence, an interaction exists between various individual-level factors and setting-level factors; when individuals with weak moral emotion spend time in particular circumstances which characterise violence-conducive settings, crime is most likely to occur. Setting-level circumstances that are particularly violence-conducive include the presence of peers, provocation, time spent unsupervised and in unstructured activities, time spent in the city centre in the evening hours in pubs and clubs, and alcohol consumption. It is hypothesised that an interaction effect exists whereby individuals with weak moral emotion and moral rules are more likely to spend time in these settings, and furthermore, have a higher sensitivity to and higher likelihood to respond violently to these particular setting-level circumstance factors.

Other particularly important components of the current study can be summarised as follows:

- Background/rationale: Moral emotion has been neglected within criminological theories of crime, and when it has been addressed, empathy, shame, and guilt have not been fully modelled as key contributors to the decision-making process. Further, the decision-making process has been omitted from many criminological explanations of crime; and when it is incorporated, a rational, cognitive, deliberative framework is often erroneously adopted.
- Existing research: The small body of existing research exploring the role of moral emotion in crime presents various theoretical and methodological limitations and therefore further research is required.
- Situational Action Theory perspective: Situational Action Theory can adequately accommodate the roles of empathy, shame, and guilt in its explanation of crime which centres upon morality.

- 4) Moral rule-breaking: Moral emotion is relevant to the breaking or following of every moral act including an act of crime, and this is modelled in the current study, particularly in the explanation of persistent habitual violence.
- 5) **The different roles of empathy, shame, and guilt:** The roles of empathy, shame, and guilt in the decision-making process differ; empathy plays an important role in increasing or reducing the possibility to experience shame and guilt; shame and guilt make an important contribution to the strength of overall individual morality.
- 6) Moral emotion and moral rules: Shame and guilt have a strong correlation to moral rules; both moral rules and moral emotions constitute overall individual morality, and together contribute towards an explanation of whether crime is seen as a viable and morally acceptable action alternative.
- 7) Shame and guilt experienced after an act of crime: As well as playing an important role before or at the time of a potential act of crime during the decision-making process, shame and guilt play an important role after an act of crime; this involves utilisation of guilt and shame as a lasting marker for future decisions. In this way, whether moral emotion is weak or strong in everyday action decision processes plays a role when an individual is subsequently presented with the same situation. In Situational Action Theory, this is referred to as habituation whereby eventually emotional input can lead to the perception of one action only, therefore the selection of that action, i.e. crime or no crime.

The findings from the current study provide further evidence to contradict the majority of individual-level criminological theories that regard the role of self-control to be of most importance in crime (see, for example, Gottfredson & Hirschi, 1990). Persistent and frequent violent offenders report weak morality (questionnaire and indepth interview data) and spend time in situations which are conducive to violence (STB and in-depth interview data), therefore ability to exercise self-control is largely irrelevant; because for the majority of individuals with regards to many violent events,

there is nothing to control. The violent offender subsample report weak morality; therefore violence is seen as a morally acceptable and viable action alternative regardless of self-control. Self-control is only relevant in situations where the context is not conducive to crime because it is required to ascertain whether weak individual-level morality can be inhibited. Therefore it is morality that is they key component in the explanation of crime (see also Wikstrom & Treiber, 2007). 8.3. Comparison of results to findings from existing literature

This section will explore the extent to which the results from the current study align with the results from existing research studies (studies which were outlined in chapter 2). The findings that are consistent with existing literature include: the existence of a relationship between shame and violence and the existence of a relationship between guilt and violence (as found by Beyers, Loeber, Wikström , & Stouthamer-Loever, 2001; Olthof, 2012; Svensson, 2004; Svensson et al, 2013; Treiber, 2013; Wikström et al., 2012; Wikström & Svensson, 2008, and others). The findings which are not consistent with existing literature include: the non-significance of shame as a predictor of crime. In the current study, when guilt was included in the regression model, shame was no longer a significant predictor of violence involvement. This disagrees with some of the existing literature referenced above, which evidences that shame is an importance predictor of violence.

However, some existing research also finds little evidence of a relationship between shame and crime. In particular, Tangney and colleagues (e.g. Tangney & Fischer, 1995) argue that shame does not play a role in rule-following behaviour, and rather, guilt is the key emotion of relevance. Further, Muris & Meesters (2014) carried out a meta-analysis and found the opposite finding to the current study's hypotheses that stronger shame may be linked to lower crime involvement; rather they found that stronger shame was linked to higher crime involvement. This may be due to conceptual differences, methodological scale measure differences, or because some studies explore shame in isolation without investigating the role of guilt (the current study findings suggest that guilt is equally or perhaps more important in violence decision-making).

The finding that shame is not a significant predictor of violence is interpreted with caution as weak shame was reported in almost all offender accounts of recent violent events collected in the in-depth interviews, and general shame (collected longitudinally via a questionnaire) correlated to violence, therefore it is believed the relationship between shame and violence may be important but not as straightforward as the relationship between guilt and violence. Furthermore, there are more research studies that have explored the relationship between guilt and violence, therefore it may be inferred that more work is needed exploring the role of shame in order to ascertain and replicate findings.

The empathy findings from the current study are consistent with existing literature, for example the studies carried out by Day, Casey,& Gerace (2010), Joliffe & Farrington (2004), and Miller & Eisenberg (1988), all of which are listed in chapter 2. Further, in the current study, although any differentiation with regards to the relationship between cognitive empathy and affective empathy and crime was difficult to ascertain (particularly because the cognitive and affective empathy scale measure may not have been entirely valid), there was a significant difference in affective empathy between the violent subsample and the rest of the sample, which aligns with findings from existing literature (such as Brouns et al, 2013; Hepper et al, 2013). Therefore, weak affective empathy may be specifically relevant in explaining violence, and this aligns with existing psychopathy literature (see, for example, Lockwood, Bird, Bridge, & Viding, 2013).

8.4. Strengths and limitations of the current research study

There are numerous strengths to the current study. First, use of self-reported data enables and captures a more valid picture of real-life crime than reliance on incomplete officially recorded police data. Second, the use of a large representative sample allows for generaliseability of the study findings to all adolescent and young adult populations. Third, triangulation of data methods (quantitative and qualitative) allows for verification and clarification of findings. Fourth, this study is unique and pioneering; it is one of few studies to model the roles of empathy, shame, and guilt within a theoretical account of

the explanation of crime. Fifth, the study conclusions can be used to further the understanding of the explanation of why violence occurs; therefore it can feature as a significant piece of the puzzle in the global quest to understand and subsequently reduce violence.

The limitations of the current study primarily involve the issue of establishing causation between moral emotion and violence. Although causation, i.e. the role that a change in moral emotion can play in a change in violent behaviour, can only be tested using real-life experiments (involving manipulating people's emotions and environments), this is unethical, impractical, and likely unfeasible. However, the current study offers a suitable alternative, which involves the development of testable implications and assumptions and testing of them, and therefore enables reasonably firm conclusions to be made regarding the processes and mechanisms by which violence occurs.

8.5. Applications to crime intervention: moral emotion development

Although the current study focuses its research efforts on exploration of the explanations and related mechanisms of why crime (and specifically violence) occur, the ultimate hope for crime research, specifically research based upon evidence which can deliver conclusive findings, is that it will be channelled towards and translated to prevention efforts. The current study proposes that weak empathy, shame, and guilt contribute to individuals perceptions of whether crime is seen as a morally acceptable and viable action alternative. Therefore in order to reduce the possibility of crime being seen as an action alternative, moral emotion development is instrumental. Increases in moral emotion capacities are likely to be facilitated by the role of significant others in childhood and adolescence, including parenting style, school-based teaching style, and relationships with peers.¹²¹

¹²¹ The Darwinian account of the evolution of moral emotion emphasises the importance of such moral influences from parents and peers (Joyce, 2007).

8.5.1. Moral emotion development

'It is possible that differences in socialisation may lead to differential propensity to feel shame and guilt respectively'

(Svensson, 2004, p. 13)

The current study finds strong support for the role of moral emotion in violence decision-making. This begs the question; how do individual differences in moral emotion develop? To gain a comprehensive understanding of the role that moral emotions may play in the life of the criminal young adult, it is necessary to consider how these moral emotions have developed across childhood, adolescence and young adulthood, and of most importance, through which processes. The faculty of morality arrives early in life. Some evidence supports the idea of developmental time windows, in which individuals are more susceptible to external influences on their development (Steinberg, 2005); for example, during adolescence, when the neurocognitive abilities that support moral reasoning are still developing (Anderson et al., 1999). Identification of critical periods of development and change may clarify when moral interventions may be most effective.

Development of moral emotions has been found to develop later than the basic emotions due to their comparative complexity (Izard, 2007). It is believed that competence in various skills processes are necessary in order to experience shame and guilt; first, a capacity of self-awareness and the ability to form stable selfrepresentations, which emerges between 18 and 24 months (Lewis, 2000).¹²² For example, shame has been found to develop from as early as 18 months of age, because that is when babies develop an awareness of the self, e.g. an awareness of their

¹²² It is important to note that an individual is likely to have experienced shame and guilt in young childhood when carrying out a moral transgression. For example, a toddler may accidently pick up something they have been asked not to touch, accidently break it, and be told off by a parent; this may lead to the experience of shame and guilt. In this way, most individuals come to develop a learned familiarity with shame and guilt and their association to rule-breaking behaviours.

reflection in the mirror (Stern, 1998). This leads to the development of the self-concept and a judgement of how others view the self.Second, in alignment with the theoretical propositions of the current study regarding the combined nature of moral rules and moral emotions, an understanding or rules and standards of socially appropriate behaviour, i.e. moral rules, are required in order to experience moral emotions (Muris & Meesters, 2014). Existing research supports the existence of early manifestations of shame and guilt from as young as age 3 (Cole, Barrett, & Zahn-waxler, 1992).

Of crucial relevance for this study, shame and guilt have found to adapt and refine across adolescence; this has been measured by asking over 200 children aged 7-16 to report shame and guilt ratings (Olthof, Ferguson, Bloemers, & Deij, 2004). This study found evidence that children older than 9-12 years of age have an increased understanding of and ability to differentiate between their shame and guilt reports, primarily due to the complex nature of moral transgression situations.¹²³ This raises interesting questions about whether the capacity to experience moral emotion is fully developed in the adolescent time period in which violence often peaks; this has been measured by asking 134 children aged 7-17 to report empathy ratings (Schwenck et al., 2013). This study found evidence that age predicted almost 40% of the variation in cognitive empathy; however, results indicate that affective empathy develops in earlymid childhood, perhaps before entry to school. This has implications for the targeting of empathy development at the appropriate developmental time windows, and furthermore, where it should be targeted, for example, this evidence suggests that parents should encourage empathy development in early childhood in order to increase affective empathy faculties in particular. All in all, existing research reaches a consensus that the experience of empathy, shame, and guilt are guided by the maturation of cognitive capabilities.

Moral development, as with all psychological traits, must be influenced by both nature and nurture. Therefore moral knowledge is to some extent native and to some extent developed by the environment. The role of the environment (i.e. parents, teachers, peers, media, politics, and much more) cannot be underestimated and this is

¹²³ However, shame and guilt are found to be relatively stable from ages 14-21 in the current study.

why environmental influence has been referred to as influencing the 'blank slate' at birth. What is clear is that moral learning occurs through stages of development and time spent with parents, teachers, and peers (Svensson, 2004). Kohlberg (as summarised in Duska & Whelan, 1975) states that the most morally advanced children are those who can role-play to see things from another person's perspective, i.e. those that demonstrate empathy, which supports the suppositions of the current study. Kohlberg (as summarised in Duska & Whelan, 1975) identified six stages of moral development, from the pre-conventional, to the conventional, to the post-conventional stages of development, and refers to those in the most developed stage as 'moral heroes'.

There is debate among moral development scholars surrounding the nature of moral development. Piaget (as summarised in Duska & Whelan, 1975) claimed that moral development occurs across two stages from the ages of 6-12, reaching autonomy through peer interactions. Progression through each stage is a developmental process of cognitive restructuring. Gibbs (Boom, 2011), characterises moral development as the transition from the 'standard' stage to the 'existential' stage. So there is no clear consensus as to the nature of the distinct stages of moral development, or the mechanisms that aid movement between the stages. It is hypothesised that psychopathic individuals do not pass through crucial moral development stages during childhood and as a result, demonstrate a distinct lack of empathy and guilt (Fine & Kennett 2004).

The role of parenting appears to be key for moral development; lack of parental input prevents appropriate moral development by preventing the child from learning what is right and wrong. However, extreme parental input, such as parental force, leads to stunted guilt and shame development (Koenig, Cicchetti, Rogosch 2000). As a consequence, a stable internalisation of morals can often be lacking in maltreated children. Therefore development of strong morality is largely influenced by an appropriate degree of parental discipline.¹²⁴ However, Durkheim (2002) argued that the foundations of morality need to be laid at school, as moral conceptions are too limited at pre-school age. This largely neglects the role of the family very early in life in the development of morality, and contrary to this, there

¹²⁴ PADS+ data has been collected regarding parental discipline and the relationship to shame and guilt could be explored in future work.

is strong evidence to support the role of both family and school in providing moral education, for example, 'socialisation, and particularly primary socialisation, is crucial for the development of these emotions' (Svensson, 2004, p. 13). Using a unique methodological approach, PADS+ STB data reveals that young people spend the majority of their time at home with their families and at school with teachers and peers (Wikström et al., 2009); therefore efforts to influence moral development must be targeted towards these places and towards the other socialising agents involved in these places.

There is evidence to suggest that other factors can increase moral emotion, several of which are listed below. First, affiliation to a particular religion and involvement in religious activities (Horgan, 2014) are found to be significantly correlated to shame and guilt. However religion is likely to be one of many factors that plays a role in moral emotion development, there are many non-religious people with strong moral emotion, i.e. non-religious people as well as religious people report strong morality therefore the relationship is not causal. There are many other factors which provide a multitude of complex influences on moral emotion development. Kochanska (1991, 1993, 1994) states that children's fearlessness is found to facilitate blockages to affective states such as shame, guilt, and empathy (Kochanska, Forman, Aksan, & Dunbar, 2005). If a child is fearless and does not successfully experience early bonding experiences and develop moral and emotional commitments to others, empathy development may be prevented or blocked (Saltaris 2002, Frick & Morris 2004). Future work should explore how and why moral development throughout childhood, adolescence, and beyond is not a uniform process for everyone.

Moral development research carried out in different countries and cultures can also further the understanding of shame and guilt development, for example, studies carried out in shame oriented cultures such as Japan provide evidence for cultural differences in moral development.¹²⁵ Moral development is tightly linked to culture and

¹²⁵ However, Fontaine (2006) compared Belgium (individualistic culture), Peru (collectivistic culture), and Hungary (in-between individualistic and collectivistic culture) and found the same guilt and shame processes in the 3 cultural groups.

the social norms and conventions of particular societies.¹²⁶ Haidt (2012) discusses the need to study beyond WEIRD (western, educated, industrialised, rich, democratic) morality and claims that this population makes up a subset of the world that differs from the majority world population in their morality.

Generally, young children do learn what is right and wrong, even if they cannot yet pinpoint exactly why. This explains why most people in society are law abiding and do not commit criminal behaviour, therefore moral emotion development, generally, seems to be satisfactorily intact (Malti et al., 2009). Consideration must also be paid to how moral emotions may change over time, although, generally, the PADS+ shame and guilt data reveal reasonable stability from ages 14-22. Nonetheless, various factors may lead to change in moral emotions, such as key life experiences or events, religion, others' responses to ones actions, observation of the actions of others and the consequences they give rise to, and changes in partner, family or peers.

8.5.2. Crime intervention

Development of intervention programmes should be targeted and specific in order to be effective, and their evaluation is critical (see Wikström & Treiber, 2008). Crime intervention programmes often involve the manipulation of controls or deterrents. However, there is evidence to state that controls are only relevant in specific circumstances (Wikstrom & Treiber, 2007; Wikstrom et al., 2011) and rather, individual morality should be the key focus, because it is relevant to every moral transgression or act of crime. Future work should explore the relative effectiveness of informing intervention efforts through the concept of morality versus the more traditional concept of controls. The key factor for consideration regarding intervention is person emergence; this involves how crime propensities come to differ as a result of moral education, attached moral emotions, and

¹²⁶ Morality differs by nationality; Russians and ukrananians are found to have weaker morality than greeks (Antonaccio, Botchkovar, & Tittle, 2011).

cognitive skill development (see Wikström, 2011).¹²⁷ The objective is to develop programmes that successfully encourage the acknowledgement and experience of the negative feelings of shame and guilt regarding breaking rules (George, 2011).

The ideal situation is to target children before the adolescent period in order to prevent weak morality development and encourage strong morality development. It is believed that early intervention will be more effective than intervention in later adolescence when weak morality has already developed. Other researchers agree that interventions should be early (Raine, 2013) and channelled towards enhancing moral emotions in children (Pornari & Wood, 2010). The second key consideration is that not all young people need to undergo intervention; PADS+ data clearly reveals that most young people have moderate-strong morality, and furthermore, do not commit crime. It is specifically individuals with weak moral emotion and weak moral rules that require intervention; if these individuals can be identified, intervention can be targeted and resources can be reduced.

By developing a better understanding of all aspects of the violent event, which is rarely achieved in criminology due to methodological restraints, prediction can become more accurate and violence prevention can be targeted. More specifically, moral education occurs via the family, school, peer networks, and other more distal overarching factors such as politics, economics, and religion. All of these listed factors play a role in how people come to acquire their moral rules and moral emotions and should be considered diligently when developing crime intervention. Since full-time education is compulsory until age 16, programmes administered in the school are likely to be more successful in encouraging the experience of moral emotion if they also target 'informal aspects' of the school framework, including the overall school ethos (George, 2011). Since schools place an emphasis on codes of conduct against a backdrop of high levels of monitoring and supervision, they are ideal places in which to harbour strong moral development (Wikström et al., 2012). If such intervention efforts are implemented and are successful, morality will develop to be strong, and as a result the criminogenic features of the environment will become largely irrelevant, i.e. individuals

¹²⁷ Cognitive skills development involves how people develop their ability to exercise self-control, which, along with morality, is also another key factor in explaining acts of crime (Wikstrom & Treiber, 2007).

with strong morality are found to be situationally immune to criminogenic settings (Wikström et al., 2012). In this way, crime would reduce dramatically because, as a result of the perception-choice process, crime would not be seen as a morally acceptable action alternative.

The suggestions for intervention outlined in the current study refer to the role of moral education in enhancing moral development, i.e. the learnt component of morality. The question of whether interventions can be designed and implemented for brain or genetic abnormalities in morality raise ethical controversies, and although this is a young discipline, scientific research in this area is becoming more common (see, for example, Raine (2013), in which several suggestions for biological intervention targeting offenders with dysfunctional morality are offered. Habits are often overlooked in intervention efforts, and it may be useful to consider attempts to build or break violence-conducive moral habits. Ultimately, consistency in teaching children and adolescents whether particular acts are right or wrong and most importantly, the detailed reasons behind these teachings to encourage a deeper understanding, is of paramount importance.

There is evidence to suggest that moral emotion can be enhanced in adult life as well; for example, the intensity, continuity, and frequency of socio-emotional stimulation, i.e. challenges encountered in daily life, which have been measured by occupation, has been found to play a role in the development of empathic abilities (Georgi, Petermann, & Schipper, 2014). There is a small body of existing research that has explored the impact of moral emotion enhancing programs on moral emotion development and subsequent delinquency and prosocial behaviour. Victim empathy is central to many cognitive-behavioural therapy interventions (Lipsey, 2007), and other researchers emphasise the importance of developing crime intervention programmes to develop empathy (Barnett & Mann, 2013).

Adolescent offenders report stronger empathy after a 10-week empathy training programme, which is corresponds to maturity in moral judgement before and after the training programme (Barriga, Sullivan-Cosetti, & Gibbs, 2009). Another study carried out a two-year intervention primarily addressing empathy in adolescents and found increases in empathy compared to the control group

(Castillo, Salguero, Fernández-Berrocal, & Balluerka, 2013). Parental behaviours and the quality of the parent-child relationship have been found to increase empathy in a large scale longitudinal study (Yoo, Feng, & Day, 2013), as well as other parenting studies (Shen, Carlo, & Knight, 2013), for example, some studies focus on the relationship between attachment and the development of moral emotions (Saltaris, 2002).

Despite the success of some of the empathy intervention programme studies, there are difficulties in establishing the extent to which the increased empathy has an influence on subsequent outcomes, for example, longer term effects (Day et al., 2010). Davidson (2003) conducted one of few studies exploring meditation as an intervention to crime and found that it enhanced brain regions involved in empathy and the ability to reduce other non-moral negative instinctive emotional reactions, such as anger.

In another study, higher guilt of prisoners predicted lower recidivism up to 2 years after release from prison (Hosser, Windzio, & Greve, 2007). Restorative justice focuses on building shame in offenders (Harris et al., 2004; McAlinden, 2004; Murphy & Harris, 2007) but others have argued that guilt and empathy play just as critical a role (Tangney & Fischer, 1995).¹²⁸ Other research has mixed findings; for example, a comparison of violent and non-violent offenders pre and post the Impact of Crime on Victims course (ICVC) found significant increases in shame but not empathy and guilt (Jackson et al., 2011). There is evidence that moral reasoning programmes can be successful with incarcerated populations (see, for example, Wilson et al. 2005).

Decisions made by the Criminal Justice System influence an individual's daily life and beyond, therefore the question of criminal responsibility raises important issues for debate. Although the offenders in the current study may not meet the full diagnostic criteria to be categorised as psychopaths, they clearly report weak empathy, shame, and guilt. Furthermore, since the brain is found to continue

¹²⁸ More detail on why restorative justice is regarded as problematic in the explanation of crime can be found in chapter 2.

to develop during adolescence and into the early 20's (Goldberg, 2001), this raises further questions about whether young offenders have the full capacity to experience the moral emotion and moral rules that are required for crime abstinence. If offenders are unable to feel empathy, guilt, or shame for their actions, should they be held responsible (Fine & Kennett 2004)? Or as Baron-Cohen (2011) advocates, should they be helped?

8.6. Future extensions to the current research study

The next wave of PADS+ data collection is scheduled to take place in 2015; further empathy, shame, and guilt data can be collected and analysed to provide further evidence for their roles in violence involvement. Several specific suggestions for future research are outlined below:

- Using longitudinal study data is the only method of exploring changes in violence across time; if changes in moral emotion correspond to changes in violence, this can make initial steps towards implying causality. This can be achieved by calculating correlation values per individual from wave to wave to reflect the magnitude of increases and decreases in shame and guilt, and analysing this data against changes in violence involvement. 'the next step will be for researchers to investigate more complex questions dealing with the moral emotions and criminal behaviour. Other researchers have emphasised the need for such analyses, for example Stuewig & Tangney (2007) state that the relationships between shame, guilt, and crime need to be examined longitudinally in order to assess any changes in moral emotion over time to changes in crime, to achieve first steps to causality.
- 2) To extend the in-depth interview analysis, violence-conducive features of the setting could be explored in more detail. For example, the exact location is known for each of the 48 violent events, therefore they could be matched with the Peterborough Community Survey (PCS) dataset to explore the proportion of

Summary and key conclusions: moral emotion plays an important role in the decision to engage in crime

crimes which took place in areas of poor collective efficacy, which is another key crime-conducive setting factor.¹²⁹

- 3) The violent subsample could be compared to a control group taken from the rest of the sample on particular measures from the space-time budget diary; for example, time spent with criminogenic peers in areas of poor collective efficacy, time spent unsupervised, alcohol and drug use, and furthermore, involvement in moral transgressions or acts of crime.
- 4) Genetics data is due to be collected from the full PADS+ sample in wave 8 of data collection in 2015. This unique data could be used to compare the violent subsample with the rest of the sample to explore the existence of a correlation between particular genetic traits and violence.
- 5) Data is available on parent's shame and parenting style and this can be analysed alongside participant's shame to identify whether there is a correlation and whether implications can be made for the role of parents in moral emotion development.
- 6) Neuroscientific work using portable fMRI scanning in an individual's natural context or setting would be the ideal method to explore the interplay of individual moral emotion and the particular circumstances of the setting (Moll, Zahn, de Oliveira-souza, & Krueger, 2005). This would contribute to an understanding of the discussion points raised in the current study regarding the moral machinery in order to explore exactly how and where in the brain moral emotion plays a part in the action process. Alternatively, a more feasible method is to develop and analyse hypothetical scenarios which can also be used to explore the interplay between moral emotion and different levels of provocation in a setting.

¹²⁹ The Peterborough Community Survey (PCS) is a large scale survey administered to residents in Peterborough primarily designed to collect information on very small unit areas regarding neighbourhood collective efficacy (Oberwittler & Wikström, 2009).

Summary and key conclusions: moral emotion plays an important role in the decision to engage in crime

8.7. Chapter summary: Summary and key conclusions: moral emotion plays an important role in the decision to engage in crime

This chapter has summarised the key pillars and findings of the current study with an outline of the key conclusions, discussed the merits and limitations of the study, and offered suggestions for application of the current study findings to crime intervention, primarily with regards to moral emotion development in childhood. Finally, this chapter offered future research extensions to further the understanding of the role of moral emotion in violence. All in all, the explanation of crime is far from straightforward because 'there are no settings in which all individuals will commit an act of crime, and no individuals who in all settings will commit an act of crime' (Treiber 2008). Therefore there is no blanket theory that can apply to all people and all settings, but rather, it is the interaction of certain individuals (i.e. with weak morality) in certain settings (i.e. those characterised by particular crime-conducive setting circumstances such as provocation, presence of peers, and time spent unsupervised in unstructured activities) that can explain crime.

- Aaltola, E. (2014). Affective empathy as core moral agency: psychopathy, autism and reason revisited. *Philosophical Explorations*, 17(1), 76–92. doi:10.1080/13869795.2013.825004
- Agnew, R. (1985). A Revised Strain Theory of Delinquency. Social Forces, 151–167.
- Agnew, R. (2001). Building on the foundation of General Strain Theory: Specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency*, *38*(4), 319.
- Agnew, R. (2014). Social Concern and Crime: Moving Beyond the Assumption of Simple Self-Interest. *Criminology*, 52(1), 1–32. doi:10.1111/1745-9125.12031
- Aharoni, E., Antonenko, O., & Kiehl, K. (2011). Disparities in the moral intuitions of criminal offenders: The role of psychopathy. *J Res Pers*, 45(3), 322–327. doi:10.1016/j.jrp.2011.02.005.Disparities
- Ahmed, E., Harris, N., Braithwaite, J., & Braithwaite, V. (2001). *Shame management through reintegration*. Cambridge University Press.
- Aksan, N., & Kochanska, G. (2005). Conscience in childhood: old questions, new answers. *Developmental Psychology*, 41(3), 506–16. doi:10.1037/0012-1649.41.3.506
- Allison, C., Baron-Cohen, S., Wheelwright, S., Stone, M., & Muncer, S. (2011). Psychometric analysis of the Empathy Quotient (EQ). *Personality and Individual Differences*, 51(7), 829–835. doi:10.1016/j.paid.2011.07.005
- Anderson, E. (1999). *Code of the street: decency, violence, and the moral life of the inner city.* New York/London: W.W.Norton & Company Ltd.
- Anderson, N., & Kiehl, K. (2012). The psychopath magnetized: insights from brain imaging. *Trends in Cognitive Sciences*, 16(1), 52–60. doi:10.1016/j.tics.2011.11.008
- Anderson, S., Bechara, A., Damasio, H., Tranel, D., & Damasio, A. (1999). Impairment of social and moral behavior related to early damage in human prefrontal cortex. *Nature Neuroscience*, 2(11), 1032–7. doi:10.1038/14833
- Antonaccio, O., Botchkovar, E., & Tittle, C. (2011). Attracted to Crime: Exploration of Criminal Motivation Among Respondents in Three European Cities. *Criminal Justice and Behavior*, 38(12), 1200–1221. doi:10.1177/0093854811423347

- Arsenio, W., Lemerise, E (2010). *Emotions, aggression, and morality in children: Bridging development and psychopathology.* American Psychological Association.
- Athens, L. (1997). *Violent criminal acts and actors revisited*. University of Illinois Press.
- Bafunno, D., & Camodeca, M. (2013). Shame and guilt development in preschoolers: The role of context, audience and individual characteristics. *European Journal of Developmental Psychology*, 10(2), 128–143. doi:10.1080/17405629.2013.765796
- Baldner, C., & McGinley, J. (2014). Correlational and exploratory factor analyses (EFA) of commonly used empathy questionnaires: New insights. *Motivation and Emotion*, 38(5), 727–744. doi:10.1007/s11031-014-9417-2
- Barnett, G., & Mann, R. (2013). Empathy deficits and sexual offending: A model of obstacles to empathy. *Aggression and Violent Behavior*, 18(2), 228–239. doi:10.1016/j.avb.2012.11.010
- Baron-Cohen, S. (2011). Zero degrees of empathy: A new theory of human cruelty. Penguin books.
- Barriga, A, Sullivan-Cosetti, M., & Gibbs, J. (2009). Moral cognitive correlates of empathy in juvenile delinquents. *Criminal Behaviour and Mental Health : CBMH*, 19(4), 253–64. doi:10.1002/cbm.740
- Basil, D., Ridgway, N., & Basil, M. (2008). Guilt and Giving : A Process Model of Empathy and Efficacy. *Psychology and Marketing*, 25(January), 1–23. doi:10.1002/mar
- Beardman, S (2004). Alchemies of the mind: Rationality and emotion by Jon Elster review. The Journal of Philosophy, 101:9, 484-491.
- Bechara, A., Damasio, H., & Damasio, A. (2000). Emotion, decision making and the orbitofrontal cortex. *Cerebral Cortex (New York, N.Y. : 1991)*, 10(3), 295–307. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/10731224
- Bechara, A., Tranel, D., & Damasio, H. (2000). Characterization of the decision-making deficit of patients with ventromedial prefrontal cortex lesions. *Brain : A Journal of Neurology*, 123 (*Pt 1*, 2189–202. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11050020
- Bennett, T., & Brookman, F. (2009). The role of violence in street crime: a qualitative study of violent offenders. *International Journal of Offender Therapy and Comparative Criminology*, 53(6), 617–33. doi:10.1177/0306624X08323158

- Bernasco, W., Bruinsma, G., Pauwels, L., & Weerman, F. (2013). Adolescent delinquency and diversity in behavior settings. *Australian & New Zealand Journal* of Criminology, 46(3), 357–378. doi:10.1177/0004865813490949
- Bertsch, K., Grothe, M., Prehn, K., Vohs, K., Berger, C., Hauenstein, K., ... Herpertz, S. C. (2013). Brain volumes differ between diagnostic groups of violent criminal offenders. *European Archives of Psychiatry and Clinical Neuroscience*, 263(7), 593–606. doi:10.1007/s00406-013-0391-6
- Beyers, J., Loeber, R., Wikström, P.-O. H., & Stouthamer-Loeber, M. (2001). What Predicts Adolescent Violence in Better-Off Neighborhoods? *Journal of Abnormal Child Psychology*, 29(5), 369–381.
- Blair, J., Mitchell, D., & Blair, K. (2005). *The psychopath: emotion and the brain*. Blackwell Publishing.
- Blasi, A. (1999). Emotions and moral motivation. *Journal for the Theory of Social Behaviour*, 29, 1–19. doi:10.1111/1468-5914.00088
- Bock, E., & Hosser, D. (2014). Empathy as a predictor of recidivism among young adult offenders. *Psychology, Crime & Law*, 20(2), 101–115. doi:10.1080/1068316X.2012.749472
- Boom, J. (2011). Egocentrism in moral development: Gibbs, Piaget, Kohlberg. *New Ideas in Psychology*, 29(3), 355–363. doi:10.1016/j.newideapsych.2010.03.007
- Bottoms, A. (2002). *Ideology, crime, and criminal justice*. (A. Bottoms & M. Tonry, Eds.). Willan Publishing.
- Bouhana, N., & Wikström, P.-O. H. (2008). *Theorizing Terrorism : Terrorism As Moral Action*.
- Bowes, N., & McMurran, M. (2013). Cognitions supportive of violence and violent behavior. Aggression and Violent Behavior, 18(6), 660–665. doi:10.1016/j.avb.2013.07.015
- Bracht, J., & Regner, T. (2013). Moral emotions and partnership. *Journal of Economic Psychology*, *39*, 313–326. doi:10.1016/j.joep.2013.09.007
- Braithwaite, J. (1989). Crime, shame, and reintegration. Cambridge University Press.
- Braithwaite, J. (2000). Shame and criminal justice. *Canadian Journal of Criminology*, 42(3).

- Braithwaite, J., & Braithwaite, V. (2001). Shame, shame management and regulation. In Shame management through reintegration (pp. 3–58). Cambridge University Press.
- Brouns, B., de Wied, M., Keijsers, L., Branje, S., van Goozen, S., & Meeus, W. (2013). Concurrent and prospective effects of psychopathic traits on affective and cognitive empathy in a community sample of late adolescents. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 54(9), 969–76. doi:10.1111/jcpp.12052
- Bzdok, D., Schilbach, L., Vogeley, K., Schneider, K., Laird, A., Langner, R., & Eickhoff, S. (2012). Parsing the neural correlates of moral cognition: ALE metaanalysis on morality, theory of mind, and empathy. *Brain Structure & Function*, 217(4), 783–96. doi:10.1007/s00429-012-0380-y
- Campos, J. (1995). Foreword. In *Self-conscious emotions: the psychology of shame, guilt, embarrassment, and pride* (pp. ix–xi). The Guilford Press.
- Canli, T., & Amin, Z. (2002). Neuroimaging of emotion and personality: scientific evidence and ethical considerations. *Brain and Cognition*, 50(3), 414–31. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/12480487
- Carlo, G., McGinley, M., Davis, A., & Streit, C. (2012). Behaving badly or goodly: is it because I feel guilty, shameful, or sympathetic? Or is it a matter of what I think? *New Directions for Youth Development*, 2012(136), 75–93, 9–10. doi:10.1002/yd.20040
- Carnì, S., Petrocchi, N., Del Miglio, C., Mancini, F., & Couyoumdjian, A. (2013). Intrapsychic and interpersonal guilt: a critical review of the recent literature. *Cognitive Processing*, 14(4), 333–46. doi:10.1007/s10339-013-0570-4
- Casebeer, W., & Churchland, P. (2003). The Neural Mechanisms of Moral Cognition : A Multiple-Aspect Approach to Moral Judgment and Decision-Making. *Biology* and Philosophy, 169–194.
- Castillo, R., Salguero, J. M., Fernández-Berrocal, P., & Balluerka, N. (2013). Effects of an emotional intelligence intervention on aggression and empathy among adolescents. *Journal of Adolescence*, *36*(5), 883–92. doi:10.1016/j.adolescence.2013.07.001

Census. (2011). 2011 Census Profile for Peterborough UA (Unitary Authority).

- Cohen, A. (1955). Delinquent boys: The culture of the gang. New York: The Free Press.
- Cohen, A., & Short, J. (1958). Research in Delinquent Subcultures. *Journal of Social Issues*, 14(3), 20–37. doi:10.1111/j.1540-4560.1958.tb01414.x

- Cohen, & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44, 588–608.
- Cohen, T., Panter, A., & Turan, N. (2012). Guilt Proneness and Moral Character. *Current Directions in Psychological Science*, 21(5), 355–359. doi:10.1177/0963721412454874
- Cohen, T., Panter, A., Turan, N., Morse, L., & Kim, Y. (2013). Agreement and similarity in self-other perceptions of moral character. *Journal of Research in Personality*, 47(6), 816–830. doi:10.1016/j.jrp.2013.08.009
- Cohen, T., Wolf, S., Panter, A., & Insko, C. (2011). Introducing the GASP scale: a new measure of guilt and shame proneness. *Journal of Personality and Social Psychology*, 100(5), 947–66. doi:10.1037/a0022641
- Cole, P. M., Barrett, K. C., & Zahn-waxler, C. (1992). Emotion Displays in Two-Year-Olds during Mishaps Emotion Displays in Two-Year-Olds during Mishaps, 63(2), 314–324.
- Cornish, D., & Clarke, R. (1986). *Reasoning criminal Rational choice perspectives on offending*. Springer books.
- Corradini, A., & Antonietti, A. (2013). Mirror neurons and their function in cognitively understood empathy. *Consciousness and Cognition*, 22(3), 1152–61. doi:10.1016/j.concog.2013.03.003
- Crockett, M., Clark, L., Hauser, M., & Robbins, T. (2010). Serotonin selectively influences moral judgment and behavior through effects on harm aversion. *Proceedings of the National Academy of Sciences of the United States of America*, 107(40), 17433–8. doi:10.1073/pnas.1009396107
- Crockett, M. (2013). Models of morality. *Trends in Cognitive Sciences*, 17(8), 363–6. doi:10.1016/j.tics.2013.06.005
- Cullen, F. (2011). Beyond Adolescence-Limited Criminology: Choosing Our Future-the American Society of Criminology 2010 Sutherland Address*. *Criminology*, 49(2), 287–330. doi:10.1111/j.1745-9125.2011.00224.x
- Dadds, M. (2008). Conduct problems and cruelty to animals in children: What is the link? In F. Ascione (Ed.), *The international handbook of animal abuse and cruelty*. Purdue University Press.
- Dadds, M., Hawes, D., Frost, A., Vassallo, S., Bunn, P., Hunter, K., & Merz, S. (2009). Learning to "talk the talk": the relationship of psychopathic traits to deficits in

empathy across childhood. *Journal of Child Psychology and Psychiatry*, 50(5), 599–606. doi:10.1111/j.1469-7610.2008.02058.x

- Damasio, A. (1991). *The feeling of what happens body and emotion in the making of consciousness*. Mariner books.
- Damasio, A. (1994). Descartes Error: Emotion, reason, and the human brain. Quill.
- Damasio, A. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain*. Mariner books.
- Damasio, A., Grabowski, T., Bechara, A., Damasio, H., Ponto, L., Parvizi, J., & Hichwa, R. (2000). Subcortical and cortical brain activity during the feeling of self-generated emotions. *Nature Neuroscience*, 3(10), 1049–56. doi:10.1038/79871
- Davis, M. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44(1), 113–126. doi:10.1037//0022-3514.44.1.113
- Day, A., Casey, S., & Gerace, A. (2010). Interventions to improve empathy awareness in sexual and violent offenders: Conceptual, empirical, and clinical issues. *Aggression and Violent Behavior*, 15(3), 201–208. doi:10.1016/j.avb.2009.12.003
- De Haan, W., & Vos, J. (2003). A crying shame: The over-rationalized conception of man in the rational choice perspective. *Theoretical Criminology*, 7(1), 29–54. doi:10.1177/1362480603007001199
- De Hooge, I., Nelissen, R., Breugelmans, S., & Zeelenberg, M. (2011). What is moral about guilt? Acting "prosocially" at the disadvantage of others. *Journal of Personality and Social Psychology*, 100, 462–473. doi:10.1037/a0021459
- De Oliveira-Souza, R., Hare, R., Bramati, I., Garrido, G., Azevedo Ignácio, F., Tovar-Moll, F., & Moll, J. (2008). Psychopathy as a disorder of the moral brain: frontotemporo-limbic grey matter reductions demonstrated by voxel-based morphometry. *NeuroImage*, 40(3), 1202–13. doi:10.1016/j.neuroimage.2007.12.054
- De Vignemont, F., & Singer, T. (2006). The empathic brain: how, when and why? *Trends in Cognitive Sciences*, *10*(10), 435–41. doi:10.1016/j.tics.2006.08.008
- Dearing, R., Stuewig, J., & Tangney, J. (2005). On the importance of distinguishing shame from guilt: Relations to problematic alcohol and drug use. *Addictive Behaviour*, 30(7), 1392–1404. doi:10.1016/j.addbeh.2005.02.002.On
- Decety, J., Chen, C., Harenski, C., & Kiehl, K. (2013). An fMRI study of affective perspective taking in individuals with psychopathy: imagining another in pain does

not evoke empathy. *Frontiers in Human Neuroscience*, 7(September), 489. doi:10.3389/fnhum.2013.00489

- Decety, J., & Michalska, K. (2010). Neurodevelopmental changes in the circuits underlying empathy and sympathy from childhood to adulthood. *Developmental Science*, 13(6), 886–99. doi:10.1111/j.1467-7687.2009.00940.x
- Decety, J., Michalska, K., & Kinzler, K. (2012). The contribution of emotion and cognition to moral sensitivity: a neurodevelopmental study. *Cerebral Cortex (New York, N.Y.*: 1991), 22(1), 209–20. doi:10.1093/cercor/bhr111
- Dinn, W., & Harris, C. (2000). Neurocognitive function in antisocial personality disorder. *Psychiatry Research*, 97(2-3), 173–90. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11166089
- Dobash, R. (1979). Violence against wives. Open Books Publishing.
- Durkheim, E. (2002). Moral education. Dover Publications.
- Duska, R., & Whelan, M. (1975). *Moral Development: A guide to Piaget and Kohlberg*. Paulist Press International, U.S.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, *51*, 665–697.
- Eisenberg, N., Hofer, C., Sulik, M., & Liew, J. (2014). The development of prosocial moral reasoning and a prosocial orientation in young adulthood: concurrent and longitudinal correlates. *Developmental Psychology*, 50(1), 58–70. doi:10.1037/a0032990
- Eisenberg, N., & Morris, A. (2001). The Origins and Social Significance of Empathy-Related Responding . A Review of Empathy and Moral Development : Implications for Caring and Justice by M. L. Hoffman, *14*(1), 95–120.
- Eisner, M., & Wikström, P.-O. H. (1999). Violent crime in the urban community: a comparison of stockholm and basel. *European Journal on Criminal Policy and Research*, 427–442.
- Elison, J. (2005). Shame and guilt: A hundred years of apples and oranges. *New Ideas in Psychology*, 23(1), 5–32. doi:10.1016/j.newideapsych.2005.07.001
- Elster, J (1998). *Alchemies of the mind: Rationality and the emotions*. Cambridge University Press.

Farrington, D. (1986). Age and crime. Crime and Justice, 7, 189-250.

- Farrington, D. (2005). The Importance of Child and Adolescent Psychopathy. *Journal of Abnormal Child Psychology*, *33*(4), 489–497. doi:10.1007/s10802-005-5729-8
- Field, A. (2013). Discovering statistics using IBM SPSS Statistics. SAGE publications.
- Fine, C., & Kennett, J. (2004). Mental impairment, moral understanding and criminal responsibility: psychopathy and the purposes of punishment. *International Journal* of Law and Psychiatry, 27(5), 425–43. doi:10.1016/j.ijlp.2004.06.005
- Fontaine, J. (2006). Untying the Gordian Knot of Guilt and Shame: The Structure of Guilt and Shame Reactions Based on Situation and Person Variation in Belgium, Hungary, and Peru. *Journal of Cross-Cultural Psychology*, 37(3), 273–292. doi:10.1177/0022022105284493
- Fourie, M., Kilchenmann, N., Malcolm-Smith, S., & Thomas, K. (2012). Real-time elicitation of moral emotions using a prejudice paradigm. *Frontiers in Psychology*, 3(August), 275. doi:10.3389/fpsyg.2012.00275
- Fourie, M., Thomas, K., Amodio, D., Warton, C., & Meintjes, E. (2014). Neural correlates of experienced moral emotion: an fMRI investigation of emotion in response to prejudice feedback. *Social Neuroscience*, 9(2), 203–18. doi:10.1080/17470919.2013.878750
- Fraser, S. (1996). *Guilt and shame in children: relationships with empathy and aggression*. Dalhousie University.
- Freud, S. (1910). The origins and development of psychoanalysis.
- Frick, P., & Morris, A. (2004). Temperament and developmental pathways to conduct problems. *Journal of Clinical Child and Adolescent Psychology : American Psychological Association, Division 53, 33*(1), 54–68. doi:10.1207/S15374424JCCP3301_6
- Frick, P., Ray, J., Thornton, L., & Kahn, R. (2013). Annual Research Review: A developmental psychopathology approach to understanding callous-unemotional traits in children and adolescents with serious conduct problems. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. doi:10.1111/jcpp.12152
- Funk, C., & Gazzaniga, M. (2009). The functional brain architecture of human morality. *Current Opinion in Neurobiology*, 19(6), 678–81. doi:10.1016/j.conb.2009.09.011
- Gelder, J., & Vries, R. (2013). Rational Misbehavior? Evaluating an Integrated Dual-Process Model of Criminal Decision Making. *Journal of Quantitative Criminology*. doi:10.1007/s10940-012-9192-8

- George, G. (2011). Shame, Guilt and Empathy in Restorative Practices in the School Setting. *Navigating beyond the compass* research report.
- Georgi, E., Petermann, F., & Schipper, M. (2014). Are empathic abilities learnable? Implications for social neuroscientific research from psychometric assessments. *Social Neuroscience*, 9(1), 74–81. doi:10.1080/17470919.2013.855253
- Ghorbani, M., Liao, Y., Çayköylü, S., & Chand, M. (2012). Guilt, Shame, and Reparative Behavior: The Effect of Psychological Proximity. *Journal of Business Ethics*, 114(2), 311–323. doi:10.1007/s10551-012-1350-2
- Gilbert, P. (1997). The evolution of social attractiveness and its role in shame, humiliation, guilt and therapy. *The British Journal of Medical Psychology*, 70 (*Pt* 2), 113–47. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9210990
- Glenn, A., & Raine, A. (2009). The immoral brain. In J. Verplaetse, J. Schrijver, S. Vanneste, & J. Braeckman (Eds.), *The moral brain*. Dordrecht: Springer Netherlands. doi:10.1007/978-1-4020-6287-2
- Glenn, A., & Raine, A. (2014). Neurocriminology: implications for the punishment, prediction and prevention of criminal behaviour. *Nature Reviews. Neuroscience*, 15(1), 54–63. doi:10.1038/nrn3640
- Goldberg, E. (2001). *The executive brain: frontal lobes and the civilised mind*. Oxford University Press.
- Goldstein, M., Brendel, G., Tuescher, O., Pan, H., Epstein, J., Beutel, M., ... Silbersweig, D. (2007). Neural substrates of the interaction of emotional stimulus processing and motor inhibitory control: an emotional linguistic go/no-go fMRI study. *NeuroImage*, 36(3), 1026–40. doi:10.1016/j.neuroimage.2007.01.056
- Gonzalez-Liencres, C., Shamay-Tsoory, S. G., & Brüne, M. (2013). Towards a neuroscience of empathy: ontogeny, phylogeny, brain mechanisms, context and psychopathology. *Neuroscience and Biobehavioral Reviews*, 37(8), 1537–48. doi:10.1016/j.neubiorev.2013.05.001
- Gottfredson, M., & Hirschi, T. (1990). *A general theory of crime*. Stanford University Press.

Grasmick, H., B. Blackwell, and R. Bursik, Jr. 1993. Changes Over Time in Gender Differences in Perceived Risk of Sanctions. *Law and Society Review* 27:679-705.

Greene, J. (2007). Why are VMPFC patients more utilitarian? A dual-process theory of moral judgment explains. *Trends in Cognitive Sciences*, 11(8), 322–3. doi:10.1016/j.tics.2007.06.004

- Greene, J., & Haidt, J. (2002). How (and where) does moral judgment work? Trends in Cognitive Sciences, 6(12), 517–523. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/12475712
- Greene, J., Nystrom, L., Engell, A., Darley, J., & Cohen, J. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron*, 44(2), 389–400. doi:10.1016/j.neuron.2004.09.027
- Greene, J., Sommerville, R., Nystrom, L., Darley, J., & Cohen, J. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science (New York, N.Y.)*, 293(5537), 2105–8. doi:10.1126/science.1062872
- Gross, J., & Barrett, L. (2013). The emerging field of affective science. *Emotion*, *13*(6), 997–998.
- Haidt, J. (2001). The Emotional Dog and Its Rational Tail : A Social Intuitionist Approach to Moral Judgment, *108*(4), 814–834. doi:10.1037//0033-295X.
- Haidt, J. (2012). *The righteous mind: why good people are divided by politics and religion*. Pantheon.
- Haidt, J. (2013). Moral psychology for the twenty-first century. *Journal of Moral Education*, 42(3), 281–297. doi:10.1080/03057240.2013.817327
- Harenski, C., Kim, S., & Hamann, S. (2009). Neuroticism and psychopathy predict brain activation during moral and nonmoral emotion regulation. *Cognitive*, *Affective & Behavioral Neuroscience*, 9(1), 1–15. doi:10.3758/CABN.9.1.1
- Harris, N. (2001). Shaming and shame: regulating drink-driving. In *Shame management through reintegration* (pp. 73–192). Cambridge University Press.
- Harris, N. (2003). Reassessing the dimensionality of the moral emotions. *British Journal of Psychology (London, England : 1953)*, 94(Pt 4), 457–73. doi:10.1348/000712603322503033
- Harris, N., Walgrave, L., & Braithwaite, J. (2004). Emotional Dynamics in Restorative Conferences. *Theoretical Criminology*, 8(2), 191–210. doi:10.1177/1362480604042243
- Hepper, E., Hart, C., Meek, R., Cisek, S., & Sedikides, C. (2013). Narcissism and Empathy in Young Offenders and Non-offenders. *European Journal of Personality*, (May), n/a–n/a. doi:10.1002/per.1939

Hirschi, T (1969). Causes of Delinquency. Berkeley: University of California Press.

- Hirschi, T., & Gottfredson, M. (1983). Age and the explanation of crime. *American Journal of Sociology*, 89(3), 552–584.
- Hoffman, M. (1982). Development of prosocial motivation: empathy and guilt. In *Development of prosocial behaviour*. New York, Academic Press.
- Hoffman, M. (2000). Empathy and Moral Development: Implications for caring and justice. New York: Cambridge University Press. doi:10.1017/CBO9780511805851
- Hoffman, M. (2002). How automatic and representational is empathy, and why. *Behavioural and Brain Sciences*, 25(1), 38–39.
- Horgan, J. (2014). Morality and religiosity. University of Cambridge.
- Hosser, D., Windzio, M., & Greve, W. (2007). Guilt and Shame as Predictors of Recidivism: A Longitudinal Study With Young Prisoners. *Criminal Justice and Behavior*, 35(1), 138–152. doi:10.1177/0093854807309224
- Hu, Q., Zhang, C., & Xu, Z. (2012). Moral Beliefs, Self-Control, and Sports: Effective Antidotes to the Youth Computer Hacking Epidemic. 2012 45th Hawaii International Conference on System Sciences, 3061–3070. doi:10.1109/HICSS.2012.438
- Hühnel, I., Fölster, M., Werheid, K., & Hess, U. (2014). Empathic reactions of younger and older adults: No age related decline in affective responding. *Journal of Experimental Social Psychology*, 50, 136–143. doi:10.1016/j.jesp.2013.09.011
- Hume, D. (1738). Book 3: Of morals. In A treatise of human nature.
- Izard, C. (2007). Basic Emotions, Natural Kinds, Emotion Schemas, and a New Paradigm. *Perspectives on Psychological Science*, 2(3), 260–280. doi:10.1111/j.1745-6916.2007.00044.x
- Jaarsma, P. (2013, November). Cultivation of empathy in individuals with highfunctioning autism spectrum disorder. *Ethics and Education*. Taylor & Francis. doi:10.1080/17449642.2013.878514
- Jackson, A., Blackburn, A., Tobolowsky, P., & Baer, D. (2011). An Examination of Guilt, Shame, Empathy and Blaming Among a Sample of Incarcerated Male and Female Offenders. *The Southwest Journal of Criminal Justice*, 8(1).
- Jeurissen, D., Sack, A., Roebroeck, A., Russ, B., & Pascual-Leone, A. (2014). TMS affects moral judgment, showing the role of DLPFC and TPJ in cognitive and emotional processing. *Frontiers in Neuroscience*, 8(February), 18. doi:10.3389/fnins.2014.00018

Johnson. (2004). Mind wide open. Scribner.

- Jolliffe, D., & Farrington, D. (2004). Empathy and offending: A systematic review and meta-analysis. Aggression and Violent Behavior, 9(5), 441–476. doi:10.1016/j.avb.2003.03.001
- Jolliffe, D., & Farrington, D. (2006a). Examining the Relationship Between Low Empathy and Bullying. *Aggressive Behavior*, 32(November 2004), 540–550. doi:10.1002/ab
- Jolliffe, D., & Farrington, D. (2006b). Development and validation of the Basic Empathy Scale. *Journal of Adolescence*, 29(4), 589–611. doi:10.1016/j.adolescence.2005.08.010
- Joyce, R. (2007). The evolution of morality. MIT Press.
- Keefer, M. (2013). Understanding Morality from an Evolutionary Perspective: Challenges and Opportunities. *Educational Theory*, 63(2), 113–132. doi:10.1111/edth.12013
- Knabb, J., Welsh, R., Ziebell, J., & Reimer, K. (2009). Neuroscience, moral reasoning, and the law. *Behavioral Sciences & the Law*, 27(2), 219–36. doi:10.1002/bs1.854
- Knutson, B., & Greer, S. (2008). Anticipatory affect: neural correlates and consequences for choice. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 363(1511), 3771–86. doi:10.1098/rstb.2008.0155
- Kochanska, G., Forman, D., Aksan, N., & Dunbar, S. (2005). Pathways to conscience: early mother-child mutually responsive orientation and children's moral emotion, conduct, and cognition. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 46(1), 19–34. doi:10.1111/j.1469-7610.2004.00348.x
- Koven, N. (2011). Specificity of meta-emotion effects on moral decision-making. *Emotion (Washington, D.C.)*, 11(5), 1255–61. doi:10.1037/a0025616
- Krettenauer, T., Asendorpf, J., & Nunner-Winkler, G. (2013). Moral emotion attributions and personality traits as long-term predictors of antisocial conduct in early adulthood: Findings from a 20-year longitudinal study. *International Journal* of Behavioral Development, 37(3), 192–201. doi:10.1177/0165025412472409
- Krettenauer, T., Campbell, S., & Hertz, S. (2013). Moral emotions and the development of the moral self in childhood. *European Journal of Developmental Psychology*, 10, 159–173. doi:10.1080/17405629.2012.762750

- Krettenauer, T., & Jia, F. (2013). Investigating the actor effect in moral emotion expectancies across cultures: a comparison of Chinese and Canadian adolescents. *The British Journal of Developmental Psychology*, *31*(Pt 3), 349–62. doi:10.1111/bjdp.12012
- Lai, V., Hagoort, P., & Casasanto, D. (2012). Affective Primacy vs. Cognitive Primacy: Dissolving the Debate. *Frontiers in Psychology*, *3*(July), 243. doi:10.3389/fpsyg.2012.00243
- Laible, D., Eye, J., & Carlo, G. (2008). Dimensions of Conscience in Mid-adolescence: Links with Social Behavior, Parenting, and Temperament. *Journal of Youth and Adolescence*, 37(7), 875–887. doi:10.1007/s10964-008-9277-8
- Lapsley, D., & Carlo, G. (2014). Moral development at the crossroads: new trends and possible futures. *Developmental Psychology*, *50*(1), 1–7. doi:10.1037/a0035225
- Lardén, M., Melin, L., Holst, U., & Långström, N. (2006). Moral judgement, cognitive distortions and empathy in incarcerated delinquent and community control adolescents. *Psychology, Crime & Law*, 12(5), 453–462. doi:10.1080/10683160500036855
- Le Doux, J. (2002). Synaptic self- how our brains become who we are. Penguin books.
- Leary, M. (2000). Affect, cognition, and the social emotions: A theory of relational devaluation. In J. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition*. Cambridge University Press.
- LeDoux, J. (2002). Synaptic self- how our brains become who we are. Penguin books.
- Leith, K., & Baumeister, R. (1998). Empathy, Shame, Guilt, and Narratives of Interpersonal Conflicts: Guilt-Prone People Are Better at Perspective Taking. *Journal of Personality*, 66(February), 1–37.
- Lewis, H. (1971). Shame and guilt in neurosis. International University Press.
- Lewis, M. (2000). Self-conscious emotions: Embarrassment, pride, shame, and guilt. In M. Lewis & J. Haviland-Jones (Eds.), *Handbook of emotions* (pp. 623–636). New York: Guilford Press.
- Lickel, B., Schmader, T., & Spanovic, M. (2007). Group-conscious emotions: the implications of others' wrongdoings for identity and relationships. In J. Tracy, R. Robins, & J. Tangney (Eds.), *The self-conscious emotions: theory and research* (pp. 351–370). New York: Guildford Press.

- Lipsey, M. (2007). Effects of cognitive-behavioral programs for criminal offenders. doi:10.4073/csr.2007.6
- Lockwood, P., Bird, G., Bridge, M., & Viding, E. (2013). Dissecting empathy: high levels of psychopathic and autistic traits are characterized by difficulties in different social information processing domains. *Frontiers in Human Neuroscience*, 7(November), 760. doi:10.3389/fnhum.2013.00760
- Loeber, R., Farrington, D., Stouthamer-Loeber, M., Moffitt, T., & Caspi, A. (1998). The development of male offending: Key findings from the first decade of the Pittsburgh Youth Study. *Studies on Crime and Crime Prevention*, 7(2), 141–171.
- Malti, T., Gasser, L., & Buchmann, M. (2009). Aggressive and prosocial children's emotion attributions and moral reasoning. *Aggressive Behavior*, 35(1), 90–102. doi:10.1002/ab.20289
- Malti, T., & Krettenauer, T. (2013). The relation of moral emotion attributions to prosocial and antisocial behavior: a meta-analysis. *Child Development*, 84(2), 397– 412. doi:10.1111/j.1467-8624.2012.01851.x
- Malti, T., & Latzko, B. (2010). Children's moral emotions and moral cognition: towards an integrative perspective. *New Directions for Child and Adolescent Development*, 2010, 1–10. doi:10.1002/cd
- Markus, H., Cross, S., Fiske, A., Gilligan, C., Givon, T., Kanagawa, C., ... Trian, H. (1991). Culture and the Self. Implications for Cognition, Emotion, and Motivation. *Psychological Review*, 98(2), 224–253.
- Marsh, A., Finger, E., Fowler, K., Adalio, C., Jurkowitz, I., Schechter, J., ... Blair, R. (2013). Empathic responsiveness in amygdala and anterior cingulate cortex in youths with psychopathic traits. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 54(8), 900–10. doi:10.1111/jcpp.12063
- Marshall, W., Marshall, L., Serran, G., & O'Brien, M. (2009). Self-esteem, shame, cognitive distortions and empathy in sexual offenders: their integration and treatment implications. *Psychology, Crime & Law*, 15(2-3), 217–234. doi:10.1080/10683160802190947
- Martens, W. (2002). Criminality and Moral Dysfunctions: Neurological, Biochemical, and Genetic Dimensions. *International Journal of Offender Therapy and Comparative Criminology*, 46(2), 170–182. doi:10.1177/0306624X02462004
- Mauss, I., Bunge, S., & Gross, J. (2007). Automatic Emotion Regulation. Social and Personality Psychology Compass, 1(1), 146–167. doi:10.1111/j.1751-9004.2007.00005.x

- McAlinden, A. (2004). The Use of "Shame" with Sexual Offenders. *British Journal of Criminology*, 45(3), 373–394. doi:10.1093/bjc/azh095
- Mcdonald, N., & Messinger, D. (2011). The development of empathy: how, when, and why. In A. Acerbi, J. A. Lombo, & J. J.Sanguineti (Eds.), *Free will, Emotions, and Moral Actions: Philosophy and Neuroscience in Dialogue.* IF-Press.
- Mehrabian, A., Epstein, N., & Angles, L. (1969). A measure of emotional empathy '.
- Messner, S. (2012). Morality, Markets, and the Asc: 2011 Presidential Address To the American Society of Criminology*. *Criminology*, 50(1), 5–25. doi:10.1111/j.1745-9125.2011.00264.x
- Michl, P., Meindl, T., Meister, F., Born, C., Engel, R., Reiser, M., & Hennig-Fast, K. (2014). Neurobiological underpinnings of shame and guilt: a pilot fMRI study. *Social Cognitive and Affective Neuroscience*, 9(2), 150–7. doi:10.1093/scan/nss114
- Mill, J. (1869). On liberty. London: Longman, Roberts & Green.
- Miller, G. (2003). The cognitive revolution: a historical perspective. *Trends in Cognitive Sciences*, 7(3), 141–144. doi:10.1016/S1364-6613(03)00029-9
- Miller, P., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, 103(3), 324–44. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3289071
- Moffitt, T., Ross, S., & Raine, A. (2011). Crime and biology. In J. Wilson & J. Petersilia (Eds.), *Crime and public policy* (pp. 53–87). Oxford University Press.
- Moll, J., & de Oliveira-Souza, R. (2007). Moral judgments, emotions and the utilitarian brain. *Trends in Cognitive Sciences*, *11*(8), 319–21. doi:10.1016/j.tics.2007.06.001
- Moll, J., & Schulkin, J. (2009). Social attachment and aversion in human moral cognition. *Neuroscience and Biobehavioral Reviews*, 33(3), 456–65. doi:10.1016/j.neubiorev.2008.12.001
- Moll, J., Zahn, R., de Oliveira-souza, R., & Krueger, F. (2005). The neural basis of human moral cognition. *Nature Reviews*, 6, 799–809.
- Moore, A., Clark, B. A., & Kane, M. (2008). Who Shalt Not Kill? Individual differences in working memory capacity, executive control, and moral judgement. *Psychological Science*, 19(6), 549–558.
- Muris, P., & Meesters, C. (2014). Small or big in the eyes of the other: on the developmental psychopathology of self-conscious emotions as shame, guilt, and

pride. *Clinical Child and Family Psychology Review*, *17*(1), 19–40. doi:10.1007/s10567-013-0137-z

- Murphy, K., & Harris, N. (2007). Shaming, shame, and recidivism: A Test of Reintegrative Shaming Theory in the White-Collar Crime Context. *British Journal* of Criminology, 47(6), 900–917. doi:10.1093/bjc/azm037
- Murray, J., Farrington, D., & Eisner, M. (2009). Drawing conclusions about causes from systematic reviews of risk factors: The Cambridge Quality Checklists. *Journal of Experimental Criminology*, 5(1), 1–23. doi:10.1007/s11292-008-9066-0
- Navarrete, C., McDonald, M., Mott, M., & Asher, B. (2012). Virtual morality: emotion and action in a simulated three-dimensional "trolley problem". *Emotion* (*Washington, D.C.*), 12(2), 364–70. doi:10.1037/a0025561
- Oakley, J. (1990). A critique of Kantian arguments against emotions as moral motives. *History of Philosophy Quarterly*, 7(4), 441–459.
- Oberwittler, D., & Wikström, P.-O. H. (2009). Why small is better: Advancing the study of the role of behavioural contexts in crime causation. In D. Weisburd (Ed.), *Putting crime in its place* (pp. 35–59). Springer Science.
- Olthof, T. (2012). Anticipated feelings of guilt and shame as predictors of early adolescents' antisocial and prosocial interpersonal behaviour. *European Journal of Developmental Psychology*, 9(3), 371–388.
- Olthof, T., Ferguson, T., Bloemers, E., & Deij, M. (2004). Morality- and identity-related antecedents of children's guilt and shame attributions in events involving physical illness. *Cognition & Emotion*, 18(3), 383–404. doi:10.1080/02699930341000077
- Osumi, T., & Ohira, H. (2010). The positive side of psychopathy: Emotional detachment in psychopathy and rational decision-making in the ultimatum game. *Personality and Individual Differences*, 49(5), 451–456. doi:10.1016/j.paid.2010.04.016

Pascal, B. (1660). Pensees.

- Pascual, L., Rodrigues, P., & Gallardo-Pujol, D. (2013). How does morality work in the brain? A functional and structural perspective of moral behavior. *Frontiers in Integrative Neuroscience*, 7(September), 65. doi:10.3389/fnint.2013.00065
- Pauwels, L., & Svensson, R. (2010). Informal Controls and the Explanation of Propensity to Offend: A Test in Two Urban Samples. *European Journal on Criminal Policy and Research*, 16(1), 15–27. doi:10.1007/s10610-009-9115-x

- Pauwels, L., Weerman, F., Bruinsma, G., & Bernasco, W. (2011). Perceived sanction risk, individual propensity and adolescent offending: Assessing key findings from the deterrence literature in a Dutch sample. *European Journal of Criminology*, 8(5), 386–400. doi:10.1177/1477370811415762
- Paxton, J., & Greene, J. (2010). Moral Reasoning: Hints and Allegations. *Topics in Cognitive Science*, 2(3), 511–527. doi:10.1111/j.1756-8765.2010.01096.x
- Pornari, C., & Wood, J. (2010). Peer and cyber aggression in secondary school students: the role of moral disengagement, hostile attribution bias, and outcome expectancies. *Aggressive Behavior*, 36(2), 81–94. doi:10.1002/ab.20336
- Posick, C., Rocque, M., & Rafter, N. (2012). More than a feeling: integrating empathy into the study of lawmaking, lawbreaking, and reactions to lawbreaking. *International Journal of Offender Therapy and Comparative Criminology*, 58(1), 5–26. doi:10.1177/0306624X12465411
- Presser, L. (2004). Violent Offenders , Moral Selves : Constructing Identities and Accounts in the Research Interview.
- Prinz, J. (2007). Is Empathy Necessary for Morality ? In P. Goldie & A. Coplan (Eds.), *Empathy: Philosophical and psychological perspectives* (pp. 1–20). Oxford University Press.
- Raine, A. (2013). The anatomy of violence: the biological roots of crime. Pantheon.
- Raine, A., & Yang, Y. (2006). Neural foundations to moral reasoning and antisocial behavior. Social Cognitive and Affective Neuroscience, 1(3), 203–13. doi:10.1093/scan/nsl033
- Reniers, R., Corcoran, R., Völlm, B., Mashru, A., Howard, R., & Liddle, P. (2012).
 Moral decision-making, ToM, empathy and the default mode network. *Biological Psychology*, 90(3), 202–10. doi:10.1016/j.biopsycho.2012.03.009
- Roberts, W., Strayer, J., & Denham, S. (2014). Empathy, anger, guilt: emotions and prosocial behaviour. *Canadian Journal of Behavioral Science*.
- Robins, R., Noftle, E., & Tracy, J. (2007). Assessing self-conscious emotions: A review of self-report and nonverbal measures. In J. Tracy, R. Robins, & J. Tangney (Eds.), *The self-conscious emotions: theory and research*.
- Roos, S., Salmivalli, C., & Hodges, E. (2011). Person × Context Effects on Anticipated Moral Emotions Following Aggression. *Social Development*, 20(4), 685–702. doi:10.1111/j.1467-9507.2011.00603.x

- Rushby, J., McDonald, S., Randall, R., de Sousa, A., Trimmer, E., & Fisher, A. (2013). Impaired emotional contagion following severe traumatic brain injury. *International Journal of Psychophysiology*, 89(3), 466–74. doi:10.1016/j.ijpsycho.2013.06.013
- Sadler, G. (2007). Aristotle's Psychology, Emotion's Rationality, and Cognition of Being : A Critical Note on Ogren's Position. *Minerva - An Internet Journal of Philosophy*, 11, 30–53.
- Saltaris, C. (2002). Psychopathy in juvenile offenders. Can temperament and attachment be considered as robust developmental precursors? *Clinical Psychology Review*, 22(5), 729–52. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/12113203
- Sampson, R. (2003). Life-course desisters? Trajectories of crime among delinquent boys followed to age 70. *Criminology*, *41*(3).
- Schirmann, F. (2014). "The wondrous eyes of a new technology"-a history of the early electroencephalography (EEG) of psychopathy, delinquency, and immorality. *Frontiers in Human Neuroscience*, 8(April), 232. doi:10.3389/fnhum.2014.00232
- Schnall, S., Haidt, J., Clore, G., & Jordan, A. (2008). Disgust as embodied moral judgment. *Personality & Social Psychology Bulletin*, 34(8), 1096–109. doi:10.1177/0146167208317771
- Schwenck, C., Göhle, B., Hauf, J., Warnke, A., Freitag, C. M., & Schneider, W. (2013). Cognitive and emotional empathy in typically developing children: The influence of age, gender, and intelligence. *European Journal of Developmental Psychology*, *11*(1), 63–76. doi:10.1080/17405629.2013.808994
- Seiter, J., & Bruschke, J. (2007). Deception and Emotion: The Effects of Motivation, Relationship Type, and Sex on Expected Feelings of Guilt and Shame Following Acts of Deception in United States and Chinese Samples. *Communication Studies*, 58(1), 1–16. doi:10.1080/10510970601168624
- Shamay-Tsoory, S. (2014). Dynamic functional integration of distinct neural empathy systems. Social Cognitive and Affective Neuroscience, 9(1), 1–2. doi:10.1093/scan/nst107
- Shaver, P., Shelley, W., & Schwartz, J. (1992). Cross-cultural similarities and differences in emotion and its representation. In *Emotion. Review of personality* and social psychology (pp. 175–212). Thousand Oaks, CA, US: Sage publications Inc.
- Shaw, D. (1992). Reason and Feeling in Hume's Action Theory and Moral philosophy. *Hume Studies Volume XVIII*, *18*(2), 349–368.

- Shen, Y.-L., Carlo, G., & Knight, G. P. (2013). Relations Between Parental Discipline, Empathy-Related Traits, and Prosocial Moral Reasoning: A Multicultural Examination. *The Journal of Early Adolescence*, 33(7), 994–1021. doi:10.1177/0272431613479670
- Sherman, L. (1993). Defiance, Deterrence, and Irrelevance: A Theory of the Criminal Sanction. *Journal of Research in Crime and Delinquency*, 30(4), 445–473. doi:10.1177/0022427893030004006
- Sherman, L. (2003). Reason for Emotion: Reinventing Justice With Theories, Innovations, and Research-the American Society of Criminology 2002 Presidential Address*. *Criminology*, 41(1), 1–38. doi:10.1111/j.1745-9125.2003.tb00980.x
- Silfver, M., Helkama, K., Lönnqvist, J.-E., & Verkasalo, M. (2008). The relation between value priorities and proneness to guilt, shame, and empathy. *Motivation* and Emotion, 32(2), 69–80. doi:10.1007/s11031-008-9084-2
- Silfver-Kuhalampi, M. (2008). *The sources of moral motivation studies on empathy*, *guilt*, *shame and values*. University of Helsinki.
- Smith, D. (2013). Wider and deeper: The future of criminology in Europe. *European Journal of Criminology*, *11*(1), 3–22. doi:10.1177/1477370813500885
- Sobhani, M., & Bechara, A. (2011). A somatic marker perspective of immoral and corrupt behavior. *Social Neuroscience*, 6(April 2012), 640–652.
- Sommer, M., Rothmayr, C., Döhnel, K., Meinhardt, J., Schwerdtner, J., Sodian, B., & Hajak, G. (2010). How should I decide? The neural correlates of everyday moral reasoning. *Neuropsychologia*, 48(7), 2018–26. doi:10.1016/j.neuropsychologia.2010.03.023

Sousa, R. De. (2001). Moral emotions. Ethical Theory and Moral Practice, 4, 109–126.

- Spinella, M. (2005). Prefrontal substrates of empathy: psychometric evidence in a community sample. *Biological Psychology*, 70(3), 175–81. doi:10.1016/j.biopsycho.2004.01.005
- Spreng, R. N., Mckinnon, M. C., Mar, R. A., & Levine, B. (2009). The Toronto Empathy Questionnaire: Scale development and initial validation of a factoranalytic solution to multiple empathy measures, 91(1), 62–71. doi:10.1080/00223890802484381.The
- Steinberg, L. (2005). Cognitive and affective development in adolescence. Trends in Cognitive Sciences, 9(2), 69–74. doi:10.1016/j.tics.2004.12.005

- Stern, A. (1998). *Cognitive and behavioral aspects of shame among preadolescents*. University of Missouri-Columbia.
- Stoklosa, A. (2012). Chasing the bear: william james on sensations, emotions and instincts. William James Studies, 9, 72–93.
- Stuewig, J., & Tangney, J. (2007). Shame and guilt in antisocial and risky behaviours. In *The self-conscious emotions: theory and research*.
- Sutherland, E & Cressey, D (1955). Principles of Criminology. Lippincott; 5th edition
- Svensson, R. (2004). Social control and socialisation: The role of morality as a social mechanism in adolescent deviant behaviour. Stockholm University.
- Svensson, R., Weerman, F., Pauwels, L., Bruinsma, G., & Bernasco, W. (2013). Moral emotions and offending: Do feelings of anticipated shame and guilt mediate the effect of socialization on offending? *European Journal of Criminology*, 10(1), 22– 39. doi:10.1177/1477370812454393
- Tancredi, L. (2005). *Hardwired behaviour: what neuroscience reveals about morality*. Cambridge University Press.
- Tangney, J. (1991). Moral affect: the good, the bad, and the ugly. *Journal of Personality* and Social Psychology, 61(4), 598–607. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/1960652
- Tangney, J., & Dearing, R. (2002). *Shame and guilt (Emotions and social behaviour)*. The Guilford Press.
- Tangney, J., & Fischer, K. (1995). Self-conscious emotions: the psychology of shame, guilt, embarrassment, and pride. The Guilford Press.
- Tangney, J., Miller, R., Flicker, L., & Barlow, D. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, 70(6), 1256–69. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/8667166
- Tangney, J., Stuewig, J., & Hastings, M. (2011). Assessing jail inmates' proneness to shame and guilt: feeling bad about the behaviour or the self? *Criminal Justice Behaviour*, 38(7), 710–734. doi:10.1177/0093854811405762.Assessing
- Tangney, J., Stuewig, J., & Mashek, D. (2007). Moral emotions and moral behavior. Annual Review of Psychology, 58, 345–72. doi:10.1146/annurev.psych.56.091103.070145

- Thomas, B., Croft, K., & Tranel, D. (2011). Harming kin to save strangers: further evidence for abnormally utilitarian moral judgments after ventromedial prefrontal damage. *Journal of Cognitive Neuroscience*, 23(9), 2186–96. doi:10.1162/jocn.2010.21591
- Tibbetts, S. (2003). Self-conscious emotions and criminal offending. *Psychological Reports*, *93*, 101–126.
- Tittle, C. (2007). The explanation of crime: Context, mechanisms and development, edited by Per-Olof H. Wikström and Robert J. Sampson. New York, NY: Cambridge University Press. *Contemporary Sociology: A Journal of Reviews*, 36(5), 484–485.
- Treiber, K. (2008). *Executive capabilities, self-control, and crime*. University of Cambridge.
- Treiber, K. (2011). The neuroscientific basis of situational action theory. In A. Walsh & K. Beaver (Eds.), *The Ashgate Research Companion to biosocial theories of crime*.
- Treiber, K. (2013). A neuropsychological test of criminal decision making : regional prefrontal influences in a dual process model. In J. van Gelder, H. Elfers, D. Nagin, & D. Reynald (Eds.), *Affect and cognition in criminal decision-making*.
- Tryggvesson, K. (2005). Fredom in a bottle: Young Swedes on rationales and norms for drunken behaviour. Department of Criminology.
- Turnbull, O., Evans, C., Bunce, A., Carzolio, B., & O'connor, J. (2005). Emotion-based learning and central executive resources: an investigation of intuition and the Iowa Gambling Task. *Brain and Cognition*, 57(3), 244–7. doi:10.1016/j.bandc.2004.08.053
- Turner, J. (2014). Researching State Shame With the Experiential Shame Scale. *The Journal of Psychology*, *148*(5), 577–601. doi:10.1080/00223980.2013.818927
- Van Gelder, J., Elffers, H., Reynald, D., & Nagin, D. (2014). *Affect and cognition in criminal decision making*. Routledge.
- Van Stokkom, B. (2002). Moral emotions in restorative justice conferences: Managing shame, designing empathy. *Theoretical Criminology*, 6(3), 339–360. doi:10.1177/136248060200600306
- Vélez García, A., & Ostrosky-Solís, F. (2006). From morality to moral emotions. *International Journal of Psychology*, 41(5), 348–354. doi:10.1080/00207590500345898

- Wagner, U., N'Diaye, K., Ethofer, T., & Vuilleumier, P. (2011). Guilt-specific processing in the prefrontal cortex. *Cerebral Cortex (New York, N.Y. : 1991)*, 21(11), 2461–70. doi:10.1093/cercor/bhr016
- Wahlund, K., Sorman, K., Gavazzeni, J., Fischer, H., & Kristiansson, M. (2010). Attenuated subjective ratings and skin conductance responses to neutral and negative pictures in non-psychopathic mentally disordered offenders with various diagnoses. *Psychiatry Research*, 180(1), 30–4. doi:10.1016/j.psychres.2009.09.009
- Wainryb, C., & Recchia, H. (2012). Emotion and the moral lives of adolescents: Vagaries and complexities in the emotional experience of doing harm. *New Directions for Youth Development*, (136), 13–26. doi:10.1002/yd
- Webb, P. (2013). Review of Per-Olof Wikstrom et al., Breaking Rules: The Social and Situational Dynamics of Young People's Urban Crime. Asian Journal of Criminology. doi:10.1007/s11417-013-9171-5
- White, B. (2014). Who cares when nobody is watching? Psychopathic traits and empathy in prosocial behaviors. *Personality and Individual Differences*, 56, 116– 121. doi:10.1016/j.paid.2013.08.033
- Wicker, F., Payne, G., & Morgan, R. (1983). Participant Descriptions of Guilt and Shame 1. *Motivation and Emotion*, 7(1).
- Wikström, P.-O. H. (2004). Crime as alternative: towards a cross-level situational action theory of crime causation. In J. McCord (Ed.), *Beyond empiricism: institutions and intentions in the study of crime* (pp. 1–37). New Brunswick: Transaction.
- Wikström, P.-O. H. (2005). The social origins of pathways in crime: towards a developmental ecological action theory of crime involvement and its changes. In D. Farrington (Ed.), *Integrated developmental and lifecourse theories of offending* (pp. 211–245). New Brunswick: Transaction.
- Wikström, P.-O. H. (2006). Individuals, settings, and acts of crime: situational mechanisms and the explanation of crime. In P.-O. H. Wikström & R. Sampson (Eds.), *The explanation of crime: context, mechanisms, and development* (pp. 61– 107). Cambridge University Press.
- Wikström, P.-O. H. (2009). Crime propensity, criminogenic exposure and crime involvement in early to mid adolescence. In *Monatsschrift fur Krimonologie und Strafrechtsreform*.
- Wikström, P.-O. H. (2010). Explaining crime as moral actions. In S. Hitlin & S. Vaysey (Eds.), *Handbook of the sociology of morality*. Springer verlag.

- Wikström, P.-O. H. (2011). Does everything matter? Addressing the problem of causation and explanation in the study of crime. In J. McGloin, C. Sullivan, & L. Kennedy (Eds.), *When crime appears: the role of emergence*.
- Wikström, P.-O. H. (2014). Why crime happens: A situational action theory. In G. Manzo (Ed.), *Analytical Sociology: Actions and Networks* (pp. 74–94). John Wiley & Sons.
- Wikström, P.-O. H., & Butterworth, D. (2006). Adolescent crime: Individual differences and lifestyles. Collumpton: Willan publishing.
- Wikström, P.-O. H., Ceccato, V., Hardie, B., & Treiber, K. (2009). Activity Fields and the Dynamics of Crime. *Journal of Quantitative Criminology*, 26(1), 55–87. doi:10.1007/s10940-009-9083-9
- Wikström, P.-O. H., Oberwittler, D., Treiber, K., & Hardie, B. (2012). Breaking rules: the social and situational dynamics of young people's urban crime. Oxford University Press.
- Wikström, P.-O. H., & Sampson, R. (2003). Social Mechanisms of Community Influences on Crime and Pathways in Criminality. In B. Lahey, T. E. Moffitt, & A. Caspi (Eds.), *Causes of conduct disorder and juvenile delinquency* (pp. 118–148). The Guilford Press.
- Wikström, P.-O. H., & Svensson, R. (2008). Why are English Youths More Violent Than Swedish Youths?: A Comparative Study of the Role of Crime Propensity, Lifestyles and Their Interactions in Two Cities. *European Journal of Criminology*, 5(3), 309–330. doi:10.1177/1477370808090835
- Wikström, P.-O. H., & Svensson, R. (2010). When does self-control matter? The interaction between morality and self-control in crime causation. *European Journal of Criminology*, 7(5), 395–410. doi:10.1177/1477370810372132
- Wikström, P.-O. H., & Treiber, K. (2007). The Role of Self-Control in Crime Causation: Beyond Gottfredson and Hirschi's General Theory of Crime. *European Journal of Criminology*, 4(2), 237–264. doi:10.1177/1477370807074858
- Wikström, P.-O. H., & Treiber, K. (2008). Offending Behaviour Programmes.
- Wikström, P.-O. H., & Treiber, K. (2009a). Violence as Situational Action. *International Journal of Conflict and Violence*, *3*(1), 75–96.
- Wikström, P.-O. H., & Treiber, K. (2009b). What drives persistent offending? The neglected and unexplored role of the social environment. In J. Savage (Ed.), *The development of persistent criminality*. Oxford: Oxford University Press.

- Wikström, P.-O. H., Treiber, K., & Hardie, B. (2011). Examining the Role of the Environment in Crime Causation : Small Area Community Surveys and Space-Time Budgets by. *The SAGE Handbook of Criminological Research Methods*, (July 2010), 1–42.
- Wikström, P.-O. H., Tseloni, A., & Karlis, D. (2011). Do people comply with the law because they fear getting caught? *European Journal of Criminology*, 8(5), 401– 420. doi:10.1177/1477370811416415
- Williams, B. (2008). Shame and neccessity. University of California Press.
- Willits, D. (2012). *Situational and individual predictors of violent intentions: a factorial survey approach*. The University of New Mexico.
- Wingrove, T., Korpas, A., & Weisz, V. (2011). Why were millions of people not obeying the law? Motivational influences on non-compliance with the law in the case of music piracy. *Psychology, Crime & Law*, 17(3), 261–276. doi:10.1080/10683160903179526
- Wolf, S. (2009). Moral obligations and social commands. In Jorgensen & Newlands (Eds.), *Metaphysics and the Good: Themes from the Philosophy of Robert Merrihew Adams* (pp. 1–31).
- Wolfgang, M., & Ferracuti, F. (1967). *The subculture of violence: towards an integrated theory in criminology*. Tavistock Press.
- Woodward, J., & Allman, J. (2007). Moral intuition: its neural substrates and normative significance. *Journal of Physiology, Paris*, 101(4-6), 179–202. doi:10.1016/j.jphysparis.2007.12.003
- Wright, R. (1994). *The moral animal why we are the way we are: the new science of evolutionary psychology*. New York: Vintage books.
- Wuensch,K (2013). *Conducting a path analysis with SPSS/AMOS*. Dept of Psychology, East Carolina University.
- Yang, Y., & Raine, A. (2008). Functional neuroanatomy of psychopathy. *Psychiatry*, 7(3), 133–136. doi:10.1016/j.mppsy.2008.01.001
- Yang, Y., & Raine, A. (2009). Prefrontal structural and functional brain imaging findings in antisocial, violent, and psychopathic individuals: a meta-analysis. *Psychiatry Research*, 174(2), 81–8. doi:10.1016/j.pscychresns.2009.03.012

- Yoo, H., Feng, X., & Day, R. (2013). Adolescents' empathy and prosocial behavior in the family context: a longitudinal study. *Journal of Youth and Adolescence*, 42(12), 1858–72. doi:10.1007/s10964-012-9900-6
- Young, L., & Dungan, J. (2012). Where in the brain is morality? Everywhere and maybe nowhere. *Social Neuroscience*, 7(February), 1–10.

Zajonc, R. (1984). On the primacy of affect. American Pscyhologist, 39(2), 117–123.

Appendices

Appendix 4-1: Shame questionnaire scale

The response options are 'No, not at all', 'Yes, a little', and 'Yes, very much'.

1. If you were caught shoplifting and your best friends found out about it, would you feel ashamed?

2. If you were caught shoplifting and your teachers/tutors or boss found out about it, would you feel ashamed?

3. If you were caught shoplifting and your parents found out about it, would you feel ashamed?

4. If you were caught breaking into a car and your best friends found out about it, would you feel ashamed?

5. If you were caught breaking into a car and your teachers/tutors or boss found out about it, would you feel ashamed?

6. If you were caught breaking into a car and your parents found out about it, would you feel ashamed?

Appendix 4-2: Guilt questionnaire scale

The response options are 'No, not at all', 'Yes, a little', and 'Yes, very much'.

1. Would you feel guilty if did something your parents (step-parents) have told you absolutely not to do?

2. Would you feel guilty if you cheated on a test?

3. Would you feel guilty if you teased another workmate/colleague so he or she started to cry?

4. Would you feel guilty if you stole something from a shop?

5. Would you feel guilty if you hit another workmate/colleague who made a rude remark to you?

6. Would you feel guilty if you broke into a car and stole something?

Appendix 4-3: General empathy questionnaire scale

	Strongly agree	Mostly agree	Mostly disagree	Strongly disagree
Homeless people only have themselves to blame				
Other peoples problems are theirs, not mine				
I get angry when I see people being mistreated by the police				
It is important to give as much money as you can afford to help people in				
When I see someone badly treated in a film I often feel upset				
I like to help people less fortunate than me				
When a child gets abused or mistreated I feel really upset				
Now and again I cry when I see a sad film				
I feel sad when I see an animal being hurt or mistreated				
Some films I watch make me very happy (in a good mood)				

How strongly do you agree or disagree with the following statements?

	Strongly agree	Mostly agree	Mostly disagree	Strongly disagree
It is easy for me to understand others viewpoints				
I feel sad when I hear about lonely people without friends				
I don't care much about whether strangers I meet are happy or sad				
I find it very upsetting when people get bullied				
People affected by tsumanis and earthquakes are not really my concern				
I find it easy to feel others pain when they are hurt				
I sometimes get frightened when watching a scary film				

Appendix 4-4: Cognitive and affective empathy questionnaire scale

How strongly do you agree or disagree with the following statements?

	Strongly Agree	Mostly Agree	Mostly Disagree	Strongly Disagree
I can often tell if a friend is upset				
I often feel sad if other people are sad				
I can often tell if a friend is happy				
I am often in a good mood if other people are in a good mood				
I can often tell if other people are sad				
I often feel happy if a friend is happy				
I can often tell if other people are in a good mood				
I often feel upset if a friend is upset				

Appendix 4-5: Moral rules questionnaire scale

The response options are 'Very wrong', 'Wrong', 'A little wrong', and 'Not wrong at all'.

How right or wrong do you think it is for someone of your age to...

- 1. Steal a pencil from a classmate
- 2. Skip doing homework for school
- 3. Ride a bike through a red light
- 4. Go skateboarding in a place where skateboarding is not allowed
- 5. Hit another young person who makes a rude comment
- 6. Lie, disobey, or talk back to teachers
- 7. Get drunk with friends on a Friday evening
- 8. Smoke cigarettes
- 9. Skip school or work without an excuse
- 10. Tease a classmate/work colleague because of the way he or she dresses
- 11. Smash a street light for fun
- 12. Paint graffiti on a house wall
- 13. Steal a CD from a shop
- 14. Smoke cannabis
- 15. Break into or try to break into a building to steal something
- 16. Use weapon or force to get money or things from another young person
- 17. To kill other people by blowing yourself up as part of a political or religious protest

Appendix 4-6: Self-reported violence (robbery and assault) questionnaire scale

Have you <u>during the year (2011)</u> used a weapon, hit or threatened to hurt someone, to <u>take money or other things</u> from them?

- ♦ No
- ♦ Yes

If No, go to question 81 on the following page. If Yes, continue with this question.

How <u>many times</u> have you used a weapon, hit or threatened to hurt someone, to take money or other things from them in the <u>last year (2011)</u>?

Were you with some of your friends the <u>last time</u> you used a weapon, hit or threatened to hurt someone, to take money or other things from them?

- ♦ No
- ♦ Yes

Not counting events when you took money or other things from someone, have you <u>during the year (2011)</u> <u>beaten up or hit someone</u> (for example_punched, stabbed, kicked or head-butted someone)? (Do not count fights with your brothers or sisters).

- ♦ No
- ♦ Yes

How <u>many times</u> have you beaten up, or hit someone in the <u>last</u> year (2011)? _____

Were you with some of your friends the *last time* you beat up or hit someone?

♦ No

♦ Yes

Appendix 5-1: In-depth interview instructions

The last part of the interview is more of an informal discussion to get more detail of your activities.

Again, at this point, it's so important that you understand that absolutely everything you say in this interview is completely confidential – we are interested in young people like you as a group, and have no interest in judging you – we take this really seriously – even if the things we discuss are sensitive.

If you don't feel comfortable to talk and be honest – there's not much point in us being here today.

I'll be using this information to pull together a picture of why young people take part in certain activities so I massively appreciate your time and honesty. Before we start – I'll just explain to you why I'm recording this. You don't need to be alarmed at all – this is purely so I don't have to write everything that you say down – it is only there to save our time during our conversation – otherwise I'd be stopping after every question I ask you to scribble everything down.

Again, it is so important that you understand this in terms of confidentiality.

Any questions at all?

(press record)

Think about the last time you were involved in any violence – so we're going to talk about the last time you committed any violence and I'll ask you various questions about it.

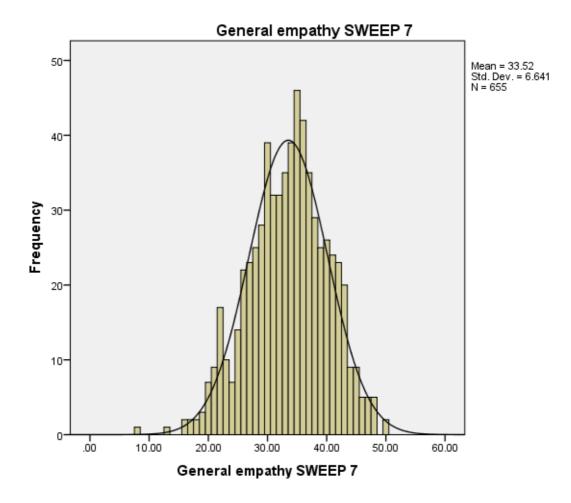
Main theme	Sub theme	Questions	NT (tick)
1.	General detail	When was it? – If no, YPQ or previous	\otimes
Context	– set the scene	Describe what happened, tell me the story – to get YP warmed up and thinking about it, make them feel comfortable, see which points they feel are important enough to mention	\otimes
		Where were you (including precise detail of the setting - which room? which part of pub, etc) Why were you there? <i>i.e. reason</i>	\otimes
		What were you doing? <i>i.e. activity</i>	\otimes
		what were you doing. i.e. activity	\otimes
	Influence of peers/others	Were you with anyone else? Who else was there? How do you know them/what relationship do they have to you?	\otimes
			\otimes
	Influence of intoxication	Had you drunk any alcohol or smoked or taken any drugs?	
		How long before did you drink/smoke/take x?	\otimes
		How drunk/drugged did you feel?	\otimes

	If yes, do you think this influenced your decision to be involved in violence?	
	If yes, do you think this influenced your decision to be involved in violence?	\otimes
		\otimes
Moments/detai	What happened just before $-e_{g}$, verbal confrontation?	
the violence	Did he/she/they approach you, or did you approach him/her/them?	\otimes
	So would you say it was one-sided or a two-way thing?	\otimes
	Who pushed/hit/kicked who first?	\otimes
Provocation		\otimes
	Did you feel provoked/approached/harassed by anyone or anything? (may already be covered)	
Reason for		\otimes
violence	At what point did you consider using violence? For what reason?	
		\otimes
	Describe the violence – who hit who, where on their body, etc.	\otimes
	Did you use a weapon? Did the victim(s)?	\otimes
	Was the victim injured? If yes, to what degree	\otimes
	Were you injured? If yes, to what degree	
	Provocation Reason for	Is leading up to the violence Did he/she/they approach you, or did you approach him/her/them? So would you say it was one-sided or a two-way thing? Who pushed/hit/kicked who first? Provocation Did you feel provoked/approached/harassed by anyone or anything? (may already be covered) Reason for violence At what point did you consider using violence? For what reason? Describe the violence – who hit who, where on their body, etc. Did you us a weapon? Did the victim(s)? Was the victim injured? If yes, to what degree

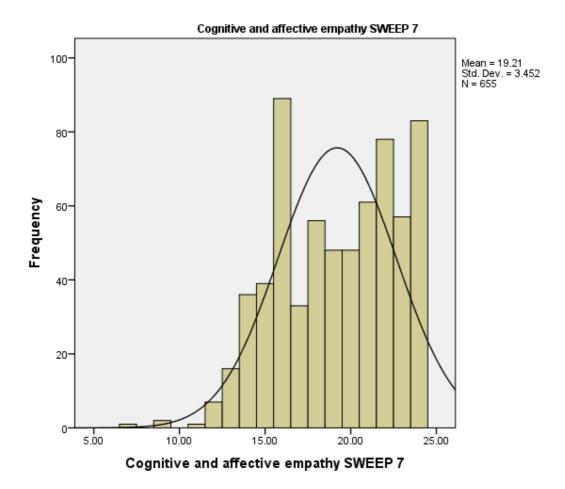
		How long did it last?	\otimes
			\otimes
3. YP's emotion at the	Moral rules	Did you think it was wrong to push/hit/kick at the time?	8
crime	Shame and	Did you feel ashamed or guilty at the time?	\otimes
	guilt	- If yes, did you feel more shame than guilt, or more guilt than shame, and if so, why?	\otimes
	Empathy	How do you think the other person/people felt?	\otimes
	Empathy	Did you consider how they felt when you hit/kicked?	\otimes
		How do you think the person/people (victim) viewed you/ what do you think he/she/they thought of you?	8
4. AFTER the	Moral rules	When you woke up the next day, did you think it was wrong to have pushed/hit/kicked?	8

violent	Shame and	When you woke up the next day, did you feel guilty or ashamed? If yes, more shame, more guilt, or both	
act (next day)	guilt	equally? Do you think this would influence whether you'd act with violence next time?	\otimes
			\otimes
		Have your friends or parents or anyone found out about it?	
		If yes, did you feel ashamed, guilty? How did this make you feel?	\otimes
		If no, would you feel ashamed, guilty if they did find out? How would this make you feel?	
		- If yes, do/did you feel more shame than guilt, or more guilt than shame, and if so, why?	\otimes
			\otimes
		When you woke up the next day, did you think about how he/she/they might be feeling?	\otimes
	Victim emotion	If you were in exactly the same situation again the next day– so in the same place, with the same people around, would you have reacted in the same way?	⊗
	Habituation/Co		\otimes
	ntinuity/Violen t outlook	Is this a typical situation for you or is this quite unusual?	
		What would you say was distinctive about this particular situation that made you act with violence? So for example, you might spend time with these people in these places but it doesn't always lead to violence	
	Individual by		
	setting		\otimes

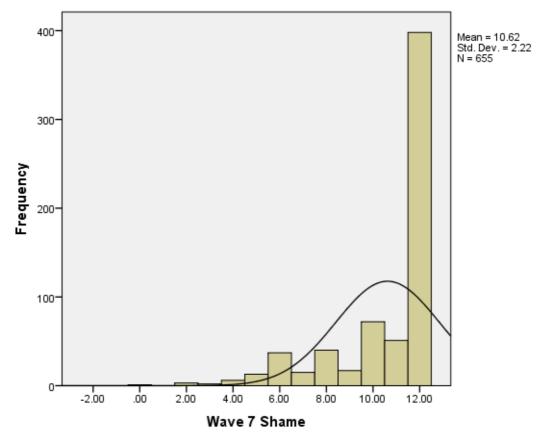
Appendix 6-1: Population distribution for the general empathy scale (wave 7)



Appendix 6-2: Population distribution for the cognitive and affective empathy scale (wave 7)



Appendix 6-3: Population distribution for the shame scale (wave 7)



Wave 7 Shame

Appendix 6-4: Population distribution for the guilt scale (wave 7)

