Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

FACE VALIDITY: EXPLORING THE RELATIONSHIP BETWEEN FACIAL AFFECT RECOGNITION AND PSYCHOPATHIC TRAITS WITH HIGH-RISK PRISONERS IN NEW ZEALAND

A thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy in Psychology

at

Massey University

by

ARMON JAMES TAMATEA

July 2011

Massey University

Te Kunenga Ki Pūrehuroa



Abstract

Psychopathy, as a psychiatric entity, psychological construct, and social idea has suffered from conceptual vagueness and misuse for over two centuries. Currently, psychopathic individuals are considered to present as having a constellation of affective, interpersonal, and behavioural characteristics that typically incurs great social, economic, and human costs by virtue of repeated displays of extreme antisocial behaviour. As such, individuals who are considered 'psychopathic' tend to be over-represented in judicial and correctional settings, tend to re-offend faster and more often than nonpsychopathic offenders, and are also resistant to conventional treatment efforts – so much so, in fact, as to have the reputation of being 'untreatable'. Historical and current conceptualisations of psychopathy have emphasised moral, behavioural, cognitive, neurocognitive, and even physiological differences. However, the various social and interpersonal contexts in which these individuals interact and indeed offend do not appear to have been fully explored in the literature. This study explored social cognitive aspects of violent offenders with psychopathic traits with a view towards informing intervention approaches with this high-risk and potentially dangerous group. Furthermore, the impact of psychopathy is largely evident in the social realm and suggests differences in social information-processing. The role of emotions, especially those of others, is an important construct across theories of social interactions and impairments in affective processing, such as low empathy, quilt, and fear that are common features of psychopathy. Given that recognising emotions from facial cues is an early developmental marker of

emotional and social development, it presents as an interface between behaviour and social cognitive processes. This study sought to investigate the basic relationships between psychopathy and social cognitive phenomena. Male prisoners (N = 68) from New Zealand prisons were invited to (1) identify facial expressions from Ekman and Friesen's (1976) Pictures Of Facial Affect stimuli set; (2) discriminate emotions from displayed pairs of faces; and (3) repeat the tasks after being administered a frustrating task. It was hypothesised that men who presented with psychopathic traits (as measured on the *Psychopathic Personality Inventory-Revised; PPI-R;* Lilienfeld & Widows, 2005) would reveal biased responding before and after the stress intervention. Contrary to expectations, the findings from this study did not – on the whole – support the hypothesis. However, the outcomes called into question the supposedly pervasive and apparently cognitively-impaired nature of psychopathic social information-processing.

Acknowledgements

When I was four, my dad told me that when I grow up he wanted me to be a doctor...I'm not sure if this is what he meant...

First and foremost, I thank my wife Nicky who has stood by me throughout this entire process and, on occasions, had to tolerate my sketchy ideas of 'lifestyle balance' as a result. Boy, is she glad this is over! In addition, I thank my family (both sides) for their unwavering support and understanding (and their occasional curiosity was also appreciated).

Secondly, I thank my supervision team, a triumvirate that consisted of:

lan Evans – Mentor, benefactor and spellbinding teller of tales...Since the
early 2000s, lan has supported my unorthodox (so some have told me)
research interests ranging from listening to Neil Armstrong's moon landing
speech *in reverse*, to exploring magical ideation and spiritual phenomena with
Māori psychiatric populations. So, when contemplating the idea of stressingout violent prisoners with marked psychopathic traits, telling them that they
have 'failed', and offering little in return bar the opportunity to press lots of
buttons – guess who was my first choice of supervisor!

John Podd – Secondary supervisor, neurocognitive wizard and teacher. What began as a casual conversation over beer and chips grew into a mutual interest in psychopathy and social cognition, as well as a constructive learning

experience for me. For his sins, John assumed the arduous task of having to reacquaint me with basic statistical procedures.

Nick Wilson – Since the very beginning, Nick encouraged me to take this journey. Forever the slave-driver, his pragmatic and strategic outlook – as well as his own forays into psychopathy research – assisted me to think my way through a good deal of the logistics for this work.

Thirdly, I acknowledge my early supporters, particularly Marion Dixon, Pieter van Rensburg, and Glen Kilgour, who were all pivotal in my decision to take this challenge on. I also include here many friends who, in part, accompanied me on this journey – a number of whom embarked on their own (sometimes ill-fated) doctoral voyages – and served as both inspirations and warnings.

Fourthly, I would also like to voice my appreciation for staff from Prison Services and Psychological Services (especially at the Special Treatment Units, where much of the data were gathered) who allowed the smoothest possible access for me to work with the participants and went to great lengths to promote the study and help recruit the participants. Psychological Service – My professional 'family' since 2003 – has provided consistent and unwavering support for me to undertake and complete this project, and were generous enough to leave me alone to do what needed to be done. I am also grateful to Mate Webb (Cultural Advisor, Psychological Services, Department of Corrections) for his advice and guidance from the earliest stages of experimental design.

Fifthly, I am indebted to Malcolm Loudon (technical advisor), School of Psychology, Massey University for developing the software programme (and the response box) for this study.

Last, but not least, an extension of gratitude to the men themselves, all of whom participated for a variety of reasons – not least of which was to assist with increasing knowledge with no material reward. I remain very grateful for your contribution to this work and the various side conversations that psychologists are fortunate enough to enjoy in correctional settings.

Table of Contents

Abstract		iii
Acknowledgements		V
Contents		ix
List of Tables		X
List of Figures		xii
List of Appendices		xiv
A Note On Terminolog	ду	xv
Preface		xvii
Chapter One	Background and Rationale	1
Chapter Two	Introduction	29
Chapter Three	Methods	79
Chapter Four	Results	105
Chapter Five	Discussion and Conclusions	141
Postscript		161
References		163
Appendices		195

List of Tables

Table		Page
1	Cleckley's Diagnostic Criteria for Psychopathy	17
2	Comparison of Sample and Psychopathy Selection Features	68
	Across Facial Affect Recognition Studies	
3	Comparison of Facial Emotion Stimuli Methods and	69
	Outcomes Across Facial Affect Recognition with Psychopathy	
	Studies	
4	Descriptions of PPI-R Content Scales	83
5	Comparison of Age of the Research Sample and the New	110
	Zealand Male Prisoner Population	
6	Comparison of Determinate Sentence Length (in Years) of the	111
	Research Sample and the New Zealand Male Prison	
	Population	
7	Comparison of RoC*RoI Scores of the Research Sample and	112
	the New Zealand Male Prison Population	
8	Descriptive Statistics for Sample PPI-R Raw Scores on Total	115
	Scale and Subscales	
9	Pearson Product-Moment Correlation Matrix of the PPI-R	117
	Total and Subscale Scores	
10	Comparison of Ranked Accuracy Judgements (%) of the	120
	Research Sample in Relation to the Pictures Of Facial Affect	
	Development Sample for Each Emotion Category	

11	Descriptive Statistics for Each of the Emotions Categories at	120
	Phase 1	
12	Correlations of Accuracy Scores for Emotion Categories and	122
	PPI-R Total Score	
13	Comparison of Correlation Co-efficients Between Sample	124
	PPI-R Subscale Raw Scores and Total Facial Affect	
	Recognition Accuracy	
14	Comparison of Correlation Coefficients Between Facial Affect	127
	Discrimination (by Category) and PPI-R Total Scores	
15	Comparison of Correlation Coefficients Between PPI-R	128
	Subscales and Total Facial Affect Discrimination Accuracy	
16	Descriptive Statistics for Sample PANAS Positive and	130
	Negative Affect Scale Scores	
17	Descriptive Statistics for Sample Facial Affect Recognition	132
	Accuracy Scores (Phases 1 and 4)	

List of Figures

Figure		Page
1	Layout of the response buttons for Phase 1 and 4 (single	90
	faces)	
2	Layout of the response buttons for Phase 2 and 5 (pairs)	90
3	Layout of the response buttons for Phase 3 (Stroop tasks)	90
4	Examples of the Pictures Of Facial Affect stimuli set: (a)	92
	fear; (b) disgust; and, (c) happy	
5	Stroop task conditions with (a) congruent word and colour;	94
	(b) colour patches; and, (c) incongruent word and colour	
6	Example of an instruction screen presented to participants	96
	prior to each experimental phase	
7	Example of an encouraging message presented to	97
	participants upon completion of a facial affect recognition	
	task	
8	Example of the 'failure message' presented to participants	99
	following each of the Stroop tasks	
9	Distribution of sample PPI-R total psychopathy raw scores	114
10	Distribution of CAVS scores	118
11	Distribution of combined accuracy scores for Phase 1 (pre-	133
	intervention)	
12	Distribution of combined accuracy scores for Phase 4 (post-	134
	intervention)	

13	Box and Whisker representation of the sample's global	135
	accuracy on the facial affect discrimination task before and	
	after the stress intervention	
14	Box and Whisker representation of the sample's accuracy	136
	on the mixed facial affect discrimination task before and	
	after the stress intervention	
15	Box and Whisker representation of the sample's reaction	138
	time on the facial affect discrimination task before and after	
	the stress intervention when emotions were similar	
16	Box and Whisker representation of the sample's reaction	139
	time on the facial affect discrimination task before and after	
	the stress intervention when emotions were mixed	

List of Appendices

Appendix		Page
Α	Information Letter and Consent Form – Part A	195
В	Letter of Thanks	199
С	Information Letter and Consent Form – Part B	200
D	Correlation Table of PPI-R Scales, Primary Measures and	204
	Facial Affect Task (Pre-intervention)	
Е	Correlation Table of PPI-R Scales, Primary Measures and	205
	Facial Affect Task (Post-intervention)	
F	PPI-R Subscale Comparisons on Least and Most Accurate	206
	Across Conditions	
G	Participants who Formed Most and Least Accurate Groups	207
	Across Conditions	

A Note on Terminology

It is acknowledged that categorisation serves the purposes of reducing complexity, exemplifying patterns of a phenomenon, and enabling one to order and relate classes of objects and events (Bruner, Goodnow, & Austin, 1956). However, because of the universally pejorative nature of the term 'psychopath' in clinical, forensic, research, and everyday contexts – a peculiar xenophobia reflected in much of this literature¹ – I will refer to individuals who meet the clinical criteria (under whatever scheme) adjectively (i.e., 'John is psychopathic' or 'a psychopathic individual') or in a possessive sense (i.e., 'John exhibits psychopathic traits'), rather than as a noun (i.e., 'the psychopath', 'psychopaths' or 'John is a psychopath').

¹ In a challenge to the legitimacy of the construct, Cavadino (1998) suggested substituting the term 'psychopath' with 'bastard' as a more accurate (if not more frank) descriptor: "For 'predominantly aggressive psychopath', read: 'stroppy bastard'. For 'predominantly inadequate psychopath', read: 'useless bastard'" (p. 6).



Preface

For now we see through a glass, darkly; but then face to face: now I know in part; but then shall I know even as also I am known.

1 Corinthians 13:12 (King James Version).

When I was at ***** prison, we had a 'kiddy-fucker² on the block. I offered to take him out³. I had a reputation for viciousness and doing what I said I would do...I made a shank⁴ with barbed wire around it — designed in such a way that it would go in easily, but make a real mess coming out — I've always had a love of fishing — when the time came, we were watching a movie on one of those old projectors...he was in the row behind me. When I spotted him, I stabbed him — so much so that I took out a lung. He was put on life support after that, and to my knowledge — unless he's dead — still is. I got another three years for that — on top of my five, but had won a lot of respect and loyalty from others as a result (Retired New Zealand gang member, personal communication, 2010).

Since becoming a psychologist for the Department of Corrections in early 2003, I became intrigued by this notion of 'psychopaths', and over the years had my fair share of experiences with offenders who were described accordingly. Most memorable were my experiences as a therapist with the experimental High-Risk Personality Programme, a pilot group-therapy

² New Zealand prison slang: an identified (or assumed) child sexual offender.

³ Slang: to intentionally kill or severely harm another individual, often in retribution.

⁴ Slang: improvised stabbing implement, usually fashioned from makeshift materials.

violence prevention programme based at West North Block at Waikeria Prison. The 12 men who participated in the 10-month intensive therapy hailed from the four corners of Aotearoa and were screened for psychopathy with the Psychopathy Checklist-Revised (PCL-R) – the first time psychopathy had ever been formally diagnosed for this purpose in the history of the Department.

Over the year, as my team and I became acquainted with many of the most notorious prisoners in the system at that time, it became apparent that no two 'looked alike' – despite similar scores on the PCL-R. Furthermore, many other things were being observed that appeared contrary to the impression imparted by the experimental literature, such as the strong sense of attachment to us as therapists and an even stronger sense of affiliation – even amongst traditional rivals – that permeated this group, even years after the programme concluded.

In light of this, a number of questions presented themselves: are socalled 'psychopaths' really a 'case apart' as the literature would have me believe, or are these kinds of contraindicative traits as described reflective of emergent properties that require time, energy, patience, and curiosity on the part of others to discover? Are the more dramatic behaviours a consequence of impairments, or differences?

In any case, individuals around the globe who have met the criteria for psychopathy have been subject to some of the harshest measures that Western societies can offer – and perhaps rightly so. Whilst I do not claim to be 'romantic' about psychopathic offenders, the paradox that these (invariably) men form a vulnerable group that make *others* vulnerable cannot be ignored if safe and just societies are to be strived towards.