EXPLORING THE STRUCTURE AND INTERNAL CONSISTENCY OF THE 33-ITEM NARRATIVE ROLES QUESTIONNAIRE (NRQ) ADMINISTERED TO ADULT MALE MENTALLY DISORDERED OFFENDERS WHEN COMPARED TO ADU LT MALE INCARCERATED OFFENDERS

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It may be a little presumptuous, but I started writing my acknowledgments before I had completely finished my PhD write up, but I needed a bit of a break and this was my 'brain candy'.

After starting my PhD I met my life long partner, had two children moved between England and Australia twice! Had been employed in various (amazing) jobs and became the sole bread winner for the family. I didn't quite realise this when I started, but a PhD is like a marathon and I consider myself a 'sprinter'. Fortunately I had an amazing support network cheering me on! In fact, 90% of the time I was not convinced I would get this finished. Fortunately 10% of me was resilient and determined enough not to let go, like a dog with a bone.

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So now that my PhD is going to be submitted, I may just begin to reform my professional identity. Whereby I not only view myself as a practitioner, but also as an academic.

HAPPY BIRTHDAY MUM (Again)!

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List of Abbreviations

Terms	Abbreviation
Aggravated Bodily Harm	ABH
American Psychological Association	APA
Analysis of Variance	ANOVA
Anti-social Personality Disorder	ASPD
Avoidant Personality Disorder	APD
Borderline Personality Disorder	BPD
Coefficient of Alienation	CofA
Department of Health	DoH
Dependent Personality Disorder	DPD
Diagnostics and Statistics Manual	DSM
Exploratory Factor Analysis	EFA
Facet Theory	FT
Factor Analysis	FA
Forensic Housing Association	FHA
General Offending	GO
General Offenders	GOs
Grievous Bodily Harm	GBH
Hebrew University Data Analysis Package	HUDAP
Historical Checklist	HCR
Histrionic Personality Disorder	HPD
International Classification of Diseases	ICD
Investigative Psychology	IP
Kaiser-Meyer-Olkin	KMO
Mean	M
Median	Mdn
Medium Secure Unit	MSU
Mental Disorder	MD
Mentally Disordered Offenders	MDOs
Non-Mentally Disordered Offenders	NMDOs

List of Abbreviations cont.

Terms	Abbreviation
Mental Health Act	MHA
Ministry of Justice	MoJ
Multi-dimensional Scaling	MDS
Multi-disciplinary Team	MDT
National Health Service	NHS
National Research Ethics Service	NRES
Narcissistic Personality Disorder	NPD
Narrative Roles Questionnaire	NRQ
Obsessive Compulsive Personality Disorder	OCPD
Offending Behaviour	OB
Paranoid Personality Disorder	PPD
Personality Disorder	PD
Personality disorder not otherwise specified	PDNOS
Positive Affect Negative Affect Model	PANA
Principle Components Analysis	PCA
Psychological Inventory of Criminal Thinking Scales	PICTS
Risk of Sexual Violence Protocol	RSVP
Schizoid Personality Disorder	SPD
Schizotypal personality disorder	STPD
Stalking Risk Profile	SRP
Standard Deviation	SD
Statistical Package for Social Sciences	SPSS
Substance Abuse Disorder	SAD
Sexual Offending	SO
Sexual Offenders	SOs
Smallest Space Analysis	SSA
Violent Offending	VO
Violent Offenders	Vos
World Health Organisation	WHO

Abstract

Research on the 33-item Narrative Roles Questionnaire, using Smallest Space Analysis found it comprises four internally consistent narrative roles (Hero, Professional, Revenger and Victim) when administered to adult male incarcerated offenders. This research explored whether the NRQ could be applied to Mentally Disordered Offenders (MDOs), withstand statistically robust analysis and be developed so that it has practical utility. Data was generated from 70 adult male MDOs, alongside secondary data from two previously published studies with a sample of 191 adult male incarcerated offenders. Findings illustrated that the NRQ could be administered to MDOs, however exploratory factor analysis found that the NRQ was more statistically robust if comprised 32-items. The presence of three of the four original narrative roles (Professional, Revenger and Victim) was supported, whilst a fourth narrative role (Thrill Seeker) was found. The original Hero narrative role was not found and instead captured within both the Professional and Thrill Seeker narrative roles. Furthermore, the presence of core and fluid sub-factor items were also found as was a linear relationship between the four narrative roles, with Axis I offenders more likely to endorse a specific narrative role (Victim) over any other narrative role. Therefore, there is emerging evidence of construct validity for the 32-item NRQ. Through this research a scoring key was developed which can now be used by practitioners to identify an individual's narrative role(s). However, limitations of the current research are that participants were required to engage in retrospective recall of an identified offence and participants with 'no formal diagnosis' could not be confirmed as having a mental disorder. Recommendations for future research are for confirmatory factor analysis to be conducted on the 191 incarcerated offenders' responses to the NRQ, in addition to further exploring construct validity of the 32- item NRQ.

Keywords: Narrative Roles Questionnaire, Smallest Space Analysis, Factor Analysis, Mentally Disordered Offenders, Narrative Roles.

Chapter 1

Literature Review

1.1 Introduction

Addressing criminality is an essential part of Governmental Policy to provide the community a sense of safety and protection. The Government spends approximately £15billion pounds per year to address reoffending and facilitate rehabilitation (Ministry of Justice (MoJ), 2019). This money is invested across a variety of services and service provisions, such as: courts, policing, prisons, probation, forensic mental health, Offending Behaviour Programs (OBPs) and other psychological interventions (MoJ, 2013; National Offender Management Services (NOMS), 2015; House of Commons, 2019) in addition to developing, changing or amending existing bills and legislation (e.g. Crime and Courts Act, 2013; Legal Aid, Sentencing and Punishment of Offenders Act, 2012; Offender Rehabilitation Act, 2014). The average cost of incarcerating a single prisoner per year is estimated to be £41, 136 (MoJ, 2019), whilst the average cost of housing a mentally disordered offender (MDO) in a Forensic Psychiatric facility ranges from £156,585 to 175,000 per year (Citizens Commission of Human Rights UK, 2017; Duke, Furtado, Guo & Vollm, 2018). This level of funding demonstrates the importance the UK Government places on addressing criminality and reducing recidivism, in particular for the treatment of mentally disordered offenders (MDOs). However, it is not only the financial costs associated with offending behavior that propels governments and agencies to address offending, it is also the impact on the victim, the victims' family and the community (Bradley, 2009; MOJ, 2015b; Spalek, 2017; HM Government, 2018). Consequently, various services and agencies also receive government funding (e.g. Police, HM Prison Services, Probation Services, Forensic Mental Health Services) (House of Commons, 2019) to reduce reoffending through desistance (MoJ, 2019) to 'break the cycle' of crime for public safety (MoJ, 2011; 2019).

Forensic research related to offending behaviour is often focused on understanding criminality and identifying strategies to predict and reduce recidivism with a specific focus on offender risk assessment and rehabilitation (MoJ, 2011; Leam, 2013; Yesberg & Polascheck, 2019). Such research is typically conducted within three different environments: prisons, the community and forensic psychiatric hospitals (e.g. or medium or high secure units). Furthermore, the language and terminology used when describing different types of offending is vast. Offenders are often categorised in groups, such as: juvenile offenders, adult male offenders, adult female offenders, offenders with a learning disability, offenders with a mental disorder (MD) and without a MD. Offenders may also be described in relation to their offending behaviour (OB) most often conceptualised within three broad offence types: violent offending (e.g. robbery, assault, grievous bodily harm), sexual offending (rape, paedophilia, child pornography) and general offending (e.g. theft, driving offences, drug offences). Within a MD offending population, offenders can be further categorised based on type of diagnosis, including: Axis I (e.g. major mental illness such as: Substance Abuse Disorder (SAD), schizophrenia, depression), Axis II (personality disorder (PD), e.g. Anti-social PD (ASPD), Borderline PD (BPD), Schizoid PD (SPD)) or considered to have a comorbid diagnosis (e.g. both Axis I and Axis II diagnosis) (DSM-5, 2013). Whilst, adult reoffending rates have decreased marginally (up to 1%) since 2005 and recidivism has remained broadly flat over time (MoJ, 2018a; MoJ, 2018b), the majority of research conducted is on non MDOs (NMDOs) despite the number of offenders admitted to Forensic Psychiatric Units continuing to rise (Fazel, Hayes, Bartellas, Clerici & Trestman, 2016; MoJ, 2019).

There is a commonly held misperception in society that offenders with a MD are more likely to be violent and aggressive than NMDOs, and MDOs often receive more media attention

and considered more dangerous than NMDOs (Ghiasi, Azhar & Singh, 2020). Furthermore, early research on offenders with MD considered MDOs to be a unique population compared to NMDOs (Adams, 1983). However, over the past three decades there has been various and competing views regarding MD, criminality and the difference (if any) between MDOs and NMDOs (Bonta, Law & Hanson, 1998; Elbogen & Johnson, 2009; Fitzgerald et. al., 2011; Morgan, Fisher, Duan, Mandracchia, & Murray, 2010; Witt, vanDorn, & Fazel, 2013). The presence of MD is however considered one of the various criminogenic needs researchers and practitioners (e.g. psychologists, psychiatrists) consider when attempting to understand and predict offending behaviour. Criminogenic needs are often identified through the development of case formulations (McMurran & Taylor, 2013; Shaw, 2017) and forensic risk assessments (Douglas, Pugh, Singh, Savulescu & Fazel, 2017; Sing et al., 2014) which include (but not exclusive to): personal experiences (e.g. attachment, relationships, upbringing), emotional regulation, mental disorder, cognitive distortions, behaviour (e.g. substance use), social support (e.g. anti-social peers) and compliance (e.g. treatment engagement) (British Psychological Society (BPS), 2011; Delle-Vergini & Day, 2016; Rocha, 2019; Yesberg & Polascheck, 2015). Identifying criminogenic needs is helpful for case formulation as it enables the practitioner to hypothesise why the offender behaves in a criminal and immoral way (e.g. the motivation) (Eisenberg, 2000; McMurran 2013; Delle-Vergini & Day, 2016). Forensic risk assessments on the other hand help identify criminogenic needs to assess an individuals' risk of reoffending and identify treatment needs. Therefore, prediction of offending and understanding the motivation for offending can be considered two different (but related) concepts, whereby prediction focuses on the factors associated with the likelihood of re-offending (the 'what'), whilst motivation focuses on the underlying reasons for offending (the 'why').

The majority of research on criminality focuses on identifying risk factors (the 'what') to reduce recidivism given this is a key Governmental objective (MoJ, 211; 2020) and less so on an individuals' story behind 'why' they offended (often addressed through psychological interventions such as group therapy or individual therapy). In 2009, Canter and Youngs published a 33-item 'Narrative Roles Questionnaire' (NRQ) and proposed the presence of four 'narrative roles' (hero, professional, revenger and victim) offenders adopt during the commission of an offence. These narrative roles were an attempt to provide one way to explain the motivation as to why someone may offend based on their 'internal narrative'. However, since the NRQs publication in 2009, only two studies have researched its application to offenders, all of whom were NMDOs, (N=71, Youngs & Canter, 2012; N = 120, Ioannou et al., 2015). Furthermore, neither these two studies or later studies (Ciesla, Ioannou & Hammond, 2019; Ioannou et al., 2017; Ioannou, Synnott, Lowe & Tzani-Pepelasi, 2018) have established the validity and reliability of NRQ, therefore a scoring key for the NRQ is yet to be developed. Consequently, practitioners are unable to administer and interpret the NRQ for offenders thus the NRQ remains exclusively within the research domain. Finally, both papers (Ioannou et al., 2015; Youngs & Canter, 2012) analysed their data using an often criticised and less commonly used analytic approach called Smallest Space Analysis (SSA). However, the idea that offenders may adopt a specific narrative role at the time of their offence and that this can be assessed through a 33-item questionnaire is an interesting proposition. If the presence of the four narrative roles was supported, this could enable both researchers and practitioners to develop their understanding as to 'the why' an individual offends in a way that has not previously been considered. However, at this stage, there are some fundamental questions that remain unanswered, including: Is the NRQ applicable to MDOs? Is the NRQ a valid and

reliable measure? Can the SSA results be replicated using more rigorous psychometric testing? Can the NRQ be developed so that it is practical utility?

This literature review will begin by discussing the differences between MDOs and NMDOs followed by an overview of criminal thinking styles. The development and content of the NRQ will then be discussed with a specific focus on its theoretical underpinnings, scale development, validity and reliability. This chapter will then conclude by identifying the aims of this research.

1.2 Mentally Disordered Offenders

The prison population in England and Wales is 81, 454 (MoJ, 2020) with most transfers to forensic psychiatric hospitals from prison as opposed to the court system (Keown, McKenna, Murphy & McKinnon, 2019). Since 2013 there has been a steady increase of prisoners transferred to forensic psychiatric units under the MHA (1983) (Keown, McKenna, Murphy & McKinnon, 2019; MOJ, 2019), suggesting research conducted on incarcerated offenders should ensure that presence or absence of MD be included as a standard demographic question. However, many studies fail to focus on MD as a demographic descriptor (Bonta, Blais, & Wilson, 2013) and therefore the differences in long-term recidivism for MDOs compared to NMDOs is largely unknown (Bengston, Lund, Ibsen & Langstrom, 2019). However, research in this area is changing and a systematic review of existing studies are starting to explore the differences between MDOs and NMDOs (Bonta, Blais & Wilson, 2013; Fazel et al., 2016).

The relationship between MD, criminogenic needs and risk of recidivism is complicated and frequently misunderstood by both researchers, practitioners and the general

public (Morgan, Sclon & Van Horn, 2020). Additionally, MDOs are often subject to public misconceptions, such as a belief they are more likely than non MDOs to commit serious violent or sexual crimes and present with a higher likelihood of re-offending then is truly the case (Nilsson et al., 2011). Furthermore, negative community perceptions of MDOs can be exacerbated by the media, and high-profile cases such as the murder of MP Joe Cox, by Thomas Mair who had a history of mental illness (Judiciary of England and Wales, 2016). Such perceptions become reinforced when research reports an association between MD and crime such as violent offending (Brennan, Mednick & Hodgins, 2000) and property crime (Bulten, Nijman & can der Staak, 2009; Vinkers et al. 2011). Whilst high rates of offending behaviour for MDOs are often associated with various mental health factors such as: substance abuse, personality disorder, conduct disorder, schizophrenia, mood disorders, psychosis and comorbid alcohol use (Crocker, Leclair, Martin & Nicholls, 2018; Van Dongen et al., 2014; Van Dongen, Buck & Van Marle, 2015), such psychopathological factors are not considered good predictors of recidivism (Kingston et al., 2016).

Whilst MD could be considered a contributing factor to criminality, so too are other factors such as: age, gender, substance misuse, previous violence and anti-social cognitions. (Bonta, Blais & Wilson, 2013; Crichton, 1999; Kingston et al., 2016). A systematic review of 35 studies comparing MDOs and general offenders found that MDOs had 'lower' reoffending rates compared to general prisoners (Fazel, Fiminska, Cocks & Coid, 2016). Additionally, Kingston et al., (2016) suggested that predictors of recidivism are largely shared between MDOs and NMDOs. Some of the challenges associated with research conducted on MD is that both the presence and definition of MD varies across studies. For example, an offender may be considered to have a MD, irrespective of it being a past or current diagnosis and/or

whether this MD was functionally linked to their offending behaviour (Lund, Forsman, Anckarsater & Nilsson, 2012). Additionally, different categories of MD may be the focus of a study over others, such as: Axis I disorders (e.g. schizophrenia, depression, psychosis) (Brennan, Mednick & Hodgins, 2000), Axis II disorders (e.g. anti-social personality disorder (ASPD), borderline personality disorder (BPD)) or dual diagnosis (Witt, van Dorn, & Fazel, 2013). Equally one or two specific types of MD may be the primary focus of study over others which could be influenced the type of access researchers may have to a specific offending population.

A further challenge when conducting research on MDOs is the absence of a single internationally recognised definition of MD due to various social, cultural, economic and legal contexts. This lack of a global definition may offer a partial explanation as to why there is such variation in the description of MD across studies. In England and Wales, one way to obtain clarity as to the definition of MD is via the Mental Health Act (1983), amended in 2007 (MHA, 2007). The MHA is the law which sets out the process as to the admission, detainment and hospitalisation of individuals with a MD, especially if there are concerns regarding an individual's risk to self or others. The MHA defines MD, and 'mentally disordered' as "any disorder or disability of mind" (MHA, 2007, p.12) such as:

"schizophrenia and delusional disorders; dementia; eating disorders; personality disorders; behavioural and personality changes attributed to brain injury/damage; affective disorders (including depression) and neurotic, stress-related somatoform disorders including, post-traumatic stress disorder" (Department of Health (DoH), 2015, p. 26).

To meet the medico-legal requirements of having a MD an individual must receive a diagnosis, normally assessed by the American Psychiatric Association's (APA) Diagnostic and Statistics Manual (DSM) (now in its 5th edition, DSM-5) (APA, 2013) or its counterpart, the International Classification of Diseases (ICD-11) (WHO, 2018). However, there is ongoing debate in the scientific community as to whether the medical model approach to 'diagnosis' should occur continue to exist or be replaced by a continuum/dimensional model of MD (Brown & Barlowe, 2005; Krueger, Markon, Patrick & Iacono, 2005; Maser & Akiskal, 2002). For example, some researchers and practitioners believe a diagnostic symptom approach to MD is too rigid and assumes a diagnosis as 'fact' as opposed to a guide to understanding an individual's presenting difficulties, thus preventing a holistic view of an individual (Barone, Maddux & Snyder, 1997; Lopez, et. al., 2006). Additionally, some researchers argue that MD is a social construct given the DSM classification system was originally developed for insurance purposes in the US.

However, even if the diagnostic approach is used it still comes with its own challenges. For example, some MDs sharing similar diagnostic criteria (e.g. schizophrenia and schizoaffective disorder) adding to the mounting criticism of the validity of a diagnostic approach (Gomes de Matos, Gomes de Matos & Gomes de Matos, 2005). Furthermore, practitioners may vary in the diagnosis they ascribe an individual based on the information they have at the time, clinical judgement and level of expertise. For example, BPD is often misdiagnosed as Bipolar affective disorder and vice versa (Ruggero, Zimmerman, Chelminski & Youngs, 2010). Thus, the inter-rater reliability of a diagnostic approach to MD is often questioned, despite findings that it has moderate to excellent inter-rater agreement (Lobbestael, Leurgans & Arntz, 2011).

Whilst the debate continues between a categorical and dimensional approach in identifying MD, internationally the ICD-11 is used for clinical purposes (as it attempts to cover health as a whole) and the DSM-5 (and earlier versions) is more commonly used for research purposes and clinical diagnosis within the US (Clark, Cuthbert, Lewis-Fernandez, Narrow & Reed, 2017). In the UK, both the DSM-5 and ICD-11 classification systems are used, depending on the professional and/or organisation conducting the assessment. The DSM-5 (2013) defines MD as:

> *"……a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder. Social deviant behavior (e.g., political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, as described above."* (APA, 2013, p. 20).

This definition of MD is premised by the notion that no definition is adequate to specify precise boundaries for the concept of MD and that there can be variation across situations that require different definitions. Thus, no MD is a completely discrete entity and the boundaries between MDs are not definitive and diagnosis should have clinical utility to determine the "prognosis, treatment plans, and potential treatment outcomes for patients" (p. 20 APA, 2013).

Personality Disorder (PD) and Substance Abuse Disorder (SAD) are the most prevalent diagnosis within the male prison population, additionally incarcerated offenders are considered to have a higher prevalence of PD than the general population (Coid, 2003; Roberts & Coid, 2010) with 64% of the prison population are considered to have an Axis II disorder (London Assembly Health Committee, 2017). Furthermore, a community population is considered to have greater variability of PD subtypes than a prison population (Baudette & Stewart; Torgersen, Kringlen & Cramer, 2001). However irrespective of disorder type, what is clear is that incarcerated offenders have high rates of MD and thus failing to explicitly address this question when conducting research, neglects a key feature important in forensic psychological research.

When the prevalence of MD has been directly explored for incarcerated offenders in relation to risk of reoffending, offenders with a co-morbid diagnosis such as ASPD combined with another MD are considered to have an increased risk of violent offending (Tyler, Gannon, Dickens & Lockerbie, 2015; Hodgins & Cote, 1993). Whilst offenders diagnosed with a psychotic disorder without a co-morbid PD or SAD are considered to have significantly lower recidivism rates (Lund, Forsman, Anckarsater & Nilsson, 2012; Fazel, Grann, Goodwin & Langstrom, 2009; Moran, Walsh, Tyrer, Burns, Creed & Fahy, 2003; Walsh, Buchanan, & Fahy, 2001). However, research in this area is not as developed as it could be despite the high prevalence of MD in the prison population. One of the main reasons for this may be due to the methodological challenges in identifying and confirming the presence of MD which is further compounded by trying to identify whether a study is focused on MD is general, or MD at time of offending.

Despite these challenges it is possible to conduct research on MDOs and an area that garners a lot of interest is the relationship between MD and crime type, although the results can often be mixed and the relationship between MD and crime type is not always clear. When exploring the association between Axis I disorders and offending behaviour, there is a common perception that offenders with schizophrenia or psychosis are more likely to engage in violent and unpredictable behaviour, and to some extent this may be true. A national study conducted on MDOs and NMDOs showed that offenders had higher rates of schizophrenia and delusions disorders (HCIP, 2016). Therefore, on one hand, offenders with MD such as schizophrenia, mood disorders or disorders with psychotic features are reported to have an elevated risk of violent offending (Tyler, Gannon & Lockerbie, 2015). Whilst other researchers have reported that offenders with comorbidity associated with alcohol induced psychoses and schizophrenia, comorbid alcohol abuse or psychoactive substance abuse are at a greater risk of violent offending (Modestin, 1998; Tiihonen et. al., 1997). Additionally, substance abuse is considered a risk factor for both MDOs and non MDOs (Crichton, 1999; Pallone, 2017; Wallace et. al., 1998; Wong & Gordon, 2010). An interesting study by Morgan et al., (2013) also explored Axis I MD and crime type and found that 14.5% to 15.4% of individuals with a mental illness committed drug, good order and property offences, 16.4% to 20.1% of violent offenders suffered from a psychiatric illness and 6.5% of violent offenders also had a substance use disorder, as did 9.1% of offenders who had committed homicide. In addition, 3.4% of homicide offenders were also diagnosed with personality disorder and 3.0% were diagnosed with schizophrenia. Vinkers et al., (2011) also found differences between Axis I MD and crime type, whereby psychotic disorders were associated with all different types of crimes except rape and MD in general was strongly associated with homicide.

In relation to research conducted on Axis II MD and crime type much of the research has heavily focused on ASPD (Brennan, Grekin, & Vanman, 2000; Eronen, Hakola & Tiihonen, 1996; Hodgins; Mednick, Brennan, Schulsinger & Engberg, 1996). Whilst, ASPD is the most commonly researched PD given its diagnostic criteria being inherently similar to behaviours resulting in criminality (Eronen et. al. 1996; Hodgins, 1998; Hodgins & Cote, 1993), offenders with co-morbid PDs are reported to commit a greater number of crimes (Hernandez-Avila, Burleson, Poling, Tennen, Rounsaville & Kranzler, 2000). Therefore, when conducted research on MDOs it is important to not only identify the specific Axis I or Axis II diagnosis, but also any presence of comorbidity.

That being said, studies by Roberts & Coid (2010) and Vinkers et al., (2011) have provided some of the most comprehensive research findings on the relationship between all PDs and offending behaviour. Roberts & Coid (2010) found that within the Cluster A grouping of PDs (Paranoid PD, Schizoid PD & Schizotypal PD), PPD was found to have significant associations with robbery, blackmail and serious violent offences and a negative association with driving offences. SPD had a relationship with kidnap, burglary and theft whilst STD was the only PD associated with arson, whilst having a negative association with robbery and blackmail (Roberts and Coid, 2010). Furthermore, in Cluster B PDs (Anti-social PD, Borderline PD, Paranoid PD, Histrionic PD and Narcissistic PD) ASPD was significantly associated with robbery, theft, burglary and firearm offences. However, no associations were found between BPD and offending behaviour despite high levels of comorbidity with other PD's especially ASPD. NPD had a significant association with fraud, forgery and drug related offences (e.g. importing drugs). Whilst HPD could not be compared with offending behaviour due to the lack of a representative sample. Furthermore, offenders with ASPD were more likely

to engage in criminal damage in addition to having a negative association with firearm offences, whilst offenders with DPD were more likely to commit firearm offences and violence, whilst having a negative association with criminal damage. Finally, OCPD was found to be associated with firearm offences (Roberts & Coid, 2010). Finally, Cluster C PDs were found to be more common in sexual offending than any other type of offending (Vinkers et al., 2011).

Whilst these findings from both Axis I and Axis II compared to crime type are interesting it is equally important to interpret such findings with caution, as it is not always clear unclear how diagnosis was obtained, how offence type was defined and if index offence or offence history was defined as the 'crime. Additionally, despite identifying a link between MD and crime type this does not necessary suggest this relationship is causal. Equally whilst an offender may not have a diagnosis, this does not necessarily mean they don't have a MD, instead perhaps they are just 'undiagnosed' (Fazel, 2016). Finally, whilst much of this research has been conducted on incarcerated offenders, would the same patterns be found for offenders residing in forensic psychiatric hospitals?

Whilst some research has found a relationship between MD and offending behaviour, the presence or absence of a MD does not entirely explain the occurrence of criminality (Morgan et al., 2010). Instead, MD is one of many criminogenic needs (a dynamic risk factor that directly relates to the likelihood of re-offending) (Andrews & Bonta, 2010). However, research on recidivism and criminogenic factors for MDOs is not as extensively researched as the risk factors for non MDOs (Fazel & Danesh, 2002; Lindstedt, Ivarsson & Soderlund, 2006). Currently, MDOs are assessed using the same forensic risk assessments (e.g. Historical Checklist revised – Version 3 (HCR-20(V3)) (Douglas, Hart, Webster & Belfrage, 2013); The

Risk of Sexual Violence Protocol (RSVP) (Hart et. al., 2003) as non MDOs. However, within forensic risk assessments the presence of both Mental Illness (MI) (Axis I) and PD (Axis II) are considered to reflect two separate criminogenic needs (de Vogel, Ruiter, Bouman & Robbe, 2012; Douglas et. al. 2013; Hare, 2003; Hart et. al. 2003; MacKenzie & McEwan, 2013; Wong & Gordon, 2000). Therefore, whilst it is important to understand the relationship between MD and crime and explore the difference in how Axis I and Axis II risk factors contribute to offending behaviour. Equally forensic risk assessments focus on various criminogenic factor other than must MD. However, if MD is not treated or managed appropriately or if a MD is present in combination with other criminogenic factors an individual's risk of offending increases (Crichton, 1999).

Overall, the ability to distinguish differences between MDOs and non MDOs is methodically challenging and varies from researcher to researcher. However, is an important area to consider, especially given the presence of MD and type of MD has been linked to certain offending behaviours. Therefore, in order to obtain an accurate picture as to the similarities and differences between MDOs and non MDOs and offending behaviour, it is important to make a concerted effort to ensure that the question about MD is always asked, as opposed to assuming non-disclosure of MD is indicative of no presence of MD. Whilst it is not feasible or ethical to conduct diagnostic assessments on all participants for research purposes, it is important to consider the potential methodological limitation of studies that discuss MDOs or NMDOs. Finally, it is important to focus not only on whether MD was present or absent, but also whether the MD was present at the time of the offence. Additionally, it is important for research to not only focus on the differences between MDOs and NMDOs, but also the differences between MDOs and a general population with MD.

1.3 Criminal Thinking Styles

In addition to MD being a criminogenic need, so too are criminal thinking styles, also known as cognitive distortions, anti-social attitudes and criminal narratives (Canter & Youngs, 2009; Walters, 2012; Wong & Gordon, 2000; Young, Klosko & Weishaar, 2003). It is the ability to identify and understand an offenders criminal thinking style, that provides researchers and practitioners an insight into the inner narrative of an offender.

Cognitive Distortions

Cognitive distortions (CDs) are reflective of problematic thinking characterised by maladaptive beliefs and attitudes held by an offender in relation to their offending (Ward, Hudson, Johnston & Marshall, 1997). CDs are also considered precursors to the development, maintenance and escalation of criminal behaviour (Andrews & Bonta, 1994; Maruna & Mann, 2006), whereby the severity of criminal attitude has been proposed to positively correlate with the severity of an offence (Eisenberg, 2000; Sykes & Matza, 1957). As such, CDs are considered techniques of neutralisation to distort, justify or rationalise offending to alleviate feelings of guilt and shame (Skypes and Matza, 1957; Eisenberg, 2000; O Ciardha & Ward, 2013; Oostermeijer et al., 2017; Ward, Gannon & Keown, 2006)), feelings that would normally act as barriers to offending.

Bonta and Andrews (2017) consider anti-social cognition as one of the 'Big 4' risk factors that predict reoffending, the other three being: anti-social associate, anti-social personality pattern and history of anti-social behaviour (Andrews, Bonta & Wormith, 2006; Bonta & Andrews, 2017). Furthermore, anti-social attitudes are often present in individuals with psychopathy or ASPD and form part of the diagnostic criteria for psychopathy and ASPD

(APA, 2013; Hare, 2003), most likely accounting for the higher rates of ASPD within the prison population. Additionally, the presence of persecutory delusions, paranoid delusions and other forms of mental illness can affect an offender's rational thinking, resulting in them believing offending was their only choice, necessary or justified.

There have been at least 52 different CDs (e.g. justification, minimization, entitlement, power, orientation and discontinuity) identified throughout the literature that offenders may adopt to justify their offending behaviour (McCoy,K. et al, 2006; Maruna & Mann, 2006, Sykes & Matza 1957, McCoy et. al 2006, Walters, 1994, 2002; Oostermeijer, et al., 2017). Therefore, CDs are considered criminogenic needs which in turn provide one explanation as to 'how' an individual overcomes internal barriers to offend (O Ciardha & Ward, 2013). Additionally, the presence of CDs feature in many of the standard forensic risk assessments and intervention programmes in the UK (e.g. Thinking Skills Programme, Kaizen, Resolve) (MoJ, 2020b). However, there remains a ubiquity regarding the definition of CDs given their various interpretations and descriptions, often interchanged with concepts such as early maladaptive schemas (Chakhssi, de Ruiter & Bernstein, 2013) and implicit beliefs (Harper & Bartels, 2016).

Whilst CDs are experienced by all types of offenders, the majority of research on CDs has predominately focused on sex offenders (Marshall, Marshall & Ward, 2009; Ward, Gannon & Keown, 2006; Szumski, Bartels, Beech & Fischer, 2018; D'Urso, Petruccellli, Grilli & Pace, 2019). Although there has been some recent research on how CDs link to aggression and found that there may be a relationship between types of cognitive distortions (e.g. externalising of blame) and aggression (proactive and reactive) (Oostermeijer, et al., 2017). Therefore, researchers continue to try and assess for the presence and type of cognitive distortions based

on offence type as opposed to being linked to an underlying core belief or inner narrative. Additionally, such research is typically focused on non-mentally disordered offenders by default, due to the lack of enquiry as to the presence of MD at the time of offending. Whilst CDs do not exclusively explain offending behaviour, they remain a crucial component in understanding the aetiology and motivation of offending (O Ciardha & Ward, 2013). Therefore, whilst there is common agreement that cognitive distortions are present within criminality, the question remains: which came first - the cognitive distortion or the crime?

Criminal Narratives

For the past 25 years, Investigative Psychology (IP) has sought to understand criminality not only exploring offending behaviour but by also by considering the way in which a criminal narrative is developed (Canter, 1994). However, the origins of 'criminal narratives' were not founded on forensic psychological literature, rather they originated from archetypal myths (Frey, 2006) and literary concepts (Murray 1985).

Criminal narratives, later known as narrative roles were conceptualised by Canter (1994) who drew upon Northop Frye's 'Theory of Mythoi" (Frye, 2006) which proposed that all stories are derived from four mythic archetypes, including; comedy, romance, tragedy and irony in a cyclical movement like the four seasons. Whereby each narrative archetype is considered dynamic and propels from one narrative archetype into the next (see Figure 1.1).

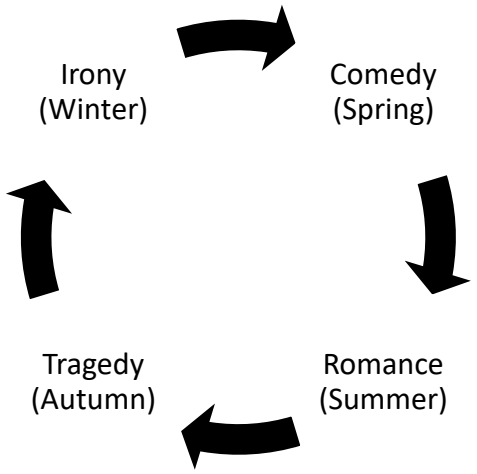

Figure 1.1: Frye's 1957 Theory of mythoi

Murray (1985) drew upon Frye's work and proposed that the four mythic archetypes could be applied to cinematography, whereby comedy (also known as romantic comedy in the 20th Century) is represented by films such as The 40-year old Virgin or Bridget Jones Diary. Romance (also considered reflective of 'adventure' in the 20th Century) is represented in films such as: Star Wars or The Avengers. Tragedy is represented in films such as: The Elephant Man or Brokeback Mountain. Finally, irony is represented in films such as: Monty Phython's Life of Brian or This is Spinal Tap. Booker (2004) extended upon these four mythoi and proposed that there are seven basic plots that are universal across countries, to determine whether or not a 'story' has a happy ending, including: overcoming the monster; rags to riches; the quest; voyage and return; comedy; tragedy and rebirth. Whilst Frye, Murray and Booker were focused on 'plots' associated with fictional stories, the connections between literature and the structure of all life stories began to be explored within Narrative Psychology (McAdams 1998; Polkinghorne, 1988). Whereby narrative psychology explored how humans develop a

sense of identity and purpose by adopting a more philosophical, and in some respects psychotherapeutic interpretation and understanding of an individuals' life story (Crossley, 2000). In some ways, narrative psychology draws upon attachment theory first proposed by John Bowley in 1968, whereby McAdams (1988) proposed that life stories take on their shape in late adolescence, when identity is forming and individuals are subject to the influence of others.

The application of narrative theory and notion of 'inner narratives' in relation to criminality was first explored by Canter (1994), who stated that

"through his actions the criminal tells us about how he has chosen to live his life. The challenge is to reveal his destructive life story; to uncover the plot in which crime appears to play such a significant part…." (p. 299).

Whereby an inner narrative was described as the "process of embedding the view of the self in an unfolding personal story" (Canter & Youngs, 2009, p. 120), which could be considered, in some respects a part of identity formation and in the current day, considered schema established by Young in 2003. However, Canter (1994) was the first to apply literary concepts to offending narratives and coined 'criminal narratives' (Canter, 1999). Subsequently the notion of narrative identity and the 'self' has become an increasing focus of researchers (Atkins, 2008; Knox, 2011; Leary & Buttermore, 2003; Stone 2016; Mason et al., 2019).

The notion of criminal narratives, narrative identity, the self and how these concepts interact with offending behaviour is not necessarily new to criminology (Presser, 2009) or

clinical and forensic psychology (Presser & Sanderg, 2015; Stone 2016; Ward, 2012; Ward & Marshall, 2007). However, to understand criminality an in-depth analysis of offenders' personal narratives is required (Maruna, 2001). This proposition is not too dissimilar from the use of case formulation in forensic psychological practice (Harvey & Coulston, 2015). However, Ward (2012) critique interpreted Canters (2009) concept of a criminal narratives due to the lack of explanation as to how criminal narratives determine who an individual is. However, equally it could be considered that an individual's belief about themselves influences their criminal narrative.

Overall, there is a growing consensus that by exploring and identifying an individual's inner narrative the more researchers and practitioners can begin to understand an offender's criminal behaviour (Canter, 2009; Maruna, 2001; Presser & Sanderg, 2015; Stone 2016; Ward, 2012). Whilst the leap from 'fiction' to 'non-fiction' and the application of narrative theory and Frye's Theory of Mythoi to criminal narratives is challenging to empirically test. In 2003, Canter, Kaouri & Ioannou explored the facet structure of Criminal Narratives as an exploration of Frye's 1957 Theory of Mythoi using psychological structures. This research involved asking incarcerated adult male offenders to provide an opened ended description of their life story, in addition to answering twenty statements based on their experience of committing an identified crime. All twenty statements were developed to represent a type of role an offender may have enacted during their offence (e.g. "I was doing a job", "I was acting like a criminal", "It was like being a victim"). The results from this research (using both interpretative and quantitative data) found four distinct themes: adventurer, professional, revenger and criminal reflective of Frye's 1957 Theory of Mythoi and its cyclical movement (Canter, Kaouri & Ioannou, 2003). This research was extended upon by Ioannou (2006) and Canter, Ioannou and Youngs (2009),

whereby a 33-item Narrative Roles Questionnaire (NRQ) informed by the previous studies findings was developed. The NRQ was administered to adult male incarcerated offenders (*N* = 71) and the findings from Smallest Space Analysis SSA again found the presence of four distinct narrative roles, including: victim, professional, hero and revenger. Whereby the criminal and adventurer role from Canter et. al., (2003) results were replaced by the professional and hero role respectively (see *Figure 1.2* for how these four criminal narrative roles mapped onto Fryes Theory of Mythoi).

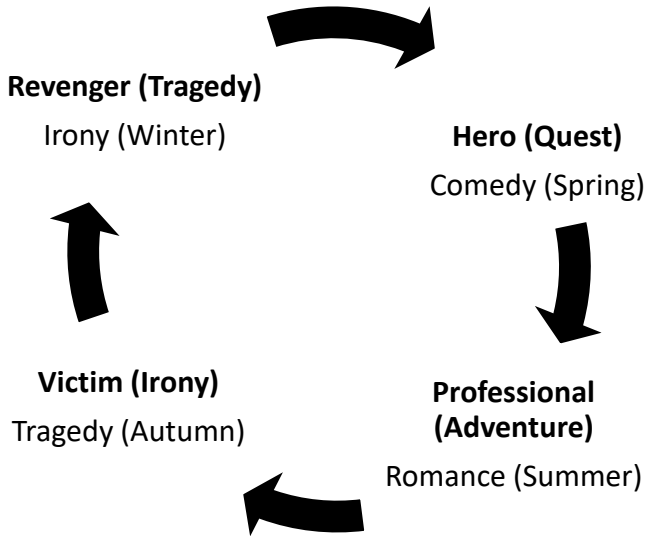

Figure 1.2: Four Narrative Roles (Canter & Youngs, 2009)

Based on the results from Canter, Ioannou and Youngs (2009) and later research by Ioannou, Canter, Youngs and Synnott (2015) narrative role descriptions were developed for the four narrative roles: hero, professional, revenger and victim, which have been summarised below.

Quest: The Hero

The hero narrative proposes that an offender subscribes to a life story where they are in pursuit of true love, happiness and stability in life which they seek to achieve by minimising environmental and social obstacles and constraints. The hero is considered optimistic and experiences positive emotions such as joy and contentment whilst being free from anxiety and guilt. The hero narrative exhibits a sense of bravado and casualness and views their actions as a righteous mission which drives them to act and could not stop. The mission is an attempt to defending their masculinity and honour whilst seeking respect and recognition (Canter & Youngs, 2009). In addition, Ioannou et al., (2015) described the hero as an offender who knows they are engaging in risk taking and perceives their offence as a manly and brave thing to do. This type of offender is also considered to find their offence both interesting and enjoyable, whilst seeking to gain recognition.

Adventurer: The Professional

The professional narrative proposes that the offender subscribes to a life story where they are on a successful hunt, pilgrimage or seeking some desired end to overcome adversity and emerge victorious. The adventure is considered to consist of three stages: a perilous journey, preliminary minor adventures, a battle where either the hero, foe or both die, and finally exaltation of the hero. As a result, the offender views their behaviour as an opportunity to gain satisfaction or pleasure by effective interactions with others and mastery of their environment, thus, they identify with terms of competency and power i.e. the professional, and experience calm but positive feelings such as excitement and fun (Canter & Youngs, 2009). In addition, Ioannou et al., (2015) describe the professional as an offender who adopts a

professional view of their offending, whereby the offence is like a job and routine. This type of offender is also described as competent, intelligent and highly skilled.

However, as can be seen from the above descriptions, the distinction between the hero and professional narrative roles is not always clear with some overlap present in the descriptions provided by Canter and Youngs (2009) and Ioannou et al., (2015). Thus, raising the question as to whether the hero and professional are two distinct narrative roles, or whether they are two ends of a spectrum.

Tragedy: The Revenger

The tragedy narrative can be described as a protagonist being overpowered by the fates and is pessimistic and ambivalent in their attempt to avoid the danger and absurdities of life, resulting in the experiencing of both pain and pleasure, happiness and sadness and recurring feelings of fear. Ultimately the offender perceives himself as the victim of his nemesis, believing he has been unfairly treated, deprived and wronged and as such, must seek 'revenge' – that he 'has to' get his own back. As a result, the narrative role enacted triggers beliefs that the individual is right and justified for their actions that they are not to blame and such actions are just 'fate'. The revenger also holds an egotistical sense of their own significance however they are ultimately doomed, proceeding with their actions as if 'nothing else mattered' (Canter & Youngs, 2009). In addition, Ioannou et al., (2015) describe the revenger as an offender who views their offence as a mission whereby they feel powerful and in control. In addition, the revenger justifies their offence by the belief they were right to take revenge and could not help themselves.

Irony: The Victim

The irony narrative proposes that the offender subscribes to a belief that nothing makes sense, nothing matters and there are no rules and views the world as dark, corrupt and violent. As a result, the individual identifies with terms of confusion and powerlessness, often accompanied by negative feelings. Subsequently their world view places them as the main "victim" in the event where normal moral and social codes do not apply to them (Canter & Youngs, 2009). In addition, Ioannou et al., (2015) describe the victim as an offender who externalises responsibility and believes their offence could not be avoided. As such, the victim believes events in their life are due to external factors they cannot control or influence such as a luck, chance or fate.

Since 2009, there has been ongoing research to explore the presence of the four criminal narratives and each time the four roles have been found to exist (Canter & Youngs, 2012; Ioannou, et. al., 2015; Ioannou, Canter & Youngs, 2017; Spruin, Canter, Youngs & Coulston, 2014; Youngs & Canter, 2012). Additionally, the NRQ and its four narrative roles have been found to have good internal consistency (Ioannou et al., 2015) although not all studies report the internal consistency (Youngs & Canter 2012). However, research using the 33-item NRQ has only ever been conducted on incarcerated adult male offenders which limits its generalizability to other offending populations. Although some preliminary research has been conducted on female and juvenile offenders combining both the NRQ and and emotions felt during crime questionnaire together (Ioannou, Synnott, Lowe & Tzani-Pepelasi, 2018; Ciesla, Ioannou & Hammond, 2019). Furthermore, of the research which has published on the 33-item NRQ the papers have been vague in the terms they use, and inconsistent language used when referring to the same concept (e.g. narrative roles, offence narrative roles, criminal

narratives etc.). Furthermore, there has also been frequent disparity regarding the statements used in the research that has used the NRQ. For example, both Spruin et al,. (2014) and Goodlard et al., (2019) refer to a 36-item NRQ, whilst Youngs and Canter (2012) and Ioannou et al., (2015) both used the 33-item NRQ. Furthermore, the order of the questions on the NRQ differed between both studies (e.g. Item 1 "It was interesting (Ioannou et al., (2015) versus Item 1 "I was like a professional" by Youngs and Canter (2012)). Additionally, some questions were worded differently across studies despite representing the same concept e.g. Item 12 "It was the only thing to do" (Youngs & Canter, 2012) and Item 24 "It was the only thing I could think of doing" (Ioannou et. al., 2015). Finally, in 2017 the NRQ had been merged with a 26-item Emotions Questionnaire (Canter & Ioannou, 2004) again changing the order of questions and quite possibly the compromise the psychometric robustness of the NRQ and the originally proposed narratives. However, despite these variations and shifts over the years the presence of four narrative roles have been found consistently, although they are not always called the same across studies. For example, the hero narrative reported by Youngs and Canter (2012) is called elated hero by Goodlard et al., (2019).

Therefore, whilst the structure of the four narrative roles has consistently been found, the items of the NRQ located in each narrative role varies across studies (Canter & Youngs, 2012; Ioannou et. al., 2015; Ioannou, et. al. 2017; Spruin, et. al. 2014; Youngs & Canter, 2012) as do the four narrative role descriptions (Canter & Youngs, 2012; Ioannou et al., 2015). Whils it is recognised the NRQ is considered to be a 'fluid measure', whereby the focus is less on the items and more on the resultant structure (Canter and Youngs, 2009), such disparity does raise concerns about the reliability of NRQ. Despite the above limitations, research on the NRQ including both 33 and 36-item NRQ have yielded interesting findings, especially when

comparing the relationship between emotions, narrative roles and offending (Canter & Youngs, 2009; Ioannou, Canter and Youngs, 2017; Spruin & Siesmaa, 2017).

When the four narrative roles have been explored in relation to offence type and victimology, criminal narratives have found to vary across offence type (including: property, drug, robbery, violence, sexual and murder offences). Offenders who adopt a certain narrative role interact with victims in a different way. Specifically, Ioannou et al., (2015) found that when the four narrative roles (hero, professional, revenger and victim) were explored in relation to offence type, 97% (n = 116) of participants could be assigned one of the four narrative roles, and that different offence types were more likely to endorse one narrative role over any other. Specifically, Ioannou et al., (2015) found that 55% of violent offenders and 45% of murderers were assigned the revenger narrative role respectively; 50% of robbers and 50% of property offenders were assigned the hero narrative role respectively; 45% of sexual offenders were assigned the victim narrative role and 40% of drug offenders were assigned the professional narrative role. These findings would suggest that certain narrative roles may be more prevalent to certain offence types than others.

Furthermore, Ioannou et. al. (2017) also compared offenders' responses to both the NRQ and an 'Emotions Questionnaire' (Canter & Ioannou, 2014) and suggested that the hero narrative role was 'elated' (e.g. excited, enthusiastic, pleased). The professional narrative role as 'calm' (e.g. calm, confident, relaxed). The revenger narrative role as 'distressed' (e.g. angry, annoyed, irritated) and the victim narrative role as 'depressed' (e.g. sad, lonely, miserable). Ioannou et al., (2017) also suggested that these findings supported the Circumplex Model of emotions proposed by Russell (1980), whereby emotions are experienced in a circular order

based on two dimensions of mood, valence (pleasantness versus unpleasantness) and activation (excited or tense versus calm and relaxed) (Russell, 1980; 1997). Additionally, a Circumplex Model of emotions would also support the cyclical relationship between the four narrative roles as originally identified by Canter and Youngs (2009).

Research by Spruin and Siesmaa (2017) which exclusively used the 'Emotions Questionnaire' when administered to MDOs (Axis I and Axis II) found that, rather than a circular order of emotions two distinct dimensions of emotion were found: pleasure and displeasure for both Axis I and Axis II disorders, which is more in line with the Vector Model (Bradley, et. al. 1992). The Vector model proposes that underlying dimensions of arousal are defined by a binary choice of valence (pleasantness and unpleasantness), whereby it is the intensity of the emotion rather than valence that determines the direction of arousal (Bradley et. al. 1992). Yet, there is also a third commonly used dimensional model of emotion which has not yet been considered in relation to emotions felt during crime or narrative roles, the Positive Activation – Negative Actitation Model (Watson, Clark & Tellegan, 1988). The PANA model is a two-factor model of affect which refers to two dominant and distinct dimensions: positive affect and negative affect (Watson, Clark & Tellegen, 1988; Watson, Weise, Vaidya & Tellegen, 1999). Additionally, both the PANA and Vector models are considered a better fit to exploring emotional arousal when exploring autobiographical memories in a non-offending population (Rubin & Talarico, 2009). The recognition of autobiographic memories in the type of emotional model in relation to the NRQ is pertinent, given that many of the offenders are responded to the NRQ based on autobiographical memory due to the time between the offence they committed and the time of research participants.

Therefore, whilst Frye's (1957) Theory of Mythoi and Russell's (1980) Circumplex model of emotions and the Vector model of emotions have been referred to when attempting to understand the four narrative roles. The identification of which emotional model best supports the presence of emotions for the narrative roles warrants further exploration. Additionally, the way in which the four narrative roles hero, professional, revenger and victim and their respective affective states, elated, calm, distressed and depressed respectively interact in a circular way is unclear. For example, using the four seasons metaphor, the four seasons rotate throughout the year, thus one season comes after another season, and each season is distinct from every other season. By applying this theory to criminal narratives, this would imply that one narrative role occurs before another narrative role and each narrative role is distinct from each other. However, the order in which the narrative roles are proposed to occur and in what way they may interact, has not been clearly identified, nor empirically tested. Additionally, exploration as to whether there are any similarities or differences in item placement for each of the narrative roles would further assist in developing the NRQ and possibly, enable the development of a scoring key so that the NRQ could move from being 'theoretical' (e.g. an untested conceptual framework to explain offending) to 'practical' (e.g. the ability to assess, analyse and understand the function of the narrative role). However, until further statistical analysis on the NRQ and its four narratives occurs, current research findings could be considered open to interpretation and the methodology, reliability and validity of the NRQ and its four narratives continues to be questioned (Ward, 2012).

1.4 NRQ and Construct Validity

The 33-item version of the NRQ and its four narrative roles has only been published twice (Canter & Youngs, 2012; Ioannou et al., 2015) since its development in 2009 (Canter &

Youngs, 2009). Subsequent research has used either the 36-item version of this measure (Ioannou et al., 2017; Goodlad, Ioannou & Hunger, 2019) or combined the NRQ with a measure of emotions (Ioannou et al., 2017; 2018). Additionally, the placement of items on the NRQ and phrasing of items has varied from study to study (Canter & Youngs, 2012; Ioannou et al., 2015; 2017; 2018; Goodlard et al., 2018; Spruin et al., 2014) thus raising questions regarding the integrity of this measure. Furthermore, Smallest Space Analysis (SSA) is the only analytic approach used to explore the structure of the NRQ (Canter & Youngs, 2012; Goodlard et al., 2018; Ioannou et al., 2015; 2017; 2018; Spruin et al., 2015; Spruin & Siesmaa, 2017). However, despite these flaws research on the NRQ has consistently found the presence of four narrative roles suggesting evidence of construct validity.

SSA is a commonly adopted approach in Investigative Psychology research (Canter & Youngs, 2009; Ioannou et al., 2015; Ioannou et. al. 2017; Spruin & Siesmaa, 2017; Youngs & Canter, 2012), albeit less commonly used by other disciplines. Whilst SSA is a less commonly used analytic approach for scale development it continues to be used by for various other research topics such as research on work values (Lyons, Higgins & Duxbury, 2009); world views and climate change (Xue, & Zhao, 2015); care giver burden (Morrison & Stomski, 2019)). SSA is considered a preliminary approach to analyse complex psychological data to assist with scale construction (Alt, 2018) with a primary goal being to understand the relations of variables to identify an underlying structure (Cohen, 2005; Flora & Flake, 2017), similar to Factor Analysis (FA) and Structural Equational Modelling (SEM) (Finch, 2019; Wolf, Harrington, Younas & Poor, 2018). SSA is underpinned by Guttmans (1954) Facet Theory (FT), therefore, to understand SSA it is also important to understand Facet Theory.

Facet Theory

Facet theory was developed to find a synthesis between theoretical and empirical approaches to data analysis that closely link theory and measurement. Subsequently research into FT sought to provide new approaches to analyse multidimensional structures resulting in the development of nonmetric analysis of multivariate data (e.g. SSA (SSA)) (Levy, 1994; Guttman, & Greenbaum, 1998). FT is described as a "systematic approach to facilitating theory construction, research design and data analysis for complex studies" (Guttman, & Greenbaum, 1998, p. 1), thus this definition supports the rationale for using FT in exploring the narrative roles of offenders. Using FT, the researcher is required to define a framework for the observations that will occur (e.g. SSA), ensure connectivity between facets, that communication of ideas is described in ordinary language and that the relationship between the defined structural system and empirical research is explored (Shye, 1978; Shye, Elizur & Hoffman, 1994). The use of FT consists of four stages, including two theoretical stages and two stages which apply to field investigation, specifically:

"(a) the design of the individual facets, (b) the construction of mapping sentence expressing the composite of all facets and elements within the facets, (c) the construction of appropriate research instruments, and, accordingly, (d) the application of an appropriate multidimensional statistical technique (e.g. SSA)" (Maslovaty, Marshall & Alkin, 2001, p. 73).

To help clarify FT terminology, a 'facet' (aka. domain/set/theme) is described as a set of variables that represent an underlying conceptual framework (e.g. professional, victim, hero or revenger narrative role). Whereby each framework comprises a number of elements (e.g. objects/ items/ attributes/ variables) such as individual items on a questionnaire (e.g. each item

of the NRQ). Additionally, each element of each facet is required to be mutually exclusive and different facets are required to be conceptually distinct from one another (Guttman, & Greenbaum, 1998).

The strength of FT is its flexible interpretation of data, yet this strength is also a weakness given 'facets' have no 'set domains' and that data interpretation is fluid (Guttman, & Greenbaum, 1998), thus data interpretation can be viewed as subjective. However, when attempting to explore more complex data (which may be derived from a relatively new or less established measure like the NRQ), the fluid and bi-directional approach to hypothesis development is considered to mitigate the limitations of the FT approach to data analysis. Subsequently, FT has typically been adopted in Investigative Psychology through the use of SSA (a Multidimensional Scaling (MDS) technique) to explore the underlying structure of new measures (e.g. 33-item NRQ).

Smallest Space Analysis

SSA provides a 'solution of smallest dimensionality' therefore rather than focusing on absolute values, SSA operates on the rank order of original correlations (Guttman, 1968, 1982) and is considered a similar approach to EFA. Prior to conducting SSA, a researcher is likely to have a set of hypotheses drawn from background theories to interpret SSA results. Therefore, the use of SSA enables the researcher to generate hypotheses about the component of the domain being studied (e.g. NRQ) and the relationship between those components (e.g. the individual items within the NRQ), which in turn could help inform future studies (Canter & Youngs, 2009). Therefore, by exploring the underlying structure of individual components (e.g. items) and their relationships with one another, SSA becomes bi-directional enabling a

researcher to explore an identified hypothesis, and/or generate a hypothesis. Unlike FA and SEM, SSA is not sensitive to sample size (Maslovaty et al., 2001) and research using small sample sizes of under 100 is not unusual, for example: *N* = 22 (Goodlad, Ioannou & Hunger, 2019), *N* = 23 (Ioannou et al., 2018), *N* = 56 (Spruin & Siesmaa, 2017); *N* = 71 (Youngs and Canter, 2012). Therefore, SSA may be a useful approach when wanting to analyse data on hard to reach populations.

Therefore, the use of SSA during the early stages of exploring the NRQ is understandable. However SSA has continued to be used to analyse the NRQ on different populations despite the presence of the four narrative roles repeatedly been found (Ciesla, Ioannou & Hammond, 2019; Ioannou et al., 2017; Ioannou, Synnott, Lowe & Tzani-Pepelasi, 2018), thus ignoring the 'preliminary approach' ethos to SSA. It could be argued that participant number were too small to conduct more established confirmatory analysis (e.g. *N* = 22 (Goodlad, Ioannou & Hunger, 2019), *N* = 23 (Ioannou et al., 2018), *N* = 56 (Spruin & Siesmaa, 2017); *N* = 71 (Youngs and Canter, 2012)) however at least one study had a sample size large enough to conduct Exploratory Factor Analysis (N = 120, Ioannou et al,. 2015). Additionally, all the studies published on the NRQ were conducted by the same research group, therefore, there was the potential to combine the data from these studies and use a more established analytic approach to assess construct validity of the NRQ, such as exploratory factory analysis, confirmatory factor analysis (Shelby, 2011; Williams & Vaske, 2003; Younas and Poor, 2018), Exploratory Structural Equation Modelling (ESEM), Structural Equation Modelling (SEM). Therefore, it is unclear if more confirmatory analysis were not chosen as the construct validity of the NRQ could not be found via other methods, or whether the researchers just prefer SSA.

SSA compared to other Analytic Approaches

SSA, EFA and CFA have the same goal, which is to understand the inter-relationship between variables to identify an underlying structure (Cohen, 2005). The strength of SSA is that it offers an alternative approach to FA and does not require assumptions of linear or orthogonal dimensions (Canter & Youngs, 2009; Guttman, 1968, 1982). Instead it enables the researcher to understand data within 3 dimensions. Additionally, SSA does not require metric data (Thapalia, 2004), is able to consider both high and low correlated variables which FA ignores (e.g. if variables do not correlate, the factors extracted), is less sensitive to extreme values (Lundrigan & Canter, 2001) and less sensitive to responses bias which may generate particularly high or low absolute frequencies (Canter & Youngs, 2009). Another strength of SSA over FA is that it provides a spatial representation of the data (variables) reflective of both factors and structural organization, thereby enabling the researcher to visually examine the relationships and patterns between variables as they co-occur in a geometric space (Trojan, & Salfati, 2008). In contrast, FA identifies the presence of a primary factor and subsequent factors based on uncorrelated variables (Cohen, 2005).

Unlike FA, the interpretation of SSA can result in various interpretations normally informed by the theory being explored (Cohen, 2005), which whilst advantageous to test and form hypotheses, can also result in subjective interpretations of the data (Ward, 2012). A final limitation of FA over SSA, is that FA results may present with more factors that are more difficult to interpret, whilst SSA presents domains in fewer dimensions (Maslovaty, Marshall & Alkin, 2001). However, the ability to identify specific items for each region that may assist in questionnaire development is difficult using SSA, due to different items being located in different regions depending on the sample being analysed. Additionally, the fluid and

subjective interpretation of regions from an SSA output can also be considered subject to researcher bias (Ward, 2012). Whilst there will continue to be differing views as to which analytic approach is more effective in identifying an underlying structure of any measure, very few researchers have used both SSA and FA on the same data (Cohen, 2005; Katz, 1986; Maslovaty, Marhsall & Alkin, 2001). Ultimately, it may be the combination of SSA, EFA and FA that provides the most robust understanding of the NRQ, its variables and underlying structure. However, until construct validity of the NRQ is established, the practical utility of the NRQ is limited.

1.5 Chapter 1 Summary

The Government invests billions of pounds to 'break the cycle' of crime (MOJ, 2019) to protect the community and rehabilitate offenders. Subsequently, research has focused on developing risk assessment and treatment programmes to address this governmental objective (MoJ, 2013; National Offender Management Services (NOMS), 2015; House of Commons, 2019). Consequently, there is a need for research to focus on factors associated with offending behaviour such as criminogenic needs (Sharma, 2019) and forensic risk assessments (Douglas, Pugh, Singh, Savulescu & Fazel, 2017; Sing et al., 2014). To complement these approaches the use of case formulation is adopted to help inform treatment plans and guide interventions (McMurran & Taylor, 2013; Rocha, 2019; Shaw, 2017).

Despite the prevalence of MD being extremely high in the prison population (Fazel et al., 2016), MDOs can often be a forgotten group either due to being viewed as a 'prisoner' therefore not considered to have a MD, or difficulties accessing MDOs in forensic psychiatric services. As a result, MDOs are sometimes considered a distinctly different population, which

is not necessarily the case. Furthermore, MD is one of many criminogenic needs that can increase an offender's risk, with Axis I and Axis II diagnosis believed to contribute to offending behaviour in very distinct ways (Bulten, Nijman & can der Staak, 2009; Vinkers et al. 2011). However, the role of MD at the time of offending can be difficult to research due to various methodological issues, including: researchers failure to ask about mental disorder, focusing on only one type of mental disorder (Axis I, Axis II) and the use of different definitions and diagnostic approaches when identifying MD (Pallone, 2017).

In addition to MD being a criminogenic need so too are cognitive distortions, which have also been the focus of research to assist in identifying an offender's risk and rehabilitation needs. However, it is not always clear whether cognitive distortions develop as a result of offending behaviour to alleviate emotional distress, or whether cognitive distortions enable maladaptive and offending behaviour to occur or a combination of the two. Whilst, research goes some way to explain 'how' an offender overcomes internal barriers to offend and predict the likelihood of recidivism. It is the role of practitioner in forensic services to case formulation the offenders presenting issues assess risk of recidivism, which is a lengthy and time-consuming process. Furthermore, the extent to which MDOs and NMDOs are considered distinctly different from one another continues to be discussed (Elbogen & Johnson, 2009; Fitzgerald et. al., 2011; Morgan, Fisher, Duan, Mandracchia, & Murray, 2010; Witt, vanDorn, & Fazel, 2013), however the focus is often on the general presence of MD as opposed to the presence of MD as the time of offending.

The presence of cognitive distortions is not unique to offenders, as they also feature within general human thinking styles. Subsequently research on belief systems, moral

development and narrative identity has been the focus of clinical, forensic and developmental researchers for decades. However, the presence of four narrative roles over at least 52 cognitive distortions, makes the NRQ an appealing concept to consider although there are a number of issues that need to be resolved. Whilst the presence of the four narrative roles (hero, professional, revenger and victim) for adult male incarcerated offenders has been tested, this research is still preliminary and construct validity is yet to be established. There has also been no exploration as to the commonality of placement of any of the 33-items of the NRQ and the cyclical relationship between narrative roles seems problematic. Furthermore, the NRQ has only ever been test using SSA and the absence of any scoring key to identify a narrative role means its practical utility is absent. Despite these limitations the concept of narrative roles is an interesting one and could offer alternate ways to identify and addressed offending behaviour than currently exists. However, more research is required before the NRQ can move from being theoretical to practical.

Therefore, this research aims to explore the structure and internal consistency of the 33-item NRQ when administered to MDOs to ascertain if the NRQ can be applied to MDOs, withstand alternate statistically analysis and be developed so that it has practical utility. To address these aims, four sub aims have been identified:

1. To review the two published studies on the NRQ by Youngs and Canter (2012) and Ioannou et al., (2015) to exploring the pattern in the placement of items across the four narrative roles (hero, professional, revenger and victim).

2. To compare the structure and internal consistency of the NRQ administered to adult male MDOs using SSA compared to the SSA results found by Youngs and Canter (2012) and Ioannou et al., (2015) on adult male incarcerated offenders.

3. To determine whether robust statistical analysis supports the structure and internal consistency of the NRQ administered to MDOs when compared to the SSA results found by Youngs and Canter (2012) and Ioannou et al., (2015) on adult male incarcerated offenders.

4. To develop the NRQ so that is has practical utility.

Chapter 2

Methodology

The previous chapter (Chapter 1) provided an overview of the literature relevant to the rationale for the current research on the NRQ and MDOs. The aim of the current research is to determine whether the NRQ can be applied to MDOs, withstand statistically robust analysis and be developed so that it has practical utility. The current chapter (Chapter 2) provides a summary of the demographic and descriptive data of the participant samples used for this research. Specifically, 70 MDOs were recruited for this research, in addition to secondary data from incarcerated offenders (N = 71, N = 120 respectively) obtained from the only two published studies on the NRQ (Youngs & Canter, 2012; Ioannou et. al., 2015) (**note:** raw data from the above two studies was unable to be accessed).

2.1 Research Design

This research applied a non-experimental, cross-sectional research design**,** using purposive sampling to recruit 70 MDOs.

2.2 Ethical Approval

This research formed part of a larger study on "Offending narratives, action patterns and experiences" by PhD Research Students, Belinda Siesmaa and Elizabeth Spruin (see Appendix A). The current study focused specifically on the application of the NRQ for MDOs. Ethical approval for the larger study and subsequently this research was obtained from three bodies (University of Huddersfield, National Health Service (NHS) and Forensic Housing Association (FHA)).

The first ethical approval was obtained from the University of Huddersfield, School of Human and Health Sciences Research Ethics Panel (see Appendix A) to ensure the research

met the Universities ethical requirements. Once University Ethics was received, ethical approval was obtained from the NHS National Research Ethics Service (NRES) (see Appendix B) to recruit MDOs ('NHS patients') residing in one of seven Medium Secure Units (MSU) in South London. The third ethical approval obtained was from a South London Forensic Housing Association (FHA), to recruit participants who were resident within one of three forensic residential hostels. The FHA approved the study following the researcher providing documentation that ethical approval had been obtained from both the University of Huddersfield and NHS.

2.3 Participant Recruitment

Across the seven MSUs, there were 107 beds, of which 93% (N = 100) were occupied. Across the three FHA residential hostels, there were 51 beds with 100% occupancy. As such, there was a total of 151 participants potentially eligible to participate in the study.

Inclusion criteria: male, 18 years or older, not appealing their conviction, no pending legal issues, spoke and understood English, convicted of a violent, sexual or general offence, reside in a Forensic Mental Health Service (e.g. MSU or FHA), identified by their care team as mentally stable at the time of the study and willing to discuss one of their offences.

Exclusion criteria: female, under 18 years of age, learning disabled, in denial of their offence, not currently residing in a Forensic Mental Health Service (e.g. MSU or FHA), mentally unstable at the time of the study, unwilling to participate in the study.

Of the potential 151 participants, 76% (*N* = 115) met the study's inclusion criteria. Of the 115 participants who met the inclusion criteria, 60% (*n* = 69) were Forensic MSU patients and 50% (*n* = 46) were FHA residents. Of these 115 participants, 61% (*N* = 70) agreed to participate in the study of which 57% (*n* = 40) were Forensic MSU patients and 43% (*n* = 30) were FHA residents.

Secondary Data

Secondary Data (descriptive data and SSA results) was used from the only two published studies on the NRQ (Youngs & Canter, 2012; Ioannou et. al., 2015). Youngs and Canter (2012) recruited 71 adult male incarcerated offenders in the North of England and Ioannou et al., (2015) recruited 120 adult male incarcerated offenders in the North of England. Access to the raw secondary data from these two studies was not possible, therefore the descriptive characteristics reported below is drawn directly from the publication's participants summary.

2.4 Participant Descriptive Characteristics

Descriptive characteristics for: age, conviction type and offence type are reported for the two previously published studies Youngs and Canter (2012) and Ioannou et al., (2015) and data from 70 MDOs.

Age

The study published by Youngs and Canter (2012) (*N* = 71) reported an age range of 21-61 years old (*M* = 34.5, SD = 9.5). The study published by Ioannou et al., (2015) (*N* = 120)

reported an age range of 21-72 years old (*M* = 34, *SD* = 10.07). The 70 MDOs had an age range of 20 to 66 years old (*M* = 38.6, *SD* = 10.67) (see Table 2.1).

Table 2.1

Age

	Youngs and Canter (2012) *N* = 71	Ioannou et al., (2015) *N* = 120	MDOs *N* = 70
Minimum	21.0	21.0	22.0
Maximum	61.0	72.0	66.0
Mean	34.5	34.0	38.6
SD	09.5	10.07	10.67

Age Frequencies (MDOs only)

In the MDOs sample (*N* = 70), the 40-44 age group had the largest number of participants (*n* = 13, 18.5%) followed by the 25-29, 30-34 and 45-49 age groups who had an equal number of participants respectively (*n* = 12, 17.2%). The next lowest number of participants were in the 50-54 (10%, *n* = 7), 20-24 (*n* = 6, 8.6%) and 35-39 (5.7%, *n* = 4) age groups. The 55-59 and 60 years and older age groups had the lowest number of participants, with both age groups having 2 (2.8%) participants each (see *Figure 2.1*).

Note: A breakdown of age groups was not provided in the studies by Canter and Youngs (2012) and Ioannou et al., (2015) and thus cannot be reported on.

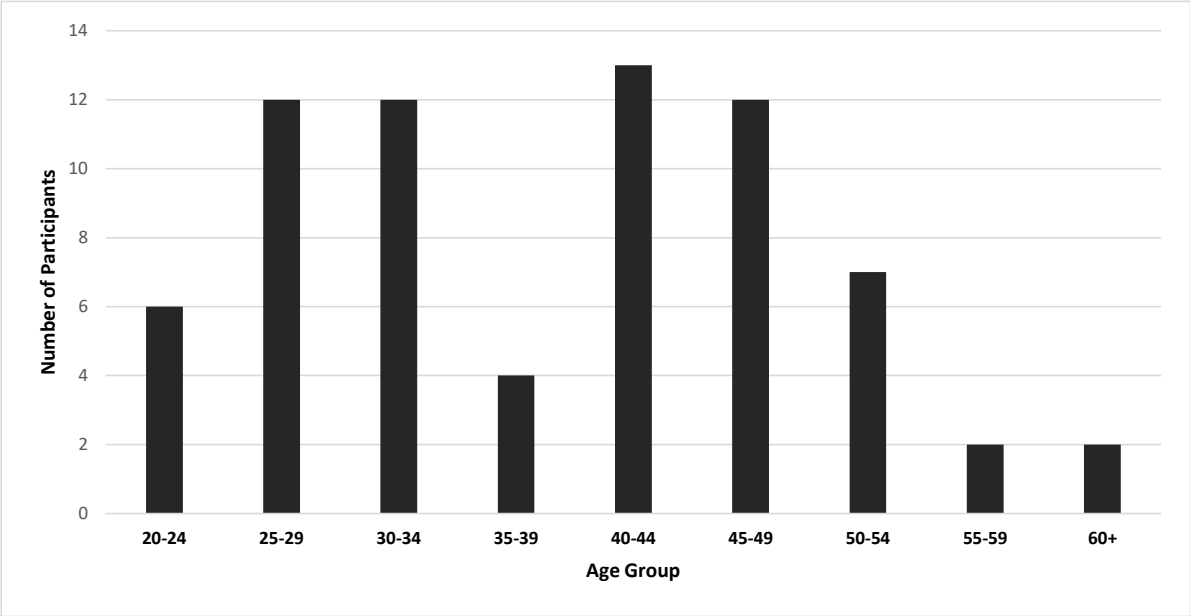

Figure 2.1: Age of MDOs (*N*=70) at time of study

Conviction Type

In the study published by Youngs and Canter (2012) (*N* = 71), offences for which participants were convicted covered nine crime types "Violence, *n* = 26; Sexual, *n* = 1; Theft/Burglary, *n* = 11; Robbery, *n* = 7; Fraud, *n* = 5; Arson, *n* = 1; Drug offences, *n* = 11; Driving offences, *n* = 3; Other, *n* = 6)" (p. 297).

In the study published by Ioannou et al., (2015) (*N* = 120), offences for which participants were convicted included "property offences (burglary, theft, shoplifting, fraud; *n* = 20), drug offences (possession, supply; *n* = 20), robbery (*n* = 20), violence (assault, ABH, GBH, violence, wounding; *n* = 20), sexual offences (indecent assault, attempted rape, rape; *n* = 20), murder (murder, manslaughter, *n* = 20)" (p. 294).

The 70 MDOs had a total of 121 convictions related to their index offence (the numbers of convictions are higher than number of participants as some participants received more than one conviction) (see Table 2.2).

Table 2.2

MDOs Conviction Type

Conviction Type	***N* = 121 (%)**
ABH	12 (10.0)
GBH	12 (10.0)
Robbery	10 (8.3)
Other Violent	7 (5.8)
Manslaughter	4 (3.3)
Common Assault	3 (2.4)
Arson	3 (2.4)
GBH with Intent	3 (2.4)
Murder	2 (1.7)
Other General	10 (8.3)
Theft	6 (5.0)
Burglary	6 (5.0)
Drug Offences	4 (3.3)
Criminal Damage	1 (0.8)
Driving Offences	0 (0.0)
Rape	11 (9.1)
Indecent Exposure	4 (3.3)
Other Sexual	4 (3.3)
Indecent Assault	3 (2.4)
Attempted Rape	1 (0.8)
Unidentified Offences	15 (12.4)

Offence Type

Based on the index offence (the last offence for which an individual was convicted) participants were categorised into one of three offence types: sexual offending, violent offending or general offending. Allocation to 'offence type' was informed by identifying the most 'serious offence' the participant had last been convicted (index offence). For example, an index sexual offence conviction superseded a violent or general index offence conviction,

thus the participant was categorised as ‘sexual offending’. An index violent offence conviction superseded an index general offence conviction, resulting in the participant categorised as ‘violent offending’. Participants who had neither a sexual of violent index offence conviction were categorised as ‘general offending’.

In Youngs and Canter (2012) publication, 34 (47.9%) participants were classified as violent offending (e.g. murder, robbery, arson, other violence). One participant (1.4%) was classified as sexual offending and 36 (50.5%) participants were classified as general offending (e.g. theft, criminal damage, fraud/deception, driving offences, other). In Ioannou et al., (2015) publication, 60 (50%) participants were classified as violent offending (e.g. robbery, assault, murder, manslaughter, ABH, GBH, wounding), 20 (16.7%) participants were classified as sexual offending (e.g. indecent assault, attempted rape, rape) and 40 (33.3%) participants were classified as general offending (e.g. burglary, theft, shoplifting, fraud, drug possession). Of the 70 MDOs, 39 participants (55.7%) were classified as violent offending (e.g. ABH, GBH, Robbery, other violent, manslaughter, common assault, arson, GBH with intent), 18 (25.7%) participants were classified as sexual offending (e.g. rape, indecent exposure, other sexual indecent assault, attempted rape) and 13 (18.6%) participants were classified as general offending (see Table 2.3).

Table 2.3

Offence Type

	Youngs and Canter (2012) N = 71	Ioannou et al., (2015) *N* = 120	MDOs *N* = 70
	***n* (%)**	***n* (%)**	***n* (%)**
Violent Offending	34 (47.9)	60 (50.0)	39 (55.7)
Sexual Offending	1 (1.4)	20 (16.7)	18 (25.7)
General Offending	36 (50.7)	40 (33.3)	13 (18.6)

Additional Descriptive Characteristics: MDOs (N=70)

No further descriptive characteristics were reported in the publications by Youngs and Canter (2012) and Ioannou et. al (2015). Therefore, the below information is based exclusively on the descriptive characteristics of the 70 MDOs.

Ethnicity

The two largest ethnic categories within the MDOs were Black British (*n* = 28, 40%) and White British (*n* = 27, 38.6%). The remaining 21.5% (*n* = 15) of participants were either Black African, Black Caribbean or Asian (see Table 2.4).

Table 2.4

Ethnicity

Ethnicity	***N* = 70** ***n* (%)**
Black British	28 (40.0)
White British	27 (38.6)
Black African	7 (10.0)
Black Caribbean	6 (8.6)
Asian	2 (2.9)

Education

Of the 70 MDOs, 47.1% (*n* = 33) had completed schooling up until 16 years of age, whilst the remaining 52.9% (*n* = 37) reported having left school earlier than 16 years old. Most participants (*n* = 56, 80%) did not pursue further education. The remaining 20% (*n* = 14) had completed some form of further education (e.g. vocational certificate, undergraduate degree, diploma or A levels) (see Table 2.5).

Table 2.5

Education

Education Type	***N* = 70** ***n* (%)**
No Further Education Completed	56 (80.0)
Vocational Certificate	10 (14.3)
Undergraduate Degree	2 (2.9)
Diploma	1 (1.4)
A – Levels	1 (1.4)

Age at time of offence

MDOs age at the time of the identified offence (the offence they recalled during the study) ranged from 15 years old to 52 years old (*M* = 29.79, *SD* = 9.41).

The largest age group 'at the time of the identified offence' was the 30-39 age group (*n* = 19, 27.1%), followed by the 20-24 and 25-29 age groups which were equally represented (*n* = 14, 20%). Participants aged 40 years or older and 15-19 'at the time of the identified offence' were the lowest represented age groups (*n* = 12, 17.1% and *n* = 11, 15.7% respectively) (see *Figure 2.2*).

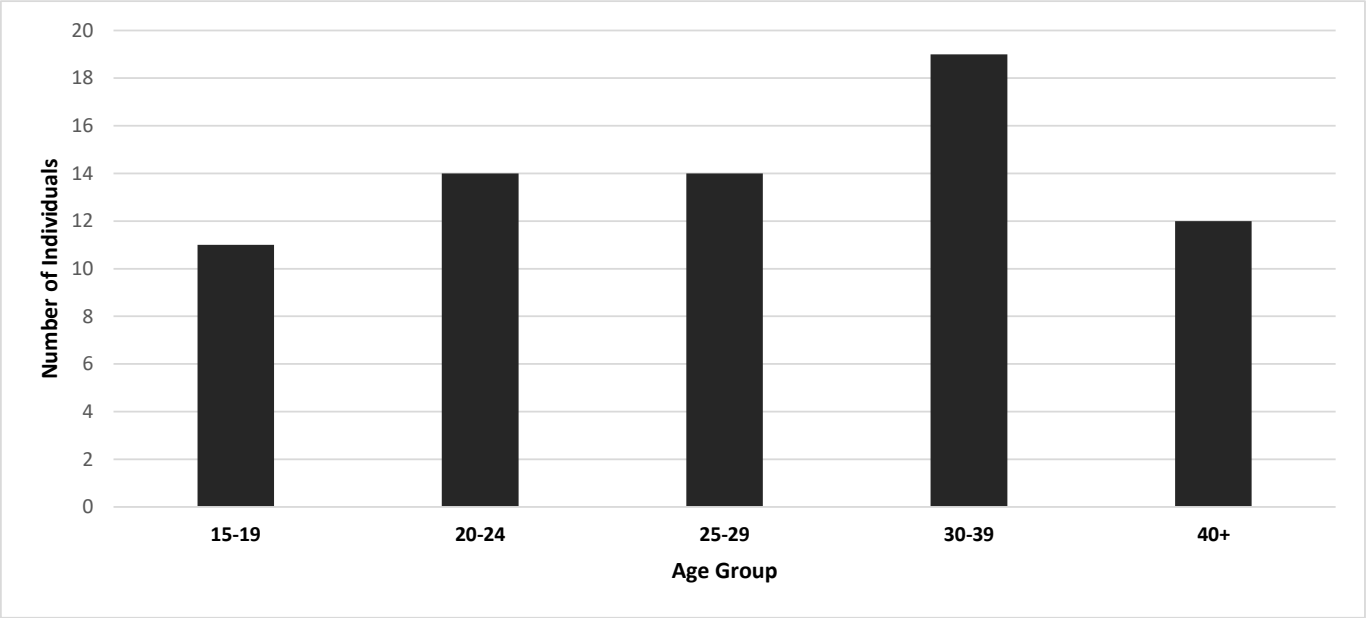

Figure 2.2: Age at identified offence

Age difference between time of study and age at identified offence

The age difference of MDOs at time of interview when compared to age at the identified offence (the offence they recalled during the study) was divided into three categories, 1-3 years,

4-6 years, 7-10 years and 11 or more years. Three of the four age groups were nearly equally represented, whilst the 7-10 years difference which was marginally lower (*n* = 13, 19%) than the other three age difference groups (see Table 2.6).

Table 2.6

Age difference between interview and time of offence (N = 70)

Age Group	***n* (%)**
1-3 years	17 (24%)
4-6 years	19 (27%)
7-10 years	13 (19%)
11+ years	21 (30%)

Mental Disorder

All MDOs were expected to have been diagnosed with a mental disorder (Axis I or Axis II) as per the DSM-5 criteria. Participants whose diagnosis was not yet formally assessed/documented were placed in the 'no formal diagnosis' category. The youngest age of onset of mental disorder was 15 years old and the oldest age of onset of mental disorder was 49 years old (*M* = 26.42, *SD* = 9.11).

Individuals' primary diagnosis at the time of the discussed offence (as categorised by the DSM-5) was categorised as either an Axis I diagnosis, Axis II diagnosis or no formal diagnosis. Nearly half of participants (*n* = 31, 44.3%) had a primary Axis I diagnosis (mental illness e.g. schizophrenia) and just over one quarter of participants had no formal diagnosis (*n* = 20, 28.6%) or a primary Axis II diagnosis (personality disorder e.g. ASPD) (*n* = 19, 27.1%) (see Table 2.7).

Table 2.7

Mental Disorder

Mental Disorder Category	**Diagnosis**		***N* = 70** ***n* (%)**
Axis I Diagnosis	Schizophrenia		23 (32.3)
	Bipolar		3 (4.3)
	Schizoaffective		2 (2.9)
	PTSD		2 (2.9)
	Psychosis		1 (1.4)
		Total	**31 (44.3)**
Axis II Diagnosis	ASPD		11 (15.7)
	BPD		4 (5.7)
	Schizoid PD		3 (4.2)
	Histrionic		1 (1.4)
		Total	**19 (27.1)**
No Formal Diagnosis		**Total**	**20 (28.6)**

Of the 50 MDOs who had received a primary Axis I or Axis II diagnosis, approximately three quarters of participants (*n* = 39, 78%) received a single diagnosis (Axis I or Axis II diagnosis only). The remaining 22% (*n* = 11) of participants had a comorbid diagnosis (primary and secondary diagnosis of a mental disorder) (see Table 2.8).

Table 2.8

Diagnosis

Psychiatric Diagnosis Comorbidity	***N* = 50** **N (%)**
Axis I Only	27 (54%)
Axis 2 Only	12 (24%)
Comorbid Diagnosis	11 (22%)

Of the 11 (22%) MDOs who had received a comorbid diagnosis, their comorbidity was either a combination of a primary Axis I and secondary Axis II diagnosis (*n* = 5, 45.5%) or a primary and secondary Axis II disorder (*n* = 6, 54.5%) (see Table 2.9). Eight (72%) of the eleven MDOs with a comorbid diagnosis, had ASPD as either a primary or secondary

diagnosis, whilst the remaining three (27%) participants had comorbidity of mental disorders other than ASPD.

Table 2.9

Comorbidity

Comorbid Combination	**Diagnosis**	***N* = 11 *n* (%)**
Primary Axis I & Secondary Axis II	Schizoaffective disorder & ASPD	1 (9.1)
	Schizophrenia & ASPD	1 (9.1)
	Depression & ASPD	1 (9.1)
	Schizophrenia & Mixed PD	1 (9.1)
	Bipolar and SPD	1 (9.1)
	Total	**5 (45.5)**
Primary and Secondary Axis II	ASPD & BPD	3 (27.3)
	ASPD & PPD	1 (9.1)
	ASPD& OCPD	1 (9.1)
	PPD & Mixed PD	1 (9.1)
	Total	**6 (54.5)**

Of the 31 MDOs with an Axis I diagnosis, the majority had been classified as violent offending (68%), whilst sexual and general offending were equally represented (16%). Of the 19 MDOs with an Axis II diagnosis, the majority had also been classified as violent offending (58%), followed closely by sexual offending (42%). There were no MDOs allocated to general offending in the Axis II diagnostic category. Finally, of the 20 MDOs in the 'no formal diagnosis category', the majority had been classified as general offending (40%), followed closely by violent offending (35%) and sexual offending (25%) (see Table 2.10).

Table 2.10

Diagnostic Category and Offence Type

Diagnostic Category (*n* =)	**Offence Type**	***N* = 70 *n* (%)**
Axis I	Violent Offending	21 (68.0)
(*n* = 31)	Sexual Offending	5 (16.0)
	General Offending	5 (16.0)
Axis II	Violent Offending	11 (58.0)
(*n* = 19)	Sexual Offending	8 (42.0)
	General Offending	0 (00.0)
No Formal Diagnosis	Violent Offending	7 (35.0)
(*n* = 20)	Sexual Offending	5 (25.0)
	General Offending	8 (40.0)

2.5 Materials

Narrative Roles Questionnaire (NRQ) (Canter & Youngs, 2009) (see Appendix C)

The NRQ is underpinned by Frye's archetypal mythoi (1957) and McAdams (1988) narrative theory and was first published in 2009 by Canter and Youngs, drawing upon research conducted by Canter et. al. (2003), Ioannou (2006) and Canter, Ioannou and Youngs (2009). The NRQ was developed to explore an offender's personal narrative and the role(s) they assign to themselves when offending (Canter & Youngs, 2009).

The NRQ comprises 33-items and takes approximately 5 to 10 minutes to complete. Participants are asked to rate each question (e.g. "It was a mission", "I was a professional", "I just wanted to get it over with") on a 5 point Likert scale (1 = Not at all; 2 = just a little; 3 = some; 4 = a lot and 5 = very much indeed) based on how they felt <u>at the time</u> of an identified offence. The NRQ has been found to have high internal reliability when applied to a sample of 71 male convicted and incarcerated offenders ($\alpha = .85$, $p < .05$) (Youngs & Canter, 2012).

Research conducted on the NRQ has consistently found the presence of four narrative themes: hero, professional, revenger and victim based on the inter-item relationship of all 33-NRQ items using Smallest Space Analysis (SSA) for convicted adult male offenders (Canter et al., 2003; Youngs & Canter, 2012; Spruin, Canter, Youngs & Coulston, 2014; Ioannou, Canter, Youngs & Synnott, 2015 and Ioannou, Canter & Youngs, 2017). Ioannou et al., (2015) also found high internal reliability for each of the four narrative themes, in a sample of 120 convicted adult male offenders (hero $\alpha = .81$, $p < .05$; professional, $\alpha = .76$, $p < .05$; revenger, $\alpha = .78$, $p < .05$ and victim $\alpha = .85$, $p < .05$).

Results from previous research show that the placement of 33 NRQ items can move between narrative themes dependent on the participant sample being assessed, however the presence of the four narrative themes remains (Canter et al., 2003; Youngs & Canter, 2012; Spruin et al., 2014; Ioannou et al., 2015 and Ioannou et al., 2017). Therefore, the NRQ is considered a fluid measure, whereby an offender's rating of each of the 33-items may vary depending on the offence they are referring to, and as a result, the offender may adopt a different narrative role(s) during the commission of different offences.

There is no scoring key provided for the NRQ, therefore no quantitative method is available to interpret an individual's overall score or specific narrative role. Instead, interpretative interpretation is required by reviewing the offenders' individual responses to each of the 33-items of the NRQ and by reviewing each of the four narrative role descriptions provided by Canter and Youngs (2009), later developed upon by Ioannou et al., (2015). The four narrative role descriptions for hero, professional, revenger and victim are surmised below.

The Hero: This narrative role describes an offender who is on a 'mission' and believes they are somewhat incapable of stopping what is inevitable. In addition, this narrative role is reflective of an offender attempting to defend their masculinity and/or seeking to regain a sense of pride and respect. As a result, this narrative role is characterised by a sense of bravado, casual attitude about their actions and minimal acceptance of ownership or responsibility for their behaviour (Canter & Youngs, 2009). Ioannou et al., (2015) describe the hero as an offender who knows they are engaging in risk taking and perceives their offence as a manly and brave thing to do. This type of offender is also considered to find their offence both interesting and enjoyable, whilst seeking to gain recognition.

The Professional: This narrative role describes an offender who is attempting to pursue a pilgrimage or journey to overcome adversity, whilst attempting to emerge victorious. In addition, this narrative role is reflective of an offender who enjoys the need to adapt to change and challenges through a sense of mastery obtained through power and control over their environment, whilst being excited by the risk taking they engage in, yet remaining calm and neutral in their responses (Canter & Youngs, 2009). Ioannou et al., (2015) describe the professional as an offender who adopts a professional view of their offending, whereby the offence is like a job and routine. This type of offender is described as a highly skilled, intelligent and competent.

The Revenger: This narrative role describes an offender driven by inevitable retaliation in response to perceived injustices, accusations or belief they have been treated unfairly. This narrative role describes an offender who seeks to avenge injustices whilst externalising blame for their actions and believes their actions were their only choice (Canter & Youngs, 2009). In

addition, Ioannou et al., (2015) describe the revenger as an offender who views their offence as a mission whereby they feel powerful and in control. In addition, the revenger justifies their offence by the belief they were right to take revenge and could not help themselves.

The Victim: This narrative role describes an offender who experiences a sense of confusion and powerlessness and perceives themselves to be the victim of an event. This narrative role describes an offender attempting to make sense of a nonsensical world they perceive as has having no rules and nothing matters (Canter & Youngs, 2009). In addition, Ioannou et al., (2015) describe the victim as an offender who externalises responsibility and believes their offence could not be avoided. As such, the victim believes events in their life are due to external factors they cannot control or influence such as a luck, chance or fate.

2.6 Procedure

To recruit the MDOs, ethics was obtained from the University of Huddersfield, National Research Ethics Service and Forensic Housing Association. Following ethical approval, the researcher contacted all seven Forensic MSUs and three Forensic Housing associations and arranged times to deliver presentations to the relevant Multi-Disciplinary Teams (MDTs) regarding the research. The content of the presentations included the purpose for the research, participant inclusion and exclusion criteria and process for recruitment. A *Recruitment Poster* (see Appendix D) and *Information Sheet* (see Appendix E) were also disseminated. One hundred and fifteen participants were considered to meet inclusion criteria for the study (excluding willingness to participate).

The researcher approached all eligible participants at their respective locations. Participants willing to engage in the research were provided with a day and time to meet the researcher. MDTs were also informed of the day, date, time and duration of scheduled meetings to ensure transparency, and abide by security and care processes. Scheduled meetings were held at the participants' respective location within private interview rooms, which also had audio video cameras. Non-auditory video cameras were present to ensure organisational security and researcher safety, whilst also ensuring participant confidentiality. Escorting to and from interview rooms by staff at the relevant MSU/FHA also occurred to ensure researcher safety.

At each meeting, participants read the *Information Sheet* and signed a C*onsent Form* (see Appendix F). Only participants who signed the consent form progressed with the research. Once consent was obtained, participants completed a *Demographic Sheet* (see Appendix G) and advised that this information would be cross-referenced with their clinical files. Requesting participants to complete this form offered two key advantages. Firstly, the researcher was able to assess the accuracy of participants' recollection of the identified offence (e.g. if the offence details were consistent with collateral file information), thereby attempting to mitigate some of the following concerns: 1. Social desirability bias (Edwards, 1957) 2. Memory recall deficits due to length of time between the identified offence and the research meeting and 3. The impact mental disorder may have on the ability to recall past behaviour **(**Barch, Csernansky, Conturo & Snyder, 2002). Secondly, asking participants to recall details of their identified offence sought to help re-orient and prepare them for answering the NRQ in relation to their identified offence.

Once the Demographic Sheet was completed, participants were asked to answer all 33-questions of the NRQ (see Appendix C) based on their identified offence from the Demographic Sheet. The researcher remained present throughout the duration of each meeting (which lasted approximately 45 minutes to 1 hour) to assist with any reading or literacy difficulties and answer any questions. Upon completion of all materials, participants were debriefed, paid £5 and offered additional support if required. Those who did not request additional support were thanked for their time. Those who requested additional support were directed to their relevant case manager.

The researcher reviewed participants' clinical files after each meeting to cross-reference the self-report information from the *Demographic Sheet* with official documents (e.g. criminal history, details of the index offence, diagnosis). All participants exhibited a high level of consistency between self-report and collateral file information. Additionally, participants acknowledged when they could not 'recall' certain facts rather than attempt to guess or fabricate such information. There were some details that both participants and collateral file information did not have, however such occurrences were minimal.

2.7 Data Analysis

For the current research data as analysed using Statistical Package for Social Sciences (SPSS, Version 23) and the Hebrew University Data Analysis Package software (HUDAP, Version 8). All data was input directly into SPSS and HUDAP (where applicable). A second researcher reviewed all data entry to reduce human error.

SPSS was used to: calculate frequencies; test for normality and measure internal consistency (Cronbach's alpha). Exploratory Factor Analysis (EFA); Spearman's r correlation, Independent Samples Kruskal-Wallis tests, planned pairwise comparisons and Friedman's two-way ANOVAs were also conducted. HUDAP was used to conduct Smallest Space Analysis (SSA), a Multi-dimensional Scaling (MDS) technique. SSA is one of the most widely used procedures for data analysis within Investigative Psychology (Canter & Fritzon, 1998; Canter & Heritage, 1990; Trojan & Salfati, 2008), and has been the sole approach to data analysis for the NRQ (Canter & Youngs, 2009; Canter et al., 2003; Youngs and Canter, 2012; Spruin, et. al., 2014; Ioannou et al., 2015 and Ioannou, et. al., 2017). SSA provides a visual representation of the underlying structure (or common themes) of inter-item correlations, without making assumption as to the nature of the structure (Canter & Youngs, 2009). An overview of MDS, SSA and the rationale for choosing this approach for data analysis is discussed in the next chapter.

2.8 Chapter 2 Summary

This chapter provided an overview of the methodology employed for the current research, including: ethical approval; participant recruitment; secondary data; participant descriptive characteristics; materials (NRQ); procedure and data analysis. This research applied a non-experimental, cross-sectional research design using purposive sampling to recruit 70 MDOs. Ethical approval was obtained from three services: University of Huddersfield; NHS and a Forensic Housing Association. Choice of statistical software for data analysis were identified (SPSS and HUDAP) and type of data analysis were stated.

Descriptive data and SSA results from two previously published studies on the NRQ (Youngs & Canter, 2012; Ioannou et. al., 2015) obtained from 71 and 120 adult male incarcerated offenders in the North of England (respectively) was used. A further 70 MDOs in the South of England were recruited, 40 (57%) of whom resided in a Medium Secure Unit and 30 (43%) who resided in a Forensic Housing Association. Only age and offence type could be compared across all three recruitment groups (Youngs & Canter, 2012; Ioannou et. al., 2015 and 70 MDOs) due to no further demographic data reported in the two published studies (Youngs & Canter, 2012; Ioannou et. al., 2015). However additional descriptive characteristics were discussed in relation to the 70 MDOs.

The age of participants across all three recruitment groups (Youngs & Canter, 2012; Ioannou et. al (2015) and MDOs) had a similar mean age (34.5, 34.0, and 38.6 respectively). There was also a similar percentage of violent offending across all three recruitment groups (Youngs & Canter (2012) = 47.9%, Ioannou et al., (2015) = 50% and MDOs = 55.7%). However, there was a greater percentage of sexual offending in the MDOs recruitment group compared to Ioannou et al., (2015) and Youngs and Canter (2012) (25.7%, 16.7% and 1.4% respectively). There was a lower percentage of general offending in the MDOs recruitment group compared to Ioannou et. al (2015) and Youngs and Canter (2012) (18.6%, 33.3% and 50.7% respectively). Whilst Youngs and Canter (2012) and Ioannou et. al (2015) describe their participants as adult male incarcerated offenders in the North of England. They do not indicate whether the presence of absence of mental disorder had been asked about, thus it can't be assumed their participants did not have a mental disorder.

The next chapter (Chapter 3 - Study 1) is the first of four studies and will a) explore the structure of the NRQ by comparing the NRQ SSA results from Youngs and Canter (2012) and Ioannou et al., (2015) studies to identify any similarities or patterns in their findings b) conduct SSA on the NRQ for the 70 MDOs and c) compare the MDOs SSA results with Youngs and Canter (2012) and Ioannou et al., (2015) SSA results. The overall aim of Chapter 3 is to ascertain whether the structure of the NRQ using SSA is consistent across all three recruitment groups given differences in presence of MD and offence type (violent, sexual and general offending), followed by discussing the implications of these findings.

Chapter 3

Study 1: Smallest Space Analysis of the 33-item Narrative Roles Questionnaire

The previous chapter described the methodology and descriptive characteristics of 70 MDOs (recruited for the current research) and the secondary data of 191 non MDOs from the only two published studies on the NRQ (Ioannou et al., 2015; Youngs & Canter, 2012). Since the introduction of the NRQ in 2009, any publications using this measure have always involved the authors (Ioannou et al., 2015; Youngs & Canter, 2012) and consistently found the presence of four narrative roles (hero, professional, revenger and victim), yet the data from these two studies has never been compared or combined. Instead further research combined the NRQ with a 26 item Emotions Questionnaire (Ioannou, Canter & Youngs, 2017) thus the NRQ has never been rigorously tested. Additionally, no research on the NRQ has been conducted on offending populations (e.g. mentally disordered offenders, female offenders and adolescent offenders) other than incarcerated offenders non MDOs, limiting the generalizability of these findings. However, the proposition that offenders may subscribe to one of four narrative roles during the commission of a crime and that such roles could be identified by a short 33-item questionnaire is worth exploring.

To date, the NRQ has only been analysed using SSA (Ioannou et al., 2015; Youngs & Canter, 2012) which is a less commonly used analytic approach for questionnaire design and validation compared to the more commonly used data analytic approach, Factor Analysis (Reio & Shuck, 2015). Whilst less commonly used, SSA continues to be used in social science research in lieu of Factor Analysis (FA) in areas such as: investigative psychology (Canter & Youngs, 2009; Ioannou, Canter & Youngs, 2017; Spruin et. al., 2014); belief systems of domestic abuse victims (Spruin, Alleyne, Baker, Papadaki & Franz, 2017); emotional experience of MDOs (Spruin & Siesmaa, 2017); motive for joining the parent-teacher association (Fisher, 2018) and care giver burden (Morrison, & Somski, 2019).

SSA is informed by Facet Theory (Guttman, 1968, 1982), which enables researchers to integrate theory formation and data analysis (Alt, 2018; Greenbaum, 2009). Both SSA and FA are data reduction approaches to explain a complex phenomenon, and both "seek to understand the inter-relationships among a large number of variables to find common underlying structural elements" (Cohen, 2005, p. 127). Fundamental differences between FA and SSA are that FA results in 'factors' following analysis of uncorrelated variables, whilst SSA provides a spatial representation of data (Alt, 2018) that is divided into 'regions' that reflect both the 'semantics' (e.g. content of the items) *and* their structural organisation informed by theoretical underpinnings of the study (Cohen, 2005). Alt (2018) states that FA fails to illustrate the interaction between content facets and mapping sentence due to capturing one facet at a time, whilst SSA enables more than one interpretation of the spatial representations. Thus, it has been proposed SSA offers greater interpretive flexibility over FA, especially if the structure among items does not support the theoretical framework proposed (Steenbergen, 2000).

Other key differences between SSA and FA that may inform which analysis to use are that FA requires metric data (Alt, 2018) whilst SSA can be analysed using *both* metric and non-metric data (Thapalia, 2004). Additionally, SSA is not limited by any measure of proximity, whilst FA is limited by the proximity measure of Pearson correlation (Cohen, 2003). Furthermore, SSA can also be useful for smaller sample sizes (e.g. $n < 100$) (Maslovaty & Levy, 2001; Maslovaty et. al. 2001) compared FA which requires larges sample sizes (at least $n = 200$ or more) (Comrey & Lee, 1992; MacCallum, Widaman, Preacher & Hong, 2001; MacCallum, Widaman, Zhan & Hong, 1999; Pearson & Mundform, 2010) due to being less reliable with small sample sizes (e.g. $n < 100$) (Alt, 2018). Finally, Lundrigan & Canter (2001) suggest that SSA is not as likely to be affected by data anomalies and responses bias compared

to other metric testing. However, given the subjective interpretation of 'facets' (aka regions) on SSA outputs, it could be argued SSA is more subject to researcher bias than FA. Finally, to conduct SSA researchers are required to use a less commonly used programme called HUDAP instead of more widely accepted statistical programmes such as SPSS and R.

In addition to SSA only ever have been conducted on the NRQ, so too has the NRQ ever been administered to incarcerated offenders (Ioannou et al., 2015; Youngs and Canter, 2012; Ioannou et. al., 2017). Greater focus on researching incarcerated offenders is not unusual given there are more offenders (and more access to offenders) in both prison and community settings (MoJ, 2020) compared to forensic mental health settings (MoJ, 2019). From a legal perspective, the presence of MD during offending can directly influence both conviction and sentence type if an individual is considered to not have *mens rea* (Crown Prosecution Service, 2019). Additionally, early research on offenders with MD considered MDOs to be a unique population compared to 'non MDOs' (Adams, 1983), although there are mixed views on this. On one hand some researchers have found MD may influence the type of offending an individual engages in (Fitzgerald et. al., 2011; Vinkers, 2011), such as an inverse relationship has previously been found between MD and general and violent offending) (Bonta, Law & Hanson, 1998). Whilst other studies have found no significant link between MD and violence (Elbogen & Johnson, 2009; Witt, vanDorn, & Fazel, 2013). Additionally, many of the forensic risk assessments used today (e.g. HCR-20 (Douglas, Hart, Webster & Belfrage, 2013), RSVP (Hart et. al., 2003) consider MD (e.g. Mental Illness, Personality Disorder) to be a criminogenic factor rather than adopting a view that MDOs as distinctly different from their non mentally disordered counterparts. Finally, research tends to focus more heavily on how risk of recidivism is linked to MD and other criminogenic factors (Bonta, Blais & Wilson, 2013;

Kingston, et. al., 2016), as opposed to the impact MD has on criminal thinking preceding and during the index offence (Morgan, Fisher, Duan, Mandracchia, & Murray, 2010). Subsequently, applying the NRQ to MDOs seeks to fill the gap in the literature by focusing on the reason for offending by the identification of narrative roles, rather than focusing specifically on recidivism.

Given the paucity of research on the NRQ and that the only two studies published have used SSA on non MDOs, it makes pedagogic sense to conduct SSA on the NRQ when administered to MDOs. Conducting SSA on the newly recruited 70 MDOs will enable a direct comparison of findings between Youngs and Canter (2012) and Ioannou et al., (2015) to ascertain if the presence of the four narrative roles continue to exist for MDOs. Additionally, due to the small sample size of MDOS (*N* =70) (given this hard to reach client group), SSA in lieu of FA is also considered the best option. Therefore, this study (Study 1) intends to address two key gaps in the current literature. The first being the lack of any comparisons between the SSA results of the only published studies on the NRQ (Youngs & Canter, 2012 and Ioannou et. al., 2015). The second being, to ascertain if the NRQs four narrative roles still apply to MDOs. Study 1 therefore has two aims:

1) To compare the SSA results from Youngs and Canter (2012) and Ioannou et al., (2015) to ascertain if there are any commonalties of item placement for the four narrative roles.
2) To conduct SSA on the NRQ for *N* = 70 MDOs and compare these findings with the results from Youngs and Canter (2012) and Ioannou et al., (2015).

3.1 Comparing SSA results from Youngs and Canter (2012) and Ioannou et al., (2015)

To address the first aim, a review of the Youngs and Canter (2012) & Ioannou et al., (2015) published studies on the NRQ will occur to explore if there is any pattern in the placement of items across the four narrative roles (hero, professional, revenger and victim).

Participants

Youngs and Canter (2012) conducted SSA on the NRQ from a sample of N = 71 incarcerated offenders (M = 34.5 years old, SD = 9.5), of which 50.7% general offenders, 47.9% were violent offenders and 1.4% were sexual offenders. Ioannou et. al (2015) conducted SSA on N = 120 incarcerated offenders (*M* = 34, SD = 10.7) of which 33.3% were general offenders, 50% were violent offenders, 16.7 were sexual offenders.

NRQ Internal consistency

Young and Canter (2012) stated that the NRQ had high internal consistency ($\alpha = .85$, $p < .05$) and reported the presence of four themes: hero, professional, revenger and victim. This paper did not report the Cronbach's alpha for these four themes. Ioannou et al., (2015) did not report an overall Cronbach's alpha for the NRQ, however reported the presence of the same four themes proposed by Youngs and Canter (2012). The Cronbach's alpha for Ioannou et. al., (2015) four themes were: hero ($\alpha = .81$, $p < .05$), professional, ($\alpha = .76$, $p < .05$) revenger ($\alpha = .78$, $p < .05$) and victim ($\alpha = .85$, $p < .05$).

Comparing SSA results between Youngs and Canter (2012) and Ioannou et al., (2015)

Comparing the SSA output results from both Youngs and Canter (2012) (see Appendix N) and Ioannou et al., 2015 (see Appendix M), there were a different number of NRQ items

located within each of the proposed narrative roles across both studies. Furthermore, not all items in each of the narrative roles were the same across both studies. However, of the 33 NRQ items, 13 items were consistently located within the same narrative role across both studies, whilst 20 items were located within one of two narrative roles across both studies. These findings are discussed below.

Hero

In the study by Youngs and Canter (2012) six items, of the NRQ were located in the hero narrative, whilst Ioannou et al., (2015) had eight items (see Table 3.1). Across both studies, two items were consistently located in the hero narrative role including: "I was looking for recognition" and "It was a manly thing to do".

Table 3.1

Hero narrative role items

HERO	
Youngs and Canter (2012) ***N* = 71**	**Ioannou et al., (2015)** ***N* = 120**
I was looking for recognition.	**I was looking for recognition.**
It was a manly thing to do.	**It was a manly thing to do.**
I couldn't stop myself.	I knew I was taking a risk.
It was like I wasn't part of it.	It was like an adventure.
It was a mission.	It was exciting.
There was nothing special about what happened.	It was interesting.
	It was fun.
	It all went to plan.

Note: Items in **bold** are common items

Professional

In the study by Youngs and Canter (2012), 14 items of the NRQ were located in the professional narrative, whilst Ioannou et al., (2015) had seven items (see Table 3.2). Across both studies, five items were consistently located in the professional narrative role including: "For me, it was like a usual days work", "It was routine", "I was like a professional", "I was doing a job" and "I knew what I was doing".

Table 3.2

Professional narrative role items

PROFESSIONAL	
Youngs and Canter (2012) ***N* = 71**	**Ioannou et al., (2015)** ***N* = 120**
I was like a professional.	**I was like a professional.**
It was a routine.	**It was routine.**
I was doing a job.	**I was doing a job.**
I knew what I was doing.	**I knew what I was doing.**
For me, it was like a usual day's work.	**For me it was just like a usual day's work.**
I was in control.	Nothing else mattered.
It was exciting.	There was nothing special about what happened.
It was interesting.	
It was like an adventure.	
I had power.	
It all went to plan.	
It was fun.	
I knew I was taking a risk.	
I guess I always knew it was going to happen.	

Note: Items in **bold** are common items

Revenger

In the study by Youngs and Canter (2012), nine items of the NRQ were located in the revenger narrative, whilst Ioannou et al., (2015) had eight items (see Table 3.3). Across both studies, three items were consistently located in the revenger narrative role including: “It was right”, “I was trying to get revenge” and “I was getting my own back”.

Table 3.3

Revenger narrative role items

REVENGER	
Youngs and Canter (2012) ***N* = 71**	**Ioannou et al., (2015)** ***N* = 120**
It was right.	**It was right.**
I was trying to get revenge.	**I was trying to get revenge.**
I was getting my own back.	**I was getting my own back.**
Nothing else mattered.	I had power.
It was my only choice.	I just wanted to get it over with.
I didn’t care what would happen.	It was a mission.
What was happening was just fate.	I was in control.
I had to do it.	I couldn’t stop myself.
It was the only thing to do.	

Note: Items in **bold** are common items

Victim

In the study by Youngs and Canter (2012), four items of the NRQ were located in the victim narrative, whilst Ioannou et al., (2015) had ten items (see Table 3.4). Across both studies, three items were consistently located in the victim narrative role, including: "I was confused about what was happening", "I was helpless" and "I was a victim".

Table 3.4

Victim narrative role items

VICTIM	
Youngs and Canter (2012) ***N* = 71**	**Ioannou et al., (2015)** ***N* = 120**
I was helpless.	**I was helpless.**
I was a victim.	**I was a victim.**
I was confused about what was happening.	**I was confused about what was happening.**
I just wanted it over with.	It was like I wasn't part of it.
	I guess I always knew it was going to happen.
	What was happening was just fate.
	I had to do it.
	It was the only thing I could think of doing.
	It was my only choice.
	I didn't care what would happen.

Note: Items in **bold** are common items

Summary of comparisons between Youngs and Canter (2012) and Ioannou et al., (2015)

The first aim of this study was to compare the SSA results from Youngs and Canter (2012) and Ioannou et al., (2015) to ascertain if there were any commonalties of item placement for the four narrative roles. There was variation in the number and type of items located within each of the four narrative roles (hero, professional, revenger and victim). Thirteen of the 33 items were located in the same narrative role in both studies (heron in known as 'core' items) (see Table 3.5). Twenty items were located in one of two narrative roles (heron in known as 'fluid' items), resulting in six different combinations (professional or hero (*n* = 7), professional or victim (*n* = 1), professional or revenger (*n* = 3), hero or revenger (*n* =2), hero or victim (*n* =1) and victim or revenger (*n* = 6) (see Table 3.6).

Table 3.5

13 proposed 'core' items

Hero ***n* = 2**	**Professional** ***n* = 5**	**Revenger** ***n* = 3**	**Victim** ***n* = 3**
I was looking for recognition. It was a manly thing to do.	For me, it was like a usual day's work. It was a routine. I was like a professional. I was doing a job. I knew what I was doing.	It was right. I was trying to get revenge. I was getting my own back.	I was confused about what was happening. I was helpless. I was a victim.

Table 3.6

20 proposed 'fluid' items

Professional or Hero *n* = 7	Professional or Victim *n* = 1	Professional or Revenger *n* = 3	Hero or Revenger *n* = 2	Hero or Victim *n* = 1	Victim or Revenger *n* = 6
It was fun. It was interesting. It was like an adventure. It was exciting. It all went to plan. There was nothing special about what happened. I knew I was taking a risk.	I guess I always knew it was going to happen.	I was in control. Nothing else mattered. I had power.	It was a mission. I couldn't stop myself.	It was like I wasn't part of it.	I had to do it. It was the only thing I could think of doing. It was my only choice. I just wanted to get it over with. I didn't care what would happen. What was happening was just fate.

3.2 Comparing MDOs SSA results with Youngs and Canter (2012) and Ioannou et al., (2015) SSA results

The second aim of this study was to conduct SSA on the NRQ for *N* = 70 MDOs and compare these findings with the results from Youngs and Canter (2012) and Ioannou et al., (2015), including: to compare the structure and internal consistency of the NRQ when administered to MDOs, ascertain if the presence of four narrative roles exists for MDOs and to compare commonalty of item placement from the SSA results for MDOs. To enable comparison of findings between Youngs and Canter (2012) and Ioannou et al., (2015) papers on the NRQ, SSA will also be conducted on the MDOs responses on the NRQ. This is important for two key reasons. Firstly, to ascertain if the presence of the four narrative roles

(hero, professional, revenger and victim) are consistent across all three studies both in relation to internal consistency and item placement. Secondly, to ascertain if the NRQ can be generalised to MDOs.

SSA produces four outputs which are a spatial representation of "the co-occurrence of variables……as distances within a geometrical space" (Ioannou et al., 2017, p. 389). The researcher will choose one of these four SSA outputs and create 'borders' to identify distinct regions. The choice regarding which of the four SSA outputs is chosen and border placement will be informed by the Coefficient of alienation (CoFA), the proximity of items on the SSA output and the theoretical basis of the study (Cohen, 2010). To further confirm the location of borders, Cronbach's alpha for each region and 'scale if item deleted' will also be used to ascertain if any items upon removal would increase the internal consistency of each region, thus help determine which items are allocated to each region. The overall aim being to either, confirm the known or expected structure (e.g. the four narrative roles), identify new unspecified facets or a combination of the two (Alt, 2018).

SSA outputs include one 2-dimensional plot (rotated on one axis: axis 1 by axis 2) and three 3-dimensional plots (rotated on three axis: axis 1 by axis 2; axis 1 by axis 3 and axis 2 by axis 3). There are two CoFA reported for SSA outputs, one for the 2-dimensional plot and one for the 3-dimensional plot (irrespective of axial rotation). The coefficient of alienation (CofA) is the level of 'best fit' between two sets of rank orders and is used to ensure the strongest and most robust output is chosen for interpretation (Alt, 2018; Cohen, 2010; Guttman, 1968; Kumur & Ryan, 2009). A coefficient of alienation (CofA) equal to zero indicates a perfect fit, whilst a coefficient of alienation of 1 indicates no relationship at all (Kumur & Ryan, 2009). In relation

to social sciences, a CofA of .15 or smaller would indicate a ‘good fit’ and CofA of .15 to .20 would be a ‘reasonably good fit’ (Guttman, 1968). Taking into account the CoFA, the researcher then reviews each of the four SSA outputs by comparing the rank order of correlations and visually reviewing distances between items (Alt, 2018; Cohen, 2010). Highly correlated items are located closer together and form a ‘region’ and items less correlated are further apart, thus located in separate regions (Canter & Heritage, 1997; Canter & Youngs, 2009). The researcher then creates ‘borders’ to identify separate ‘regions’ and labels these ‘regions’ as informed by the content of the items in that region and the theoretical underpinnings of the study.

It is important for any new measure to have internal consistency (Cronbach, 1951; Vaske, 2017), whereby the lower the Cronbach’s alpha the more unreliable the scale and the higher the Cronbach’s alpha the more reliable the scale. Cronbach’s alpha ($p < .05$) will be used to assess the internal consistency of the NRQ, as well as assess the internal consistency of each region *and* ensure appropriate item placement within each region (as assessed by Cronbach’s alpha ‘if item deleted’). A Cronbach’s alpha of $\alpha = .65\text{-}.80$, $p < .05$ is considered adequate’ (dependent on number of items and sample size) (Vaske, 2008; Taber, 2018), therefore the following commonly accepted rule for internal consistency as proposed by DeVillis (1991) will be used. A Cronbach’s alpha, $\alpha < .60$, $p < .05$ will be considered ‘unacceptable’. A Cronbach’s alpha ranging between $\alpha = .60$ to $\alpha = .65$, $p < .05$will considered ‘undesirable’. A Cronbach’s alpha ranging between $\alpha = .65$ to $\alpha = .70$, $p < .05$ will be considered ‘minimally acceptable’. A Cronbach’s alpha ranging between $\alpha = .70$ to $\alpha = .80$, $p < .05$ will be considered ‘respectable’. A Cronbach’s alpha ranging between $\alpha = .80$ to $\alpha = .90$,

$p < .05$ will be considered 'very good' and a Cronbach's alpha above $\alpha = .90$, $p < .05$ will be considered excellent (although may suggest shortening the scale) (DeVellis, 1991).

3.3 Study 1 Hypothesis

Hypothesis 1 – Structure and Internal Consistency of the NRQ

The internal consistency and structure of the NRQ when administered to MDOs will result in four internally consistent narrative themes (e.g. hero, professional, revenger and victim) as found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015). The null hypothesis is that the four narrative themes will not exist or that a different structure will emerge.

Hypothesis 2 – 13 Core Items

Thirteen core items (see Table 3.7) of the NRQ will be located within the same narrative role (hero, professional, revenger or victim) for MDOs as found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015). The null hypothesis is that the 13 core items will not be located within the same narrative roles as found in previous research.

Table 3.7

Hypothesis 2 – 13 Core Items

Hero ***n* = 2**	**Professional** ***n* = 5**	**Revenger** ***n* = 3**	**Victim** ***n* = 3**
Q20. I was looking for recognition. Q27. It was a manly thing to do.	Q1. I was like a professional. Q7. It was a routine. Q10. I was doing a job. Q11. I knew what I was doing.	Q4. It was right. Q29. I was trying to get revenge. Q31. I was getting my own back.	Q16. I was helpless. Q18. I was a victim. Q19. I was confused about what was happening.

	Q28. For me, it was like a usual day's work.		

Hypothesis 3 – 20 Fluid Items

Twenty fluid items (see Table 3.8) of the NRQ will be located within one of two narrative roles for MDOs as found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015) for MDOs. The null hypothesis would be that the 20 NRQ items will not be located within either of the narrative roles as found in previous research.

Table 3.8

Hypothesis 3 – 20 Fluid Items

Professional or Hero *n* = 7	**Victim or Revenger Items *n* = 6**	**Revenger or Professional *n* = 3**	**Revenger or Hero *n* = 2**	**Victim or Hero *n* = 1**	**Victim or Professional *n* = 1**
Q3: It was fun. Q5: It was interesting. Q6: It was like an adventure. Q9: It was exciting. Q24: It all went to plan. Q30: There was nothing special about what happened Q32: I knew I was taking a risk	Q2: I had to do it. Q12: It was the only thing I could think of doing. Q17: It was my only choice. Q21: I just wanted to get it over with. Q22: I didn't care what would happen. Q23: What was happening was just fate.	Q8: I was in control. Q14: Nothing else mattered. Question 15: I had power.	Q13: It was a mission. Q25: I couldn't stop myself.	Q26: It was like I wasn't part of it.	Q33: I guess I always knew it was going to happen.

3.4 Results: Hypothesis 1 – Structure and Internal Consistency of the NRQ

Hypothesis 1 proposed that the NRQ administered to MDOs would be internally consistent and have comparable internal consistency with that found by Youngs and Canter (2012) on incarcerated, adult male offenders. In addition, the NRQ would result in the same structure (the presence of four regions reflective of hero, professional, revenger and victim narrative roles) as found in previous research on incarcerated, adult male offenders (Ioannou et al., 2015; Youngs & Canter, 2012). Finally, that each of the identified regions would be internally consistent and comparable to the internal consistency found by Ioannou et al., (2015) when administered to incarcerated, adult male offenders.

<u>NRQ: Internal Consistency</u>

The NRQ had 'very good' internal consistency, $\alpha = .86$, $p < .05$ when administered to MDOs, which is similar to that reported by Youngs and Canter (2012) ($\alpha = .85$, $p < .05$) when administered to a sample of 71 incarcerated, adult male offenders.

The Cronbach's alpha (when administered to MDOs) would increase to $\alpha = .87$, $p < .05$ if two items (item 8 & 19) were deleted. Whilst deleting either of these two items would increase the overall Cronbach's alpha, this increase would be marginal. Ten items (items 1, 4, 16, 18, 23, 25, 26, 29, 30 & 31) did not increase or decrease the NRQ Cronbach's alpha ($\alpha = .86$, $p < .05$ would remain at $\alpha = .86$, $p < .05$, if any one of these 10 items were deleted). The remaining 21 items (items 2, 3, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 17, 20, 21, 22, 24, 27, 28, 32 & 33) contributed to internal consistency of the NRQ (see Table 3.9).

Table 3.9

NRQ (MDOs, N =70) Cronbach's alpha if item deleted

NRQ Item No (SSA output number)	**NRQ Question**	**NRQ** ($\alpha = .86$, $p < .05$) **Cronbach's Alpha if item deleted** ***p* < .05**
1	I was like a professional	.86
2	I had to do it	.85
3	It was fun	.85
4	It was right	.86
5	It was interesting	.85
6	It was like an adventure	.85
7	It was routine	.85
8	I was in control	**.87**
9	It was exciting	.85
10	I was doing a job	.85
11	I knew what I was doing	.85
12	It was the only thing to do	.85
13	It was a mission	.85
14	Nothing else mattered	.85
15	I had power	.85
16	I was helpless	.86
17	It was my only choice	.85
18	I was a victim	.86
19	I was confused about what was happening	**.87**
20	I was looking for recognition	.85
21	I just wanted to get it over with	.85
22	I didn't care what would happen	.85
23	What was happening was just fate	.86
24	It all went to plan	.85
25	I couldn't stop myself	.86
26	It was like I wasn't part of it	.86
27	It was a manly thing to do	.85
28	For me it was just like a usual day's work	.85
29	I was trying to get revenge	.86
30	There was nothing special about what happened	.86
31	I was getting my own back	.86
32	I knew I was taking a risk	.85
33	I guess I always knew it was going to happen	.85

*Items in **bold** represent the increased Cronbach's alpha the NRQ would obtain if that item were deleted

Smallest Space Analysis

Figure 3.1 is the SSA output for MDOs (*N* = 70) responses on the NRQ. This figure shows a 3-dimensional axis 1 by axis 3 spatial projection. Pearson's coefficient of the items and their corresponding geometric distances in the configuration show a 'reasonably good fit' with a Guttman-Lingoes coefficient of alienation .16693 in 16 iterations.

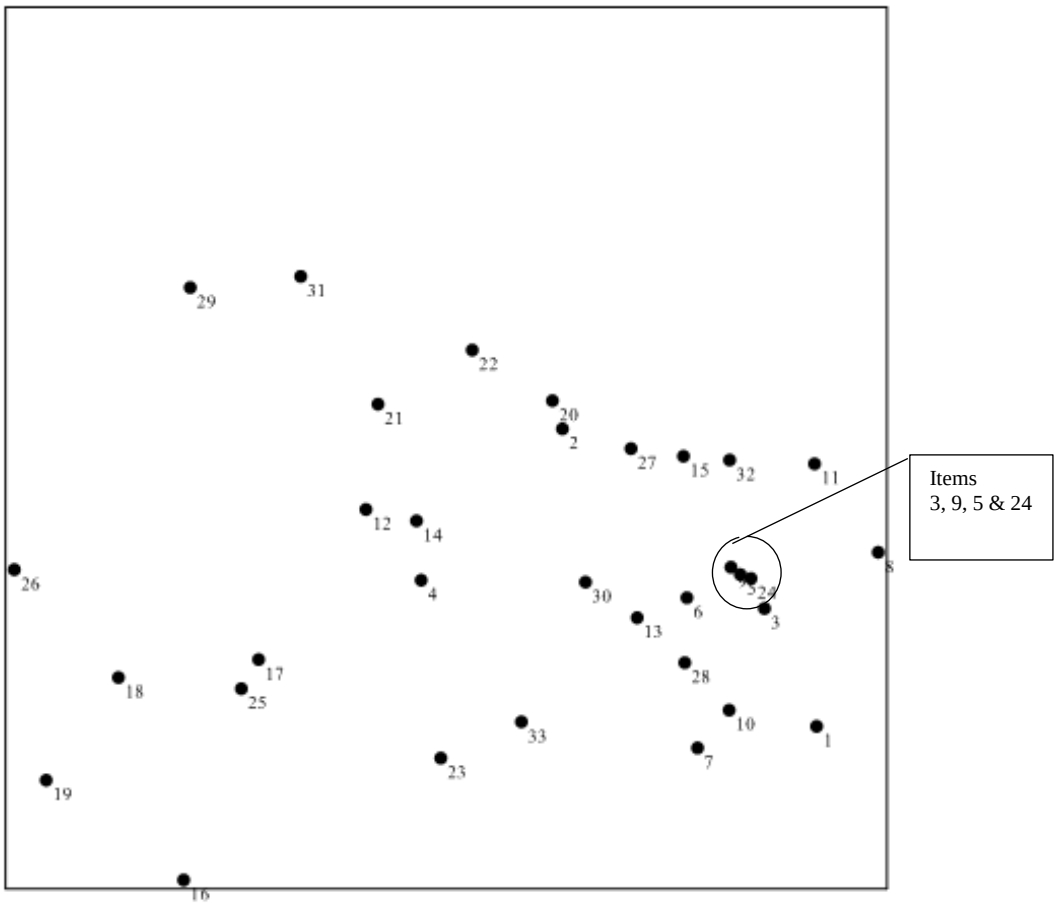

Figure 3.1: SSA (3D axis 1 by axis 3), NRQ (*N* =70)

Regional Interpretation of the NRQ

To explore the structure of the NRQ, interpretation of the SSA output requires the identification of regions. In order to identify the presence of a region, visual examination of all 33 individual items on the SSA configuration was required, followed by assessing each regions' internal consistency. The visual examination involved identifying whether there were groupings of individual items clustered around one another (e.g. highly correlated) or further apart (e.g. low correlation). Therefore, items located closer together would be considered part of a region and items further apart, would be in separate regions.

Based on a visual review of the 33 individual items on the SSA plot, four distinct regions were identified. The top right region was labelled 'Region 1' and comprised 5 items (2, 15, 20, 27 & 32). The bottom right region was labelled 'Region 2' and comprised 14 items (1, 3, 5, 6, 7, 8, 9, 10, 11, 13, 24, 28, 30 & 33). The top left region was labelled 'Region 3' and comprised 7 items (4, 12, 14, 21, 22, 29 & 31) and the bottom left region was labelled 'Region 4' and comprised 7 items (16, 17, 18, 19, 23, 25 & 26) and (see Figure 3.2).

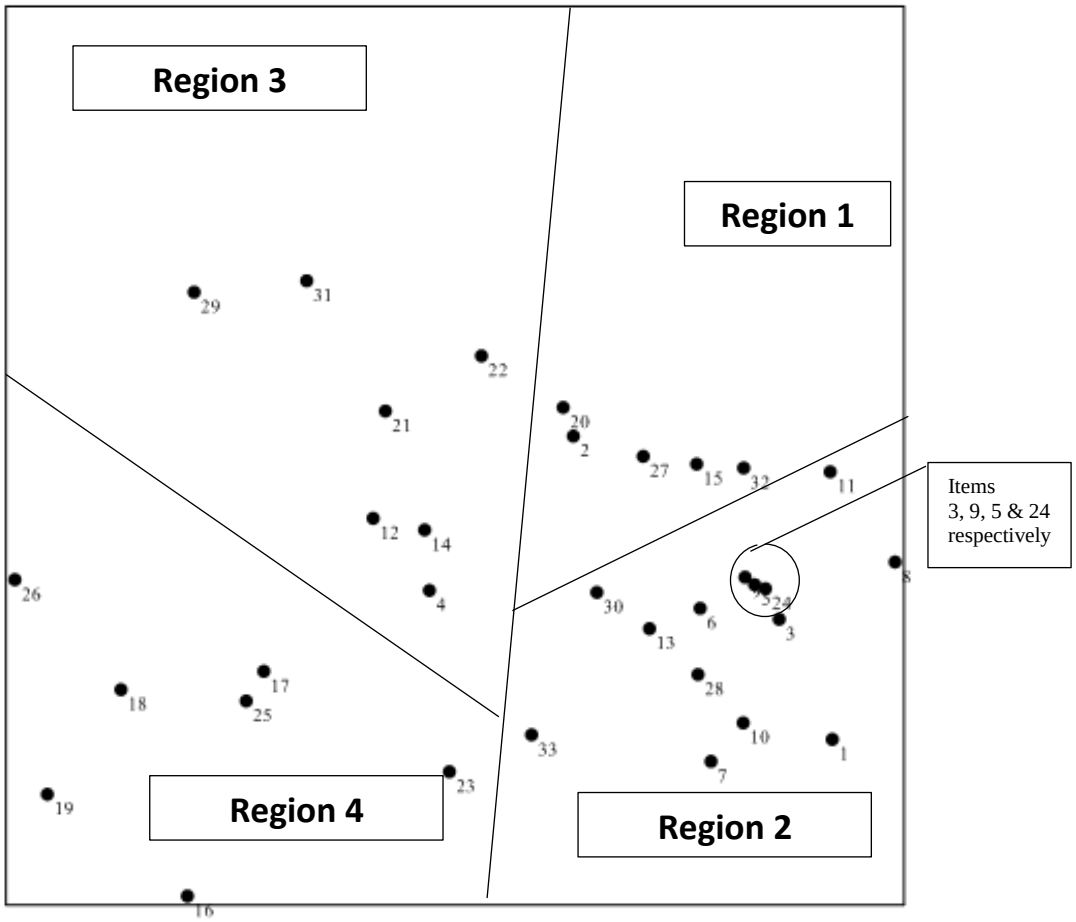

Figure 3.2: SSA regions of NRQ (N = 70)

Reliability Analysis of Regional Interpretation

The creation of regions on an SSA output is informed by item content and the theoretical underpinnings of the research, thus is a subjective interpretation of the data. Cronbach's alpha is a helpful way to measure each regions' internal consistency and identify appropriate placement of items. Therefore, a Cronbach's alpha at $p < .05$ was conducted for each of the four regions to assess for internal consistency and identify appropriate placement of items.

Internal Consistency – Region 1

The top right region, Region 1 comprised five items (2, 15, 20, 27 & 32) and obtained a Cronbach's alpha of $\alpha = .70$, $p < .05$, indicating 'respectable' internal consistency. This Cronbach's alpha would not increase if any item were deleted (see Appendix I, Table I1).

Internal Consistency – Region 2

The bottom right region, Region 2 comprised 14 items (1, 3, 5, 6, 7, 8, 9, 10, 11, 13, 24, 28, 30 & 33) and obtained a Cronbach's alpha of $\alpha = .88$, $p < .05$, indicating 'very good' internal consistency. This Cronbach's alpha would increase to $\alpha = .89$, $p < .05$ if item 30 "There was nothing special about what happened" (see Appendix I, Table I2) was deleted.

Item 30 "there was nothing special about what happened" was found to reduce the internal consistency of Region 2. In review of the SSA diagram and the division of regions (see *Figure 3.2*), item 30 could equally have been placed in Region 1. If item 30 were added to the Region 1, the hero regions Cronbach's alpha would reduce from $\alpha = .70$, $p < .05$ to $\alpha = .69$, $p < .05$.

Internal Consistency – Region 3

The top left region, Region 3 comprised seven items (4, 12, 14, 21, 22, 29 & 31). Region 3 obtained a Cronbach's alpha of $\alpha = .73$, $p < .05$ indicating 'respectable' internal consistency. This Cronbach's would not increase if any item were deleted (see Appendix I Table I3).

Internal Consistency – Region 4

The bottom left region, Region 4 comprised 7 items (16, 17, 18, 19, 23, 25 & 26). Region 4 obtained a Cronbach's alpha of $\alpha = .70$, $p < .05$ which is considered 'respectable' internal consistency. This Cronbach's alpha would increase to $\alpha = .73$, $p < .05$ if item 23 "What was happening was just fate" was deleted (see Appendix I, Table I4).

Item 23 could equally have been placed in either Region 3 or Region 2. When item 23 was added to Region 3, this regions Cronbach's alpha remained at $\alpha = .73$, $p < .05$. When item 23 was added to Region 2, Region 2's Cronbach's alpha remained at $\alpha = .88$, $p < .05$. Therefore item 23 does not increase or decrease the internal consistency of either Region 2 or Region 3, however the presence of item 23 does marginally decrease the Cronbach's alpha for Region 4. It is also worth noting that item 23 does not increase or decrease the NRQ Cronbach's alpha ($\alpha = .86$, $p < .05$ would remain at $\alpha = .86$, $p < .05$ if item 23 were deleted) (see Table 3.9 above). Therefore, the allocation of item 23 to a region is currently unclear thus it will remain in Region 4 for now.

<u>MDOs regions compared to Youngs and Canter (2012) and Ioannou et al., (2015) regions</u>

The NRQ is considered a fluid measure, whereby items may be located in different regions depending on the participant group being assessed. Therefore, it is not expected that all items from previous research by Youngs and Canter (2012) and Ioannou et. al., (2015) will be an exact replica of items within the current study's SSA regions. Therefore, to determine if the current study's regions are conceptually similar to the four regions (hero, professional, revenger and victim) proposed by Youngs and Canter (2012) and Ioannou et al., (2015), the following approach will be used.

The four regions and item location in Youngs and Canter (2012) and Ioannou et al., (2015) studies (hero, professional, revenger and victim) will be compared with the current studies SSA regions and item location (Region 1, Region 2, Region 3 & Region 4). Where a region of the current study has ≥ 50% of the same narrative role items from Youngs and Canter (2012) and Ioannou et al., (2015) studies and that this score is greater or approximately equal (±5%) to the total percentage score of the other three regions added together. That region will be considered conceptually similar to the dominant narrative role and allocated that narrative role label. For example purposes only: If 60% of Region 1 items were common with Youngs and Canter (2012) and Ioannou et al., (2015) hero region items, Region 1 would be considered conceptually similar to the hero narrative role and re-labelled hero. Where a region does not have ≥ 50% of items allocated to any narrative role, or where two narrative roles are equally represented with 50% of items each based on the results from Youngs and Canter (2012) and Ioannou et al., (2015), the original 'Region' label will remain. For example purposes only, if Region 1 did not have ≥ 50% of items present for any of the four narrative roles; or Region 1 had two narrative roles both representing 50% of items based on the results from Youngs and Canter (2012) and Ioannou et al., (2015), Region 1 will not be considered conceptually similar to any specific narrative role and will remain labelled as 'Region 1'). This classification approach has previously been adopted Ioannou et al., (2017), Canter and Firston (1998) and Salfati (2000).

Table 3.10 provides a summary of the current study's four SSA regions, with the number and percentage of items allocated to each narrative role (hero, professional, revenger and victim) reported in Youngs and Canter (2012) and Ioannou et al., (2015) studies (see Appendix H for a detailed description of region and item comparison). These results show

that when compared to Youngs and Canter (2012) and Ioannou et al., (2015) all four regions have ≥ 50% of common items with one specific narrative role and all four regions dominant percentage was greater or approximately equal to (±5%) the total percentage score of the other three regions added together (see Table 3.10). Specifically, Region 1 had 50% (*n* = 5) of items similar to the hero region across both studies. Region 2 had 64.3% (*n* = 18) of items similar to the professional region across both studies. Region 3 had 71.4% (*n* = 10) of items similar to the revenger region across both studies and Region 4 had 71.4% (*n* = 10) of items similar to the victim region across both studies.

Table 3.10

Summary of NRQ items

Regional Item Placement from Youngs and Canter (2012) & Ioannou et al., (2015)				
Narrative	**Region 1** *n* = 10	**Region 2** *n* = 28	**Region 3** *n* = 14	**Region 4** *n* = 14
Hero	**5 (50%)**	7 (25%)	0 (0%)	3 (21.4%)
Professional	2 (20%)	**18 (64.3%)**	1 (7.1%)	0 (0%)
Revenger	2 (20%)	2 (7%)	**10 (71.4%)**	3 (21.4%)
Victim	1 (10%)	1 (3.6%)	2 (14.3%)	**10 (71.4%)**

n refers to the combined number of items available across both studies for each region.

The results reported in Table 3.10 indicate that each of the current study's four regions (Region 1, Region 2, Region 3 and Region 4) are conceptually similar to the hero, professional, revenger and victim regions respectively, as reported by Youngs and Canter (2012) and Ioannou et al., (2015).

In addition to considering a numerical similarity between studies, it is also important to determine if the content of the items within each region are conceptually similar to the four narrative role descriptions (hero, professional, revenger and victim) provided by Canter & Youngs (2009) & Ioannou et al., (2015). Therefore a interpretative review of each of the current studies four regions (Region 1, Region 2, Region 3 and Region 4) individual items will be compared to the four narrative role descriptions (hero, professional, revenger and victim) provided by Canter and Youngs (2009) & Ioannou et al., (2015) (see Chapter 2: Methodology, Materials – NRQ). These comparisons are discussed below.

Region 1

Region 1 comprised 5 items (items: 2, 15, 20, 27 & 32) (see Table 3.11). All five items located to this region exhibited similarity to the hero narrative description provided by Canter and Youngs (2009) and Ioannou et al., (2015). Specifically, item 32 "I knew I was taking a risk", reflects the hero narrative which describes an offender who engages in risk taking (Ioannou et al., 2015). Item 2 "I had to do it", reflects the hero narrative which describes an offender who is somewhat incapable of stopping what is inevitable (Canter & Youngs, 2009). Item 20 "I was looking for recognition" reflects the hero narrative which describes an offender who is seeking a sense of pride, respect and recognition (Canter & Youngs, 2009). Item 27 "It was a manly thing to do" and item 15 "I had power" reflect the hero narrative where the offender perceives their offence as a manly and brave thing to do (Ioannou et al., 2015) and has a sense of bravado (Canter & Youngs, 2009). Overall, Region 1 is considered conceptually similar to the hero narrative descriptions provided by Canter & Youngs (2009) and Ioannou et al., (2015).

Table 3.11

SSA Region 1 items

NRQ Item No (SSA output number)	NRQ Question
2	I had to do it
15	I had power
20	I was looking for recognition
27	It was a manly thing to do
32	I knew I was taking a risk

Each number represents the matching NRQ question, with these numbers located on each SSA output

Region 2

Region 2 comprised 14 items (items: 1, 3, 5, 6, 7, 8, 9, 10, 11, 13, 24, 28, 30 & 33) (see Table 3.12). All fourteen items located to this region exhibited similarity to the professional narrative description provided by Canter and Youngs (2009) and Ioannou et al., (2015). Specifically, item 1 "I was like a professional" reflects the name of this narrative role provided by Canter and Youngs (2009) and Ioannou et al., (2015). Item 3 "It was fun", item 5 "it was interesting", item 6 "It was like an adventure" and item 9 "it was exciting" reflect the professional narrative, whereby the offender enjoys the need to adapt to change and is excited by the risk taking they engage in (Canter & Youngs, 2009). Item 7 "It was routine", item 8 "I was in control", item 10 "I was doing a job", item 24 "It all went to plan", item 28 "for me it was just like a usual days work" and item 30 "There was nothing special about what happened" reflect the professional narrative, whereby the offender remains calm and neutral in their responses (Canter & Youngs, 2009) and adopts a professional view of their offending (Ioannou et al., (2015). Finally item 11 "I knew what I was doing", item 13 "it was a mission" and item 33 "I guess I always knew it was going to happen" reflect the professional narrative, whereby the offender is considered to be pursuing a pilgrimage or journey (Canter & Youngs, 2009) and is a highly skilled and competent individual (Ioannou et al., 2015). Overall, Region 2 is

considered conceptually similar to the professional narrative description provided by Canter and Youngs (2009) and Ioannou et al., (2015).

Table 3.12

SSA Region 2 items

NRQ Item No (SSA output number)	NRQ Question
1	I was like a professional
3	It was fun
5	It was interesting
6	It was like an adventure
7	It was routine
8	I was in control
9	It was exciting
10	I was doing a job
11	I knew what I was doing
13	It was a mission
24	It all went to plan
28	For me it was just like a usual day's work
30	There was nothing special about what happened
33	I guess I always knew it was going to happen

Each number represents the matching NRQ question, with these numbers located on each SSA output.

Region 3

Region 3 comprised 7 items (items 4, 12, 14, 21, 22, 29 & 31) (see Table 3.13). All seven items located to this region exhibited similarity to the revenger narrative description provided by Canter and Youngs (2009) and Ioannou et al., (2015). Specifically, item 4 "It was right", item 12 "It was the only thing to do", item 29 "I was trying to get revenge" and item 31 "I was getting my own back" reflect the revenger narrative description, whereby the offender is seeking retaliation in response to perceived injustices, accusations or treated unfairly (Canter & Youngs, 2009) and believe they were right to take revenge (Ioannou et al., 2015). In addition, item 14 "Nothing else mattered", item 21 "I just wanted to get it over with" and item 22 "I

didn't care what would happen" also reflect the revenger narrative description, whereby the offender was driven by inevitable retaliation and believed the actions they took were their only choice (Canter & Youngs, 2009) and could not help themselves (Ioannou et al., 2015). Overall, Region 3 is considered conceptually similar to the revenger narrative description provided by Canter and Youngs (2009) and Ioannou et al., (2015).

Table 3.13

SSA Region 3 items

NRQ Item No (SSA output number)	NRQ Question
4	It was right
12	It was the only thing to do
14	Nothing else mattered
21	I just wanted to get it over with
22	I didn't care what would happen
29	I was trying to get revenge
31	I was getting my own back

Each number represents the matching NRQ question, with these numbers located on each SSA output.

Region 4

Region 4 comprised 7 items (items 16, 17, 18, 19, 23, 25 & 26) (see Table 3.14). All seven items located to this region exhibited similarity to the victim narrative description provided by Canter and Youngs (2009) and Ioannou et al., (2015). Specifically, item 18 "I was a victim" reflects the name of this narrative role provided by Canter and Youngs (2009) and Ioannou et al., (2015), and an offenders view that they were a victim of an event (Canter & Youngs, 2009). Item 16 "I was helpless", item 19 "I was confused about what was happening" and item 26 "It was like I was not part of it" reflect the victim narrative description, where by the offender experiences a sense of confusion and powerlessness, alongside trying to

make sense of a nonsensical world (Canter & Youngs, 2009). Item 17 “It was my only choice” and item 25 “I couldn’t stop myself” reflect the victim narrative description, whereby the offender believes their offence could not be avoided (Ioannou et al., (2015). Finally, item 23 “What was happening was just fate” reflects the victim narrative description, whereby the offender believes events in their life are due to external factors such as luck, chance or fate (Ioannou et. al., 2015). Overall, Region 4 is considered conceptually similar to the victim narrative description provided by Canter and Youngs (2009) and Ioannou et al., (2015).

Table 3.14

SSA Region 4 items

NRQ Item No (SSA output number)	**NRQ Question**
16	I was helpless
17	It was my only choice
18	I was a victim
19	I was confused about what was happening
23	What was happening was just fate
25	I couldn’t stop myself
26	It was like I wasn’t part of it

Each number represents the matching NRQ question, with these numbers located on each SSA output.

Overall, all four regions (Region 1, Region 2, Region 3 and Region 4) found in the current study are considered conceptually similar to the four narrative roles (hero, professional, revenger and victim) found by Canter and Youngs (2009) and Ioannou et al., (2015) quantitative and qualitive findings. Specifically, Region 1 was considered conceptually similar to the hero narrative role and will be re-labelled ‘Hero’. Region 2 was considered conceptually similar to the professional narrative role and will be re-labelled ‘Professional’. Region 3 was considered conceptually similar to the revenger narrative role will be re-labelled ‘Revenger’

and Region 4 was considered conceptually similar to the victim narrative role will be re-labelled 'Victim' (see *Figure 3.3*).

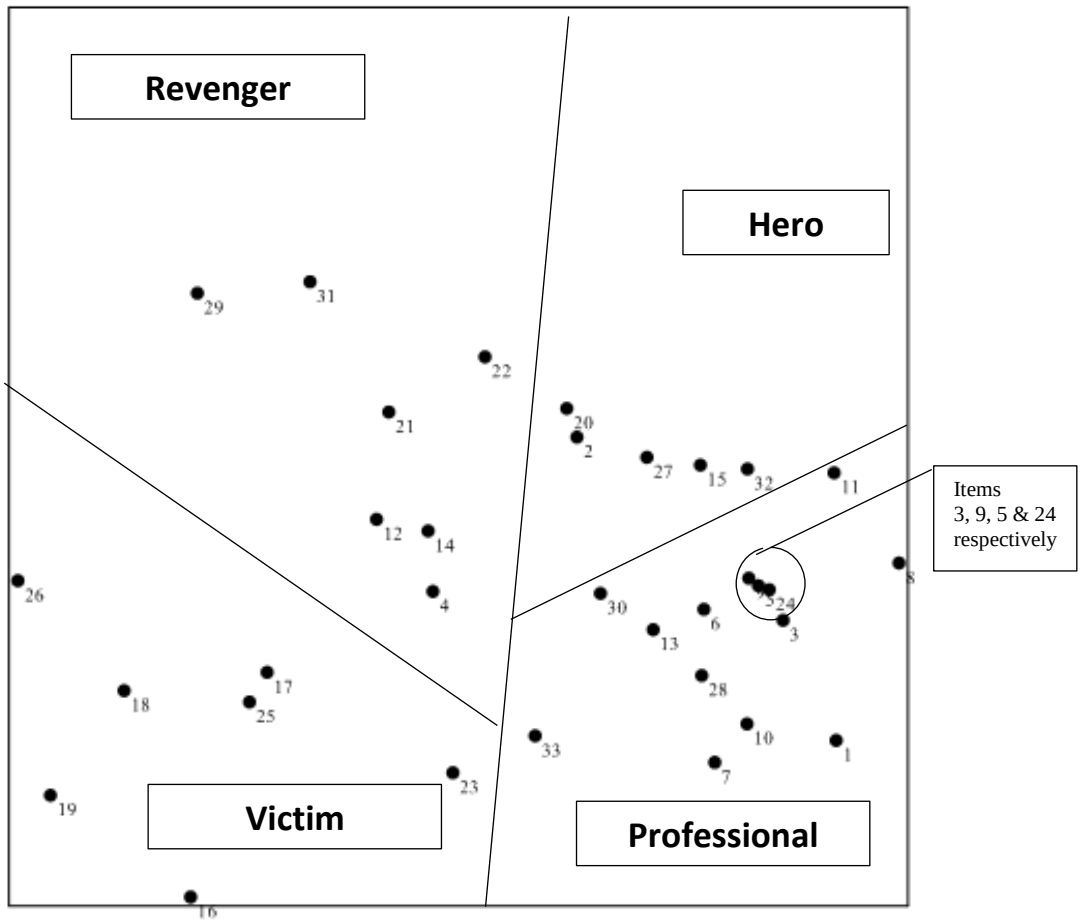

Figure 3.3: Regional Interpretation of SSA output for NRQ (N = 70)

<u>Reliability Analysis of Regional Interpretation</u>

Following the re-labelling of regions to narrative roles (her professional, revenger and victim), the internal consistency of the four regions (hero, professional, revenger and victim) will be compared with previous research findings by Ioannou et al., (2015). This comparison will assist in understanding whether the internal consistency of each region found for MDOs,

is comparable to the internal consistency of the four narratives (hero, professional, revenger and victim) for incarcerated, adult male offenders.

Internal Consistency – Hero

The hero region for MDOs comprised five items (2, 15, 20, 27 & 32) and obtained a Cronbach's alpha of $\alpha = .70$, $p < .05$, indicating 'respectable' internal consistency. This Cronbach's alpha was lower than the hero region ($n = 8$) from Ioannou et al., (2015) study which had 'very good' internal consistency ($\alpha = .81$, $p < .05$).

Internal Consistency – Professional

The professional region for MDOs comprised 14 items (1, 3, 5, 6, 7, 8, 9, 10, 11, 13, 24, 28, 30 & 33) and obtained a Cronbach's alpha of $\alpha =.88$, $p < .05$, indicating 'very good' internal consistency. This Cronbach's alpha was higher than the professional region ($n = 7$) from Ioannou et al., (2015) study which had 'respectable' internal consistency ($\alpha = .76$, $p < .05$).

Internal Consistency – Revenger

The revenger region for MDOs comprised seven items (4, 12, 14, 21, 22, 29 & 31) and obtained a Cronbach's alpha of $\alpha = .73$, $p < .05$, indicating 'respectable' internal consistency. This Cronbach's alpha was marginally lower than the revenger region ($n = 8$) from Ioannou et al., (2015) study which also had 'respectable' internal consistency ($\alpha = .78$, $p < .05$).

Internal Consistency – Victim

The bottom left region, Region 4 comprised 7 items (16, 17, 18, 19, 23, 25 & 26) and obtained a Cronbach's alpha of $\alpha = .70$, $p < .05$ which is considered 'respectable' internal consistency. This Cronbach's alpha was lower than the victim regions ($n = 10$) from Ioannou et al., (2015) study which had 'very good' internal consistency ($\alpha = .85$, $p < .05$).

Summary of Results: Hypothesis 1 - Structure and Internal Consistency of the NRQ

Results from the analysis of the NRQ for MDOs ($N = 70$) found that the NRQ had 'very good' internal consistency ($\alpha = .86$, $p < .05$). Two items, item 8 "I was in control" and item 19 "I was confused about what was happening" did not contribute to the internal consistency of the NRQ ($\alpha = .86$, $p < .05$ would increase to $\alpha = .87$, $p < .05$, if either item were deleted). This internal consistency of the NRQ when administered to MDOs was similar to the internal consistency found by Youngs and Canter (2012) when administered to $N = 71$, adult male, incarcerated offenders ($\alpha = .85$, $p < .05$).

Analysis of the structure of the NRQ for MDOs, found the presence of four regions (Region 1, Region 2, Regions 3 and Region 4) which were considered conceptually similar to the four narrative roles (hero, professional, revenger and victim respectively) found in previous research (Canter & Youngs, 2009; Youngs & Canter, 2012; Ioannou et. al., 2015). The internal consistency of each of the four regions in the current study was considered 'very good' (professional region, $\alpha = .88$, $p < .05$) or 'acceptable' (hero $\alpha = .70$, $p < .05$, revenger $\alpha = .73$, $p < .05$ and victim region $\alpha = .70$, $p < .05$).

Two items, item 23 “What was happening was just fate” and item 30 “There was nothing special about what happened” were found to marginally decrease the Cronbach’s alpha of their identified regions (victim and professional regions respectively). Item 23, located in the victim region, could also have been located in two other regions: professional or revenger regions. The presence of item 23 neither increased, nor decreased the Cronbach’s alpha of either of these two regions. Item 30, located in the professional region, could also have been located in a second region, the hero region. The presence of item 30 in the hero region, would marginally decrease the Cronbach’s alpha of the hero region but did not change the internal consistency range of ‘minimally acceptable’. Both items (item 23 and 30) did not increase, nor decrease the Cronbach’s alpha of the NRQ.

When the internal consistency of each region was compared to Ioannou et al., (2015) study on non-mentally disordered offenders. Region 1 (hero), in the current study had ‘acceptable’ internal consistency ($\alpha = .70$, $p < .05$), however this was not strong as the internal consistency of the hero region which was ‘very good’ ($\alpha = .81$, $p < .05$) found by Ioannou et al., (2015). Furthermore, Region 1 (hero, $n = 5$) in the current study had three fewer items than Ioannou et al., (2015) hero region ($n = 8$). The internal consistency of Region 2 (professional) for the current study had ‘very good’ internal consistency ($\alpha =.88$, $p < .05$), which was better than the internal consistency found for the professional region which was respectable in Ioannou et al., (2015) study ($\alpha =.76$, $p < .05$). In the current study, Region 2 (professional) had double the number of items located in that region ($n = 14$), compared to Ioannou e. al., (2015) professional region ($n = 7$). Region 3 (revenger) and Region 4 (victim) for the current study both had respectable internal consistency ($\alpha = .73$, $p < .05$ and $\alpha = .70$, $p < .05$, respectively). The internal consistency for these two regions were not strong as the internal consistency found

in the revenger ($\alpha = .78$, $p < .05$) and victim ($\alpha = .85$, $p < .05$) regions by Ioannou et al., (2015). Furthermore, Region 3 (revenger, $n = 7$) in the current study had one less item than the revenger region ($n = 8$) found by Ioannou et al., (2015). Region 4 (victim, $n = 7$) in the current study had three less items than the victim region ($n = 10$) found by Ioannou et al., (2015) (see Table 3.15).

Table 3.15

Summary table of the four SSA regions Cronbach's alpha compared to Ioannou et al., (2015)

	Cronbach's Alpha (α) p < .05	
Narrative Role Number of items	**SSA** **MDOs** ***N* = 70**	**Ioannou et al., (2015)** ***N* = 120**
Hero Number of items	.70 5	**.81** 8
Professional Number of items	**.88** 14	.76 7
Revenger Number of items	.73 7	**.78** 8
Victim Number of items	.70 7	.85 10

Items in bold have the stronger Cronbach's alpha

3.5 Results: Hypothesis 2 – 13 Core NRQ items

The second hypothesis was that when administered to MDOs, a core 13 items of the NRQ (items 1, 4, 7, 10, 11, 16, 18, 19, 20, 27, 28, 29 & 31) would be located within a specific region considered conceptually similar to the hero, professional, revenger and victim regions as found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015). It was hypothesised that two items would be located in the hero region, (items 20 & 27), five items

(items 1, 7, 10, 11, 28) would be located within the professional region, three items (items 4, 29 & 31) would be located in the revenger region and three items (items 16, 18 & 19) would be located within in the victim region. The results from the SSA output with regional interpretation shows that all 13 items (1, 4, 7, 10, 11, 16, 18, 19, 20, 27, 28, 29 & 31) were located within their hypothesised regions (see summary Table 3.16).

Table 3.16

Summary table of 13 core items SSA regional placement for all offenders, offence type and psychiatric diagnosis

Narrative Region	**NRQ Item**	**Regional Item Location** ***N = 70***
Hero		
	Item 20: I was looking for recognition	*Yes*
	Item 27: It was a manly thing to do	*Yes*
Professional		
	Item 1: I was like a professional	*Yes*
	Item 7: It was routine	*Yes*
	Item 10: I was doing a job	*Yes*
	Item 11: I knew what I was doing	*Yes*
	Item 28: For me it was a usual days work	*Yes*
Revenger		
	Item 4: It was right	*Yes*
	Item 29: I was trying to get revenge	*Yes*
	Item 31: I was getting my own back	*Yes*
Victim		
	Item 16: I was helpless	*Yes*
	Item 18: I was a victim	*Yes*
	Item 19: I was confused about what was happening	*Yes*

Comparison of Individual Items and Regional Internal Consistency

Hero SSA Region

The two items (item 20 and 27) hypothesized to be located in the hero SSA region contributed to the internal consistency of that region ($\alpha = .70$, $p < .05$ would reduce to $\alpha = .65$, $p < .05$, if either item were deleted). In addition, both items contributed to the internal consistency of the NRQ ($\alpha = .86$, $p < .05$ would reduce to $\alpha = .85$, $p < .05$ if either item were deleted) (see Table 3.17).

Professional SSA Region

One of the five items (item 10) hypothesised to be located in the professional SSA region contributed to the internal consistency of that region ($\alpha = .88$, $p < .05$ would reduce to $\alpha = .87$, $p < .05$, if item 10 were deleted). Whilst the remaining four items (items 1, 7, 11 & 28) hypothesised to be located in the professional region neither increased, nor decreased the professional regions Cronbach's alpha ($\alpha = .88$, $p < .05$ would remain at $\alpha = .88$, $p < .05$ if any of the four items were deleted). Four of the five items (items 7, 10, 11 & 28) did contribute to the internal consistency of the NRQ ($\alpha = .86$, $p < .05$ would reduce to $\alpha = .85$, $p < .05$ if any of the four items were deleted). However, one item (item 1) did not increase or decrease the Cronbach's alpha for the NRQ ($\alpha = .86$, $p < .05$ would remain at $\alpha = .86$, $p < .05$ if item 1 was deleted) (see Table 3.17).

Revenger SSA Region

All three items (items 4, 29 and 31) hypothesised to be located in the revenger SSA region contributed to the internal consistency of that region ($\alpha = .73$, $p < .05$ would reduce to $\alpha = .72$, $p < .05$; $\alpha = .70$, $p < .05$ and $\alpha = .68$, $p < .05$ respectively, if any of these three items

were deleted). However, all three items neither increased, nor decreased the internal consistency of the NRQ ($\alpha = .86$, $p < .05$ would reduce to $\alpha = .86$, $p < .05$ if any of the three items were deleted) (see Table 3.17).

Victim SSA Region

All three items (items 16, 18 & 19) hypothesised to be located in the victim region, contributed to the internal consistency of that region ($\alpha = .70$, $p < .05$ would reduce to $\alpha = .67$, $p < .05$; $\alpha = .61$, $p < .05$ and $\alpha = .66$, $p < .05$ respectively, if any of the three items were deleted). Two items (item 16 & 18) neither increased, nor decreased the internal consistency of the NRQ ($\alpha = .86$, $p < .05$ would reduce to $\alpha = .86$, $p < .05$ if any of the three items were deleted). Furthermore, item 19 did not to contribute to the internal consistency of the NRQ ($\alpha = .86$, $p < .05$ would increase to $\alpha = .87$, $p < .05$ if item 19 were deleted) (see Table 3.17).

Table 3.17

Cronbach's alpha – 13 core items SSA region and NRQ if item deleted

Narrative Region $\alpha =$, $p < .05$	**NRQ Item**	**SSA Region Cronbach's alpha if item deleted** $\alpha =$, $p < .05$	**NRQ** **$\alpha = .86, p < .05$** **Cronbach's alpha if item deleted** $\alpha =$, $p < .05$
Hero $n = 2$ $\alpha = .70, p < .05$	20: I was looking for recognition	.65	.85
	27: It was a manly thing to do	.65	.85
Professional $n = 5$ $\alpha = .88, p < .05$	1: I was like a professional	**.88**	**.86**
	7: It was routine	**.88**	.85
	10: I was doing a job	.87	.85
	11: I knew what I was doing	**.88**	.85
	28: For me it was a usual days work	**.88**	.85
Revenger $n = 3$ $\alpha = .73, p < .05$	4: It was right	.72	**.86**
	29: I was trying to get revenge	.70	**.86**
	31: I was getting my own back	.68	**.86**
Victim $n = 3$ $\alpha = .70, p < .05$	16: I was helpless	.67	**.86**
	18: I was a victim	.61	**.86**
	19: I was confused about what was happening	.66	.87*

Items in **bold** did not increase, nor decrease the internal consistency of the identified Cronbach's alpha

*Cronbach's alpha would increase if that item were deleted

Summary of Results: Hypothesis 2 – 13 Core NRQ items

All 13 core items were located within their hypothesised regions. Specifically, two items were located in the hypothesised hero region, (items 20 & 27), five items (items 1, 7, 10, 11, 28) were located in the hypothesized professional region, three items (items 4, 29 & 31) were located in the hypothesised revenger region and three items (items 16, 18 & 19) were located in the hypothesised victim region.

Both items (item 20 & 27) in the hero region contributed to the internal consistency of this region. In addition, both items contributed to the internal consistency of the NRQ. One of the five items in the professional region (item 10) contributed to the internal consistency of the professional region, whilst the remaining four items (items 1, 7, 11 & 28) neither increased, nor decreased the Cronbach's alpha for the professional region. Four of the five items (items 7, 10, 11 & 28) in the professional region did however contribute to the internal consistency of the NRQ. One item (item 1) did not increase, nor decrease the Cronbach's alpha for the NRQ. Three items (items 4, 29 & 31) contributed to the internal consistency of the revenger region. However all three items neither increased, nor decreased the Cronbach's alpha for the NRQ. Finally, all three items (items 16, 18 & 19) of the victim region, contributed to the internal consistency of this region. Two items (items 16 & 18) also contributed to the internal consistency of the NRQ, however one item (item 19) did not contribute to the internal consistency of the NRQ.

In summary, all 13 core items were located in their hypothesised regions. Three of the 13 items (items 20, 27 & 10) contributed to the internal consistency of both their identified region (hero, hero and professional respectively) and the NRQ. Nine items (items 4, 7, 11, 16,

18, 19, 28, 29 & 31) contributed to the internal consistency of either their identified region (revenger: 4, 29 & 31; victim: 16, 18 & 19) or to the NRQ (items 7, 11 & 28 (professional region)). One item (item 1) did not increase, nor decrease the Cronbach's alpha for either its identified region (professional) or the NRQ.

3.6 Results: Hypothesis 3 – 20 Fluid NRQ items

The third hypothesis was that 20 fluid items of the NRQ (items 2, 3, 5, 6, 8, 9, 12, 13, 14, 15, 17, 21, 22, 23, 24, 25, 26, 30, 32 & 33) would be located within one of two identified regions for MDOs as found in previous research by Youngs and Canter, 2012 & Ioannou et al., (2015). Specifically, it was hypothesised that seven items (items 3, 5, 6, 9, 24, 30 & 32) would be located within either the professional or hero region, six items (items 2, 12, 17, 21, 22 & 23) would be located within either the victim or revenger region, three items (items 8, 14 & 15) would be located within revenger or professional region, two items (items 13 & 25) would be located in the revenger or hero region, one item (item 26) would be located in either the victim or hero region and one item (item 33) would be located in the victim or professional region.

Sixteen of the proposed 20 items (item 3, 5, 6, 8, 9, 12, 14, 17, 21, 22, 23, 24, 26, 30, 32 & 33) were located within one of the two identified narrative regions for five of the six categories (professional or hero, victim or revenger, revenger or professional, revenger or hero, victim or hero and victim or professional). Four items (item 2 "I had to do it", 13 "It was a mission", 15 "I had power" and 25 "I couldn't stop myself") were located in a third region (see Table 3.18).

Table 3.18

Placement of 20 fluid items into one of two SSA regions

Narrative Region	**NRQ Item**	***N=70***
Professional or Hero (*n* = 7)	3: It was fun	Yes (Prof)
	5: It was interesting	Yes (Prof)
	6: It was like an adventure	Yes (Prof)
	9: It was exciting	Yes (Prof)
	24: It all went to plan	Yes (Prof)
	30: There was nothing special about what happened	Yes (Prof)
	32: I knew I was taking a risk	Yes (Hero)
Victim or Revenger (*n* = 6)	2: I had to do it*	**No** ***(Hero)***
	12: It was the only thing to do	Yes *(Rev)*
	17: It was my only choice	Yes *(Vic)*
	21: I just wanted to get it over with	Yes *(Rev)*
	22: I didn't care what would happen	Yes *(Rev)*
	23: What was happening was just fate	Yes *(Vic)*
Revenger or Professional (*n* = 3)	8: I was in control	Yes (Prof)
	14: Nothing else mattered	Yes *(Rev)*
	15: I had power*	**No** **(Hero)**
Revenger or Hero (*n* = 2)	13: It was a mission*	**No** ***(Prof)***
	25: I couldn't stop myself*	**No** ***(Vic)***
Victim or Hero (*n* = 1)	26: It was like I wasn't part of it	Yes *(Vic)*
Victim or Professional (1 item)	33: I guess I always knew it was going to happen	Yes *(Prof)*

* Represents an item located in a 'third' region

Comparison of Individual Items and Regional Internal Consistency

Of the seven items (items 3, 5, 6, 9, 24, 30 & 32) hypothesised to be located in the 'professional or hero' region, six items (items 3, 5, 6, 9, 24 & 30) were located in the professional region and one item (item 32), was located in the hero region.

Five of the six items (items 3, 5, 6, 9 & 24) located in the professional region contributed to the internal consistency of this region (α =.88, $p < .05$, would reduce to α =.87, $p < .05$ if any of the five items were deleted). Furthermore, all five items contributed to the internal consistency of the NRQ (α =.86, $p < .05$, would reduce to α =.85, $p < .05$ if any of the five items were deleted). One item, (item 30) did not contribute to the internal consistency of the professional region (α =.88, $p < .05$, would increase to α =.89, $p < .05$ if item 30 were deleted). Additionally, item 30 neither increased, nor decreased the Cronbach's alpha of the NRQ (α =.86, $p < .05$, would remain at α =.86, $p < .05$ if item 30 were deleted) (see Table 3.19).

The one item (item 32) located in the hero region, contributed to the internal consistency of this region (α =.70, $p < .05$, would reduce to α =.66, $p < .05$ if item 32 were deleted). Furthermore, item 32 contributed to the internal consistency of the NRQ (α =.86, $p < .05$, would reduce to α =.85, $p < .05$ if item 32 were deleted) (see Table 3.19).

Six items (items 2, 12, 17, 21, 22 & 23) were hypothesised to be located in the 'victim or revenger' region, three items (items 17 & 23) were located in the victim region and three items (items 12, 21, & 22) were located in the revenger region. One item (item 2) was located in a third region, the hero region (see Table 3.19).

The two items located in the victim region (item 17 & 23), item 17 contributed to the internal consistency of the victim region (α =.70, $p < .05$, which would reduce to α =.65, $p < .05$ if item 17 were deleted). Item 17 also contributed to the internal consistency of the NRQ (α =.86, $p < .05$, which would reduce to α =.85, $p < .05$ if item 17 were deleted). Item 23 did not contribute to the internal consistency of the victim region (α =.70, $p < .05$, which increased to α =.73, $p < .05$ if item 17 were deleted). Furthermore, item 23 did not increase, nor decrease the Cronbach's alpha of the NRQ (α =.86, $p < .05$, would remain at to α =.86, $p < .05$ if item 23 were deleted) (see Table 3.19).

All three items (items 12, 21 & 22) located in the revenger region, contributed to the internal consistency of this region (α =.73, $p < .05$, which would reduce to α =.72, $p < .05$ if item 12 were deleted; α =.73, $p < .05$, which would reduce to α =.71, $p < .05$ if item 21 were deleted and α =.73, $p < .05$, which would reduce to α =.67, $p < .05$ if item 22 were deleted). All three items also contributed to the internal consistency of the NRQ (α =.86, $p < .05$, which would reduce to α =.85, $p < .05$ if any of the three items were deleted) (see Table 3.19).

The one item (item 2), which was located in a third region, the hero region contributed to the internal consistency of this region (α =.70, $p < .05$, which would reduce to α =.67, $p < .05$ if item 2 were deleted). Item 2 also contributed to the internal consistency of the NRQ (α =.86, $p < .05$, which would reduce to α =.85, $p < .05$ if item 2 were deleted) (see Table 3.19).

Three items (items 8, 14 & 15) were hypothesised to be located in either the 'revenger or professional' region. One item (item 8) was located in the professional region, one item

(item 14) was located in the revenger region and one item (item 15) was located in a third region, the hero region (see Table 3.19).

Item 8 neither increased, nor decreased the internal consistency for the professional region (α =.88, p < .05 would remain at α =.88, p < .05 if item 8 were deleted). Furthermore, removal of item 8 from the NRQ would marginally increase the NRQs internal consistency from α =.86, p < .05 would to α =.87, p < .05. Item 14 contributed to the internal consistency of the revenger region (α =.70, p < .05, which would reduce to α =.69, p < .05 if item 14 were deleted). Item 14 also contributed to the internal consistency of the NRQ (α =.86, p < .05, which would reduce to α =.85, p < .05 if item 14 were deleted). Item 15 contributed to the internal consistency of the hero region (α =.70, p < .05, which would reduce to α =.64, p < .05 if item 15 were deleted). Item 15 also contributed to the internal consistency of the NRQ (α =.86, p < .05, which would reduce to α =.85, p < .05 if item 15 were deleted) (see Table 3.19).

Both items (items 13 & 25) hypothesised to be located in either the 'revenger or hero' regions, were located in a third region (professional and victim regions respectively). Item 13 contributed to the internal consistency of the professional region (α =.88, p < .05, which would reduce to α =.87, p < .05 if item 13 were deleted). Item 13 also contributed to the internal consistency for the NRQ (α =.86, p < .05, which would reduce to α =.85, p < .05 if item 2 were deleted). Item 25 contributed to the internal consistency of the victim region (α =.70, p < .05, which would reduce to α =.67, p < .05 if item 25 were deleted). However, item 25 did not increase, nor decrease the internal consistency for the NRQ (α =.86, p < .05, which would remain at α =.86, p < .05 if item 25 were deleted) (see Table 3.19).

The one item (item 26) hypothesised to be located in the 'victim or hero' region, was located in the victim region. Item 26 contributed to the internal consistency of the victim region (α =.70, $p < .05$, which would reduce to α =.67, $p < .05$ if item 26 were deleted). Item 26 neither increased, nor decreased the Cronbach's alpha for the NRQ (α =.86, $p < .05$, which would remain at α = .86, $p < .05$ if item 26 were deleted) (see Table 3.19).

The one item (item 33) hypothesised to be located in the 'victim or professional' region, was located in the professional region. Item 33 neither increased, nor decreased the Cronbach's alpha of the professional region (α =.88, $p < .05$, which would remain at to α =.88, $p < .05$ if item 25 were deleted). However, item 33 did contribute to the internal consistency of the NRQ (α =.86, $p < .05$, which would reduce to α =.85, $p < .05$ if item 33 were deleted) (see Table 3.19).

Table 3.19

Cronbach's alpha – 20 fluid items SSA region and NRQ if item deleted

SSA Region (α = p < .05)	**NRQ Item**	**SSA Region Cronbach's Alpha if item deleted** α = < .05	**NRQ** ***α* = .86, *p* < .05 Cronbach's alpha if item deleted** α = < .05
Hero (α = .70, *p* < .05)	2: I had to do it**	.67	.85
	15: I had power**	.64	.85
	32: I knew I was taking a risk	.66	.85
Professional (α = .88, *p* < .05)	3: It was fun	.87	.85
	5: It was interesting	.87	.85
	6: It was like an adventure	.87	.85
	8: I was in control	**.88**	.87*
	9: It was exciting	.87	.85
	13: It was a mission**	.87	.85
	24: It all went to plan	.87	.85
	30: There was nothing special about what happened	.89*	**.86**
	33: I guess I always knew it was going to happen	**.88**	.85
Revenger (α = .73, *p* < .05)	12: It was the only thing to do	.72	.85
	14: Nothing else mattered	.69	.85
	21: I just wanted to get it over with	.71	.85
	22: I didn't care what would happen	.67	.85
Victim (α = .70, *p* < .05)	17: It was my only choice	.65	.85
	23: What was happening was just fate	.73*	**.86**
	25: I couldn't stop myself**	.67	**.86**
	26: It was like I wasn't part of it	.67	**.86**

Items in **bold** did not increase, nor decrease the internal consistency of the identified Cronbach's alpha

*Cronbach's alpha would increase if that item were deleted

** Represents an item located in a 'third' region

Summary: Hypothesis 3 – 20 Fluid NRQ items

Sixteen of the 20 fluid NRQ items (item 3, 5, 6, 8, 9, 12, 14, 17, 21, 22, 23, 24, 26, 30, 32 & 33) were located within one of the two identified narrative regions for five of the six categories (professional or hero, victim or revenger, revenger or professional, revenger or hero, 'victim or hero' and 'victim or professional'). Four items (item 2, 13, 15 & 25) were located

in a third region, including: item 2 “I had to do it” and item 15 “I had power” were both located in the hero region instead of either the ‘victim or revenger’ and ‘revenger and professional’ regions respectively. Item 13 “It was mission” was located in the professional region instead of either the ‘revenger or hero region’. Item 25 “I couldn’t stop myself” was located in the victim region instead of either the ‘revenger or hero region.

Eleven of the 16 items located within one of the two hypothesised regions (item 3, 5, 6, 9, 12, 14, 17, 21, 22, 24 and 32), contributed to the internal consistency of their identified region (hero: item 32; professional: items 3, 5, 6, 9 & 24; revenger: items 12, 14, 21 & 22 & victim: item 17) and the NRQ. Of the four items (item 2, 13, 15 & 25) located in a third region (hero, hero, professional and hero respectively), three items (item 2, 13 & 15) contributed to the internal consistency of their identified region and the NRQ. Two items (item 25 & 26) contributed to the internal consistency of their identified region (victim region). However, neither item increased nor decreased the Cronbach’s alpha for the NRQ. Whilst item 33 did not increase, nor decrease the Cronbach’s alpha of its identified region (professional region). Item 33 did contribute to the internal consistency of the NRQ. Three items (items 8, 23 & 30) did contribute to either their identified region (professional, victim and professional regions respectively) or the NRQ.

In summary, 16 of the 20 items were located within one of the two hypothesized regions. Fourteen of the 20 items (items 2, 3, 5, 6, 9, 12, 13, 14, 15, 17, 21, 22, 24 & 32) contributed to the internal consistency of both their identified regions and the NRQ. Three items (items 19, 25, 26 & 33) contributed either to Cronbach’s alpha for their identified region

or to the Cronbach's alpha for the NRQ. Three items (items 8, 23 & 30) did not contribute to either their identified regions or the NRQ Cronbach's alpha.

3.7 Chapter 3 (Study 1) Summary

Study 1 was the first time a comparison of the only two previously published studies on the NRQ (Ioannou et al., 2015; Youngs & Canter, 2012) has occurred, and the first time the NRQ the presence of 'core' items (items located in one specific narrative role) and 'fluid' items (items located in one of two specific narrative roles) has been considered. It was also the first time the NRQ has been administered to MDOs in forensic mental health settings instead of incarcerated adult male offenders. Study 1 sought to explore the internal consistency and structure of the NRQ when administered to MDOs and compare these findings to previously published research on the NRQ by Youngs and Canter (2012) and Ioannou et al., (2015). The findings from Study 1 were that when administered to MDOs, the NRQ has similar internal consistency and structural consistency (Hypothesis 1). The same four narrative regions (hero, professional, revenger and victim) were found and each narrative region had comparable internal consistency to incarcerated, adult male offenders' narrative roles. Additionally, the presence of all 13 core items (Hypothesis 2) and 16 of 20 fluid items (Hypothesis 3) were also found.

The results from Study 1 provide support for the NRQ and its four narrative regions (hero, professional, revenger and victim) for both MDOs and incarcerated offenders. However, understanding the challenges when comparing MDOs with incarcerated offenders is important. The prison population is reported to have high rates of offenders with a diagnosis of MD compared to the general population (Fridell et al., 2008; Fazel and Seewald, 2012; National

Audit Office, 2017), some of whom may be undiagnosed (Martin, Hynes, Hatcher & Coleman, 2016). Additionally, assessing the presence or absence of MD is subject to various methodological difficulties, such as: researchers not explicitly assessing for or reporting the presence of MD; the use of varying definitions and differing diagnostic definition used (Eher & Turner, 2019; Golenkov et al., 2016) and the potential for diagnostic error (Martin, Hynes, Hatcher & Coleman, 2016), whereby approximately 10-15% of offenders are reportedly misclassified (Beaudette & Stewart, 2016). There is also a paucity of research focused exclusively on the percentage of offenders who experienced MD at the time of offending. Therefore, if MD is not reported in a study it does not necessarily mean MD was not present, instead absence of MD could be because the question was never asked, or MD had not been identified. As such, participants included in Study 1 (MDOs and incarcerated offenders) may not have been inherently different from one another, hence the similarity of findings. However, there were additional differences between all three participant groups that provide support for the structure and internal consistency of the NRQ. Specifically, all three studies: were conducted at different locations in the UK (prison, medium secure Forensic Mental Health Unit and community settings); were conducted at different time points and participants groups varied from one another in relation to offence type (violent, sexual and general offending) (Ioannou et al., 2015; Youngs & Canter, 2012).

Whilst findings from Study 1 suggest the NRQ can be applicable to both MDOs and incarcerated offenders, the quality of the NRQ was yet to be clearly established. The quality of a measure should reflect both 'validity' (e.g. content, construct, structural) (Onwuegbuzie et al., 2007; Kumar, 2016; Younas & Porr, 2018) and 'reliability' (aka internal consistency) (Taber, 2013a; Morgado et al., 2017), as measured by Cronbach's alpha (Cronbach, 1951;

Taber, 2017). Bonett and Wright (2015) recommend conducting Cronbach's alpha on subpopulations to further support internal consistency. Study 1 does this by comparing the Cronbach's alpha for incarcerated offenders versus MDOs. To compare structural validity, MDOs responses on the NRQ were analysed using the same analytical approach (SSA) as the two previously published studies (Ioannou et al., 2015; Youngs & Canter, 2012). This enabled direct comparisons between both the narrative regions identified across all three studies and their respective items, of which the same four narrative regions was found. To further contextualise these findings internal consistency (as assessed by Cronbach's alpha) for each region was conducted, whereby all four narrative regions were considered to have 'acceptable' or 'very good' internal consistency. Whilst there was some variation in the Cronbach's alpha found for the four narrative regions of MDOs compared to incarcerated offenders. Cronbach's alpha can be affected by number of items, item inter correlations and dimensionality (Vaske, Beaman & Sponarski, 2017), which may explain some of the differences found between both Study 1 and Ioannou et al., (2015) study. For example, narrative regions which obtained a higher Cronbach's also had the greater number of items both between and within studies. Therefore, the difference in internal consistency between studies may be a response to the number of items in the identified region, as opposed to the participant sample it was conducted on.

Overall, the findings from Study 1 indicate support for the NRQ, its four narrative regions and the presence of newly introduced 'core and 'fluid' items. However, there are still some unresolved items (item 1, 2, 8, 13, 15, 19, 23, 25 & 30) and their respective regions victim, professional and hero) that warrant further exploration due to their lack of contribution to their identified region or the NRQ as informed by 'Alpha if item Deleted'. Alpha if Item

Deleted is a helpful way to assess the relevance of an item to a measure, however removing such items should only occur if they 'substantially' decrease the Cronbach's alpha (Vaske, Beaman & Sponarski, 2017). Additionally, Cronbach's does not test stability or consistency of a measure (Vaske, Beaman & Sponarski, 2017) or unidimensionality (Ten Berge & Socan, 2004). Therefore, Study 2 will adopt a more commonly accepted measure of scale development, EFA with a view to compare those findings with the SSA results from this study. It is hoped that by conducting EFA, results will be less subject to researcher bias and further clarity regarding the structure of the NRQ and item placement will occur.

Chapter 4

Study 2: Exploratory Factor Analysis of the 33-item Narrative Roles Questionnaire (NRQ)

SSA draws upon FT to enable theory construction, data analysis and fluid interpretation of data to occur on complex studies (Guttman & Greenbaum, 1998). Drawing on FT and adopting Frye's 1957 theory of mythoi (Frye, 2006) and McAdams (1988) narrative theory the developers of the NRQ were able to generate hypothesis that were bi-directional in nature (e.g. hypothesis as informed by the literature *and* data) (Canter & Youngs, 2009). Their research found support for the development of the NRQ (Canter, Kaouri & Ioannou, 2003) and later, the presence of four narrative roles (her, professional, revenger and victim) as analysed by SSA for incarcerated offenders (Canter & Youngs, 2009; Ioannou et al., 2015; 2017; Youngs & Canter 2012). To date, there has been no attempt to establish the structural (construct) validity of the NRQ outside of the use of SSA which is often subject to criticism. Furthermore, research on the NRQ has only ever been conducted on groups of offenders (Ciesla, Ioannou & Hammond, 2019; Ioannou et al., 2017; Ioannou, Synnott, Lowe & Tzani-Pepelasi, 2018), therefore the ability to administer and interpret the NRQ for individual offenders (e.g. a scoring key) does not yet exist. As such, the NRQ remains a theoretical framework for understanding criminality with limited practical utility.

Factor analysis (e.g. EFA, CFA) is one of the most commonly used analytic approaches when assessing content validity and internal structure (dimensionality) of items of a psychometric measure (Clark & Miller, 2013; Finch, 2019; Flora & Flake, 2017; Reio & Shuck, 2015; Shelby, 2011; Williams & Vaske, 2003; Wolf, Harrington, Younas & Poor, 2018) as is structural equation modelling (SEM) (Guo et al., 2017; Marsh et al., 2014). Therefore, researchers may be more confident in results provided by these analytic approaches over SSA. However there have been a small number of researchers who have analysed data using both SSA and FA and reported that SSA provides a richer understanding of a scale and subfactors

to occur (Alt, 2018; Cohen, 2005; Maslovaty, Marshall, & Alkin, 2001; Tucker-Drob & Salthouse,2009; Cohen, 2005; Katz, 1986; Maslovaty, Marhsall & Alkin, 2001). On the whole, these approaches (SSA, EFA, CFA, SEM) have the same goal, which is to understand the relations of variables to identify an underlying structure (Cohen, 2005; Flora & Flake, 2017). Marsh et al., (2014) recommends that applied researchers should conduct both CFA and SEM and compare these results, followed by conducting ESEM for subsequent analyses. However, the choice of which analysis to choose (e.g. SSA, EFA, CFA, SEM) should be informed by identifying which approach is most relevant to the research being conducted, such as the data, theory and research application (Marsh et al., 2014).

SSA analyses the relationship among variables in a geometric space whilst EFA, FA and SEM focus on the relationship of variables to a particular axis in a linear way (Ioannou, 2006). Whilst EFA and CFA are underpinned by a common factor model, EFA commonly uses correlations and allows for cross-loading of items whilst CFA uses covariances and does not allow for cross-loading of items (e.g. only one item can be loaded onto a single factor) (Flora & Flake, 2017; Marsh et al., 2014). Additionally, EFA is considered the first step towards assessing validity evidence for a measure and often considered a precursor to CFA and SEM (Cudeck & MacCallum, 2007; Marsh et al., 2014; Ratti, Vickerstaff, Crabtree & Hassiotis, 2017). Furthermore, EFA is normally conducted when the researcher has no preconceived ideas as to the number of factors, thus allowing for the potential of unanticipated factors (Flora & Flake, 2017). CFA and SEM on the other hand are considered confirmatory approaches normally used when there are hypothesis pertaining to a specific number of factors (Finch, 2020). Whilst an individual SSA output requires the identification of borders to create ‘regions’, thus appearing to be similar to CFA (e.g. items are located in only one region), the

placement of these borders is subject to researcher interpretation and the theoretical model chosen. Thus, it is possible one item could be located in one region by one researcher and a different region by another researcher, which is more reflective of EFA. Additionally, the bi-directional hypothesis testing of SSA is much more closely aligned with EFA given the placement of boundaries to form regions in SSA is informed by the data output as opposed to a fixed view as to an expectant structure. For example, previous research on the NRQ (Youngs & Canter, 2012; Ioannou et al., 2015) has placed the same items of the NRQ in different 'narrative regions', thus suggesting items may indeed be cross-loaded.

Sample size is always crucial when conducting any study to ensure the analyses chosen has statistical power to detect an effect (Coolican, 2014; Kyriazos, 2018; Tabachnick & Fidell, 2013). The larger the sample the better the results (Thompson, 2004), the smaller the sample size the more sensitive data is to outliers, producing unstable correlation estimates and Type I and Type II errors etc. (Brown, 2015; Finch et al., 2017; Kline, 2016). A 'rule of thumb' for identifying a minimum sample size for EFA is n = 100 (Cattell, 1978; Gorshuch, 1983; Tabachnick & Fidell, 2013; Everitt, 1975), whilst CFA and SEM are recommend to have a 10:1 or 20:1 ratio (N/p) (Scumacker & Lomax, 2015; Kline, 2016), however these guides should not replace power calculation methods such as the Monte Carlo Approach (Muthen & Muthen, 2002). SSA on the other hand does not have a recommended minimum number of participants nor require a large sample (Maslovaty et al., 2001), and research using small sample sizes of under 100 is not unusual, for example: N = 22 (Goodlad, et al., 2019), N = 23 (Ioannou et al., 2018), N = 56 (Spruin & Siesmaa, 2017); N = 71 (Youngs and Canter, 2012). Instead, to conduct SSA in a meaningful way, a multitude of variables (e.g. 20-90) is deemed necessary (Shye, 2014). Therefore, SSA may be a useful approach when wanting to analyse

data on hard to reach populations. The current study had access to raw data from *N* = 70 MDOs and published results of SSA outputs (as opposed to raw data) from Youngs and Canter (2012) and Ioannou et al., (2015) studies, therefore combining the data from all three studies was not possible. Therefore, taking power size into account, EFA would be the most appropriate analytic approach to use.

In summary, EFA will be used for the current study (Study 2) to provide a complementary by alternate approach to analyse the structure of the NRQ and item placement, including providing clarity regarding the unresolved items (item 1, 2, 8, 13, 15, 19, 23, 25 & 30) and their respective regions (victim, professional and hero) from Study 1. Study 2 will therefore conduct EFA on the 70 MDOs responses to the NRQ followed by comparing EFA results to SSA results found for MDOs, Youngs and Canter (2012) and Ioannou et al., (2015) studies. The aims for Study 2 are:

1. To ascertain if EFA supports the four-region structure of the NRQ found in Study 1 and previous research by Youngs and Canter (2012) and Ioannou et al., (2015).

2. To determine if the factors identified from the EFA are conceptually similar to the four SSA regions (hero, professional, revenger and victim) found in Study 1.

3. To determine if the factors identified from the EFA are conceptually similar to the four narrative roles (hero, professional, revenger and victim) found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015).

4.1 Study 2 Hypotheses

Hypothesis 1: EFA will identify four factors underlying the structure of the NRQ. The Null hypothesis is that there will be no evidence for four factors, or a different factorial structure will emerge.

Hypothesis 2: The factors identified by EFA will be internally consistent and conceptually similar to the four SSA regions (hero, professional, revenger and victim) for MDOs found in Study 1. The null hypothesis being that not all factors will be conceptually similar to the four SSA regions.

Hypothesis 3: The factors identified by EFA will be conceptually similar to the four narrative roles (hero, professional, revenger and victim) found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015). The null hypothesis being that not all factors will be conceptually similar to the four narrative roles.

4.2 Results: Hypothesis 1 – Structure and internal consistency of the NRQ

The first hypothesis was that EFA would identify four factors underlying the structure of the NRQ. To address this hypothesis an Unforced FA was conducted on the NRQ.

(H1) Unforced FA

EFA on the NRQ was conducted using Principle Component Analysis (PCA) with the Varimax (Orthogonal) rotation method with Kaiser Normalization, rotation converged in 11 iterations (see Table 4.1). Items with a loading of less than .3 were supressed, whilst items with loadings of $\geq$.40 were used for interpretative purposes (Stevens, 2002). Items with

loadings of ≥ .3 were only discussed for interpretative purposes if the item did not receive a loading of ≥ .4 on any component.

The Kaiser-Meyer-Olkin measure indicated that the sampling adequacy was 'mediocre' KMO = .66 (Hutcheson & Sofroniou, 1999). The anti-image correlation matrices showed that all KMO values for 25 of the 33-items were >. 5 (minimum KMO = .51 to maximum KMO = .83) which is above the acceptable limit of .5 (Field, 2017). Five items (items 12, 16, 19, 20 & 31) fell below acceptable limits with KMO values of < .5, including: item 12 "It was the only thing to do" (KMO=.49); item 16 "I was helpless" (KMO = .38); item 19 "I was confused about what was happening" (KMO = .46); item 20 "I was looking for recognition" (KMO = .40) and item 31 "I was getting my own back" (KMO = .45). Based on these results, these five items would normally be considered for removal. However due to the small sample size (N = 70) and given the current FA is being used for exploratory purposes, item removal did not occur.

Bartlett's test of sphericity was significant ($x^2(528) = 1276.766$, $p < .001$), indicating that correlations between items were suitable for PCA. Initial analysis suggests that ten of the 33 components had eigenvalues over Kaiser's criterion of 1, and in combination explained 73.36% (with extraction and rotation sums of squared loadings) of the variance. 14 components had eigenvalues over .70 and explained 83.24% of the variance and 16 items had eigenvalues over .60 and accounted for 87.13% of the variance. Stevens (2002) guidance on eigenvalues significance loadings was used as a guide to identify factors, whereby eigenvalues greater than .72 in a sample size of N = 50 were reflective of factors and items loading greater than .51 at alpha .01 (2 tailed) in a sample size of n = 100 were reflective of factors. The current sample size was N =70, therefore an eigenvalue of .60 or higher was considered a satisfactory

threshold for the current study loading, as an eigenvalue of .60 has been described as a world-wide accepted value (Field, 2017).

In review of the correlation matrix there were no variables that did not correlate with any other variable ($r < .2$), nor were there any variables which correlated very highly ($r > .9$). Therefore, all questions on the NRQ were considered to correlate reasonably well with all other items with no correlation coefficients considered excessively large. As a result, no items were eliminated. One hundred and thirty-seven elements of the correlation matrix (25%) had non redundant residuals with absolute values greater than .05 (e.g. that less than 50% of residuals (the difference between observed correlations and the correlations based on the model) were $p < .05$, suggesting that the model was a 'good' fit.

Table 4.1

Unforced EFA on the NRQ (N = 70)

Item No	**NRQ FA Abbreviation**	**Component** 1	2	3	4	5	6	7	8	9	10
3	It was fun	**.88**									
9	It was exciting	**.85**									
5	It was interesting	**.82**									
6	It was like an adventure	**.79**									
10	I was doing a job	**.74**									
13	It was a mission	**.64**									
8	I was in control	**.54**		**-.49**							
15	I had power	**.47**							.34		
28	For me it was just like a usual day's work		**.82**								
7	It was routine		**.74**								
33	I guess I always knew it was going to happen		**.64**			**.44**					
27	It was a manly thing to do		**.52**						**.43**		
24	It all went to plan	.37	**.43**		.31						
19	I was confused about what was happening			**.77**							
16	I was helpless			**.69**							
18	I was a victim			**.69**							
26	It was like I wasn't part of it			**.41**				-.38		.40	
21	I just wanted to get it over with				**.86**						
22	I didn't care what would happen				**.75**						
14	Nothing else mattered				**.62**					.40	
2	I had to do it				**.55**						
4	It was right					**.78**					
23	What was happening was just fate					**.64**					
17	It was my only choice			**.41**		**.62**			**.43**		
31	I was getting my own back						**.92**				
29	I was trying to get revenge						**.92**				
32	I knew I was taking a risk							**.83**			
11	I knew what I was doing							**.72**			
20	I was looking for recognition								**.73**		
25	I couldn't stop myself							-.37	**.50**	**.41**	
12	It was the only thing to do									**.80**	
30	There was nothing special about what happened								.32		**.72**
1	I was like a professional	.39									**.70**
	Eigenvalues	5.13	2.65	2.59	2.49	2.07	2.07	2.02	1.91	1.69	1.60
	% of Variance	15.55	8.02	7.84	7.55	6.27	6.27	6.13	5.78	5.12	4.84
	n (items)	8	5	5	4	4	2	2	4	2	2
	A	.90	.77	.70	.77	.68	.90	.81	.55	.42	.55

Items in **bold** have a factor loading of > .40

Cronbach's alpha was conducted on all (+) items in bold for that component.

The unforced FA of the NRQ indicated that there were 10 components (factors), with internal consistency ranging from ($\alpha = .90$, $p < .05$ to $\alpha = .42$, $p < .05$). Any item loaded on two or more components, was allocated to the component where the item loading was highest. Component 1 had a Cronbach's alpha of ($\alpha = .90$, $p < .05$) and comprised eight items (items 3, 5, 6, 8, 9, 10, 13 & 15). The highest factor loading was .88 (item 3) and the lowest factor loading was .47 (item 15). Component 2 had a Cronbach's alpha of ($\alpha = .77$, $p < .05$) and comprised five items (items 7, 24, 27, 28 & 33). The highest factor loading being .82 (item 28) and the lowest factor loading was.43 (item 24). Component 3 had a Cronbach's alpha of ($\alpha = .70$, $p < .05$) and comprised five items (items 16, 17, 18, 19 & 26). The highest factor loading was .77 (item 19) and the lowest factor loading was .41 (item 26). Component 4 had a Cronbach's alpha of ($\alpha = .77$, $p < .05$) and comprised four items (items 2, 14, 21 & 22). The highest factor loading being .86 (item 21) and the lowest factor loading was .55 (item 2). Component 5 had a Cronbach's alpha of ($\alpha = .68$, $p < .05$) and comprised four items (items 4, 17, 23 & 33). The highest factor loading was .78 (item 4) and the lowest factor loading was .62 (item 17). Component 6 had a Cronbach's alpha of ($\alpha = .90$, $p < .05$) and comprised two items (item 29 & 31). Both items had a factor loading of .92. Component 7 had a Cronbach's alpha of ($\alpha = .81$, $p < .05$) and comprised two items (items 32 & 11). The highest factor loading was .83 and the lowest factor loading was .72, respectively. Component 8 had a Cronbach's alpha of ($\alpha = .55$, $p < .05$) and comprised two items (items 20 & 25). The highest factor loading was .73 and the lowest factor loading was .50, respectively. Component 9 had a Cronbach's alpha of ($\alpha = .42$, $p < .05$) and comprised two items (item 12 & 25). The highest factor loading being .80 and the lowest being .41, respectively. Component 10 had a Cronbach's alpha of ($\alpha = .55$, $p < .05$) and comprised two items (item 30 & 1). The highest factor loading was .72 and the lowest factor loading was .70, respectively (see Table 4.1).

Four items (items 17, 25, 27 & 33) were loaded on more than one component at ≥ .4. Item 17 was loaded onto components 3, 5 & 8. The highest loading for item 17 was on Component 5 at .62, followed by Component 8 at .43 and then Component 3 at .41. Item 25 was loaded onto two Components (Component 8 and Component 9). The highest loading for item 25 was on Component 8 at .50 followed by Component 9 at .41. Item 27 was loaded onto two Components (Component 2 and Component 8). The highest loading for item 27 was on Component 2 at .52 followed by Component 8 at .43. Item 33 was loaded onto two Component (Component 2 and Component 5). The highest loading for item 33 was on Component 2 at .64 followed by Component 5 at .44. One item at > .4 (item 8) had a negative factor loading for Component 3 (-.49) and a positive loading for Component 1 loading (.54) (see Table 4.1).

Five items (items 1, 14, 15, 24, 26 & 30) with a loading of .3 or higher were loaded onto more than one component. Two items (item 25 & 26) had a negative loading (see Table 4.1). These items factor loadings will not be surmised given each item had a loading of .4 or higher on at least one factor which was used for interpretative purposes.

The convergence scree plot for the FA also indicated the presence of four components based on Cattell's (1966) criterion for point of inflexion (see *Figure 4.1*).

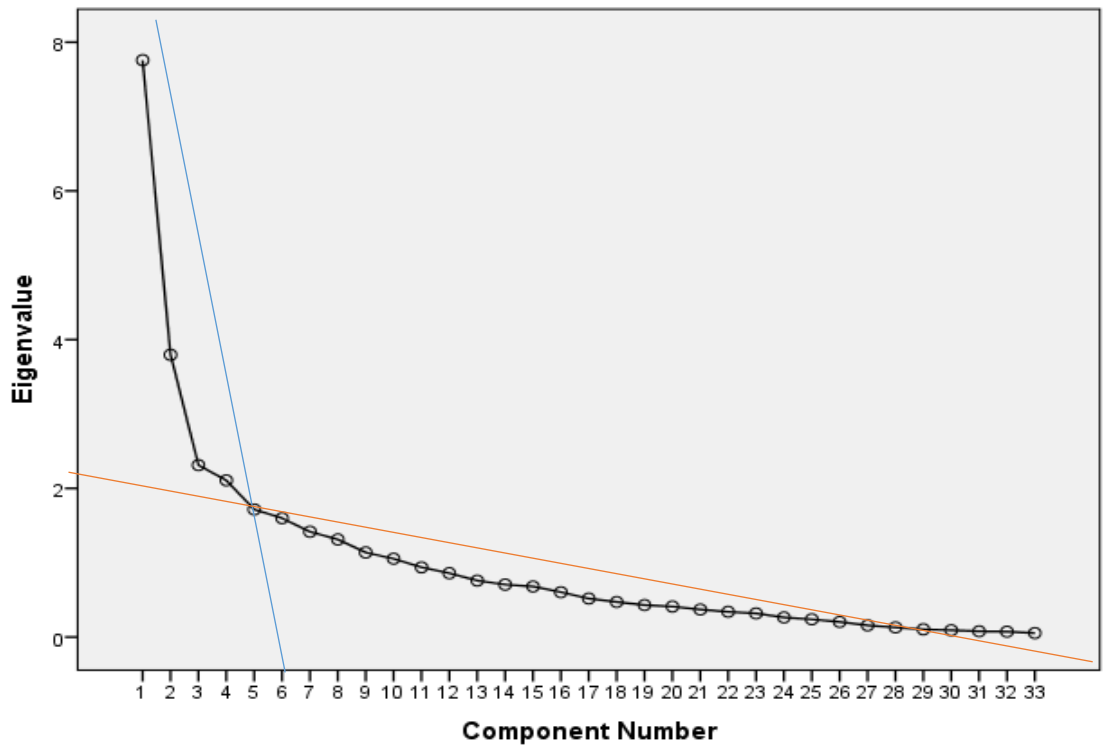

Figure 4.1: Unforced FA Scree Plot

In *Figure 4.1*, the point of inflexion (where the blue line meets the red line) indicates the presence of four components (components to the left of the blue line). The sharp drop between eigenvalues of component 1 and 2, suggest these two components are the strongest. Followed by a smaller yet still significant drop in eigenvalues between components 2 and 3. There is also a smaller, drop in eigenvalues between component 3 and 4. Beyond the point of inflection, the drop in eigenvalues from components 5 onwards is marginal.

Summary: (H1) Unforced FA

By conducting an unforced FA, all items of the NRQ are analysed without researcher manipulation and therefore represent the true nature of components for the NRQ. Ten components were identified for the NRQ, six of which had a Cronbach's alpha $\alpha = >.70$, $p <.05$

(Components 1, 2, 3, 4, 6 & 7). The scree plot indicates that there are four components at the point of inflexion, therefore the first hypothesis is supported: the structure of the NRQ would result in four factors (components). These four factors will now be explored using a forced four factor, FA to identify individual item placement for each factor and enable internal consistency for each factor to be determined.

(H1) Forced Four Factor, FA

The forced four factor FA was conducted using (PCA) with the rotation method being Varimax (Orthogonal) with Kaiser Normalization, rotation converged in 6 iterations (see Table 4.2). Items with a loading < .3 were supressed, whilst items with loadings of ≥.40 were used for interpretative purposes (Stevens, 2002). As this was an EFA, items with loadings of ≥ .3 were also used for interpretative purposes.

Extracting four components of the NRQ accounted for 48.403% of the variance (with extraction and rotation sums of squared loadings). Two hundred and eighty-three items (53%) had non redundant residuals with absolute values greater than .5, suggesting that the model was not a good fit.

The forced four factor FA loaded 32 of the 33-items of the NRQ onto one of the four factors at > .3. One item (item 23) was not loaded on any factor at >.3. Item 23 was also considered an 'unresolved' item from Study 1. Where an item was loaded onto one or more factors >.3, that item was considered a 'complex' item and allocated to the factor where it had the highest factor loading. Four items (item 1, 14, 24 & 26) were considered 'complex' items, one of which was also considered an 'unresolved' item from Study 1 (item 1). Specifically,

item 1 loaded onto both Factor 1 (.36) and Factor 2 (.40) and was allocated to Factor 2. Item 14 loaded onto both Factor 3 (.51) and Factor 4 (.31) and was allocated to Factor 3. Item 24 loaded onto both Factor 1 (.49) and Factor 2 (.55) and allocated to Factor 2. Item 26 loaded onto both Factor 2 (.31) and Factor 4 (.47) and allocated to Factor 4 (see Table 4.2).

Table 4.2

Forced Four Factor EFA on the NRQ (N = 70)

Item No	NRQ Question	Factor 1	2	3	4
5	It was interesting	**.87**			
9	It was exciting	**.84**			
3	It was fun	**.82**			
6	It was like an adventure	**.76**			
10	I was doing a job	**.73**			
13	It was a mission	**.67**			
8	I was in control	**.57**			
15	I had power	**.52**			-.38
28	For me it was just like a usual day's work		**.75**		
7	It was routine		**.69**		
32	I knew I was taking a risk		**.66**		
11	I knew what I was doing		**.62**		
30	There was nothing special about what happened		**.56**		
24	It all went to plan	.49*	**.55***		
27	It was a manly thing to do		**.52**		
33	I guess I always knew it was going to happen		**.43**		
1	I was like a professional	.36*	**.40***		
20	I was looking for recognition		**.36**		
31	I was getting my own back			**.75**	
29	I was trying to get revenge			**.71**	
22	I didn't care what would happen			**.68**	
2	I had to do it	-.37		**.55**	
14	Nothing else mattered			**.51***	.31*
21	I just wanted to get it over with			**.47**	
4	It was right			**.44**	
12	It was the only thing to do			**.40**	
18	I was a victim				**.69**
17	It was my only choice				**.66**
16	I was helpless				**.63**
19	I was confused about what was happening				**.60**
25	I couldn't stop myself				**.58**
26	It was like I wasn't part of it		.31*		**.47***
23	What was happening was just fate **				
	Eigenvalues	7.76	3.80	2.31	2.11
	% of Variance	23.51	11.50	7.00	6.39
	n (item)	8	10	8	6
	α	.89	.82	.76	.73

Items in **bold** represent those items allocated to that factor at >.3

* Where an item was loaded onto one or more factors, the item was allocated to the factor where it had the highest eigenvalue.

** FA could not classify item >.3

(H1) Forced Four Factor, FA - Internal Consistency

Factor 1 comprised eight items (items 3, 5, 6, 8, 9, 10, 13 & 15) and obtained a Cronbach's alpha of α = .89, *p* <.05, indicating 'very good' internal consistency. Two items (item 8 & 15) would increase this Cronbach's alpha from α = .89, *p* <.05 to α = .90, *p* <.05 if either item were deleted (see Appendix J). The highest factor loading was .87 (item 5) and the lowest factor loading was .52 (item 15). One item (item 15), had a negative factor loading with Factor 4 (-.38). There were no complex items (see Table 4.2).

Factor 2 comprised ten items (items 1, 7, 11, 20, 24, 27, 28, 30, 32 & 33) and obtained a Cronbach's alpha of α = .82 *p* < .05 indicating 'very good' internal consistency. No items deleted would increase the Cronbach's alpha (see Appendix J). The highest factor loading was .75 (item 28) and the lowest factor loading was .36 (item 20). There were no negatively loaded items. Factor 2 had two complex items (items 1 & 24) (see Table 4.2).

Furthermore, in Study 1 two items (item 1 & 30) did not contribute to the internal consistency of their identified SSA region (professional respectively). Both items now contribute to the internal consistency of Factor 2 (see Appendix J).

Factor 3 comprised eight items (items 2, 4, 12, 14, 21, 22, 29 & 31) and obtained a Cronbach's alpha of α = .76, p<.05 indicating 'respectable' internal consistency. No items deleted would increase the Cronbach's alpha (see Appendix J). The highest factor loading was .75 (item 31) and the lowest factor loading was .40 (item 12). One item (item 2), had a negative factor loading with Factor 1 (-.37). Factor 3 had one complex item (item 14) (see Table 4.2).

Factor 4 comprised 6 items (items 16, 17, 18, 19, 25 & 26) and obtained a Cronbach's alpha of α = .73, *p* <.05 indicating 'respectable' internal consistency. No items deleted would increase the Cronbach's alpha (see Appendix J). The highest factor loading was .69 (item 18) and the lowest factor loading was .47 (item 26). There were no negative loaded items. Factor 4 had one complex item (item 26) (see Table 4.2).

(H1) Forced Four Factor, FA - Complex Items

Each of the four 'complex' items (item 1, 14, 24 & 26) were allocated to the factor they obtained the highest factor loading (item 1 was allocated to Factor 2, item 14 was allocated to Factor 3; Item 24 was allocated to Factor 2 and item 26 was allocated to Factor 4). To further clarify which of the two factors each of the four complex items should be allocated to, a Cronbach's alpha was conducted on both factors including each factors identified 'complex item'.

Item 1 was loaded onto both Factor 2 (.40) and Factor 1 (.36). Removal of item 1 from Factor 2 would reduce the Cronbach's alpha from α = .82 *p* <.05 to α = .81 *p* <.05. If item 1 was allocated to Factor 1, the Cronbach's alpha for Factor 1 would remain at α =.90, *p*<.05. These results suggest that item 1 neither increases, nor decreases the Cronbach's alpha for Factor 1, but does increase the Cronbach's alpha for Factor 2. Therefore item 1 should be retained in Factor 2.

Item 14 was loaded onto both Factor 3 (.51) and Factor 4 (.31). Removal of item 14 was from Factor 3 would reduce the Cronbach's' alpha from α = .76, p<.05 to α = .73, *p* <.05. If item 14 was added to Factor 4, the Cronbach's alpha would reduce from α = .73, *p* < .05 to

α = .72, *p* < .05. These results suggest that item 14 contributes to the internal consistency of Factor 3 but does not contribute to the internal consistency of Factor 4. Therefore item 14 should be retained in Factor 3.

Item 24 was loaded onto both Factor 2 (.55) and Factor 1 (.49). Removal of item 24 from Factor 2 would reduce the Cronbach's alpha from α = .82 *p* < .05 to α = .79 *p* < .05. If item 24 was allocated to Factor 1, the Cronbach's alpha would increase from α =.89, *p* < .05 to α =.90, *p* < .05. These results suggest that item 24 increases the Cronbach's alpha for both Factor 1 and Factor 2. As item 24 had the highest factor loading on Factor 2, item 24 will be allocated to Factor 2 but considered 'partially' unresolved.

Item 26 was loaded onto both Factor 4 (.47) and Factor 2 (.31). Removal of item 26 from Factor 4 would reduce the Cronbach's alpha from α = .73 *p* <.05 to α = .71, *p* < .05. If item 26 was added to Factor 2, the Cronbach's alpha would reduce from α = .82 *p* < .05 to α = .76 *p* <.05. These results suggest that item 26 contributes to the internal consistency of Factor 4 but does not contribute to the internal consistency of Factor 2. Therefore item 26 should be retained in Factor 4.

(H1) Forced Four Factor, FA: 32-item NRQ Internal Consistency

The 32-item NRQ (with item 23 removed) obtained a Cronbach's alpha of α = .86,

p <.05 indicating 'very good' internal consistency. This is the same as the Cronbach's alpha found for the NRQ found in Study 1 and similar to the Cronbach's alpha reported by Youngs and Canter (2012) (α = .85, *p* <.05). Therefore, removal of item 23 (an unresolved item from Study 1) did not compromise the internal consistency of the NRQ, as such item 23

is now considered resolved. Furthermore, removing item 23 from the NRQ improved the four unresolved items from Study 1 (item 1, 8, 19 & 30) contribution to the internal consistency of the 32-item NRQ. Specifically, no items deleted would increase the Cronbach's alpha of the 32-item NRQ, whilst the Cronbach's alpha for the NRQ from Study 1 would increase from α =.86, $p < .05$ to α =.87, $p < .05$, if either item 8 or item 19 were deleted. Item 8 now contributes to the internal consistency of the 32-item NRQ ($\alpha = .86 = p < .05$ would decrease to $\alpha = .85$, $p < .05$ if item 8 were deleted) and item 19 neither increases, nor decreases the internal consistency of the 32-item NRQ ($\alpha = .86 = p < .05$ would remain at $\alpha = .86$, $p < .05$ if item 19 were deleted). Both items are now considered resolved. Two further items (item 1 & 30) were considered 'unresolved' from Study 1. Both items were found to neither increase, nor decrease the Cronbach's alpha for the NRQ ($\alpha = .86$, $p < .05$ would remain at $\alpha = .86$, $p < .05$ if either item 1 or 30 were deleted). Both items (item 1 & 30) now contribute to the internal consistency of the 32-item NRQ. Specifically, the Cronbach's alpha for the 32-item NRQ would reduce to $\alpha = .85$, $p < .05$ from $\alpha = .86$, $p < .05$ if either item 1 or 30 were deleted respectively. Both items are now considered resolved (see Table 4.3).

Table 4.3

Cronbach's alpha if item deleted, NRQ (Study 1) vs 32-item NRQ (Study 2)

NRQ Item (SSA number)	**NRQ Question**	**NRQ (Study 1) Cronbach's alpha if item deleted** $\alpha = .86, p < .05$	**32-item NRQ (Study 2) Cronbach's alpha if item deleted** $\alpha = .86, p < .05$
1	I was like a professional	.86	.85
2	I had to do it	.85	.85
3	It was fun	.85	.85
4	It was right	.86	.85
5	It was interesting	.85	.85
6	It was like an adventure	.85	.84
7	It was routine	.85	.85
8	I was in control	**.87**	.85
9	It was exciting	.85	.85
10	I was doing a job	.85	.85
11	I knew what I was doing	.85	.85
12	It was the only thing to do	.85	.85
13	It was a mission	.85	.85
14	Nothing else mattered	.85	.85
15	I had power	.85	.85
16	I was helpless	.86	.86
17	It was my only choice	.85	.85
18	I was a victim	.86	.86
19	I was confused about what was happening	**.87**	.86
20	I was looking for recognition	.85	.85
21	I just wanted to get it over with	.85	.85
22	I didn't care what would happen	.85	.85
23	What was happening was just fate	.86	*
24	It all went to plan	.85	.85
25	I couldn't stop myself	.86	.86
26	It was like I wasn't part of it	.86	.86
27	It was a manly thing to do	.85	.85
28	For me it was just like a usual day's work	.85	.85
29	I was trying to get revenge	.86	.86
30	There was nothing special about what happened	.86	.85
31	I was getting my own back	.86	.85
32	I knew I was taking a risk	.85	.85
33	I guess I always knew it was going to happen	.85	.85

*Item unloaded on any narrative. Items is **bold** would increase the Cronbach's alpha of the NRQ if that item were deleted.

Summary: (H1) Forced Four Factor, FA

The results from the forced four factor FA supported the presence of four internally consistent factors drawn from 32-items from the original 33-items of the NRQ. There were four 'complex' items (item 1, 14, 24 & 26) which were loaded onto two factors. Therefore each 'complex' item was allocated to the factor where it had the highest factor loading and contributed to that factors' internal consistency. Overall, Factor 1 comprised eight items (items 3, 5, 6, 8, 9, 10, 13 & 15) and obtained a Cronbach's alpha of $\alpha = .89$, $p < .05$, indicating 'very good' internal consistency. Factor 2 comprised ten items (items 1, 7, 11, 20, 24, 27, 28, 30, 32 & 33) and obtained a Cronbach's alpha of $\alpha = .82$ $p < .05$ indicating 'very good' internal consistency. Factor 3 comprised eight items (items 2, 4, 12, 14, 21, 22, 29 & 31) obtained a Cronbach's alpha of $\alpha = .76$, $p < .05$ indicating 'respectable' internal consistency. Factor 4 comprised 6 items (items 16, 17, 18, 19, 25 & 26) obtained a Cronbach's alpha of $\alpha = .73$, $p < .05$ indicating 'respectable' internal consistency.

The 32-item NRQ was also found to have 'very good' internal consistency and obtained the same as the Cronbach's alpha ($\alpha = .86$, $p < .05$), as the NRQ from Study 1 and similar to the Cronbach's alpha of the NRQ found by Youngs and Canter (2012) administered to adult male incarcerated offenders ($\alpha = .85$, $p < .05$). Furthermore, the 32-item NRQ was found to be more statistically robust with the removal of item 23. Additionally, the five 'unresolved' items (item 1, 8, 23, 19 & 30) from Study 1, which did not contribute to the internal consistency of the NRQ are now considered 'resolved'. Specifically item 23 was removed, three items (item 1, 8 & & 30) now contribute to the internal consistency of the 32-item NRQ and item 19 neither increases, nor decreases the Cronbach's alpha for the 32-item NRQ.

Summary: Hypothesis 1 – Structure and internal consistency of the NRQ

Hypothesis 1 was that exploratory FA would identify four internally consistent factors underlying the structure of the NRQ. The results from the unforced FA identified ten components present for the NRQ and the scree plot indicated that there were four components at the point of inflexion. The forced four factor FA found four internally consistent factors derived from 32-items from the NRQ. Item 23 "What was happening was just fate" was not loaded onto any factor. There were four 'complex' items (item 1, 14, 24 & 26) which were loaded onto two factors. Each of these four items were found to contribute to the internal consistency of the factor where they obtained the highest factor loading. Subsequently, item 1 was allocated to Factor 2, item 14 was allocated to Factor 3, item 24 was allocated to Factor 2 and item 26 was allocated to Factor 4.

Overall, the 33-item NRQ was found to have 'very good' internal consistency and obtained the same as the Cronbach's alpha ($\alpha = .86$, $p < .05$) (with item 23 removed), as the NRQ from Study 1 and similar to the Cronbach's alpha reported by Youngs and Canter (2012) ($\alpha = .85$, $p < .05$) when administered to adult male incarcerated offenders. Factor 1 comprised eight items (items 3, 5, 6, 8, 9, 10, 13 & 15) and had 'very good' internal consistency ($\alpha = .89$, $p < .05$). Factor 2 comprised ten items (items 1, 7, 11, 20, 24, 27, 28, 30, 32 & 33) and had 'very good' internal consistency ($\alpha = .82$ $p < .05$). Factor 3 comprised eight items (items 2, 4, 12, 14, 21, 22, 29 & 31) and had 'respectable' internal consistency ($\alpha = .76$, $p<.05$). Factor 4 comprised six items (items 16, 17, 18, 19, 25 & 26) and had 'respectable' internal consistency ($\alpha = .73$, $p < .05$).

4.3 Results: Hypothesis 2 – The Four FA Factors will be conceptually similar to the four SSA regions found for MDOs in Study 1

The second hypothesis was that the factors identified by the exploratory FA would be conceptually similar to the four SSA regions (hero, professional, revenger and victim) found for MDOs in Study 1. The analysis for this hypothesis was conducted in three steps. The first step involved placing each of the four factors items on the SSA output from Study 1 (including the four proposed regions (hero, professional, revenger and victim) and their items). Followed by visually comparing each factor's items and SSA regions items location with one another. The second step will involve comparing the percentage of each factors items located within each SSA region from Study 1 (hero, professional, revenger and victim). This comparison will help determine which SSA region (if any), each factor is considered most 'conceptually' similar to. The third step will involve comparing the internal consistency of each factor with the internal consistency of the SSA region (from Study 1) each factor is considered most 'conceptually' similar to (if any).

(H2) Step 1 – Visual comparison of the four factors items with SSA regions from Study 1

The first step for hypothesis 2 involved placing the four factors items on the SSA output from Study 1. Followed by comparing the four factors items placement with the SSA regional items results.

Factor 1

Factor 1 comprised eight items (item 3, 5, 6, 8, 9, 10, 13 & 15). All eight items loaded on Factor 1 were located across both the hero (n = 1) and professional (n = 7) SSA regions. Specifically, one item (item 15) was located in the hero SSA region and seven items (items 3,

5, 6, 8, 9, 10 & 13) were located within the professional SSA region from Study 1 (see *Figure 4.2*).

One item (item 24), was located within the 'sphere' of items for Factor 1, however had not been allocated to Factor 2. In hypothesis 1, item 24 was a 'complex' item as it had been loaded onto both Factor 1 (.36) and Factor 2 (.40). Item 24 also contributed to the internal consistency of both Factor 1 and Factor 2, therefore item 24 was considered 'partially unresolved'. Based the placement of item 24 in the sphere of Factor 1, item 24 continues to be 'partially' unresolved.

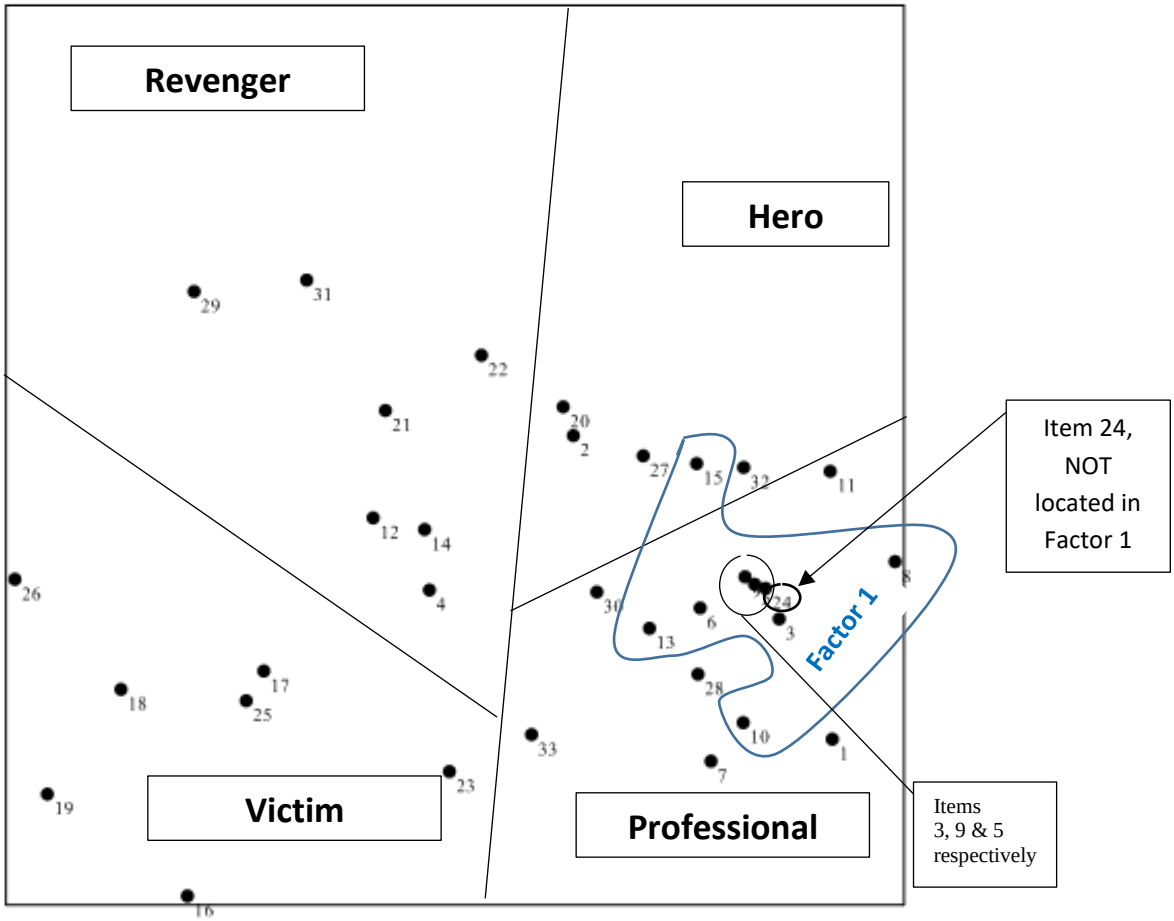

Figure 4.2: Factor 1 and SSA regions

Factor 2

Factor 2 comprised ten items (item 1, 7, 11, 20, 24, 28, 27, 30, 32 & 33). All ten items loaded on Factor 2 were located across both the hero (n = 3) and professional (n = 7) SSA regions. Specifically, three items (items 20, 27 & 32) were located in the hero SSA region and seven items (items 1, 7, 11, 24, 28, 30 & 33) were located within the professional SSA region from Study 1 (see *Figure 4.3*).

One item (item 2), was located within the 'sphere' of items for Factor 2. In hypothesis 1, item 2 had been allocated to Factor 3 as this was the only factor this item loaded on (.55), with a negative loading on Factor 1 (-.37).

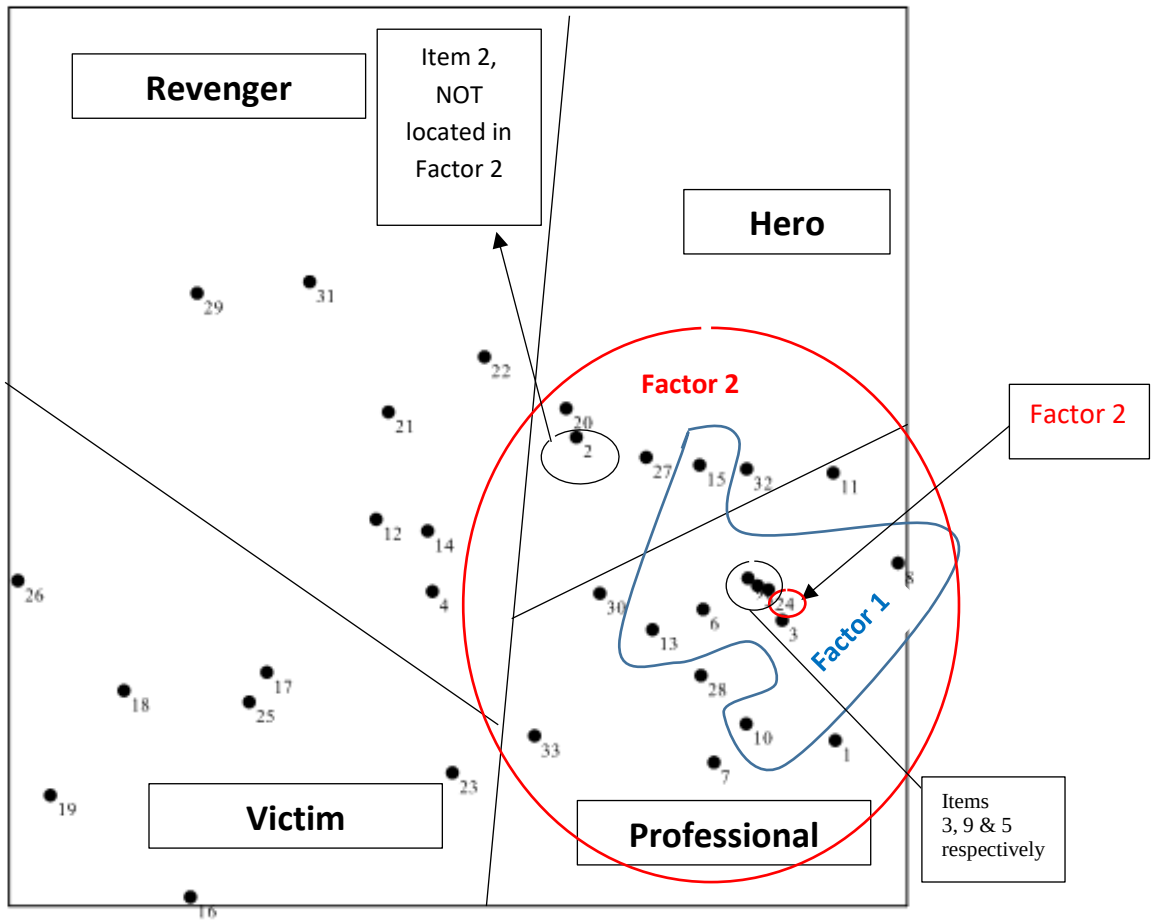

Figure 4.3: Factor 2 and SSA Regions

Factor 3

Factor 3 comprised eight items (items 2, 4, 12, 14, 21, 22, 29 & 31). When these items were compared to each of the SSA regions, seven of the eight items (items 4, 12, 14, 21, 22, 29 & 31) were located in the revenger SSA region and one item (item 2) was located in the hero SSA region from Study 1 (see *Figure 4.4*).

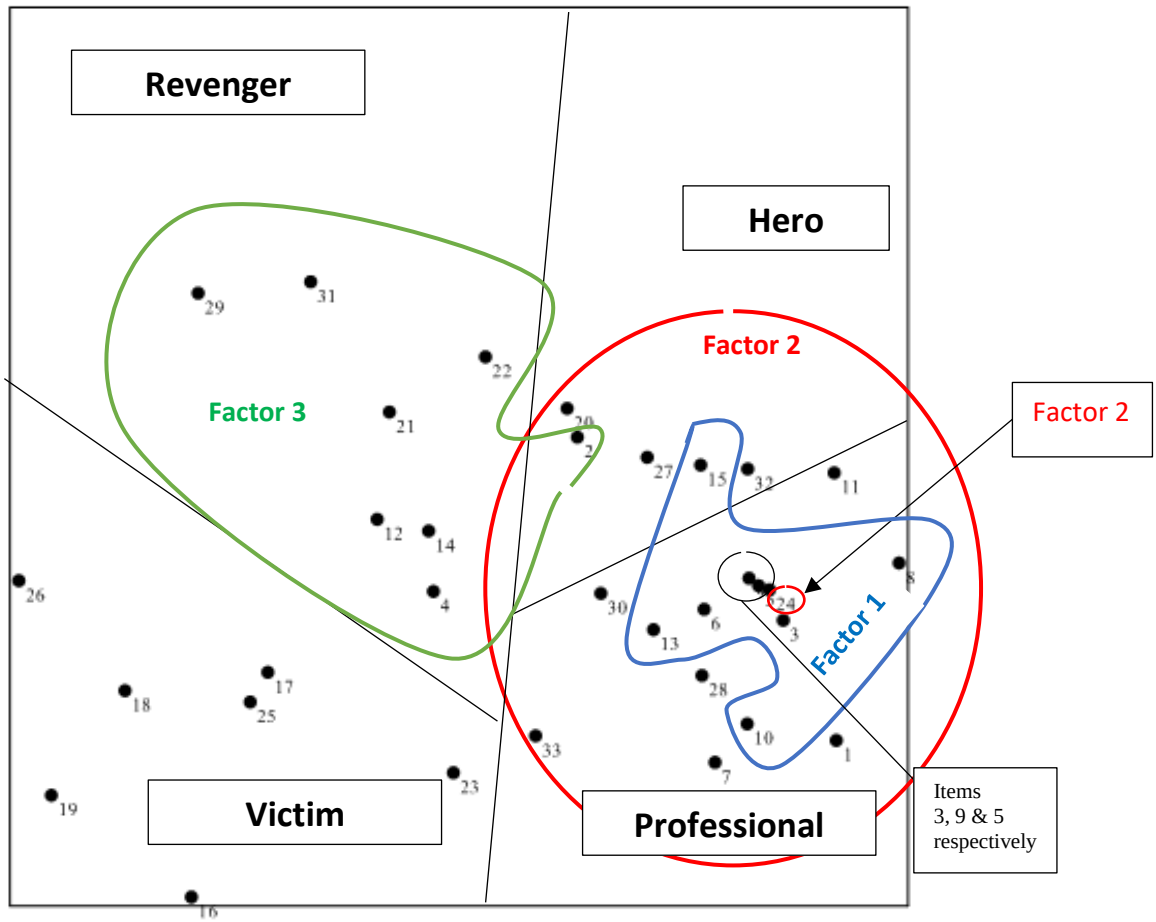

Figure 4.4: Factor 3 and SSA Regions

Factor 4

Factor 4 comprised six items (item 16, 17, 18, 19, 25 & 26). When these items were compared to each of the SSA regions, all six items were located within the victim SSA region from Study 1 (see *Figure 4.5*).

In review of the SSA victim region, only 1 item (item 23) had not been loaded on Factor 4. Furthermore, the results from Hypothesis 1 found that item 23 had not been loaded onto any factor (>. 3).

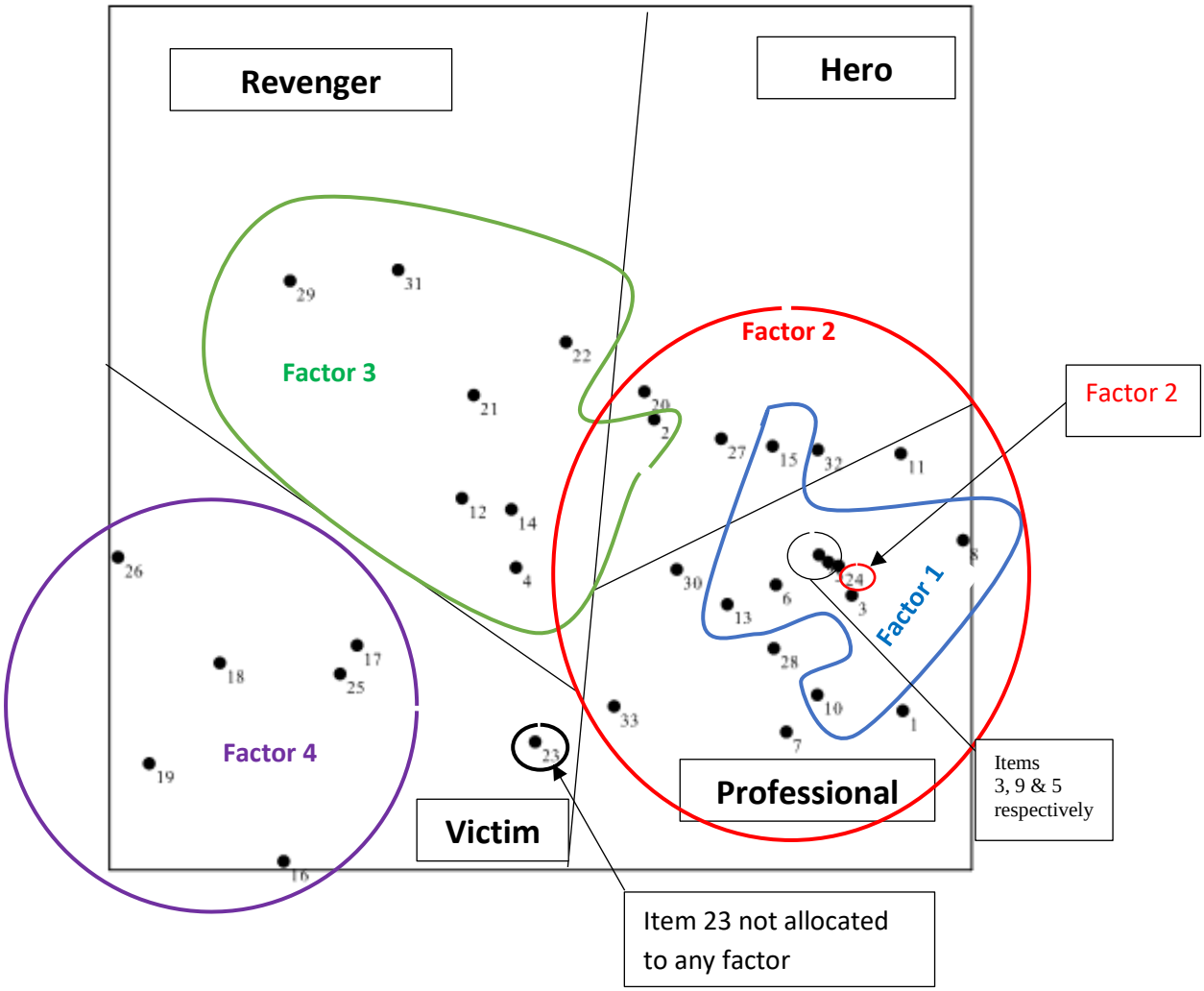

Figure 4.5: Factor 4 and SSA Regions

When visually reviewing each factors 'sphere', Factor 1 had one item (item 15), located in the 'hero' SSA region whilst all other Factor 1 items were located in the professional SSA region. Additionally, all Factor 1 items were located *within* the 'sphere' of Factor 2 and all Factor 2 items were spread across both the hero and professional SSA regions. Additionally, one item (item 24) was located *within* the 'sphere' of Factor 1. These findings may be due to the way FA and SSA results are analysed, or this overlap may represent a relationship of some form between Factor 1 and Factor 2 and the hero and professional SSA regions. Overall, identifying this type of inter-connected relationship between Factor 1 and Factor 2 is difficult to interpret using SSA alone. Therefore, the forced four factor FA results has been able to more clearly distinguish between these two Factors.

In relation to Factor 3 one item (item 2) was located in the SSA hero region and the 'sphere' of Factor 2 despite being allocated to Factor 3. In Study 1, item 2 was hypothesised to be located in either the revenger SSA region (e.g. Factor 3) or victim SSA region (e.g. Factor 4), however was instead located in the hero SSA region. The placement of item 2 in Factor 3 (revenger), is more consistent with the original hypothesis from Study 1. Additionally, seven of the eight Factor 3 items (with the exception of item 2) were located in the revenger SSA region, further supporting the placement of item 2 in Factor 3. Overall, the results from the forced four factor FA may be more sensitive to the placement of item 2 when compared to the SSA results from Study 1.

To further contextualise the above visual interpretation of the four factors items placement when compared to the SSA regions items placement from Study 1, a statistical interpretative approach will now be conducted. Whereby the percentage of each factors items

located within each SSA region from Study 1 (hero, professional, revenger and victim) will be calculated.

(H2) Step 2 – Comparison of the four factors items percentage with the SSA regions from Study 1

The second step for hypothesis 2 required calculating the percentage of each factors items location with their identified SSA region Study 1 (hero, professional, revenger and victim). For example, if three out of the eight items from Factor 1 were located in the hero SSA region, 37.5% (n = 3) of Factor 1 items would be considered hero SSA region items. Once all items within a Factor have been allocated to an SSA region, any factor which has $\geq$ 50% of items allocated to one specific SSA region (hero, professional, revenger and victim) and that this score is greater or approximately equal ($\pm$5%) to the total percentage score of the other three factors added together. That factor will be considered conceptually similar to the that SSA region. For example purposes only: if 60% of Factor 1 items were common with hero SSA region items. Factor 1 would be considered conceptually similar to the hero SSA region. Where a factor does <u>not</u> have $\geq$ 50% of items allocated to any one SSA region, or where two SSA regions are equally represented with 50% of items each, that factor will be considered a 'new narrative'. For example purpose only, if Factor 1 did not have $\geq$ 50% of items present for any of the four SSA regions; or Factor 1 had two SSA regions both representing 50% of items based on the results from Study 1. Factor 1 would not be considered 'conceptually similar' to any specific SSA region and instead considered a new 'narrative'. This classification approach has previously been adopted Ioannou et al., (2017), Canter and Firston (1998) and Salfati (2000).

Table 4.4 provides a summary of the four factors items SSA region percentage (hero, professional, revenger and victim). For a detailed summary of each Factors items when compared to the SSA regions from Study 1, see Appendix K.

Table 4.4

Four Factors items compared to Study 1 SSA regions

SSA Region	**Factor 1** (*n* = 8) *n* (%)	**Factor 2** (*n* = 10) *n* (%)	**Factor 3** (*n* = 8) *n* (%)	**Factor 4** (*n* = 6) *n* (%)
Hero (*n* = 5)	1 (12.5%)	3 (30%)	1 (12.5%)	0 (0%)
Professional (*n* = 14)	**7 (87.5%)**	**7 (70%)**	0 (0%)	0 (0%)
Revenger (*n* = 7)	0 (0%)	0 (0%)	**7 (87.5%)**	0 (0%)
Victim (*n* = 7)	0 (0%)	0 (0%)	0 (0%)	**6 (100%)**

*Items in **bold** reflect the 'dominant' SSA region ≥50%*

All four factors (Factor 1, Factor 2, Factor 3 & Factor 4) from the current study had ≥ 50% of common items with three of the four SSA regions from Study 1 (professional, professional revenger & victim respectively). The hero SSA region was not present ≥ 50% on any factor, instead hero SSA regional items were predominantly located within Factor 2 (*n* = 3, 30%) and to a lesser extent Factor 1 and Factor 3 (*n* = 1, 12.5% respectively). There were no hero SSA region items located in Factor 4 (see Table 4.4).

Factor 1 comprised 87.5% (*n* = 7) of professional SSA region items and 12.5% (*n* = 1) of hero SSA region items. Therefore Factor 1 is considered conceptually similar to the professional SSA region. Factor 2 comprised 70% (*n* = 7) of professional SSA region items

and 30% (n = 3) are comprised of hero SSA region items. Therefore, Factor 2 is considered conceptually similar to the professional SSA region. Furthermore, Factor 1 and Factor 2 were both comprised exclusively of hero and professional SSA region items (see Table 4.4).

Factor 3 comprised 87.5% (n = 7) revenger SSA region items and 12.5% (n = 1) hero SSA region items. There were no professional or victim SSA region items found in Factor 3. Therefore, Factor 3 is considered conceptually similar to the revenger SSA region (see Table 4.4).

Factor 4 did not have any professional revenger or hero SSA region items and was exclusively comprised of 100% (n = 6) of victim SSA region items. Therefore, Factor 4 is considered conceptually similar to the victim SSA region (see Table 4.4).

(H2) Step 3 – Comparison of Cronbach's alpha: Four Factors vs Four SSA regions

The third and final step for hypothesis 2 involved comparing the internal consistency of each factor found in Hypothesis 1 of the current study, with the internal consistency of its 'conceptually similar' SSA region from Study 1. Based on the above findings, Factor 1 and Factor 2 were considered conceptually similar to the professional SSA region; Factor 3 was considered conceptually similar to the revenger SSA region and Factor 4 was considered conceptually similar to the victim SSA region. Therefore, the Cronbach's alpha for Factor 1 and Factor 2, will be compared with the Cronbach's alpha for the professional SSA region. The Cronbach's alpha for Factor 3, will be compared with the Cronbach's alpha for the revenger SSA region. The Cronbach's alpha for Factor 4, will be compared with the

Cronbach's alpha for the victim SSA region. Table 4.5 provides a summary of these comparisons.

Table 4.5

Cronbach's alpha comparison between four factors and four SSA regions

Narrative (Factor) *n* =	**A**	**Study 1 SSA Region**	**α**
N/A	*	Hero (*n* = 5)	.70
Professional (Factor 1) (*n* = 8)	**.89**	Professional (*n* = 14)	.88
Professional (Factor 2) (*n* = 10)	.82	Professional (*n* = 14)	.88
Revenger (Factor 3) (*n* = 8)	**.76**	Revenger (*n* = 7)	.73
Victim (Factor 4) (*n* = 6)	**.73**	Victim (*n* = 7)	.70

Items in **bold** represent the highest Cronbach's alpha for the identified Factor/SSA region

*indicates that no Factor was found for the hero narrative role

Factor 1 was considered conceptually similar to the professional SSA region. The Cronbach's alpha for Factor 1 (α = .89, p <.05) was similar to the Cronbach's alpha for the professional SSA region from Study 1 (α = .88, p <.05). Factor 1 (n = 8) had six fewer items than the professional SSA region (n = 14) (see Table 4.5).

Factor 2 was considered conceptually similar to the professional SSA region. The Cronbach's alpha for Factor 2 (α = .82, p <.05) was slightly lower than the Cronbach's alpha

for the professional SSA region from Study 1 ($\alpha = .88$, $p < .05$). Factor 2 ($n = 10$) had six fewer items than the professional SSA region ($n = 14$) (see Table 4.5).

Factor 3 was considered conceptually similar to the revenger SSA region. The Cronbach's alpha for Factor 3 ($\alpha = .76$, $p < .05$) was marginally higher alpha than the Cronbach's alpha for the revenger SSA region from Study 1 ($\alpha = .73$, $p < .05$). Factor 3 ($n = 8$) had one more item than the revenger SSA region ($n = 7$) (see Table 4.5).

Factor 4 was considered conceptually similar to the victim SSA region. The Cronbach's alpha for Factor 4 ($\alpha = .73$, $p < .05$) was marginally higher than the Cronbach's alpha for the victim SSA region found in Study 1 ($\alpha = .70$, $p < .05$). Factor 4 ($n = 6$) had one more item than the victim SSA region ($n = 7$) (see Table 4.5).

Whilst there was no factor found to be conceptually similar to the hero region, the three factors which had hero SSA region items (Factor 1, Factor 2 and Factor 3) obtained higher Cronbach's alpha (Factor 1: $\alpha = .90$, $p < .05$; Factor 2: $\alpha = .82$, $p < .05$; Factor 3: $\alpha = .76$, $p < .05$) than the hero SSA region from Study 1 ($\alpha = .70$, $p < .05$) (see Table 4.5).

Summary: Hypothesis 2 – The Four FA Factors will be conceptually similar to the four SSA regions found in Study 1

The second hypothesis was that the factors identified by the EFA would be conceptually similar to the four SSA regions found in Study 1. The analysis for this hypothesis was conducted in three steps. The first step involved placing each of the four factor's items on the SSA output from Study 1 and visually comparing the four factors items (Factor 1, Factor 2,

Factor 3 and Factor 4) with the four SSA regions (from Study 1) (hero, professional, revenger and victim) item location. The second step involved comparing the percentage of the four factors items located within each SSA region from Study 1, to determine which SSA region (if any) each factor was considered most conceptually similar to. The third step involved comparing the internal consistency of each of the four factors with the internal consistency of the SSA region from Study 1, each factor was considered most conceptually similar to (if any) (Factor 1: professional SSA region; Factor 2: professional SSA region; Factor 3: revenger SSA region and Factor 4: victim SSA region).

The results from Step 1, found that the Factor 1 (n = 8) had seven items (item 3, 5, 6, 8, 9, 10 & 13) located within the professional region and one item (item 15) located in the hero region. Factor 2 (n = 10) had seven items (items 1, 7, 11, 24, 28, 30 & 33) located in the professional region and three items (items 20, 27 & 32) located in the hero region. Factor 3 (n=8) had seven items (item 4, 12, 14, 21, 22, 29 & 31) located in the revenger region and one item (item 2) located in the hero region. Factor 4 (n = 6) had all six items (item 16, 17, 18, 19, 25 & 26) located in the victim region.

The results from Step 2, whereby the percentages for each factor's items were compared with each items allocated SSA region found that Factor 1 was considered conceptually similar to the professional SSA region (87.5%). Factor 2 was considered conceptually similar to the professional SSA region (70%). Factor 1 and Factor 2 both comprised exclusively professional and hero SSA regional items, with more hero SSA region items located in Factor 2. Factor 3 was considered 'conceptually similar' to the revenger SSA region (87.5%) and comprised predominantly revenger SSA region items (with the exception of item 2 which was located in

the hero SSA region). Factor 4 was considered 'conceptually similar' to the victim SSA region (100%) and comprised exclusively victim SSA region items. No factor was considered 'conceptually similar' to the hero SSA region, although Factor 1, Factor 2 and Factor 3 had SSA hero regional items located in each factor (n = 1, n = 3, n = 1 respectively).

Furthermore, when visually reviewing each factors 'sphere', the sphere of Factor 1 (professional) was located within the sphere of Factor 2 (professional). Item 24 was located in the 'sphere' of Factor 1 (professional) despite being allocated to Factor 2 (professional) and item 2 was located in the 'sphere' of Factor 2 (professional) despite being allocated to Factor 3. These variations in findings between FA and SSA is due to the way FA and SSA results are analysed. However, on the whole, the results from the forced four factor FA was able to distinguish more clearly and robustly, the placement of items within a specific factor compared to a visually interpretive approach via SSA.

The results from step 3 involved comparing each of the four factors Cronbach's alpha with the SSA regions Cronbach's alpha (from Study 1), that each factor was considered most 'conceptually similar' to. Factor 1 (α = .90, p <.05) had a higher Cronbach's alpha when compared to the professional SSA region (α = .88, p <.05). Additionally Factor 1 (n = 8) had 6 items fewer items than the professional SSA region (n = 14), suggesting that Factor 1 was stronger than the professional SSA region. Factor 2 (α = .82, p <.05) had a slightly lower Cronbach's alpha when compared to the professional SSA region (α = .88, p <.05). Factor 2 (n = 10) also had four fewer items than the professional SSA region (n = 14) which may account for this difference. Factor 3 (α = .76, p <.05) had a marginally higher Cronbach's alpha when compared to the revenger SSA region (α = .73, p <.05).

Factor 3 (n = 8) had one more item (item 2) more than the revenger SSA region (n = 7) which may account for this difference. Factor 4 (α = .73, p <.05) had a marginally higher Cronbach's alpha when compared to the victim SSA region (Factor 4, α = .70, p <.05). Factor 4 (n = 6) also had one less item (item 23) than the victim SSA region (n = 7), suggesting that Factor 4 was stronger than the SSA victim region. Whilst there was no factor considered conceptually similar to the hero region, all three factors (Factor 1, α = .90, p <.05, Factor 2, α = .82, p <.05 and Factor 3, α = .76, p <.05) which comprised of hero SSA regions items (n = 1, n = 3, n = 1 respectively) obtained higher Cronbach's' alpha than the hero SSA region from Study 1 (α = .70, p <.05). Overall, these results would suggest that each of the four factors had better internal consistency than the four SSA regions from Study 1.

4.4 Results: Hypothesis 3 - FA Factors will be conceptually similar to the four SSA narrative roles found by Youngs and Canter (2012) and Ioannou et al., (2015)

Hypothesis 3 extends upon the findings from Hypothesis 2. Specifically hypothesis 3 is that the factors identified by the FA will be conceptually similar to the four narrative roles found by Young and Canter, (2012) and Ioannou et al., (2015). The analysis for this hypothesis will be conducted in three steps.

The first step involves comparing the percentage of items loaded on each factor, with the number of items located in each narrative role (hero, professional, revenger and victim) found by Youngs and Canter (2012). Comparisons of each factor's narrative role with each SSA region found by Youngs and Canter (2012) could not occur as access to raw data was not possible.

The second step involves comparing the percentage of items loaded on each factor with the number of items located in each narrative role (hero, professional, revenger and victim) found by Ioannou et al., (2015). This will then be followed by comparing the internal consistency of the four factors with the internal consistency of the narrative role (found by Ioannou et al., 2015) each factor is considered conceptually similar to.

The third step will involve comparing the percentage of items loaded on to each factor with the number of items located in each narrative role (hero, professional, revenger and victim) from both Youngs and Canter, (2012) and Ioannou et al., (2015) studies. At the end of step three a final decision will be made as to which factors are considered conceptually similar to which narrative role (if any).

(H3) Step 1 – Comparison of the four factors items percentage with the narrative roles from Youngs and Canter (2012)

The first step for hypothesis 3 involved comparing the percentage of each factors items located within each narrative role (hero, professional, revenger and victim) reported by Youngs and Canter (2012).

As in Hypothesis 2 (step 2), the percentage of each factors' items location with their identified narrative role found by Youngs and Canter (2012) (hero, professional, revenger and victim) will be calculated. For example, if three out of the eight items from Factor 1 were located in the hero narrative role, 37.5% (n = 3) of Factor 1 items would be considered hero narrative role items. Once all items within a factor have been allocated to a narrative role, any

factor which has ≥ 50% of items allocated to one specific narrative role (hero, professional, revenger and victim) and that score is greater or approximately equal to (±5%) to the total percentage score of the other three narrative roles added together. That factor will be considered conceptually similar to that narrative role. For example purposes only: if 60% of Factor 1 items were common with previous research by Youngs and Canter (2012) and Ioannou et al., (2015) hero region items. Factor 1 will be considered conceptually similar to the hero narrative role. Where a factor does not have ≥ 50% of items allocated to any one narrative role, or where two narrative roles are equally represented with 50% of items each based on the results from previous research by Youngs and Canter (2012) & Ioannou et al., (2015) that 'Factor' will be considered a 'new narrative role'. For example purposes only, if Factor 1 did not have ≥ 50% of items present for any of the four narrative roles; or Factor 1 had two narrative roles both representing 50% of items based on the results from previous research by Youngs and Canter (2012) & Ioannou et al., (2015). Factor 1 will not be considered 'conceptually similar' to any specific narrative role and considered a new 'narrative role'. This classification approach has previously been adopted Ioannou et al, (2017), Canter and Firston (1998) and Salfati (2000).

Table 4.6 provides a summary of the four factors, with the number and percentage of each factors' items when compared with the narrative roles by Youngs and Canter (2012). For a detailed summary of each factors' items compared with Youngs and Canter (2012) SSA regions, see Appendix L.

Table 4.6

Four Factors items compared to regional item placement from Youngs and Canter (2012)

Narrative Role	**Factor 1** (*n* = 8) *n* (%)	**Factor** 2 (*n* = 10) *n* (%)	**Factor 3** (*n* = 8) *n* (%)	**Factor 4** (*n* = 6) *n* (%)
Hero (*n* = 6)	1 (12.5)	3 (30%)	0 (0%)	2 (33%)
Professional (*n* =14)	**7 (87.5%)**	**7 (70%)**	0 (0%)	0 (0%)
Revenger (*n* = 8*)	0 (0%)	0 (0%)	**7 (87.5%)**	1 (17%)
Victim (*n* = 4)	0 (0%)	0 (0%)	1 (12.5%)	**3 (50%)**

*Items in **bold** reflect the 'dominant' narrative role ≥50%*

*item 23 was removed

Factor 1 had 87.5% (*n* = 7) of items similar to the professional narrative role and 12.5% (*n* = 1) of items similar to the hero narrative role. Therefore Factor 1 is considered conceptually similar to the professional narrative role. Factor 2 had 70% (*n* = 7) of items similar to the professional narrative role and 30% (*n* = 3) of items similar to the hero narrative role. Therefore Factor 2 is considered conceptually similar to the professional narrative role. Factor 3 had 87.5% (*n* = 7) of items similar to the revenger narrative role and 12.5% (*n* = 1) of items similar to the victim narrative role. Therefore Factor 3 is considered conceptually similar to the revenger narrative role. Factor 4 had 50% (*n* = 3) of items similar to the victim narrative role, 33% (*n* = 2) of items similar to hero narrative role and 17% (*n* = 1) similar to the revenger narrative role. Therefore Factor 4 is considered conceptually similar to the victim narrative role (see Table 4.6). Whilst the hero narrative role was not conceptually similar to any factor, the hero narrative role items were located across Factor 1 (*n* = 1), Factor 2 (*n* = 3) and Factor 4 (*n* = 1).

(H3) Step 2 –Four Factors vs Ioannou et al., (2015) Four Narrative Roles

The second step for Hypothesis 3 involved comparing the percentage of items loaded on each factor, with the number of items located in each narrative role (hero, professional, revenger and victim) found by Ioannou et.al., (2015). This was then followed by comparing the internal consistency of the four factors with the internal consistency of the narrative role (found by Ioannou et al., 2015) each factor is considered conceptually similar to. To determine which narrative role each factor is considered 'conceptually similar' to using the same approach from Hypothesis 3 (Step 1) was used.

Table 4.7 provides a summary of the four factors, with the number and percentage of each factors items when compared with the narrative roles by Ioannou et al., (2015). For a detailed summary of each factors items compared with Ioannou et al., (2015) SSA regions, see Appendix L.

Table 4.7

Four Factors items compared to regional item placement from Ioannou et al., (2015)

Narrative Role	**Factor 1** (*n* = 8) *n* (%)	**Factor** 2 (*n* = 10) *n* (%)	**Factor 3** (*n* = 8) *n* (%)	**Factor 4** (*n* = 6) *n* (%)
Hero (*n* = 8)	**4 (50%)**	4 (40%)	0 (0%)	0 (0%)
Professional (*n* = 7)	1 (12.5%)	**5 (50%)**	1 (12.5%)	0 (0%)
Revenger (*n* = 8)	3 (37.5%)	0 (0%)	**4 (50%)**	1 (17%)
Victim (*n* = 9*)	0 (0%)	1 (10%)	3 (37.5%)	**5 (83%)**

Items in ***bold*** *reflect the 'dominant' narrative role ≥50%* *item 23 was removed

Factor 1 had 50% (*n* = 4) of items similar to the hero narrative role, 37.5% (*n* = 3) of items similar to the revenger narrative role and 12.5% (n =1) of items similar to the professional narrative role. Therefore Factor 1 is considered conceptually similar to the hero narrative role. Factor 2 had 50% (*n* = 5) of items similar to the professional narrative role, 40% (*n* = 4) of items similar to the hero narrative role and 10% (n =1) of items similar to the victim narrative role. Therefore Factor 2 is considered conceptually similar to the professional narrative role. Factor 3 had 50% (*n* = 4) of items similar to the revenger narrative role and 37.5% (*n* = 3) of items similar to the victim narrative role and 12.5% (n = 1) item similar to the professional narrative role. Therefore Factor 3 is considered conceptually similar to the revenger narrative role. Factor 4 had 83% (*n* = 5) of items similar to the victim narrative role and 17% (*n* = 1) similar to the revenger narrative role. Therefore Factor 4 is considered conceptually similar to the victim narrative role (see Table 4.7).

Comparisons of each factors Cronbach's alpha when compared to the Cronbach's alpha found by Ioannou et al., (2015) will now occur. Based on the above findings, the Cronbach's alpha for Factor 1 will be compared with the Cronbach's alpha for the hero narrative role. The Cronbach's alpha for Factor 2 will be compared with the Cronbach's alpha for the professional narrative role. The Cronbach's alpha for Factor 3 will be compared with the Cronbach's alpha for the revenger narrative role. The Cronbach's alpha for Factor 4 will be compared with the Cronbach's alpha for the victim narrative role. Table 4.8 provides a summary of these comparisons.

Table 4.8

Cronbach's alpha comparison between four factors and four narrative roles

Narrative (Factor) *n* =	**α**	**Ioannou et al., (2015) Narrative Role**	**α**
Factor 1 (hero) (*n* = 8)	**.90**	Hero (*n* = 8)	.81
Factor 2 (professional) (*n* = 10)	**.82**	Professional (*n* = 7)	.76
Factor 3 (revenger) (*n* = 8)	.76	Revenger (*n* = 8)	**.78**
Factor 4 (victim) (*n* = 6)	.73	Victim (*n* = 10)	**.85**

Items in **bold** represent the highest Cronbach's alpha for the identified Factor/SSA region

*indicates that no Factor was found for the hero narrative role

Factor 1 was considered conceptually similar to the hero narrative role. The Cronbach's alpha for Factor 1 (α = .90, *p* <.05) was higher than the Cronbach's alpha for the hero narrative role found by Ioannou et al., (2015) (α = .81, *p* <.05). Factor 1 (*n* = 8) had the same number of items as the hero narrative role (*n* = 8) (see Table 4.8).

Factor 2 was considered conceptually similar to the professional narrative role. The Cronbach's alpha for Factor 2 (α = .82, *p* <.05) was higher than the Cronbach's alpha for the professional narrative role found by Ioannou et al., (2015) (α = .76, *p* <.05). Factor 2 (*n* = 10) had three more items than the professional narrative role (*n* = 7) (see Table 4.8).

Factor 3 was considered conceptually similar to the revenger narrative role. The Cronbach's alpha for Factor 3 (α = .76, *p* <.05) was marginally lower than the Cronbach's alpha

for the revenger narrative role found by Ioannou et al., (2015) ($\alpha = .78$, $p < .05$). Factor 3 ($n = 8$) had the same number of items as the revenger narrative role ($n = 8$) (see Table 4.8).

Factor 4 was considered conceptually similar to the victim narrative role. The Cronbach's alpha for Factor 4 ($\alpha = .73$, $p < .05$) was lower than the Cronbach's alpha for the victim SSA region found by Ioannou et al., (2015) ($\alpha = .85$, $p < .05$). Factor 4 ($n = 6$) had four less items than the victim narrative role ($n = 10$) (see Table 4.8).

(H3) Step 3 –Four Factors vs Youngs and Canter (2012) and Ioannou et al., (2015) Four Narrative Roles

The third step for Hypothesis 3 involved comparing the percentage of items loaded on each factor, with the number of items located in each narrative role (hero, professional, revenger and victim) from both Youngs and Canter, (2012) and Ioannou et al., (2015) studies. As the items for each factor (Factor 1, Factor 2, Factor 3 and Factor 4) are being compared to two studies. Each factors items will be compared twice, resulting in each factor's items becoming 'double'. For example, Factor 1 has eight items therefore all eight items will be compared to Youngs and Canter (2012) and eight items will be compared to Ioannou et al., (2015) narrative roles, resulting in a total number of 16 comparisons (items) for Factor 1. Once each factor has been compared with both studies, the total number (and percentage) of items for each factor as represented by each narrative role (hero, professional, revenger and victim) will be calculated. For example, if 10 of the 16 possible results within Factor 1 items were similar to the professional narrative role, Factor 1 will be considered to have 62.5% of items similar to the professional narrative role.

Table 4.9 provides a summary of the four factors, with the number and percentage of each factors items when compared with the narrative roles by Youngs and Canter (2012) and Ioannou et al., (2015).

Table 4.9

Four Factors items compared to regional item placement from Youngs and Canter (2012) & Ioannou et al., (2015)

Narrative Role	**Factor 1** (*n* = 16) *n* (%)	**Factor** 2 (*n* = 20) *n* (%)	**Factor 3** (*n* = 16) *n* (%)	**Factor 4** (*n* = 12) *n* (%)
Hero (*n* = 14)	5 (31%)	7 (35%)	0 (0.0%)	2 (16.5%)
Professional (*n* = 21)	**8 (50%)**	**12 (60%)**	1(6%)	0 (0%)
Revenger (*n* = 16*)	3 (19%)	0 (0%)	**11 (69%)**	2 (16.5%)
Victim (*n* = 13*)	0 (0%)	1 (5%)	4 (25%)	**8 (67%)**

*Items in **bold** reflect the 'dominant' narrative role ≥50%*

*item 23 was removed

Factor 1 had 50% (*n* = 8) of items similar to the professional narrative role, 31% (*n* = 5) of items similar to the hero narrative role and 19% (*n* = 3) of items similar to the revenger narrative role. Therefore Factor 1 is considered conceptually similar to the professional narrative role. Factor 2 had 60% (*n* = 12) of items similar to the professional narrative role, 35% (*n* = 7) of items similar to the hero narrative role, and 5% (*n* = 1) of items similar to the victim narrative role. Therefore Factor 2 is considered conceptually similar to the professional narrative role. Factor 3 had 69% (*n* = 11) of items similar to the revenger narrative role, 25% (*n* =4) of items similar to the victim narrative role and 6% (*n* = 1) of items similar to the

professional narrative role. Therefore Factor 3 is considered conceptually similar to the revenger narrative role. Factor 4 had 67% (n = 8) of items similar to the victim narrative role and 16.5% (n = 2) of items similar to both the revenger and hero narrative roles respectively, but no items from the professional role. Factor 4 was considered conceptually similar to the victim narrative role (see Table 4.9).

Summary: H(3) Comparing the FA factors items percentage with SSA narrative roles from previous research by Youngs and Canter (2012) and Ioannou et al., (2015).

Hypothesis 3 was that the factors identified by the exploratory FA would be conceptually similar to the four narrative roles (hero, professional, revenger and victim) found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015). This hypothesis was addressed in three steps.

The first step compared the percentage of items loaded on each factor, with the number of items located in each narrative role (hero, professional, revenger and victim) found by Youngs and Canter (2012). The results for Step 1 found that all four factors (Factor 1, Factor 2, Factor 3 and Factor 4) had $\geq$ 50% of common items with three of the four narrative roles (professional, professional, revenger & victim respectively) when compared to Youngs and Canter (2012). Specifically, Factor 1 was considered conceptually similar to the professional narrative role (87.5%). Factor 2 was considered conceptually similar to the professional narrative role (70%). Factor 3 was considered conceptually similar to the revenger narrative role (87.5%) and Factor 4 was considered conceptually similar to the victim narrative role (50%). The hero narrative role was not present $\geq$ 50% on any factor, instead hero narrative

role items were predominantly located within ‘Factor 1’ (*n* = 1, 12.5%), Factor 2 (*n* = 3, 30%) and Factor 4 (*n* = 2, 33%).

The second step compared the percentage of items loaded on each factor with the number of items located in each narrative role (hero, professional, revenger and victim) found by Ioannou et al., (2015). Followed by comparing the internal consistency of the four factors with the internal consistency of the narrative role (found by Ioannou et al., 2015) each factor is considered conceptually similar to. The results from Step 2 found that all four factors (Factor 1, Factor 2, Factor 3 and Factor 4) had $\geq$ 50% of common items with all four narrative roles (hero, professional, revenger & victim respectively) when compared to Ioannou et al., (2015). Specifically, Factor 1 was considered conceptually similar to the hero narrative role (50%). Factor 2 was considered conceptually similar to the professional narrative role (50%). Factor 3 was considered conceptually similar to the revenger narrative role (50%) and Factor 4 was considered conceptually similar to the victim narrative role (83%).

Comparisons were then made between each of the four factors Cronbach’s alpha when compared to the Cronbach’s alpha of the narrative role each factor was considered conceptually similar to. Factor 1 obtained a better Cronbach’s alpha than the hero narrative role and had the same number of items. Factor 2 obtained a better Cronbach’s alpha than the professional narrative role, although Factor 2 had three more items than the professional narrative role which may account for this difference. Factor 3 had a marginally lower Cronbach’s alpha than the revenger narrative role and had the same number of items as the revenger narrative role. Factor 4 obtained a lower Cronbach’s alpha than the victim narrative role, however Factor 4 had four less items than the victim narrative role which may account for this difference.

The third step compared the percentage of items loaded on each factor with the number of items located in each narrative role (hero, professional, revenger and victim) from both Youngs and Canter, (2012) and Ioannou et al., (2015) studies. The results from step 3 found that all four factors (Factor 1, Factor 2, Factor 3 and Factor 4) had $\geq$ 50% of common items with three of the four narrative roles (professional, professional, revenger & victim respectively) when compared to Youngs and Canter (2012) & Ioannou et al., (2015) studies. The hero narrative role was not present $\geq$ 50% on any factor, instead hero narrative role items were predominantly located within Factor 1 (n = 5, 31%) and Factor 2 (n = 7, 35%) and to a lesser extent Factor 4 (*n* = 2, 16.5%).

4.5 Chapter 4 (Study 2) Summary

Researchers who have conducted both CFA and SSA on the same data (Alt, 2018; Cohen, 2005; Maslovaty et al., 2001; Tucker-Drob & Salthouse, 2009) have done so in the early stages of scale development to enable the interpret of results to be informed by the theoretical framework adopted (Alt, 2018). Therefore, the current study was focused on taking the next step from early stage development to ascertain whether the structure of the NRQ is further supported a more commonly used analytic approach, EFA.

Study 2 explored the structure of the NRQ using EFA as a complementary, yet alternate approach to SSA to further understand the NRQ (including a focus on nine unresolved items from Study 1 (item 1, 2, 8, 13, 15, 19, 23, 25 & 30)) by comparing EFA results to SSA results for MDOs (Study 1), and SSA results reported by Youngs and Canter (2012) and Ioannou et al., (2015). SSA requires the researcher to create borders to identify regions, which could be

considered a response to researcher bias and subjective interpretation of the data (Alt, 2018; Canter & Youngs, 2009). EFA enabled the researcher to conduct analysis with no assumption regarding a factor structure (Flora & Flake 2017) by identifying factors as informed by the data (e.g. scree plot, eigen value) (Finch, 2020).

Results from EFA supported the presence of four factors (Hypothesis 1), confirming SSA findings on MDOs (Study 1) and incarcerated offenders as found by Youngs and Canter (2012) and Ioannou et al., (2015). However, these four factors comprised 32-items as opposed to the original 33-items of the NRQ (item 23 did not load on any factor). The 32-item NRQ (with item 23 removed) was again found to have 'very good' internal consistency and obtained the same Cronbach's alpha ($\alpha = .86$, $p < .05$) as the 33-item NRQ from Study 1 (MDOs) and similar to the Cronbach's alpha found by Youngs and Canter (2012) ($\alpha = .85$, $p < .05$). Additionally, five of the nine 'unresolved' items (item 1, 8, 19, 23 & 30) from Study 1 were resolved following the removal of item 23, suggesting this item may not be necessary to include in the NRQ. Furthermore, item 23 was considered an unresolved fluid item from Study 1 (e.g. it was not located in one of the two hypothesised factors). Therefore, the internal consistency of the NRQ can be considered established and the removal of item 23 recommended.

Hypothesis 2, that factors identified by EFA would be internally consistent and conceptually similar to the four SSA regions (hero, professional, revenger and victim) for MDOs found in Study 1 was mostly supported. To address this hypothesis, a Cronbach's alpha was conducted for each factor, as well as mapping each factor (and its respective items) onto the SSA output. This approach enabled a direct comparison of similarities and differences between EFA factors, SSA regions and item placement. This comparison was of particular

interest given SSA is less commonly used than EFA and often subject to criticism (Ward, 2012). However, it is worth noting however that SSA analyses the relationship among variables in a geometric space whilst EFA focuses on the relationship of variables to a particular axis in a linear way (Ioannou, 2006). Therefore, if consistency was found between the mapping of EFA factors onto the SSA output, the proposed narrative regions from Study 1 (hero, professional. revenger and victim) would be further supported, as too would be the use of SSA as an approach to assessing questionnaire structure.

Two of the four factors (Factor 3 and Factor 4) and their respective items directly mapped onto the equivalent SSA Regions (revenger and victim respectively), with the exception of two items: item 23 and item 2. Item 23 (located in the victim SSA region in Study 1), was not included as it did not load onto any factor. Item 2 was located in Factor 3 (revenger), however in Study 1, item 2 was located in the hero SSA region and considered an unresolved fluid item (as it was not located in one of the two hypothesized narrative regions e.g. victim or revenger). This is an example of the subjective nature of boundary placement for SSA and how this may be less accurate than EFA. Specifically, whilst item 2 had been allocated to the hero SSA region in Study 1, this item could equally have been located within the revenger SSA region given its placement near the boundary line separating hero and revenger regions (see Figure 3.3). Furthermore, the placement of item 2 in Factor 3 (revenger) would also support the original hypothesis from Study 1, that item 2 was a fluid item located in either the victim or revenger region. Therefore item 2 is considered better located in the revenger SSA region as opposed to the hero SSA region from Study 1. Finally, both Factor 3 (revenger) with item 2 included and Factor 4 (victim) with item 23 removed, obtained slightly better internal consistency compared to the respective SSA regions (revenger and victim respectively).

Therefore, the results from the EFA for both Factor 3 (revenger) and Factor 4 (victim) both support and improve upon the SSA results from Study 1, suggesting EFA may be a better analytic approach to SSA.

The mapping of EFA Factor 1 and Factor 2 items on the SSA plot was not as clear as that found for Factor 3 (revenger) and Factor 4 (victim). Whilst all Factor 1 items (with the exception of one item, item 15 (an unresolved fluid item from Study 1) were located in the professional SSA region, not all professional SSA region items were located in Factor 1. Additionally, all Factor 2 items were spread across both the Hero and Professional SSA regions (including two unresolved items fluid from Study 1, items: 13 & 25) and one item was located within the sphere of Factor 1 (item 24). The internal consistency for Factor 1 (hero/professional) and Factor 2 (professional) was also found to be slightly better than the professional and hero narrative SSA regions for MDOs. Whilst these findings are not entirely surprising given Youngs and Canter (2012) and Ioannou et al., (2015) report different items within each of their hero and professional narrative roles with these items only located within either the hero or professional narrative roles (e.g. victim and revenger items are not located in hero or professional narrative roles). Therefore, the results from the EFA suggest a need to further explore Factor 1 (hero/professional) and consider why the hero SSA region was not conceptually similar to any factor. Therefore hypothesis 2 was considered mostly supported.

The third hypothesis that factors identified by EFA would be conceptually similar to the four narrative roles (hero, professional, revenger and victim) found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015) was mostly supported. Factor 1 was considered conceptually similar to both the professional narrative role (Youngs & Canter,

2012) and the hero narrative role (Ioannou et al., 2015). Factor 2 was considered conceptually similar to the professional narrative role by Youngs and Canter (2012) and Ioannou et al., (2015). Factor 3 was considered conceptually similar to the revenger narrative role for both Youngs and Canter (2012) and Ioannou et al., (2015). Factor 4 was considered conceptually similar to the victim narrative role by Youngs and Canter (2012) and Ioannou et al., (2015). The internal consistency for all four factors (Factor 1, Factor 2, Factor 3, Factor 4) were also considered to have either similar, or better internal consistency than their four conceptually similar narrative roles (hero/professional, professional, revenger and victim respectively) as reported by Ioannou et al., (2015).

The aim of Study 2 was to ascertain if EFA would support the presence of the four SSA regions and their respective items, and to a large extent this has occurred. However, the results from the EFA also indicate that this analytic approach may be more effective at identifying the underlying structure of a measure over SSA even with a small sample size (N = 70). In particular, EFA may be effective at detecting subtle differences in the relationship between items in a way that SSA does not (e.g. in SSA it would be unusual to identify a region within a region). Whilst it could be argued that a direct comparison of EFA on an SSA output is not methodologically sound – a direct mapping of two of the four factors (Factor 3 and Factor 4) was possible.

Overall, EFA has provided a clearer understanding of the data both in relation resolving six of the nine unresolved items (item 1, 2, 8, 19, 23 & 30) from Study 1 and introduced the possibility of a new narrative role, Factor 1 (hero/professional) in lieu of the hero narrative role. Study 1 introduced the presence of 13 core items and 20 fluid items for each narrative

role. Therefore, the next study (Chapter 5 – Study 3) intends to extend upon the current study (Study 2) by exploring the placement of these core and fluid items for each of the EFA factors to gain final clarity as to which factors represent which narrative roles. This clarity will be particularly pertinent for resolving the remaining unresolved fluid items from (items 13, 15 & 25), Factor 1 (hero/professional) and the absence of a conceptually similar hero narrative role factor.

Chapter 5

Study 3: Establishing the structure of the NRQ (SSA or EFA)

The development of the NRQ began in 2003 (Ioannou et al., 2003), however for the past 17 years no research has focused on developing a scoring key for this measure. Furthermore, whilst the developers of this measure continue to publish on the NRQ (Ciesla, Ioannou & Hammond, 2019; Goodlad, Ioannou & Hunger, 2019; Ioannou et al., 2017; 2018) this research exclusively uses SSA to support the narrative structure of this measure as opposed to more commonly used approaches such as CFA or SEM (Finch, 2019; Guo et al., 2017; Marsh et al., 2014; Reio & Shuck, 2015). To have any practical utility, the NRQ needs to demonstrate construct validity and in turn the development of a scoring key so it can be administered and interpreted for individual offenders as opposed to exclusively used for research purposes.

The aim of this research is to address the gap in the literature by exploring the structure and internal consistency of the NRQ administered to MDOs compared to incarcerated offenders. Study 1 supported the use of the NRQ for MDOs and introduced the presence of core and fluid items. Study 2 conducted EFA on the NRQ to ascertain if the presence of the narrative roles would be found by an alternate statistical analytic approach other than SSA, of which three of the four narrative roles were supported. Yet the results from the EFA in Study 2 when compared to the SSA results from Study 1, Youngs and Canter (2012) and Ioannou et al., (2015) resulted in two slightly different interpretations of the structure of the NRQ. Specifically, SSA on the NRQ has consistently found the presence of four narrative roles: hero, professional, revenger and victim (Ioannou et al., 2015; Study 1; Youngs & Canter, 2012). EFA on the NRQ also supported the presence of three of these four narrative roles, Factor 2 (professional), Factor 3 (revenger) and Factor 4 (victim), however a conceptually similar hero narrative role was absent, instead a different factor, Factor 1 (hero/professional) was identified.

Additionally, the placement of hero and professional items in the four factors varied from their placement in the SSA regions for MDOs.

Therefore, two different analytic approaches have resulted in two similar but slightly different outcomes for the structure of the NRQ, although evidence of construct validity is forming. The next step to establish the structure of the NRQ is to finalise the four narrative roles and their respective items. In absence of raw data from Youngs and Canter (2012) and Ioannou et al., (2015), Study 1 focused on comparing findings between newly recruited MDOs and the published SSA results of the NRQ administered to incarcerated offenders (N = 71, Youngs and Canter, 2012; N = 120, Ioannou et al., 2015). This approach continued in Study 2, whereby EFA was conducted on the same data obtained from MDOs to compare item placement with the SSA from MDOs, followed by determining if EFA factors were conceptually similar to narrative roles when compared to Study 1, Youngs and Canter (2012) and Ioannou et al., (2015). Overall, EFA results from Study 2 provided greater clarity regarding the structure and placement of NRQ items and their respective factors. However direct comparisons of items located within each of the EFA factors and SSA results by Youngs and Canter (2012) and Ioannou et al., (2015) has not yet occurred.

Study 1 introduced and supported the presence of 13 core and 20 fluid items. However, determining the presence of core and fluid items for the EFA four factors has not yet occurred. Furthermore, the EFA four factors are derived from 32-items (item 23 was removed), therefore only 19 of the 20 fluid items can be compared. Following comparison of the EFA four factors and MDOs item placement in Study 2, a direct replication for Factor 3 and Factor 4 with the revenger and victim narrative roles respectively was found. Therefore, it is expected the

presence for core and fluid items for these two factors will also be found. Thus, Study 3 will primarily focus on Factor 1 (hero/professional) and Factor 2 (professional) as these were the two factors items that did not directly map onto the SSA results (e.g. hero and professional).

The ability to identify whether core and fluid items are located within their conceptually similar factor is an important extension upon Study 2 as such findings can confirm the appropriate labelling of factors alongside confirming the presence of core and fluid items, which have not previously been considered in any other research on the NRQ. Through this process the three remaining unresolved items (items 13, 15 & 25) will hopefully be resolved and an understanding as to why the hero narrative role (identified by SSA analysis) appears to have been replaced by Factor 1 (hero/professional), identified by EFA. The five aims for the current study (Study 3) are surmised below:

Study Aims

1. To determine if the placement of 13 core items (items 1, 4, 7, 10, 11, 16, 18, 19, 20, 27, 28, 29 & 31) for each of the four factors, are located in the same 'conceptually similar' factor when compared to Young's and Canter (2012) and Ioannou et al., (2015) and Study 1 results.

2. To determine if the placement of the 19 fluid items (items 2, 3, 5, 6, 8, 9, 12, 13, 14, 15, 17, 21, 22, 24, 25, 26, 30, 32 & 33) for each of the four factors, are located in the same 'conceptually similar' factor when compared to Young's and Canter (2012) and Ioannou et al., (2015) results. In addition, to ascertain if the three 'unresolved' fluid items (item 13, 15 & 25) from Study 1 become resolved.

3. To determine whether the hero narrative role items as found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015) are located exclusively in Factor 1 (hero/professional) and Factor 2 (professional).

4. To determine whether Factor 1 (hero/professional) exclusively comprises of hero and professional narrative role/SSA regions items when compared to previous research by Youngs and Canter (2012) & Ioannou et al., (2015) and Study 1.

5. To determine whether SSA or EFA results should be used in establishing the structure of the NRQ.

Based on the combined results from Study 1 and Study 2, Factor 1 will retain the label Factor 1 (hero/professional) and is considered conceptually similar to both the hero and professional SSA regions/narrative roles. Factor 2 will retain the label Factor 2 (professional) and is considered conceptually similar to the professional SSA region/narrative roles. Factor 3 will retain the label Factor 3 (revenger) and is considered conceptually similar to the revenger SSA region/narrative roles. Factor 4 will retain the label Factor 4 (victim) and is considered conceptually similar to the victim SSA region/narrative roles. Hero SSA region/narrative role items can be allocated to either Factor 1 (hero/professional) or Factor 2.

5.1 Study 3 Hypotheses

Hypothesis 1: The 13 core items (items 1, 4, 7, 10, 11, 16, 18, 19, 20, 27, 28, 29 & 31) located in a specific narrative role/SSA region from previous research by Youngs and Canter (2012), Ioannou et al., (2015) and Study 1, will be located in the same conceptually similar

factor (see Table 5.1). The null hypothesis being that the 13 core items will not be located in the same conceptually similar factor.

Table 5.1

Hypothesised outcomes for the four factors 13 core items

Narrative Role/SSA region results (Ioannou et al., 2015; Study 1; Youngs & Canter, 2012)	**NRQ core item**	**Hypothesised Factor**
Hero (*n* = 2)	Item 20: I was looking for recognition	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 27: It was a manly thing to do	Factor 1(hero/professional) or Factor 2 (Professional)
Professional (*n* = 5)	Item 1: I was like a professional	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 7: It was routine	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 10: I was doing a job	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 11: I knew what I was doing	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 28: For me it was a usual days work	Factor 1 (hero/professional) or Factor 2 (professional)
Revenger (*n* = 3)	Item 4: It was right	Factor 3 (Revenger)
	Item 29: I was trying to get revenge	Factor 3 (Revenger)
	Item 31: I was getting my own back	Factor 3 (Revenger)
Victim (*n* = 3)	Item 16: I was helpless	Factor 4 (Victim)
	Item 18: I was a victim	Factor 4 (Victim)
	Item 19: I was confused about what was happening	Factor 4 (Victim)

Hypothesis 2

The 32-item NRQ had 19 of the 20 fluid items loaded across all four factors, item 23 was removed. Therefore only 19 fluid items will be compared to the original 20 fluid items found in Study 1. Furthermore, in Study 1, 15 fluid items were located in one of the two

conceptually similar SSA regions when compared to Youngs and Canter (2012) & Ioannou et al., (2015). Additionally, in Study 2 (Hypothesis 2) item 2 was considered more appropriately placed in the revenger SSA region as opposed to the Hero narrative region from Study 1. Therefore, three fluid items (item 13, 15 & 25) from Study 1 were located in a third region and considered 'unresolved' items. Therefore Hypothesis 2 will comprise of two hypotheses.

Hypothesis 2a

The 16 fluid items located in a specific SSA region in Study 1 (items 2, 3, 5, 6, 8, 9, 12, 14, 17, 21, 22, 24, 26, 30, 32 & 33), would be located in the same conceptually similar factor (see Table 5.2). The null hypothesis being that the 16 fluid items would not be located in the same conceptually similar factor.

Table 5.2

Placement of 16 fluid Items into conceptually similar narrative roles/SSA Region

Narrative role (Ioannou et al., 2015; Youngs & Canter, 2012)	**NRQ Item**	***Study 1 SSA Region***	***Hypothesised Factor***
Professional or Hero (*n* = 7)	Item 3: It was fun	Professional	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 5: It was interesting	Professional	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 6: It was like an adventure	Professional	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 9: It was exciting	Professional	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 24: It all went to plan	Professional	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 30: There was nothing special about what happened	Professional	Factor 1 (hero/professional) or Factor 2 (professional)
		Hero	Factor 1 (hero/professional) or Factor 2 (professional)

	Item 32: I knew I was taking a risk		Factor 1 (hero/professional) or Factor 2 (professional)
Victim or Revenger (*n* = 5)	Item 2: I had to do it	*Revenger	Factor 3 (revenger)
	Item 12: It was the only thing to do	Revenger	Factor 3 (revenger)
	Item 17: It was my only choice	Victim	Factor 4 (victim)
	Item 21: I just wanted to get it over with	Revenger	Factor 3 (revenger)
	Item 22: I didn't care what would happen	Revenger	Factor 3 (revenger)
Revenger or Professional (*n* = 2)	Item 8: I was in control	Professional	Factor 1 (hero/professional) or Factor 2 (professional)
	Item 14: Nothing else mattered	Revenger	Factor 3 (revenger)
Victim or Hero (*n* = 1)	Item 26: It was like I wasn't part of it	Victim	Factor 4 (Victim)
Victim or Professional (*n* = 1)	Item 33: I guess I always knew it was going to happen	Professional	Factor 1 (hero/professional) or Factor 2 (professional)

** item 2 was considered a revenger narrative role instead following results from Study 2.*

Hypothesis 2b

The three fluid unresolved items from Study 2 (item 13, 15 & 25) will be located in one of two factors that are conceptually similar to the 'narrative roles' these three items were located in from previous research by Youngs and Canter (2012) and Ioannou et al., (2015) (see Table 5.3). The null hypothesis being that the three fluid unresolved items from Study 1 will not be located in either of the conceptually similar factors when compared to previous research findings.

Table 5.3

Placement of 3 fluid items into conceptually similar narrative roles

Narrative role (Ioannou et al., 2015; Youngs & Canter, 2012)	**NRQ Item**	***Study 1 SSA Region***	***Hypothesised Factor***
Revenger or Hero (*n* = 1)	13: It was a mission	Professional	Factor 3 (revenger) or

			Factor 1 (hero/professional) or Factor 2 (professional)
Revenger or Professional (*n* = 3)	15: I had power	Hero	Factor 3 (revenger) or Factor 2 (professional)
Revenger or Hero (*n* = 2)	25: I couldn't stop myself	Victim	Factor 3 (revenger) or Factor 1 (hero/professional) or Factor 2 (professional)

Study 1 results are included for comparison purposes.

Hypothesis 3

All thirteen hero narrative role/SSA regions items (item 3, 5, 6, 9, 13, 15, 20, 24, 25, 26, 27, 30 & 32) found in previous research by Youngs and Canter (2012) & Ioannou et al., (2015) and Study 1 will be located exclusively in Factor 1 (hero/professional) or Factor 2 (professional). The null hypothesis being that all hero narrative role/SSA region items will not be exclusively located in either Factor 1 (hero/professional) or Factor 2 (professional).

Hypothesis 4

All eight Factor 1 (hero/professional) items (item 3, 5, 6, 8, 9, 10, 13 & 15) will be located exclusively in the hero or professional narrative roles/SSA region as found in Study 1 and previous research by Youngs and Canter (2012) & Ioannou et al., (2015). The null hypothesis being that not all eight Factor 1 items will not be located exclusively in hero or professional narrative roles/SSA region.

5.2 Results: Hypothesis 1 – 13 core NRQ items

Hypothesis 1 was 13 core items (items 1, 4, 7, 10, 11, 16, 18, 19, 20, 27, 28, 29 & 31) located in a specific narrative role/SSA region from previous research by Young's and Canter

(2012) and Ioannou et al., (2015) and Study 1, would be located in the same conceptually similar factor. Specifically, all hero narrative role/SSA region items (item 20 & 27) would be located in either Factor 1 (hero/professional) or Factor 2 (professional). All professional narrative role/SSA region items (item 1, 7, 10, 11 & 28) would be located in Factor 2 (professional). All revenger narrative role/SSA region items (item 4, 29 & 31) would be located within Factor 3 (revenger). All victim narrative role/SSA region items (item 16, 18 & 19) would be located in Factor 4 (victim).

Two core items (items 20 & 27) hypothesized to be located in either Factor 1 (hero/professional) or Factor 2 (professional) were both located in Factor 2 (professional). Therefore Factor 2 (professional) was representative of the hero narrative role/SSA region. Of the five core items (item 1, 7, 10, 11 & 28) hypothesised to be located in either Factor 1 (hero/professional) or Factor 2 (professional), four core items (item 1, 7, 11 & 28) were located in Factor 2 (professional) and one core item (item 10) was located in Factor 1 (hero/professional). The placement of item 10 is in a different factor from the other four professional narrative role/SSA region items, therefore raising the question as to whether item 10 should be considered a core item for Factor 1 (hero/professional) or should instead be considered a fluid item. In Study 2, the results from the forced four factor, EFA found that item 10 obtained a factor loading of .73 on Factor 1 (hero/professional) and was not loaded on any other factor. Item 10 was also found to contribute to the internal consistency of Factor 1 ($\alpha = .90$, $p < .05$ would reduce to $\alpha = .85$, $p < .05$ if item 10 was deleted). Therefore, item 10 is considered robust enough to be considered a core item for Factor 1 (hero/professional).

Three core items (item 4, 29 & 31) hypothesised to be located in Factor 3 (revenger) were all located in Factor 3 (revenger). These three items have consistently been located in the same conceptually similar factor (Factor 3 (revenger), SSA region (revenger) and narrative role (revenger) by Youngs and Canter (2012) and Ioannou et al., (2015), providing support for these three core items to be located in Factor 3 (revenger). Three core items (item 16, 18 & 19) hypothesised to be located in Factor 4 (victim) were all located in Factor 4 (victim). These three core items (16, 18 & 19) have consistently located in the same conceptually similar factor (Factor 4 (victim)), SSA region (victim) and narrative role (victim) by Youngs and Canter (2012) & Ioannou et al., (2015), providing support for these three core items to be located in Factor 4 (victim). Therefore all 13 core items were located within their hypothesised factors thus hypothesis 1 was supported (see Table 5.4).

Table 5.4

13 core items factor placement

Narrative Role/SSA region results (Ioannou et al., 2015; Study 1; Youngs & Canter, 2012)	**NRQ Core Item**	**Factor Results**
Hero (*n* = 2)	Item 20: I was looking for recognition	Factor 2 (Professional)
	Item 27: It was a manly thing to do	Factor 2 (Professional)
Professional (*n* = 5)	Item 1: I was like a professional	Factor 2 (Professional)
	Item 7: It was routine	Factor 2 (Professional)
	Item 10: I was doing a job	Factor 1 (hero/professional)
	Item 11: I knew what I was doing	Factor 2 (Professional)
	Item 28: For me it was a usual days work	Factor 2 (Professional)
Revenger (*n* = 3)	Item 4: It was right	Factor 3 (Revenger)
	Item 29: I was trying to get revenge	Factor 3 (Revenger)
	Item 31: I was getting my own back	Factor 3 (Revenger)
Victim (*n* = 3)	Item 16: I was helpless	Factor 4 (Victim)
	Item 18: I was a victim	Factor 4 (Victim)
	Item 19: I was confused about what was happening	Factor 4 (Victim)

Item in **bold** represents an item located in a 'second' region

5.3 Results: Hypothesis 2 - 19 fluid NRQ items

Hypothesis 2a – 16 fluid items

Hypothesis 2 was that the 16 fluid items located in a specific SSA region in Study 1 (items 2, 3, 5, 6, 8, 9, 12, 14, 17, 21, 22, 24, 26, 30, 32 & 33), would be located in the same conceptually similar factor. Specifically, the one fluid item located in the hero SSA region item (item 32) is hypothesised to be located in either Factor 1 (hero/professional) or Factor 2 (professional). The eight fluid items located in the professional SSA region (item 3, 5, 6, 8, 9, 24, 30 & 33) are hypothesised to be located in either Factor 1 (hero/professional) or Factor 2 (professional). The four fluid items located in the revenger SSA region (item 12, 14, 21 & 22) are hypothesised to be located in Factor 3 (revenger). The two fluid items located in the victim SSA region (item 17 & 26) are hypothesised to be located in Factor 4 (victim).

Of the eight items (item 3, 5, 6, 8, 9, 24, 30 & 33) hypothesised to be located in either Factor 1 (hero/professional) or Factor 2 (professional), five items were located in Factor 1 (hero/professional) (item 3, 5, 6, 8 & 9) and four items were located in Factor 2 (professional) (item 24, 30, 32 & 33). The one item (item 32) hypothesised to be located in Factor 1 (hero/professional) or Factor 2 (professional) was located in Factor 2 (professional). All five items (item 2, 12, 14, 21 & 22) hypothesised to be located in Factor 3 (revenger) were located in Factor 3 (revenger). Both items (item 17 & 26) hypothesised to be located in Factor 4 (victim) were located in Factor 4 (victim). Overall all 16 fluid items were located in a hypothesised factor thus hypothesis 2a was supported (see Table 5.5).

Table 5.5

16 fluid items factor placement

Narrative role Ioannou et al., (2015) and Youngs and Canter, (2012) respectively	**NRQ Item**	***Study 1 SSA Region***	***Factor Results***
Professional or Hero (*n* = 7)	Item 3: It was fun	Professional	Factor 1 (hero/professional)
	Item 5: It was interesting	Professional	Factor 1 (hero/professional)
	Item 6: It was like an adventure	Professional	Factor 1 (hero/professional)
	Item 9: It was exciting	Professional	Factor 1 (hero/professional)
	Item 24: It all went to plan	Professional	Factor 2 (professional)
	Item 30: There was nothing special about what happened	Professional	Factor 2 (professional)
	Item 32: I knew I was taking a risk	Hero	Factor 2 (professional)
Victim or Revenger (*n* = 5)	Item 2: I had to do it	Hero	Factor 3 (revenger)
	Item 12: It was the only thing to do	Revenger	Factor 3 (revenger)
	Item 17: It was my only choice	Victim	Factor 4 (victim)
	Item 21: I just wanted to get it over with	Revenger	Factor 3 (revenger)
	Item 22: I didn't care what would happen	Revenger	Factor 3 (revenger)
Revenger or Professional (*n* = 2)	Item 8: I was in control	Professional	Factor 1 (hero/professional)
	Item 14: Nothing else mattered	Revenger	Factor 3 (revenger)
Victim or Hero (*n* = 1)	Item 26: It was like I wasn't part of it	Victim	Factor 4 (Victim)
Victim or Professional (*n* = 1)	Item 33: I guess I always knew it was going to happen	Professional	Factor 2 (professional)

Item in **bold** represents an item located in a 'second' region

Hypothesis 2b – 3 fluid NRQ items

Hypothesis 2b was that the three fluid unresolved items from Study 1 and Study 2 (item 13, 15 & 25) would be located in one of two factors that are conceptually similar to the

‘narrative roles’ these items were located in from previous research (Youngs and Canter, 2012 & Ioannou et al., 2015). Specifically, item 13 would be located in either Factor 3 (revenger), Factor 1 (hero/professional) or Factor 2 (professional). Item 15 would be located in either Factor 3 (revenger), Factor 1 (hero/professional) or Factor 2 (professional). Item 25 would be located in either Factor 3 (revenger), Factor 1 (hero/professional) or Factor 2 (professional).

Item 13 was located in Factor 1 (hero/professional). Item 15 was located in Factor 1 (hero/professional). Item 25 was located in Factor 4 (victim). Overall two of the three items (item 13 & 15) were located in one of the hypothesised factors, however one item (item 25) was located in a third Factor (Factor 4 (victim)). The placement of item 25 in Factor 4 (victim) was the same placement as in the SSA for MDOs (victim SSA region). Item 25 was also considered an ‘unresolved’ item from Study 1 and Hypothesis 2. Therefore, further exploration of Youngs and Canter (2012), Ioannou et al., (2015) results will occur, alongside reviewing Study 1 and Study 2 findings for item 25.

Item 25 “I couldn’t stop myself”

Item 25 was allocated to Factor 4 (victim). In Study 1, item 25 was also allocated to the victim SSA region. However, item 25 had been allocated to the hero narrative role proposed by Youngs and Canter (2012) and revenger narrative role proposed by Ioannou et al., (2015).

When reviewing the SSA output from Canter and Youngs (2012) item 25 “I couldn’t stop myself” was labelled “Couldn’t Stop” and was allocated to the hero narrative role. However, item 25 could also have been allocated to the victim narrative role (see Appendix N). When reviewing the SSA output from Ioannou et al., (2015), item 25 “I couldn’t stop

myself" was labelled 16 "no stop" and was allocated to the revenger narrative role. However, item 25 could equally have been allocated to the victim narrative role (see Appendix M). Furthermore, the results from the forced four factor EFA in Study 2 showed that item 25 obtained a factor loading of .58 on Factor 4 (victim) and was not loaded on any other factor. Item 25 was also found to contribute to the internal consistency of Factor 4 (α = .73, p < .05 would reduce to α = .70, p < .05 if item 25 was deleted). Overall, item 25 is considered to be more appropriately placed in Factor 4 (victim) than the proposed revenger narrative by Ioannou et al., (2015) or proposed hero narrative role by Youngs and Canter (2012), thus supporting Hypothesis 2b (see table 5.6 for a summary of Hypothesis 2b results).

Table 5.6

3 fluid items factor placement

Narrative role Ioannou et al., (2015) and Youngs and Canter, (2012) respectively	**NRQ Item**	***Study 1 SSA Region***	***Hypothesised Factor Results***
Revenger or Hero (n = 1)	Item 13: It was a mission	Professional	Factor 1 (hero/professional)
Revenger or Professional (n = 1)	Item 15: I had power	Hero	Factor 1 (hero/professional)
***Revenger or Hero (victim)** (n = 1)	Item 25: I couldn't stop myself	Victim	Factor 4 (Victim)

*Item 25 could equally have been placed in the Victim Narrative role for both Ioannou et al., (2015) and Youngs and Canter (2012)

5.4 Results: Hypothesis 3 - Hero narrative role/SSA region items

Hypothesis 3 was that all thirteen hero narrative role items/SSA regions items (item 3, 5, 6, 9, 13, 15, 20, 24, 25, 26, 27, 30 & 32) found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015) and Study 1 would be located exclusively in either Factor 1 (hero/professional) or Factor 2 (professional). In hypothesis 2 of the current study, it was

identified that item 25 was better placed in Factor 4 (victim) narrative role rather than the professional or hero narrative role for Youngs and Canter (2012) and Ioannou et al., (2015), therefore this item will be removed from this hypothesis. Therefore, the remaining twelve narrative role/SSA regions items (item 3, 5, 6, 9, 13, 15, 20, 24, 26, 27, 30 & 32) will be explored for the current hypothesis.

Eleven of the 12 hero narrative role/SSA regions items were located in either Factor 1 (hero/professional) or Factor 2 (professional). Specifically, seven of the 13 hero narrative role items were located in Factor 1 (item 3, 5, 6, 9, 13, 15 & 32) (hero/professional) and four items were located in Factor 2 (professional) (item 24, 20, 27 & 30). One item (item 26) was located in an alternate Factor, Factor 4 (victim). Therefore, further exploration of Youngs and Canter (2012), Ioannou et al., (2015) results will occur, alongside reviewing Study 1 and Study 2 findings for item 26.

Item 26 "It was like I wasn't part of it"

Item 26 was allocated to Factor 4 (victim), both Study 1 and Ioannou et al., (2015) placed item 26 in the victim SSA region/narrative role. However, the results from Youngs and Canter (2012) had placed item 26 in the hero narrative role.

When reviewing the SSA output from Youngs and Canter (2012) item 26 "It was like I wasn't part of it" was labelled "Wasn't Part of it" and was allocated to the hero narrative role. However, item 26 could equally have been allocated to the victim narrative role (see Appendix N). Furthermore, the results from the forced four factor FA in Study 2 showed that item 26 obtained a factor loading of (.47) for Factor 4 (victim) as well as Factor 2 (professional) (.31).

A Cronbach's alpha was conducted on Factor 4 (victim) and Factor 2 (professional) to include item 26. Item 26 contributed to the internal consistency of Factor 4 (victim) (α = .73, p < .05 would reduce to α = .71, p < .05 if item 26 was deleted), whereas item 26 did not to the internal consistency of Factor 2 (professional) (α = .82 p <.05 would reduce to α = .76 p <.05 if item 26 was added). Therefore item 26 is considered to be more appropriately placed in Factor 4 (victim) than the hero narrative role proposed by Youngs and Canter (2012) (see Table 5.9 for a summary of Hypothesis 3 results).

Table 5.7

Hero narrative role/SSA region items compared with the forced four factor results

Hero Item	**Youngs and Canter (2012)** (n = 6)	**Ioannou et al., (2015)** (n = 8)	**Study 1 SSA Region** (n = 5)	**Factor Results**
Item 3: It was fun	Professional	Hero	Professional	Factor 1 (hero/professional)
Item 5: It was interesting	Professional	Hero	Professional	Factor 1 (hero/professional)
Item 6: It was like an adventure	Professional	Hero	Professional	Factor 1 (hero/professional)
Item 9: It was exciting	Professional	Hero	Professional	Factor 1 (hero/professional)
Item 13: It was a mission	Hero	Victim	Factor 4 (Victim)	Factor 1 (hero/professional)
Item 15: I had power	Professional	Revenger	Hero	Factor 1 (hero/professional)
Item 24: It all went to plan	Professional	Hero	Professional	Factor 2 (professional)
Item 20: I was looking for recognition	Hero	Hero	Hero	Factor 2 (Professional)
Item 26: It was like I wasn't part of it	Hero*(victim)	Victim	Victim	**Factor 4 (Victim)**

Item 27: It was a manly thing to do	Hero	Hero	Hero	Factor 2 (Professional)
Item 30: There was nothing special about what happened	Hero	Professional	Professional	Factor 2 (professional)
Item 32: I knew I was taking a risk	Professional	Hero	Hero	Factor 1 (hero/professional)

*item 26 could equally have been placed in the Victim Narrative role for Youngs and Canter (2012)

5.5 Results: Hypothesis 4 – Factor 1 (hero/professional) items

Hypothesis 4 was that all eight Factor 1 (hero/professional) items (item 3, 5, 6, 8, 9, 10, 13 & 15) would be located in either a hero or professional narrative role/SSA region as found in previous research by Young's and Canter (2012) and Ioannou et al., (2015) and Study 1. Factor 1 (hero/professional) was comprised of one core item (item 10) and seven fluid items (item 3, 5, 6, 8, 9, 13 & 15).

Five items (item 3, 5, 6, 9 & 10) were located in either the hero or professional narrative role/SSA region across all three studies (Ioannou et al., 2015; Study 1; Youngs & Canter, 2012) (see Table 5.8). Interestingly all five items obtained the highest factor loading for all eight items of Factor 1 (hero/professional) and only loaded onto Factor 1 (herp/professional) (see Table 5.7). Item 10 is a core item, however this item had the lowest factor loading compared to the other four items (item 3, 5, 6 & 9), therefore these four items will also be considered core items. The remaining three items (item 8, 13 & 15) were located in either the professional or hero narrative role/SSA region for Youngs and Canter (2012) and Study 1, however Ioannou et al., (2015) had placed all three items within the revenger narrative role. These three items are considered fluid items and obtained the lowest factor loading (see Table 5.7). Therefore, these three items (item 8, 13 & 15) warrant further exploration.

Table 5.8

Factor 1 (hero/professional) item loadings on the forced four factor EFA

Item Number	**NRQ Item**	Factor 1 (hero/professional)
5	It was interesting	**.87**
9	It was exciting	**.84**
3	It was fun	**.82**
6	It was like an adventure	**.76**
10	I was doing a job	**.73**
13	It was a mission	.67
8	I was in control	.57
15	I had power	.52
	Eigenvalues	7.76
	% of Variance	23.51
	*n (*item)	8
	A	.89

Item 8 "I was in control"

Item 8 was allocated to Factor 1 (hero/professional). In Study 1, item 8 was allocated to the professional SSA region. Item 8 was also allocated to the professional narrative role proposed by Youngs and Canter (2012), however item 8 was allocated to the revenger narrative role proposed by Ioannou et al., (2015).

When reviewing the SSA output from Ioannou et al., (2015), item 8 "I was in control" was labelled "9. Control" and could equally have been allocated to the hero narrative role (see Appendix M). Furthermore, the results from the forced four factor FA in Study 2 showed that item 8 obtained a factor loading of .57 on Factor 1 (hero/professional) and was not loaded on any other factor. Item 8 was also found to contribute to the internal consistency of Factor 1 (α = .90, p < .05 would reduce to α = .85, p < .05 if item 8 was deleted). Therefore, item 8 is considered to be more appropriately placed in Factor 1 (hero/professional) as opposed to the revenger narrative role proposed by Ioannou et al., (2015), thus supporting hypothesis 4 (see Table 5.7).

Item 13 "I was on a mission"

Item 13 was allocated to Factor 1 (hero/professional). In Study 1, item 13 was allocated to the professional SSA region. Item 13 was also allocated to the hero narrative role proposed by Youngs and Canter (2012), however item 13 was allocated to the revenger narrative role proposed by Ioannou et al., (2015).

When reviewing the SSA output from Ioannou et al., (2015), item 13 "I was on a mission" was labelled "14. Mission" and could equally have been allocated to the hero narrative role, albeit it could equally be located in the revenger region (see Appendix M). Furthermore, the results from the forced four factor FA in Study 2 showed that item 13 obtained a factor loading of .67 on Factor 1 (hero/professional) and was not loaded on any other factor. Item 13 was also found to contribute to the internal consistency of Factor 1 (α = .89, p < .05 would reduce to α = .85, p < .05 if item 13 was deleted). Therefore, item 13 is considered more appropriately placed in Factor 1 (hero/professional) than the proposed revenger narrative role by Ioannou et al., (2015), thus supporting hypothesis 4 (see Table 5.7).

Item 15 "I had power"

Item 15 was allocated to Factor 1 (hero/professional). In Study 1, item 15 was allocated to the hero SSA region. Item 15 was also allocated to the professional narrative role proposed by Youngs and Canter (2012), however item 15 was allocated to the revenger narrative role proposed by Ioannou et al., (2015).

When reviewing the SSA output from Ioannou et al., (2015), item 15 “I had power” was labelled “11. Power” and could equally have been allocated to the hero narrative role (see Appendix M). Furthermore, based on the results from the forced four factor, FA in Study 2, item 15 obtained a factor loading of .52 on Factor 1 (hero/professional) and was not loaded on any other factor. Item 15 was also found to contribute to the internal consistency of Factor 1 (α = .89, p < .05 would reduce to α = .85, p < .05 if item 15 was deleted). Therefore, item 15 is considered more appropriately placed in Factor 1 (hero/professional) than the proposed revenger narrative role by Ioannou et al., (2015), thus supporting hypothesis 4 (see Table 5.8).

Table 5.9

Factor 1 (hero/professional) items narrative role/SSA region

Factor 1 (hero/professional) NRQ item	**Narrative Role** (Youngs & Canter, 2012)	**Narrative role** (Ioannou et. al., 2015)	***Study 1 SSA Region***
Item 3: It was fun	Professional	Hero	Professional
Item 5: It was Interesting	Professional	Hero	Professional
Item 6: It was like an adventure	Professional	Hero	Professional
Item 8: I was in control	Professional	Revenger*(hero)	Professional
Item 9: It was exciting	Professional	Hero	Professional
Item 10: I was doing a job	Professional	Professional	Professional
Item 13: I was on a mission	Hero	Revenger*(hero)	Professional
Item 15: I had power	Professional	Revenger*(hero)	Hero

*Item could equally have been allocated to the hero narrative role for Ioannou et al., (2015).

5.6 Chapter 5 (Study 3) Summary

The fifth aim of Study 3 and the purpose of this chapter is to decide whether to use SSA or EFA results to establish a structure for the NRQ. The decision to choose between either SSA or EFA can only be made following a review of the combined findings from the previous three studies. This review is particularly pertinent given SSA results propose the NRQ comprises 33 items (Study 1), whilst EFA suggests 32 items (with item 23 removed) (Study 2). Both SSA and EFA support the presence of four internally consistent narrative roles/factors, three of which are consistently present in both SSA and EFA findings (professional, revenger, victim) (Studies 1 & 2). However, SSA refers to a hero narrative role (Study 1) whilst EFA replaces the hero narrative role with a different factor, Factor 1 (hero/professional) (Studies 2 and 3). Finally, both SSA and EFA support the presence of core and fluid items, whereby SSA supports the presence of 13 core and 20 fluid items (Study 1 and Study 2) and EFA supports the presence of 17 core and 15 fluid items (Study 3).

A key strength of SSA is its underpinnings with Facet Theory to assist with theory development, validation and construction of scales (Alt, 2018). Therefore, SSA enables a researcher to "explore how a set of items hang together" (Alt, 2018, p. 436) both quantitatively and interpretatively. Currently, studies 1, 2 and 3 have only explored the NRQ using a combination of statistical and methodological approaches (e.g. SSA, EFA, mapping EFA onto SSA, Cronbach's alpha) whilst also comparing findings between studies (e.g. SSA for MDOs (Study 1), EFA results for MDOs (Study 2 and 3)) and published results by Youngs and Canter (2012) and Ioannou et al., (2015) (Studies 1-3). Therefore, the next natural step before deciding which analytic results to choose is to continue this joint approach by interpretatively comparing the content of EFA and SSA factors/narrative roles. Following this interpretative comparison

and considering both quantitative and interpretative findings, a decision can then be made as to which analytic results (SSA or EFA) will be used to establish the structure of the NRQ.

Therefore, this section of the discussion will begin with a interpretative review of the EFA factors and their respective items informed by the combined results from Study 2 and Study 3. These four factors interpretative summaries will then be compared to the SSA narrative role descriptions provided by Canter and Youngs (2009) (this description of items refers to their later publication, Youngs and Canter (2012)) and Ioannou et al., (2015). A summary of findings from Study 3 will then be discussed and a structure proposed for the NRQ based on chosen analytic approach (SSA or EFA).

Factor 1 (hero/professional)

Factor 1 (hero/professional) comprised five core items (item 3, 5, 6, 9 & 10) and three fluid items (item 8, 13 & 15) (Study 3). Based on the results from Study 3, Factor 1 (hero/professional) was considered conceptually similar to both hero and professional narrative roles. Factor 1 (hero/professional) items describe an offender who is on a pilgrimage (item 10 "I was doing a job"; item 13 "It was on a mission") and believes they have power and control over the situation (item 8 "I was in control"; item 15 "I had power"). Furthermore, this type of offender experiences positive affect from their offending (item 3 "It was fun"; item 5 "it was interesting"; item 6 "It was like an adventure"; item 9 "It was exciting"). Therefore, Factor 1 (hero/professional) describes an offender who is on a pilgrimage and believes they have power and control over the situation. As such, this type of offender is likely to experience positive affect whilst offending.

Canter and Youngs (2009) professional narrative role describes an offender who is attempting to pursue a pilgrimage or journey to overcome adversity, whilst attempting to emerge victorious. The attempt to pursue a pilgrimage or journey is also covered by hero narrative role description by Canter and Youngs (2009), whereby the offender is on a 'mission' (item 13 "I was on a mission") and was doing a job (item 10 "I was doing a job"). Canter and Youngs (2009) also describe the professional narrative role as an offender who enjoys the need to adapt to change and challenges by developing mastery through power and control (item 8 "I was in control"; item 15 "I had power"). Canter and Youngs (2009) also state that the professional narrative role describes an offender who is excited by the risk taking they engage in (item 3 "It was fun"; item 5 "it was interesting"; item 6 "it was like an adventure"; item 9 "It was exciting"). This excitement gained from offending is also reflected in hero narrative role description by Ioannou et al., (2015), whereby the offender finds their offence both interesting and enjoyable (item 3 "It was fun"; item 5 "it was interesting"; item 6 "it was like an adventure"; item 9 "It was exciting).

The description of Factor 1 (hero/professional) is similar to Canter and Youngs (2009) professional narrative role description and somewhat similar, but less so, to Ioannou et al., (2015) description of the professional narrative role. However, Factor 1 (hero/professional) is very similar to Ioannou et al., (2015) description of the hero narrative role and has some elements of the hero narrative provided by both Canter and Youngs (2009). The similarity between the professional narrative role description provided by Canter and Youngs (2009) and hero narrative role description provided by Ioannou et al., (2015), is the description of an offender experiencing positive affect (item 3 "It was fun"; item 5 "it was interesting"; item 6 "it was like an adventure"; item 9 "It was exciting). Therefore, based on the item content of

Factor 1 (hero/professional) and reviewing both the hero and professional narrative role descriptions provided by Canter and Youngs (2009) and Ioannou et al., (2015), items 3, 5, 6, & 9 are further confirmed as core items for Factor 1 (hero/professional).

Overall, Factor 1 was supported as a new factor comprising both hero and professional narrative roles descriptions. Based on the item content of Factor 1 (hero/professional) this factor will now be considered a **'Thrill Seeker'** narrative role.

Factor 2 (professional)

Factor 2 (professional) comprised six core items (1, 7, 11, 20, 27 & 28) and four fluid items (item 24, 30, 32, 33) (Study 3). Based on the results from Study 2, Factor 2 (professional) was considered conceptually similar to the professional narrative role. Factor 2 (professional) items describe an offender who adopts a professional and calculated approach to their offending (item 1 "I was like a professional"; item 7 "it was routine"; item 11 "I knew what I was doing"; item 24 "it all went to plan"; item 28 "for me it was a usual days work"), whilst holding a neutral view of their actions (item 30 "there was nothing special about what happened"; item 32 "I knew I was taking a risk"; item 33: I guess I always knew it was going to happen") and thus experiences neutral affect. Furthermore, this type of offender views offending as a way to maintain their masculinity (item 27 "It was manly thing to do"), alongside seeking recognitions from others (item 20 "I was looking for recognition). Therefore Factor 2 (professional) describes an offender who adopts a professional and calculated approach to their offending and views offending as a way to maintain their masculinity, alongside seeking recognition from others. As such, this type of offender is likely to experience minimal affect whilst offending.

Ioannou et al., (2015) described the professional narrative role as an offender who is highly skilled, intelligent, competent and adopts a professional view of their offending (item 1 “I was like a professional”; item 7 “It was routine”; item 11 “I knew what I was doing”; item 24 “It all went to plan”; item 28 “For me it was a usual days work”; item 30 “There was nothing special about what happened”; item 33 “I guess I always knew this was going to happen”). This description is also consistent with the professional narrative role described by Canter and Youngs (2009), whereby the offenders adopts a casual attitude about their actions and minimal acceptance of ownership or responsibility, whilst remaining calm and neutral in their responses (item 1 “I was like a professional”; item 7 “it was routine”; item 11 “I knew what I was doing”’; item 24 “It all went to plan”; item 28 “For me it was like a usual days work”; item 30 “there was nothing special about what happened”; item 33 “I guess I always knew it was going to happen”). Factor 2 (professional) also had some elements of the hero narrative role description provided by Ioannou et al., (2015) and professional narrative role description provided by Canter and Youngs (2009) whereby the offender knew they were engaging in risk taking (item 32 “I knew I was taking a risk”). The hero narrative role description provided by both Youngs and Canter (2009) and Ioannou et al., (2015) also described an offender who perceived their offence as a manly thing to do (item 27 “It was manly thing to do”) and seeks recognition (item 20 “I was looking for recognition”).

Overall, Factor 2 (professional) is most similar to Ioannou et al., (2015) professional narrative role with some items similar to Canter and Youngs (2009) description of the professional narrative, therefore Factor 2 (professional) will retain the **‘Professional’** narrative role label.

Factor 3 (revenger)

Factor 3 (revenger) comprised three core items (items 4, 29 & 31) and five fluid items (items 2, 12, 14, 21 & 22) (Study 3). In Study 2, Factor 3 (revenger) was considered conceptually similar to the revenger narrative role. Factor 3 (revenger) items refer to an offender who experiences negative affect and is preoccupied by revenge (item 29 "I was trying to get revenge"; item 31 "I was getting my own back"; item 14 "Nothing else mattered") and believes they had no other choice but to offend (item 2 "I had to do it"; item 12 "It was the only thing to do"), and offends irrespective of the consequences (item 22 "I didn't care what would happen"). This type of offender also holds the belief that their offending was justified (item 4 "It was right") whilst seeking a quick resolution (Q21 "I just wanted to get it over with"). Therefore Factor 3 (revenger) describes an offender who is preoccupied by revenge and seeks a quick resolution. Furthermore, they believe they had no other choice but to offend and feels justified in offending, irrespective of the consequences. As such, this type of offender is likely to experience negative affect whilst offending.

Canter and Youngs (2009) describe the revenger narrative roles as an offender who is driven by inevitable retaliation in response to perceived injustices, accusations or treated unfairly who seeks to avenge injustices and believe their actions were their only choice (item 29 "I was trying to get revenge"; item 31 "I was getting my own back"; item 14. "Nothing else mattered"; item 2 "I had to do it"). In addition, Ioannou et. al (2015) described the revenger narrative role as an offender who justifies their offence by the belief they were right to take revenge (e.g. item 4 "It was right") and couldn't help themselves (e.g. item 12 "It was the only thing to do"). Two of the eight Factor 3 (revenger) items also referred to an offender who is seeking a quick resolution (e.g. item 21 "I just wanted to get it over with") and did not care

about the consequences of their actions irrespective (e.g. item 22 “I didn’t care what would happen”). Whilst these two items content were not covered in the revenger narrative role descriptions provided by either Canter & Youngs (2009) and Ioannou et al., (2015), both items remain consistent with the revenger narrative role description.

Overall, Factor 3 (revenger) is similar to both Canter and Youngs (2009) and Ioannou et al., (2015) descriptions of the revenger narrative roles, therefore Factor 3 (revenger) will retain the **‘Revenger’** narrative role label.

Factor 4 (victim)

Factor 4 (victim) comprised three core items (items 16, 18 & 19) and three fluid items (items 17, 25 & 26) (Study 3). In Study 2, Factor 4 (victim) was considered conceptually similar to the victim narrative role. Factor 4 (victim) items describe an offender who views themselves as a helpless victim (item 16 “I was helpless”; item 18 “I was a victim”) who could not control their actions (item 25 “I couldn’t stop myself”), nor had any other alternatives than offending (item 17 “It was my only choice”). In addition, this type of offender experiences negative affect during the commission of their offence as a result of confusion and disconnection (item 19 “I was confused about what was happening”; item 26 “It was like I wasn’t part of it”). Therefore Factor 4 (victim) describes an offender who is confused, disconnected and views themselves as a helpless victim who could not control their actions, nor believes they had any other alternative other than offending. As such, this type of offender is likely to experience negative affect whilst offending.

Canter and Youngs (2009) propose that the victim narrative role describes an offender who experiences a sense of confusion and powerlessness, and perceives themselves to be a victim of an event (e.g. item 16: I was helpless"; item 18: I was a victim; item 19 "I was confused about what was happening"; item 26 "It was like I wasn't part of it). In addition, Ioannou et al., (2015) describe the victim as an offender who externalises responsibility and believes their offence could not be avoided (e.g. item 17 "It was my only choice"; item 25 "I couldn't stop myself"). What was not covered in Factor 4, that is referred to by Ioannou et al., (2015) victim narrative role description, is the offenders belief that events in their life are due to external factors they cannot control or influence such as a luck, chance or fate (e.g. item 23 "What was happening was just fate"). Item 23 had not been loaded onto any of the four factors from the EFA (Study 2). Nor did item 23 contribute to the internal consistency of the victim SSA region or the NRQ (Study 1). Furthermore, the content of item 23 "what was happening was just fate" may require an individual to believe in the concept 'fate', which also has religious connotations. However, the notion that an offender may believe events in their life are due to external they cannot control may equally be captured by the item 16 "I was helpless" and item 25 "I couldn't stop myself". Therefore, it is considered that the removal of item 23 does not impact on the overarching victim narrative role description.

Overall, Factor 4 (victim) is similar to both Canter and Youngs (2009) and Ioannou et al., (2015) descriptions of the victim narrative role, therefore Factor 4 (victim) will retain the **'Victim'** narrative role label.

Summary of EFA and SSA Interpretative Findings

Two of the EFA narrative role interpretative descriptions (revenger and victim) provide the same if not better description compared to the revenger and victim narrative roles descriptions provided by Canter and Youngs (2009) and Ioannou et al., (2015). Specifically, the EFA narrative roles focus not only on the motivation for offending but they also identify the presence of negative affect whilst offending, which could be considered related to reactive violence (Kroner, 2020; Walters, 2017; 2018). Furthermore, the EFA narrative roles thrill seeker and professional are more easily distinguished from one another compared to the hero and professional narrative roles proposed by Canter and Youngs (2009) and Ioannou et al., (2015). Specifically, the thrill seeker narrative role is considered to experience positive affect and enjoy offending, similar to offenders with ASPD and possibly psychopathy (Howard, 2017; Agbakwuru & Mgbeoduru, 2020). Whilst the professional narrative role reflects individuals more likely to engage in instrumental offending alongside experiencing minimal affect, similar to an offender with psychopathy (Hare, 1991; Preston & Anestis, 2019) or an offender engaging in proactive violence (Kroner, 2020; Walters 2017; 2018). Overall the EFA four factors narrative role descriptions are considered more robust compared to those proposed by Canter and Youngs (2009) and Ioannou et al., (2015) using SSA.

Study 3 Summary of Findings

The primary aim of study (Study 3) was to establish the structure of the NRQ, for this to occur, Study 3 extended upon the findings from Study 2 by confirming whether core and fluid items (as proposed in Study 1) would be located within each factor and resolve three items (items 13, 15 & 25) from Study 2. Additionally, Study 3 sought to clarify the content of Factor 1 (hero/professional) and the hero SSA region items reported by Youngs and Canter, (2012),

Ioannou et al., (2015) and Study 1. Following the outcome of these findings it could then be decided whether EFA or SSA results would best to establish the structure of the NRQ.

The results from Study 3 supported all four hypotheses. Hypothesis 1 that 13 core items (items 1, 4, 7, 10, 11, 16, 18, 19, 20, 27, 28, 29 & 31) would be located within a the same conceptually similar EFA factor as found in previous research by Youngs and Canter (2012), Ioannou et. al., (2015) and Study 1 was supported. Hypothesis 2a, that all 16 fluid items (items 2, 3, 5, 6, 8, 9, 12, 14, 17, 21, 22, 24, 26, 30, 32 & 33) would be located in the same conceptually similar EFA factor as found in previous research by Youngs and Canter (2012) and Ioannou et. al., (2015) was supported. Whilst hypothesis 2b, that all three unresolved items from Study 2 would be located in one of two factors that are conceptually similar to the 'narrative roles' found in previous research by Youngs and Canter (2012) and Ioannou et al., (2015) was supported. Further exploration of item 25 was warranted, whereby it was found that despite original placement of this item in the revenger narrative role (Ioannou et al., 2015) and hero narrative role (Youngs and Canter, 2012), item 25 could equally have been located in the victim narrative role for both studies. Only then was the hypothesis for item 25 supported.

Hypothesis 3 was changed from thirteen items to twelve items following the re-allocation of item 25 to the victim narrative role in hypothesis 2. Only then was hypothesis 3 supported whereby all twelve hero narrative role /SSA region items (item 3, 5, 6, 9, 13, 15, 20, 24, 26, 27, 30 & 32) found in previous research (Ioannou et. al., 2015; Youngs & Canter, 2012) and Study 1 would be located exclusively in either Factor 1 (hero/professional) or Factor 2 (professional). Furthermore, to support this hypothesis further exploration of item 26 was warranted, whereby it was found that the placement of item 26 in the hero narrative role

(Youngs & Canter, 2012) could equally have been located in the victim narrative role. Only then was the hypothesis for item 26 supported. Hypothesis 4 that all eight Factor 1 (hero/professional) items (item 3, 5, 6, 8, 9, 10, 13 & 15) would be located in either a hero or professional narrative role/SSA region as found in previous research (Young's and Canter, 2012; Ioannou et. al 2015) and Study 1 was also supported. However, three items (item 8, 13 and 15) warranted further exploration, whilst all three items had originally been located in the revenger narrative role by Ioannou et al., (2015) they could equally have been allocated to the hero narrative role. Finally, in review of the EFA factor loadings, four additional items (item 3, 5, 6 & 9) were also considered 'core' items in addition to item 10. These four new core items were also further supported by the interpretative exploration of Factor 1 (hero/professional), now known as the Thrill Seeker narrative role.

Choosing between EFA and SSA

The need to 'further explore' five items (item 8, 13, 15, 25 & 26) for three of the five hypothesis, of which three items (item 13, 15 & 25) were unresolved items from Study 2, highlights the limitations of the subjective interpretation of SSA (e.g. allocation of boundaries and their subsequent regions). Whilst the purpose of Study 2 and Study 3 was to conduct a comparison between SSA and EFA results to determine the underling structure of the NRQ, in doing so the strengths and weaknesses of both analytic approaches also became a focal point.

SSA is recommended as a preliminary approach to analyse complex psychological data (Alt, 2018) and has been used to explore the underlying structure of the NRQ in different populations (Goodlad, Ioannou & Hunger, 2019; Ioannou et al., 2015; 2017; 2018; Spruin & Siesmaa, 2017; Youngs and Canter, 2012). SSA provides greater interpretive flexibility (Alt,

2018; Cohen, 2005; Steenbergen, 2000) for a measure (e.g. in the placement of boundaries to form regions) compared to EFA, CFA and SEM (Finch, 2019; Flora & Flake, 2017; Guo et al., 2017; Reio & Shuck, 2015). However, this interpretive flexibility is also a weakness, as evidenced from the varied placement of items across studies (Ioannou et al., 2015; Study 1; Youngs and Canter, 2012) despite the same 'narrative roles' being identified.

However, the ability to directly compare SSA findings by Youngs and Canter (2012) and Ioannou et al., (2015) was a strength of SSA, as this resulted in the identification of core and fluid items for this research. Whilst these core and fluid items were further supported in the four factors identified by EFA (Study 3), EFA itself does not necessarily enable the identification of core and fluid items as the primary focus is to explore the relations of variables and identify an underlying structure (Flora & Flake, 2017). Another strength of SSA is its ability to be analyse data from small sample sizes (Maslovaty et al., 2001), which is particularly important when conducting research on hard to reach populations like MDOs. EFA on the other hand is sensitive to sample size. However, despite the small sample size (N = 70) results from the EFA were very similar to the SSA findings (e.g. four regions, presence of professional, revenger and victim regions), suggesting sample size on this occasion may not be problematic. Finally, EFA provided further clarity regarding the hero and professional narrative roles in a way SSA could not (e.g. the inability to identify regions within regions) which was further supported by a interpretative comparison of the EFA factors and SSA narrative role descriptions.

Overall, the combined findings from Youngs and Canter (2012), Ioannou et al., (2015) and the current research suggest that SSA is a good starting point for scale development (in this case the NRQ). Additionally, the combination of both SSA and EFA, including a

comparison of the interpretative content for each factor/narrative role has provided a richer understanding of the NRQ. However, taking into consideration the strengths and limitations for both SSA and EFA, SSA falls short in its ability to establish construct validity. EFA on the other hand both supports and extends upon the findings found by SSA, alongside being considered a more robust and established analytic approach (Finch, 2019; Flora & Flake, 2017; Reio & Shuck, 2015; Wolf, Harrington, Younas & Poor, 2018). Therefore, the structure of the NRQ will be informed by the EFA forced four factor results and the following structure proposed. The NRQ is comprised of 32 items, including 17 core items and 15 fluid items located across four narrative roles: Thrill Seeker, Professional, Revenger and Victim (see Table 5.10).

Table 5.10

Structure of the 32-item NRQ

Thrill Seeker *n* = 8 α =.89, *p* < .05	**Professional** *n* = 10 α =.82, *p* < .05	**Revenger** *n* = 8 α =.76, *p* < .05	**Victim** *n* = 6 α = .73, *p* < .05
Q3. It was fun	**Q1. I was like a professional.**	Q2. I had to do it	**Q16. I was helpless**
Q5. It was interesting	**Q7. It was a routine.**	**Q4. It was right**	Q17. It was my only choice
Q6. It was like an adventure	**Q11. I knew what I was doing**	Q12. It was the only thing to do	**Q18. I was a victim**
Q8. I was in control	**Q20. I was looking for recognition.**	Q14. Nothing else mattered	**Q19. I was confused about what was happening.**
Q9. It was exciting	Q23. It all went to plan	Q21. I just wanted to get it over with	Q24. I couldn't stop myself.
Q10. I was doing a job	**Q26. It was a manly thing to do.**	Q22. I didn't care what would happen	Q25. It was like I wasn't part of it
Q13: It was a mission	**Q27. For me, it was like a usual day's work.**	**Q28. I was trying to get revenge.**	
Q15. I had power		**Q30. I was getting my own back.**	

	Q29. There was nothing special about what happened	
	Q31. I knew I was taking a risk	
	Q32. I guess I always knew it was going to happen	

Establishing the structure of the NRQ provides the ability to consider previously theoretically derived 'narrative roles' as subscales of a questionnaire. However, the purpose and function of core and fluid items is yet to be explored. Furthermore, the interpretative descriptions of the EFA narrative roles suggests they not only reflect how an individuals' views themselves at the time of offending, but also their affect (positive, negative, neutral). Therefore, the relationship between the narrative roles warrants further exploration as does understanding how the NRQ applies to MDOs. Finally, despite the structure for the NRQ having been established a scoring key does not yet exist. Therefore, the next study (Chapter 6 - Study 4) intends to address these gaps with a view to develop a scoring key for the NRQ so that it has practical utility.

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Chapter 6

Study 4: Developing a Scoring Key for the 32-item NRQ

Study 3 established the structure of the NRQ which is comprised of four narrative roles: thrill seeker, professional, revenger and victim. However, to date no research has explored the relationship between the four narrative roles. When the NRQ was first developed the authors proposed that narrative roles interact in a cyclical way which makes pedagogic sense given the NRQ was underpinned by Frye's 1957 four archetypal mythoi (Frye, 2006) (e.g. literary themes and plots interact via a cyclical movement similar to the way the four seasons evolve). However, the cyclical relationship between narrative roles has never been questioned despite an absence of empirical support for this theoretical assumption. Furthermore, the notion that offenders move from one narrative role to another like the 'four seasons' is problematic as it implies one narrative role (e.g. hero) is experienced after specific narrative role (e.g. professional) which in turn is followed by another specific narrative role (e.g. victim) etc. and that all narrative roles are present at some point in time.

An alternate view to the cyclical relationship of the four narrative roles started to emerge in Study 3 following an interpretative exploration of the item content of each narrative role (thrill seeker, professional, revenger and victim). These findings indicated that the relationship between the narrative roles may be linked by affective experience. Specifically, both the revenger and victim narrative roles were reflective of negative affect, the professional narrative role was reflective of neutral affect and the thrill seeker reflective of positive affect. Whilst the presence of affective experience within the narrative roles was also evident within Canter and Youngs (2009) and Ioannou et al., (2015) interpretative descriptions of hero, professional, revenger and victim, they failed to recognise the potential significance of how affect may inform the relationship between them.

There are three main dimensional models of emotion: The Circumplex model of emotions (Russell, 1980), Vector Model (Bradley et. al., 1992) and the Positive Activation – Negative Activation model (PANA) (Watson and Tellegan, 1988). Both the Vector model and Circumplex model of emotions have been referred to when exploring the presence of emotions for narrative roles (Spruin & Siesmaa, 2017; Ioannou, Canter & Youngs, 2017 respectively). However, the Circumplex model of emotions is not the best fit when applied to the NRQ for two key reasons. Firstly, Vector and PANA models are considered the strongest of the three models (Bradley, et. al. 1992). Secondly, whilst Vector model is strongest when examining word and picture stimuli (Bradley, et. al. 1992) the PANA model is considered strongest when assessing "events, autobiographical memories, or random words" (Rubin & Talarico, 2009, p. 808), which is what the NRQ requires participants to do (e.g. to recall an offence drawing upon autobiographical memory).

The PANA model of emotion refers to two distinct dimensions of emotion (positive and negative affect) and thus suggests a linear relationship between emotions. Therefore, if the NRQ does in fact measure emotions in addition to narrative role, this would suggest the relationship between narrative roles is also linear (as opposed to cyclical). For example, Victim and Revenger narrative roles are reflective of negative affect and thus at one end of a dimension, the Thrill Seeker narrative role is reflective of positive affect and the Professional narrative role is reflective of neutral affect, thus separating both positive and negative affect. However, the proposition that there is a linear as opposed to cyclical relationship between narrative roles is yet to be established.

The presence of core items (items that are consistently located within one specific narrative role) and fluid items (items located within one of two specific narrative roles) were identified in Study 1 and supported in Study 3. However, the internal consistency for each of the core and fluid 'subscales' has yet to be established as does their contribution (if any) to their respective narrative role. However, if present, core and fluid subscales may further assist in understanding the relationship between narrative roles (e.g. 'subscales' of the NRQ) and their affective states. Once clarification is obtained regarding the relationship between narrative roles and the presence or absence of core and fluid subscales, a scoring key for the NRQ can then be developed and applied to MDOs.

The absence of a scoring key is one of the main flaws of the NRQ and as a result, the approach used to identify the presence of a narrative role varies across studies. For example, Goodlard et al., (2018) conducted a study on a small sample of incarcerated male PD offenders (N = 22) using a different version of the NRQ (36-items) to support the presence of four slightly different narrative roles (depressed victim, distressed revenger, calm professional, elated hero) (Goodlard et al., 2018). This study found that offenders diagnosed with BPD identified with the depressed victim, whilst paranoid and schizoid PD did not identify with the calm professional (Goodlard et al., 2018). However, how the researchers decided upon the allocation of narrative roles was not described. A second study by Ioannou et al., (2015) explored the presence of narrative roles in relation to offence type using 33-item NRQ (also used in this research) and its four narrative roles (hero, professional, revenger and victim) for incarcerated male offenders (N = 120). This study found that 50% of property offenders were assigned the 'hero' narrative role, 45% of sexual offenders were assigned the victim narrative role and 55% violent offenders were more likely assigned the revenger narrative role and 20% were assigned

the victim narrative role. Whilst the presence of narrative role was determined based on 'proportional score', how each narrative role was identified was also not discussed. Consequently, how narrative roles are identified varies across studies and without a commonly used scoring key, prevents both consistency and comparison of findings.

Overall, the very title of the Narrative Roles Questionnaire implies it is measuring cognitive constructs (e.g. internal narratives), however it may be that the NRQ measures both cognition *and* emotion. Therefore, Study 4 intends to explore the relationship between the four narrative roles, the differences in narrative roles for MDOs based on MD and offence type and explore the presence of core and fluid subscales. The outcome off these findings can then be used to develop a scoring key for the NRQ. The aims for Study 4 are:

1. To explore the nature of the relationship between the four narrative roles.
2. To explore narrative role mean score differences both between and within groups of MD (Axis I, Axis II and no formal diagnosis) and Offence type (violent, sexual and general offenders)
3. To explore how core and fluid subscales and their respective items contribute to the interpretation of the NRQ.

6.1 Study 4 Hypotheses

Hypothesis 1: There will be a linear relationship between each of the four narrative roles. Specifically, the victim and revenger narrative roles will have a statistically significant relationship with each other. The Revenger and Professional narrative roles will have a statistically significant relationship with each other. The Professional and Thrill Seeker

narrative role will have statistically significant relationship with each other and a statistically significant negative relationship with the victim narrative role. The null hypothesis is that the proposed relationships will not be linear nor statistically significant.

Hypothesis 2: There will be between group differences of narrative role scores for MD type (Axis I, Axis II and no formal diagnosis) and Offence type (VO, SO and GO) and there will be within group differences of narrative role scores for each MD type (Axis I, Axis II and no formal diagnosis) and each offence type (VO, SO and GO). The null hypothesis is that there will be no differences in narrative role scores both between and within MD type and offence type.

Hypothesis 3: All narrative role core and fluid subscales will have acceptable internal consistency (see Table 6.1). The null hypothesis being that all narrative role core and fluid subscales will not have acceptable internally consistency.

Table 6.1

32-item NRQ core and fluid subscales

CORE SUBSCALE ITEMS			
Thrill Seeker *n* = 5	**Professional** *n* = 6	**Revenger** *n* = 3	**Victim** *n* = 3
3. It was fun	1. I was like a professional	4. It was right	16. I was helpless
5. It was interesting	7. It was a routine.	28. I was trying to get revenge.	18. I was a victim
6. It was like an adventure	11. I knew what I was doing	30. I was getting my own back.	19. I was confused about what was happening.
9. It was exciting	20. I was looking for recognition.		
10. I was doing a job	26. It was a manly thing to do.		
	27. For me, it was like a usual day's work.		
FLUID SUBSCALE ITEMS			
Thrill Seeker *n* = 3	**Professional** *n* = 4	**Revenger** *n* = 5	**Victim** *n* = 3
8. I was in control	23. It all went to plan	2. I had to do it	17. It was my only choice
13: It was a mission	29. There was nothing special about what happened	12. It was the only thing to do	24. I couldn't stop myself.
15. I had power	31. I knew I was taking a risk	14. Nothing else mattered	25. It was like I wasn't part of it
	32. I guess I always knew it was going to happen	21. I just wanted to get it over with	
		Q22. I didn't care what would happen	

6.2 Results: Hypothesis 1 – A linear relationship between narrative roles

Hypothesis 1 was there would be a linear relationship found between each of the four narrative roles. Specifically, the victim and revenger narrative roles would have a statistically significant relationship with each other. The Revenger and Professional narrative roles would

have a statistically significant relationship with each other. The Professional and Thrill Seeker narrative roles would have statistically significant relationship with each other and statistically significant negative relationship with the victim narrative role.

Each item on the NRQ is rated on a 5-point Likert scale (1 = not at all, 2 = just a little, 3 = some, 4 = a lot and 5 = very much indeed), therefore the minimum score each narrative role could obtain was 1 and a maximum score of 5. Thrill Seeker comprised 8 items (item 3, 5, 6, 8, 9, 10, 13 & 15), Professional comprised 10 items (item 1, 7, 11, 20, 23, 26, 27, 29, 31 & 32), Revenger comprised 8 items (item 2, 4, 12, 14, 21, 22, 28 & 30) and Victim comprised 6 items (item, 16, 17, 18, 19, 24 & 25). To explore hypothesis 1, mean scores for each of the four narrative roles subscales were calculated and a Shapiro-Wilk test of normality conducted to determine whether a Pearson's r correlation or Spearman's r correlation should be used. The Shapiro-Wilk test of normality was chosen due to the small sample size (N = 70) (Guo, 2012). Based on the results from the Shapiro-Wilk test of normality, only the revenger narrative role was normally distributed, the other three narrative roles professional, thrill seeker and victim were non normal (see Table 6.2).

Table 6.2

Four factors frequencies and Shapiro Wilk test of normality

	Thrill Seeker *n* = 8	**Professional** *n* = 10	**Revenger** *n* = 8	**Victim** *n* = 6
Mean (M)	2.00	2.12	2.44	2.5
Standard Deviation (SD)	1.01	.83	.92	.98
Minimum	1	1	1	1
Maximum	5	4.4	5	5
Skewness	1.19	.73	.22	.54
Skewness SE	.29	.29	.29	.29
Kurtosis	.66	-.01	-.38	-.28
Kurtosis SE	.57	.57	.57	.57
Shapiro-Wilk ($p < .05$)	**.00**	**.00**	.09	**.02**

Items in **bold** are non normal

Z scores for skewness and kurtosis were calculated on all four subscales to address the non-normal distribution followed by a Shapiro-Wilk test of normality. The revenger narrative role was again normally distributed (W = .09, p <.05), whilst the remaining three narrative roles thrill seeker, professional and victim continued to be non-normal (W = .00, *p* <.05; W = .00, *p* <.05; W = .02, *p* <.05 respectively). Therefore, a log linear transformation was conducted on all three non-normal narrative roles. The thrill seeker narrative role continued to be non-normal (W = .00, p <.05), however the professional and victim narrative roles were normal (W = .12 p <.05 and W = .16, p <.05). Z scores were calculated for the transformed thrill seeker narrative role and a Shapiro-Wilks test of normality conducted. Thrill seeker continued to be non-normal (W = .00, p <.05). Further attempts were made to ascertain if thrill seeker could obtain normal distribution (e.g. removal of outliers), it continued to be non-normal.

Given the non-normal distribution for the thrill seeker narrative role, a Spearman's r correlation was considered the appropriate analysis to explore the relationship between the narrative roles. To determine the strength of association, the use of Cohen's (1988) conventions for effect size were used (with caution), whereby a correlation r = .2 would be considered a 'small' effect size, a correlation of r = .5 would be considered a medium effect size and a correlation of r = .8 would be considered a 'large' effect size. The results from the Spearman's r (2 –tailed) correlation showed that thrill seeker and professional had a statistically significant medium positive correlation. Revenger and professional had a statistically significant small positive correlation and revenger and victim had a statistically significant small positive correlation. Whilst not statistically significant, victim was also negatively correlated with both thrill seeker and professional (see Table 6.3).

Table 6.3

Four factors Spearman's r correlations

	Professional (N = 70)	**Revenger** (N = 70)	**Victim** (N = 70)
Thrill Seeker	.62**	.23	-.21
Sig (2-tailed)	.00	.06	.09
Professional		.27*	-.12
Sig (2-tailed)		.03	.31
Revenger			.31**
Sig (2-tailed)			.01

**Correlation is significant at the .01 level (2-tailed)

*Correlation is significant at the .05 level (2 tailed)

Summary: Hypothesis 1 Linear relationship between narrative roles

Overall, Hypothesis 1 was mostly supported. Specifically, the hypothesis that victim and revenger would have a statistically significant relationship with each other was supported.

That revenger and professional would have a statistically significant relationship with each other was supported and professional and thrill seeker would have a statistically significant relationship was supported. Whilst professional and thrill seeker had a negative relationship with victim narrative role, this was not statistically significant.

6.3 Results: Hypothesis 2 – Mental Disorder and Offence Type

Hypothesis 2 was that narrative role mean scores will differ between mental disorder (Axis I, Axis II and no formal diagnosis) and offence type (violent, sexual, general). This hypothesis will be addressed by first focusing on mental disorder and then offence type.

Mental Disorder

Prior to conducting analysis to address this hypothesis it is firstly important to review the key descriptive characteristics for mental disorder (Axis I, Axis II, no formal diagnoses).

Descriptive Characteristics

Participants were 70 MDOs. Individuals' primary diagnosis (as categorised by the DSM-5) was categorised as either Axis I (n = 31), Axis II (n = 19) or no formal diagnosis (n = 20). The majority of Axis I participants had a diagnosis of schizophrenia (n = 23, 74.2%) and the majority of Axis II participants had a diagnosis of ASPD (n = 11, 58%) (see Table 6.4).

Table 6.4

Mental disorder category and diagnosis

Mental Disorder Category (*n* =)	**Diagnosis**	***n* (%)**
Axis I Diagnosis (*n* = 31)	Schizophrenia	23 (74%)
	Bipolar disorder	3 (10%)
	Schizoaffective	2 (6%)
	PTSD	2 (6%)
	Psychosis	1 (3%)
Axis II Diagnosis (*n* = 19)	ASPD	11 (58%)
	BPD	4 (21%)
	Schizoid PD	3 (16%)
	Histrionic	1 (5%)
No Formal Diagnosis (*n* = 20)		20 (29%)

Independent Samples Kruskal-Wallis tests were used to compare scores between the three types of mental disorder (Axis I, Axis II and no formal diagnosis) for each of the four narrative roles (Thrill Seeker, Professional, Revenger and Victim). Table 6.5 provides the means and standard deviations for each narrative role in relation to type of Mental Disorder (Axis I, Axis II and no formal diagnosis).

Table 6.5

Narrative role means and standard deviations for mental disorder type

	Thrill Seeker *n* = 8		**Professional** *n* = 10		**Revenger** *n* = 8		**Victim** *n* = 6	
Offender Category	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Axis I (*n* = 31)	2.01	1.13	2.20	.85	2.42	1.00	2.89	.95
Axis II (*n* = 19)	1.91	1.03	1.75	.68	2.34	.89	2.32	1.01
No Formal Diagnosis (*n* = 20)	2.07	.81	2.34	.87	2.56	.84	2.07	.80

The distribution of three of the four narrative roles (Thrill Seeker, Professional, Revenger) did not differ significantly across Axis I, Axis II and no formal diagnosis. However, the distribution of the victim narrative role was significantly different across the three types of mental disorder, $H(2) = 9.64$, $p = 0.008$. Planned pairwise comparisons with adjusted *p*-values investigating scores for the victim narrative role indicated that the average rank for Axis 1 was significantly higher than for the no formal diagnosis group ($p = 0.010$). There was no difference in average ranks for 'factor' when comparing Axis 1 to Axis II, or Axis II to no formal diagnosis.

Related samples Friedman's two-way ANOVAs were conducted to compare scores between the four narrative roles (Thrill Seeker, Professional, Revenger and Victim) for each type of mental disorder separately (Axis I, Axis II and no formal diagnosis). Axis I mean score distributions were not the same across all four factors, $\chi^2(3) = 13.39$, $p = 0.004$. Pairwise comparisons with adjusted *p*-values investigating scores for each factor showed that the mean rank score (MR) for the victim subscale (MR = 3.13) was significantly higher than the mean rank of the thrill seeker narrative role (MR = 1.98). There were no significant differences when comparing other subscales for Axis 1, nor were significant differences found in the mean score distributions of the four narrative roles for Axis II and no formal diagnosis.

Offence Type

Prior to conducting analysis on offence type (violent (VO), sexual (SO) and general offending (GO)), it is firstly important to review the key descriptive characteristics.

Descriptive Characteristics

Participants were 70 MDOs. Based on the offence type referred to when rating the NRQ, the 70 MDOs were classified as having engaged in either violent offending (VO) (*n* = 39), sexual offending (SO) (*n* = 18) or general offending (GO) (*n* = 13). The majority of participants who engaged in VO had an Axis I diagnosis, the majority of participants who engaged in SO had an Axis II diagnosis (45%) and the majority of participants who engaged in GO had no formal diagnosis (62%) (see Table 6.6).

Table 6.6

Offence type and diagnosis

Mental Disorder Category (*n* =)	**Diagnosis Type**	***n* (%)**
Violent Offending (*n* = 39)	Axis I	21 (54%)
	Axis II	11 (28%)
	No Formal Diagnosis	7 (18%)
Sex Offending (*n* = 18)	Axis I	5 (28%)
	Axis II	8 (45%)
	No Formal Diagnosis	5 (28%)
General Offending (*n* = 13)	Axis I	5 (38%)
	Axis II	0 (0%)
	No Formal Diagnosis	8 (62%)

Independent Samples Kruskal-Wallis tests were used to compare scores between the three types of offending (VO, SO and GO) for each of the four narrative roles separately (thrill seeker, professional, revenger and victim). Table 6.7 provides the means and standard deviations for each narrative role in relation to type of offending (VO, SO & GO).

Table 6.7

Narrative role means and standard deviations for offence type

	Thrill Seeker *n* = 8		**Professional** *n* = 10		**Revenger** *n* = 8		**Victim** *n* = 6	
Offender Category	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
VO (*n* = 39)	1.98	1.03	2.07	.84	2.48	1.00	2.63	.95
SO (*n* = 18)	2.02	1.05	1.86	.65	2.53	.79	2.4	1.00
GO (*n* = 13)	2.03	.94	2.59	.90	2.19	.84	2.24	1.04

For each of the four narrative roles the distribution of scores did not differ significantly across the three offending types. Related samples Friedman's two-way ANOVAs were conducted to compare scores between the four narrative roles (thrill seeker, professional, revenger and victim) separately for each type of offending (VO, SO and GO). The mean score distributions for VO were not the same across all four factors, χ^2 (2) = 13.81, p = 0.003. Pairwise comparisons investigating scores for VO showed that showed that the mean rank scores for revenger and victim were significantly higher than the mean rank for thrill Seeker (2.01) (both p=0.020). There were no significant differences when comparing other subscales for the VO group.

Summary: Hypothesis 2 – Mental Disorder, Offence type and narrative roles

Overall, the results from analysing MD type (Axis I, Axis II and no formal diagnoses) and offence type (VO, SO, GO) narrative role mean scores were that only Axis I disordered offenders scores on the victim narrative role were significantly higher than for the thrill seeker

narrative role. Furthermore, only VOs were found to have scored significantly higher on revenger and victim narrative roles than the thrill seeker narrative role. Overall, hypothesis 3 was partially supported.

6.4 Results: Hypothesis 3 – Core and Fluid subscales

Hypothesis 3 was that all narrative role core and fluid subscales would have acceptable internal consistency (see Table 6.1). For the purpose of this analysis, each narrative role's combined core items will be referred to as a 'core subscale' and each narrative role's combined fluid items will be referred to as a 'fluid subscale'.

The approach to assess internal consistency will be the same used in Study 1. A Cronbach's alpha, $\alpha < .60$, $p < .05$ will be considered 'unacceptable'. A Cronbach's alpha ranging between $\alpha = .60$ to $\alpha = .65$, $p < .05$ will considered 'undesirable'. A Cronbach's alpha ranging between $\alpha = .65$ to $\alpha = .70$, $p < .05$ will be considered 'minimally acceptable'. A Cronbach's alpha ranging between $\alpha = .70$ to $\alpha = .80$, $p < .05$ will be considered 'respectable'. A Cronbach's alpha ranging between $\alpha = .80$ to $\alpha = .90$, $p < .05$ will be considered 'very good' and a Cronbach's alpha above $\alpha = .90$, $p < .05$ will be considered excellent.

Thrill Seeker

The thrill seeker narrative role ($n = 8$) has a Cronbach's alpha of $\alpha = .89$, $p < .05$. The Thrill seeker core subscale comprised five items (item 3, 5, 6, 9 & 10) and the fluid subscale is comprised of three items (item 8, 13 & 15).

The Cronbach's alpha for the core subscale (items 3, 5, 6, 9 & 10) was $\alpha = .91$, $p < .05$ indicating excellent internal consistency. No items deleted would increase this Cronbach's alpha. The Cronbach's alpha for the fluid subscale (item 8, 13 & 15) was $\alpha = .67$, $p < .05$, indicating minimally acceptable internal consistency. No items deleted would increase this Cronbach's alpha.

The hypothesis that the thrill seeker core and fluid subscale would be internally consistent was supported.

Professional

The professional narrative role ($n = 10$) has a Cronbach's alpha of $\alpha = .82$, $p < .05$. The professional core subscale comprised six items (item 1, 7, 11, 20, 26 & 27) and the fluid subscale comprised four items (item 23, 29, 31 & 32).

The Cronbach's alpha for the six core subscale items (item 1, 7, 11, 20, 26 & 27) was $\alpha = .72$, $p < .05$ indicating respectable internal consistency. No items deleted would increase this Cronbach's alpha. However, two items (item 1, 20) contributed marginally to the Cronbach's alpha of the core subscale ($\alpha = .72$, $p < .05$ would reduce to $\alpha = .71$, $p < .05$ if either item 1 or item 20 were deleted). The Cronbach's alpha for the four fluid subscale items (item 23, 29, 31 & 32) was $\alpha = .41$, $p < .05$ indicating unacceptable internal consistency. This Cronbach's alpha would increase to $\alpha = .44$, $p < .05$ if item 29 was deleted, again indicating unacceptable internal consistency. The change in Cronbach's alpha with item 29 deleted, is marginal therefore item 29 will be retained as a fluid subscale item. Due to the low Cronbach's alpha, the two core subscale items (item 1 & 20) was explored. If both items were removed

from the core subscale, the core subscale would reduce from $\alpha = .72$, $p < .05$ to $\alpha = .71$, $p < .05$. If both items were included in the fluid subscale, the Cronbach's alpha would increase from $\alpha = .44$, $p < .05$ to $\alpha = .67$, $p < .05$, indicating minimally acceptable internal consistency. Therefore items 1 and 20 are removed from the core subscale and allocated to the fluid subscale.

The hypothesis that the professional core and fluid subscales would be internally consistent was supported after two core subscale items (item 1, 20) were relocated to the fluid subscale.

Revenger

The revenger narrative role ($n = 8$) has a Cronbach's alpha of $\alpha = .76$, $p < .05$. The revenger core subscale comprised three items (item 4, 28 & 30) and the fluid subscale comprised five items (item 2, 12, 14, 21 & 22).

The Cronbach's alpha for the core subscale (item 4, 28 & 30) was $\alpha = .68$, $p < .05$ indicating minimally acceptable internal consistency. This Cronbach's alpha would increase to $\alpha = .90$, $p < .05$ if item 4 was deleted, indicating excellent internal consistency. Therefore item 4 will be explored as a fluid subscale. The Cronbach's alpha for the fluid subscale (item 2, 12, 14, 21 & 22) was $\alpha = .75$, $p < .05$ indicating minimally acceptable internal consistency. This Cronbach's alpha would increase to $\alpha = .77$, $p < .05$ if item 12 was deleted. If item 4 was allocated to the fluid subscale, the Cronbach's alpha for this subscale would become $\alpha = .76$, $p < .05$, indicating minimally acceptable internal consistency. No items deleted would increase this Cronbach's alpha. Therefore, item 4 is now considered a fluid subscale item.

The hypothesis that the revenger core and fluid subscales would be internally consistent was supported after one core subscale item (item 4) was relocated to the fluid subscale.

Victim

The victim narrative role ($n = 6$) has a Cronbach's alpha of $\alpha = .73$, $p < .05$. The victim core subscale comprised three items (item 16, 18 & 19) and the fluid subscale comprised three items (item 17, 24 & 25).

The Cronbach's alpha for the core subscale items (item 16, 18 & 19) was $\alpha = .68$, $p < .05$, indicating minimally acceptable internal consistency. No items deleted would increase this Cronbach's alpha. One item, item 18 contributed marginally to this Cronbach's alpha, $\alpha = .68$, $p < .05$ would reduce to $\alpha = .62$, $p < .05$ if item 18 was deleted, therefore item 18 will also be explored as a fluid subscale item. The Cronbach's alpha for the fluid subscale (item 17, 24 & 25) was $\alpha = .53$, $p < .05$ indicating unacceptable internal consistency. This Cronbach's alpha would increase to $\alpha = .55$, $p < .05$ if item 24 was deleted. If item 18 was added to the fluid subscale, the Cronbach's alpha would increase from $\alpha = .53$, $p < .05$ to $\alpha = .67$, $p < .05$ indicating minimally acceptable internal consistency. Therefore item 18 is now considered a fluid subscale item.

The hypothesis that victim core and fluid subscales would be internally consistent was supported after one core subscale item (item 18) was relocated to the fluid subscale.

Summary: Hypothesis 3 – Core and fluid subscale items

Overall, all four core and fluid subscales obtained internal consistency that was strong enough for each to be considered a viable subscale of their respective narrative role. When each of the core and fluid subscales Cronbach's alpha were compared to each other, three of the fluid subscales (thrill seeker, professional, revenger) obtained a lower Cronbach's alpha than their core subscales counterpart. The fluid victim subscale obtained a marginally higher Cronbach's alpha compared to the core victim subscale. When each of the core and fluid subscales Cronbach's alpha were compared to their respective narrative roles Cronbach's alpha. Two of the four core subscales (thrill seeker and revenger) obtained higher internal consistency than their respective narrative roles Cronbach's alpha and two core subscales (professional and victim) obtained a lower Cronbach's alpha than their respective narrative role. Furthermore, three of the four fluid subscales (thrill seeker, professional and victim) obtained a Cronbach's alpha lower than their respective narrative role, whilst the fluid revenger subscale obtained the same Cronbach's alpha as the revenger narrative role (see Table 6.8).

Table 6.8

Four factors Cronbach's alpha compared to core and fluid subscales Cronbach's alpha

	Thrill Seeker	**Professional**	**Revenger**	**Victim**
Narrative Role				
N	8	10	8	6
α = , *p* < .05	.89	**.82**	.76	**.73**
Core Subscale				
N	5	4	2	2
α = , *p* < .05	**.91**	.71	**.90**	.62
Fluid Subscale				
N	3	6	6	4
α = , *p* < .05	.67	.67	.76	.67

Items in **bold** reflect the strongest Cronbach's alpha across narrative role, core subscale and fluid subscale

Overall the findings from Hypothesis 3 support the inclusion of core and fluid subscales into the structure of the NRQ from Study 3, resulting in a proposed scoring key for the NRQ (see Table 6.9).

Table 6.9

Hypothesis 3: 32-item Narrative Roles Questionnaire Scoring Key

NARRATIVE ROLES			
Thrill Seeker	**Professional**	**Revenger**	**Victim**
n = 8	*n* = 10	*n* = 8	*n* = 6
α =.89, *p* <.05	α =.82, *p* <.05	α =.76, *p* <.05	α = .73, *p* <.05
CORE SUBSCALE ITEMS			
Thrill Seeker	**Professional**	**Revenger**	**Victim**
n = 5	*n* = 4	*n* = 2	*n* = 2
α =.91, *p* < .05	α =.71, *p* < .05	α =.90, *p* < .05	α =.62, *p* < .05
3. It was fun	7. It was a routine.	28. I was trying to get revenge.	16. I was helpless
5. It was interesting	11. I knew what I was doing	30. I was getting my own back.	19. I was confused about what was happening.
6. It was like an adventure	26. It was a manly thing to do.		
9. It was exciting	27. For me, it was like a usual day's work.		
10. I was doing a job			
FLUID SUBSCALE ITEMS			
Thrill Seeker	**Professional**	**Revenger**	**Victim**
n = 3	*n* = 6	*n* = 6	*n* = 4
α =.67, *p* < .05	α =.67, *p* < .05	α =.76, *p* < .05	α =.67, *p* < .05
8. I was in control	1. I was like a professional.	2. I had to do it	17. It was my only choice
13: It was a mission	20. I was looking for recognition.	4. It was right	18. I was a victim
15. I had power	23. It all went to plan	12. It was the only thing to do	24. I couldn't stop myself.
	29. There was nothing special about what happened	14. Nothing else mattered	25. It was like I wasn't part of it
	31. I knew I was taking a risk	21. I just wanted to get it over with	
	32. I guess I always knew it was going to happen	Q22. I didn't care what would happen	

Note: Means and standard deviations for core and fluid sub factors in relation to mental disorder type (Axis I, Axis II and no formal diagnosis), offence type (VO, SO and GO) and *N* = 70 MDOs are reported in Appendix O.

6.5 Chapter 6 Summary

The current study extended upon the findings from Study 3 which established the structure of the NRQ by identifying four narrative roles (thrill seeker, professional, revenger and victim) and their respective core and fluid items. The purpose of Study 4 was to explore the relationship between the four narrative roles, the differences in narrative roles for MDOs based on MD and offence type and explore the presence of core and fluid subscales. Hypothesis 1, that a linear relationship between the four narrative roles would be found was supported (see *Figure 6.1*), challenging the previously proposed cyclical relationship by Canter and Youngs (2009)).

Victim ➡ Revenger ➡ Professional ⟷ Thrill Seeker

Figure 6.1: Linear relationship of the four narrative roles

The presence of this linear relationship also supports a linear relationship between the narrative roles affective states identified in Study 3 (negative, neutral, positive). Specifically, victim and revenger narrative roles were reflective of negative affect and had a significant positive relationship with each other. Professional was reflective of neutral affect (and could move towards either positive or negative affect) as supported by its significant relationship with both revenger (negative affect) and thrill seeker (positive affect). Thrill seeker was reflective of positive affect and had a bi-directional significant positive relationship with professional (neutral affect) (e.g. professional had significant positive relationship with thrill seeker and thrill seeker had a significant positive relationship with professional). Finally, a negative (albeit non-significant) relationship was found between both thrill seeker (positive affect) and professional (neutral affect) with victim (negative affect) (see *Figure 6.2*).

Figure 6.2: Four narrative roles and affect

These findings provide support for the PANA dimensional model of emotion (Watson and Telegan, 1988) when applied to narrative roles, as opposed to previously suggested models including the Circumplex model of emotion (Canter & Youngs, 2017) and Vector Model (Spruin & Siesmaa, 2017). Therefore, providing preliminary support that the NRQ has the potential to measure both narrative role and emotion.

The findings from hypothesis 2, that narrative role mean scores would differ between mental disorder (Axis I, Axis II, no formal diagnoses) and offence type (VO, SO and GO) was partially supported, yielded some interesting results. Specifically, only Axis I and VO's mean scores were found *not* to be the same across all four narrative roles. Therefore Axis II, no formal diagnosis, SOs and GOs four narrative role mean scores were similar to each other. Furthermore, only Axis I offenders scored significantly higher on any narrative role compared to Axis II and no formal diagnosis. Additionally, Axis I victim mean score was significantly higher than the Axis I thrill seeker mean score.

Axis I was comprised of schizophrenia (74%, n = 23), Bipolar disorder (10%, n =3), schizoaffective disorder (6%, n = 2) PTSD (6%, n = 2) and psychosis (3%, n = 1). The Victim

narrative role describes an offender who views themselves as a helpless victim, who could not control their actions, nor had any other alternative but to offend. Additionally, the victim narrative role described an offender who experiences negative affect as a result of confusion and disconnection, which are traits present in schizophrenia, bipolar, schizoaffective disorder and psychosis (APA, 2013). Furthermore, offenders with untreated schizophrenia are three times more likely to engage in violence and experience persecutory delusions associated with violence (Keers, Ullrich, DeStavola & Coid, 2014). Therefore, the tendency to obtain higher mean scores for the victim narrative role may be explained by the very nature of the MD's present in the Axis I group.

In relation to offence type, the distribution of mean scores for VO's, SO's and GO's did not differ significantly for any of the four narrative roles. However, VO's mean scores were significantly higher on both revenger and victim compared to thrill seeker. These findings support the research by Ioannou et. al., (2015) who found that 55% of VO's were assigned the revenger narrative role and 20% were assigned the victim narrative role (the top two of the four narrative roles assigned). Furthermore, 54% (*n* =21) of VOs had an Axis I diagnosis and Axis I offenders also scored significantly higher on victim than thrill seeker. Therefore, it could be that the same participants were also within the VO group. Finally, 28% (*n* = 11) of VO's had an Axis II disorder including: ASPD (58%, n = 11), BPD (21%, n = 4), schizoid PD (16%, n = 3) and histrionic PD (5%, n = 1). Research by Goodlard et al., (2018) found that BPD was linked to the depressed victim, which could suggest participants within the VO group also had a BPD diagnosis hence victim mean scores were significantly higher for victim compared to thrill seeker. Additionally, the high prevalence of ASPD (58%) may account for the revenger

mean scores being significantly higher compared to thrill seeker, given ASPD traits can be linked to behaviours associated with seeking revenge (APA, 2013).

Finally, thrill seeker was the only narrative role that was not normally distributed which could explain why this narrative role was significantly lower for both Axis I and VO's compared to the victim and revenger narrative roles. Equally it could be considered that offenders identify less with thrill seeker compared to revenger and victim narrative roles, as offending is often a result of emotional dysregulation in relation to negative affect as opposed to positive affect (Gillespie, Garofalo & Velotti, 2018). Overall, it could be inferred that offenders with schizophrenia and VO's with BPD may be more likely to adopt a victim narrative role and VOs with ASPD are more likely to adopt a revenger narrative role. Whilst professional and thrill seeker narrative roles are less commonly endorsed due to offending being driven by negative as opposed to neutral or positive affect. Although such findings warrant further research, they do begin to provide evidence of face validity for the NRQ.

The third hypothesis that all core and fluid subscales would be internally consistent was supported despite four of the 17 core subscale items (including two professional items (item 1 & 20)), one revenger item (item 4) and one victim item (item 18) being relocated from their core subscale to the fluid subscale. Whilst it may be questionable to suggest original core subscale items be located in their respective fluid subscale, however taking into account the relationship between the narrative roles and the content of these items, this reallocation can be justified. For example, the professional narrative role has a relationship with the thrill seeker narrative role, therefore the two new professional fluid subscales item 1 "I was like a professional" and item 20 "I was looking for recognition" would suggest that a thrill seeker

may also view themselves as someone who is both professional and seeking recognition during their offending. The revenger narrative role has a relationship with the professional narrative role, therefore item 4 “It was right” enables a professional to also hold the view their offending was right, which mirrors the description of the professional. Finally, the revenger narrative role has a relationship with the victim narrative role, therefore item 18 “I was a victim” enables revengers to also view themselves as victim. This makes sense given seeking revenge implies something unjust has been done to you, therefore you in turn perceive yourself as a victim.

Currently, the contribution of core and fluid subscales in unknown. However, findings from hypothesis 3 show that the internal consistency of the four narrative roles was generally stronger than their core subscale (except for the thrill seeker and revenger narrative role subscales which were stronger) and all four core subscales had stronger internal consistency than the fluid subscales. Therefore, taking into account the internal consistency of the four narrative roles (thrill seeker, professional, revenger and victim) and their respective core and fluid subscales. Alongside considering the relationship between the four narrative roles found in hypothesis 1 and drawing upon the PANA model, the following interaction is proposed.

Narrative role mean scores indicate the ‘presence’ of a narrative role (e.g. the higher the mean score the more present it is, the lower the mean score the less present it is). Core subscales determine the ‘strength’ of a narrative role (e.g. the higher the mean score the stronger the narrative role, the lower the mean score the weaker the narrative role). Fluid subscale mean scores measure the ‘strength of interaction’ (e.g. the higher the mean score, the stronger the interaction between two related narrative roles. The lower mean score, the weaker the interaction between two related narrative roles) between two specific narrative roles

informed by hypothesis 1. Specifically, the thrill seeker (positive affect) fluid subscale determines the strength of interaction between the thrill seeker (positive affect) and professional (neutral affect) narrative roles. The professional (neutral) fluid subscale determines the strength of interaction between the professional (neutral affect) and thrill seeker (positive affect) narrative roles. The revenger (negative affect) fluid subscale determines the strength of interaction between the revenger (negative affect) and professional (neutral affect) narrative roles. The Victim (negative affect) fluid subscale determines the strength of interaction between the victim (negative affect) and revenger (negative affect) narrative roles (see *Figure 6.3*).

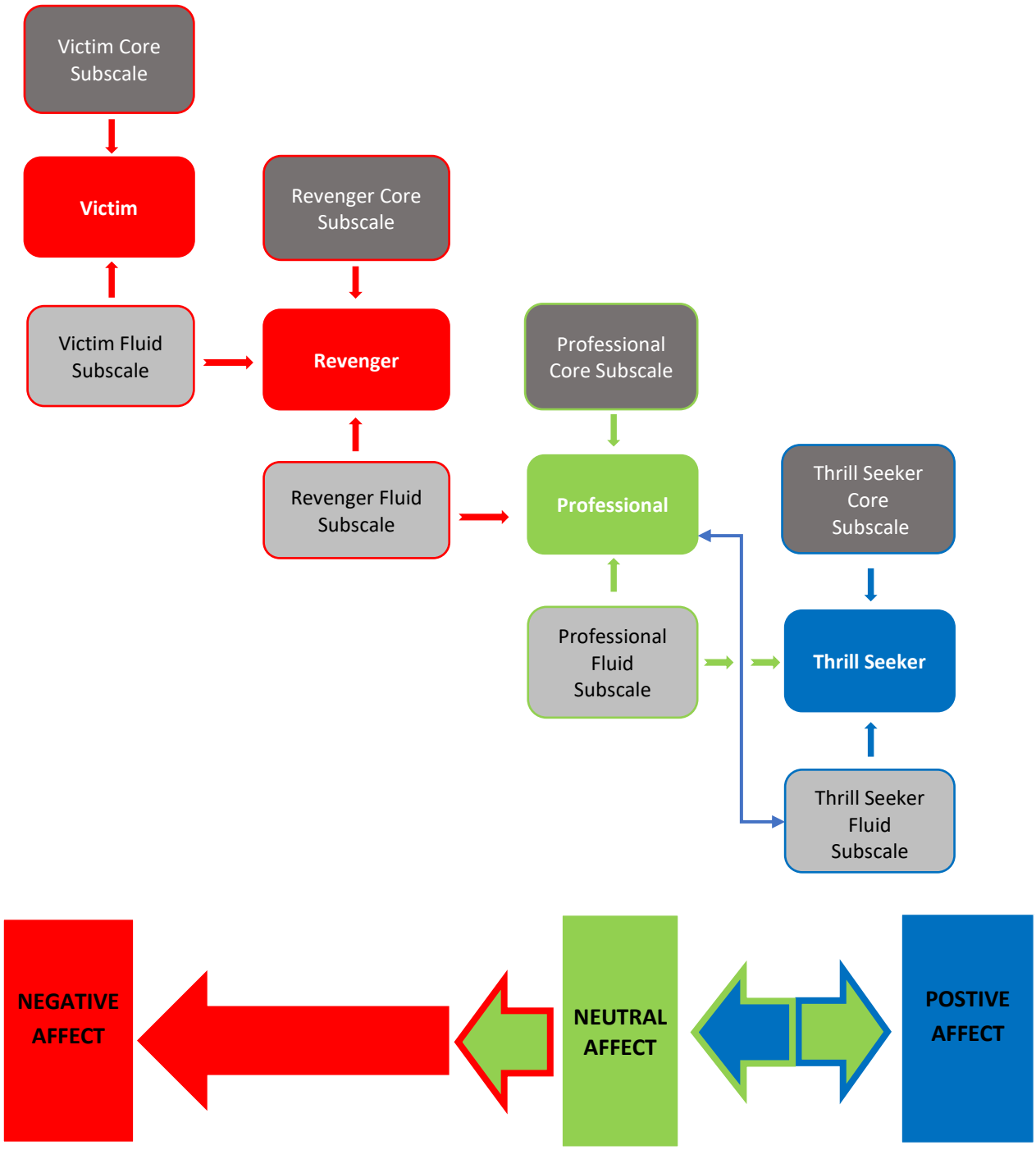

Figure 6.3: PANA model, narrative roles, narrative role core and fluid subscales

Overall, the findings from Study 4 have confirmed the presence of a linear relationship between the four narrative roles (thrill seeker, professional, revenger and victim) (hypothesis 1). Alongside discussing how this linear relationship includes the presence of emotions (positive, neutral and negative) by drawing upon the PANA dimensional model of emotion (Watson and Tellegan, 1988). Additionally, this study has to some extent begun to address how narrative roles can be used to understand offending behaviour both for MD and offence type (hypothesis 2) as well as providing preliminary evidence of construct and criterion validity for the NRQ. The presence of core and fluid items and their respective subscales has also been confirmed (hypothesis 3) and discussed in relation to their contribution when interpreting the NRQ. Finally, the NRQ now has a scoring key which can now be used both by researchers *and* practitioners (see Figure 6.6. for a summary of these findings and Appendix P for the Practitioners Guide to the NRQ).

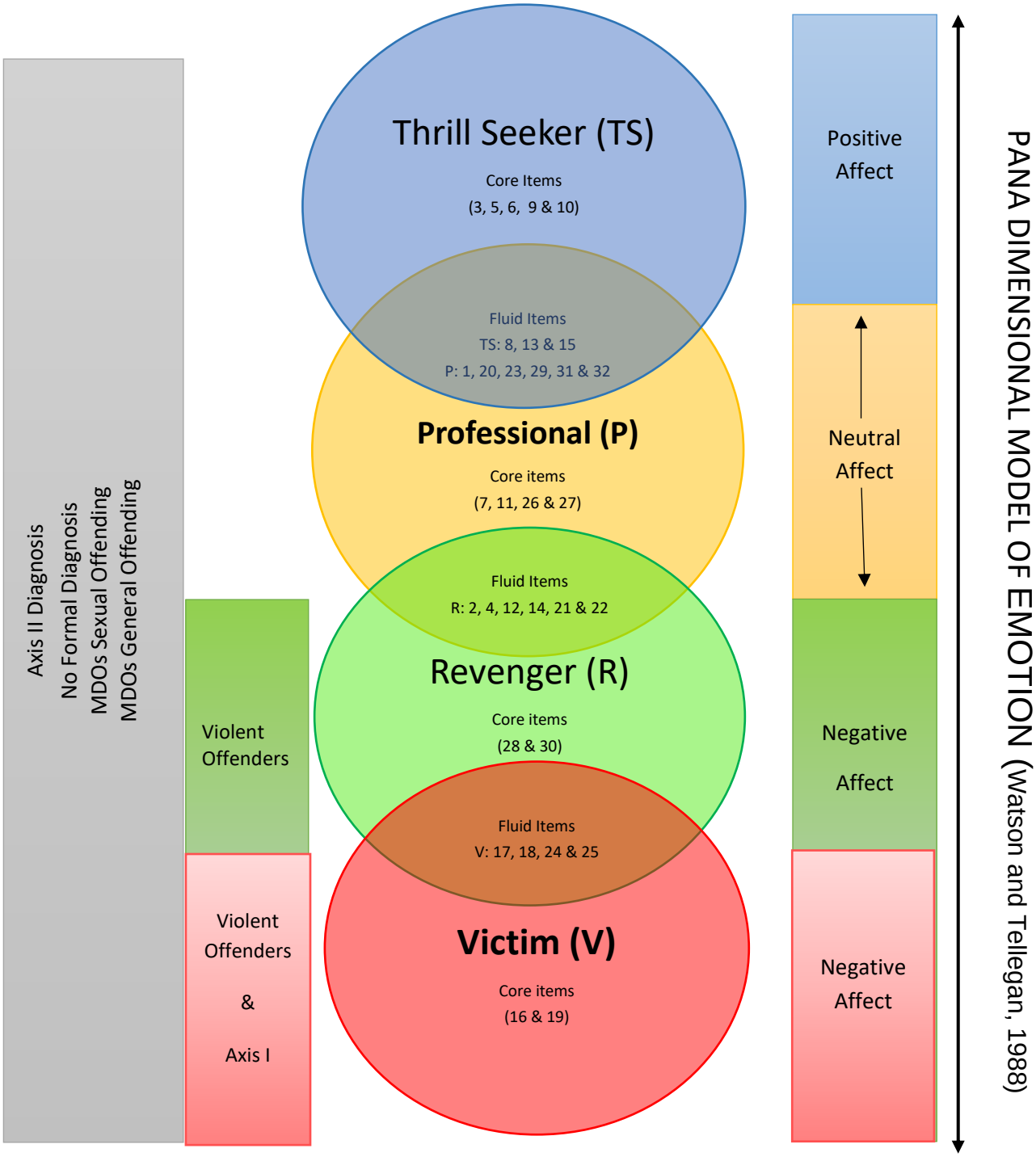

Figure 6.4: Study 4 findings: 32-item Narrative Roles Questionnaire

Chapter 7

Discussion

The purpose of this research was to explore the structure and internal consistency of the 33-item NRQ administered to adult male MDOs when compared to adult male incarcerated offenders. Research on the development of the NRQ began in 2003 (Canter, Kaouri & Ioannou, 2003) and was underpinned by Frye's archetypal mythoi (1957) and McAdams (1988) narrative theory; however, it was not until 2009 that the 33-item NRQ was first published (Canter & Youngs, 2009). Currently the 33-item NRQ has only ever been conducted on adult male incarcerated offenders (Youngs & Canter, 2012; Ioannou et. al. 2015) and both studies found the presence of the same four narrative roles: hero, professional, revenger and victim using SSA. However, the numbers of offenders diagnosed with a mental disorder across UK prisons is elevated (Singleton, Meltzer & Gatward, 1998; Fazel et. al. 2016) and there continues to be steady increase in the number of offenders being detained in mental health hospitals (MoJ, 2019). Therefore, it is important to explore whether the NRQ and its four narrative roles can still be found when considering MD at the time of offending.

Whilst SSA is a common method of analysis within Investigative Psychology (Canter & Fritzon, 1998; Canter & Heritage, 1990; Trojan & Salfati, 2008; Goodlard et al., 2018; Ioannou et al., 2017; 2018), such analysis is not frequently used within mainstream psychology. Therefore, the statistical robustness of the 33-item NRQ is often challenged (Ward, 2012). Furthermore, the patterns of item placement within narrative roles and the relationship between these roles has remained unexamined. As such, the cyclical relationship of narrative roles continues to be assumed (Frye, 1957; Canter, Kaouri & Ioannou, 2003; Canter & Youngs, 2009; Ioannou et. al. 2015; Youngs & Canter, 2012). Furthermore, the structure of the 33-item NRQ has only ever been tested using SSA on small and medium-sized samples (N = 71, Youngs and Canter, 2012 and N = 120, Ioannou et. al. 2015) and construct validity is yet to be

established. As a result, there is no guidance provided on how offenders are assigned a narrative role or how the NRQ can be used for individual interpretation making it largely inaccessible to researchers and practitioners alike. Therefore, despite being published in 2009 the 33-item NRQ remains in the early stage of scale development and remains a conceptual framework for understanding criminality with limited practical utility.

This research sought to investigative the NRQ by examining it at a more nuanced statistical level with a different population (MDOs) to address four key aims. Firstly, to compare previous research findings on the 33-item NRQ (Youngs and Canter, 2012; Ioannou et al., 2015) to explore if there was any pattern in the placement of items for the four narrative roles (hero, professional, revenger and victim). Secondly, to ascertain whether the NRQ could be applied to MDOs. Thirdly, to determine whether the NRQ and its four narrative roles could withstand statistically robust analysis. Finally, to determine whether the NRQ could move from being theoretical to practical. The ultimate aim was to develop a scoring key for the NRQ and its four narrative roles (hero, professional, revenger and victim) so that identification of narrative roles can become consistent amongst researchers and professionals and future research on narrative roles can become comparable.

Participants for the current research comprised 70 adult male MDOs recruited from seven medium secure inpatient facilities and three forensic housing associations in South London. All 70 participants were administered the 33-item NRQ (Canter and Youngs, 2009) and demographic information was collected. Secondary data was obtained from two published papers that administered the 33-item NRQ to incarcerated offenders (N = 71, Youngs & Canter,

2012; *N* = 120, Ioannou et al., 2015). **Note:** raw data from these two studies was not available, therefore only data reported in the publications were used.

7.1 Summary of Findings

The overarching aim of Study 1 was to determine whether the NRQ and its four narrative roles (hero, professional, revenger and victim) could be applied to MDOs. Study 1 had two aims, the first being to review the results from the only two published studies to have used the 33-item NRQ (Ioannou et. al 2015; Youngs and Canter, 2012) and explore commonality of item placement across the four narrative roles (hero, professional, revenger and victim). Secondly, to conduct SSA on MDOs responses on the NRQ and compare these findings with the results reported by Youngs and Canter (2012) and Ioannou et al., (2015).

Comparison of Youngs and Canter (2012) and Ioannou et al., (2015) SSA results on the NRQ resulted in the identification of 13 core items (items that were located in the same narrative role in both papers) and 20 fluid items (items located in one of two different narrative roles). Therefore, core and fluid items formed part of the hypotheses for Study 1. The findings from Study 1 were that when administered across two different offending populations (MDOs and incarcerated offenders) the 33-item NRQ had similar internal consistency ($\alpha = .86$, $p < .05$ (Youngs and Canter, 2009) and $\alpha = .85$, $p < .05$, MDOs). Additionally, four internally consistent SSA regions labelled hero, professional, revenger and victim were found for MDOs supporting findings by Youngs and Canter (2012) and Ioannou et al., (2015) (hypothesis 1). The four SSA regions found for MDOs also had the same 13 core items (hypothesis 2) and 16 of the 20 fluid items (hypothesis 3). It was concluded that the NRQ and its four narrative roles could be

applied to adult male MDOs and the presence of core items was supported, whilst the presence of fluid items mostly supported.

The overarching aim of Study 2 was to determine whether the structure of the NRQ identified by SSA, would also be found using EFA. Study 2 comprised three aims including: to ascertain if EFA supported the presence of four SSA regions/narrative roles, secondly to determine if the factors identified by EFA would be conceptually similar to the four SSA regions found for MDOs in Study 1. Thirdly, to determine if the EFA factors were conceptually similar to the four narrative roles proposed by Youngs and Canter (2012) and Ioannou et al., (2015).

The results from the unforced EFA identified the presence of four factors for the NRQ, supporting hypothesis 1. A forced EFA was then conducted and these four factors were found to be internally consistent (hypothesis 2), however these factors were derived from 32-items of the NRQ as opposed to 33-items. Additionally, all four factors were found to have better internal consistency than the four SSA regions for MDOs and incarcerated offenders (Ioannou et al., 2015). Three of these factors were considered conceptually similar to the revenger, victim and professional SSA regions found for MDOs (hypothesis 2) and found by Youngs and Canter (2012) and Ioannou et al., (2015) (hypothesis 3). However, a fourth factor Factor 1 (hero/professional) was identified in lieu of the hero SSA region/narrative role.

The overarching aim of Study 3 was to establish the structure of the 32-item NRQ by deciding whether to use SSA or EFA results. Study 3 comprised four aims, the first two aims being to determine if the 13 core and 19 fluid items (one fluid item had been removed) were

located within a hypothesised factor. The third aim was to identify the placement of the 13 hero items (identified in SSA results for MDOs, Canter and Youngs (2009) and Ioannou et al., (2015)) in each of the four EFA factors. The fourth aim was to identify the placement of Factor 1 (hero/professional) items in SSA results for MDOs, Canter and Youngs (2009) and Ioannou et al., (2015).

The results from Study 3 not only supported the presence of 13 core (hypothesis 1) and 19 fluid items (hypothesis 2), but also supported the movement of four fluid items to core items. Furthermore, it was found that all hero SSA region/narrative role items had been located within one of two hypothesised factors (Factor 1 (hero/professional) and Factor 2 (professional)) (hypothesis 3). Finally, all Factor 1 (hero/professional) items were located within either the hero or professional SSA regions (hypothesis 4). Following these results, a detailed review of item content for each of the EFA factors was conducted and compared to the narrative role descriptions provided by Canter and Youngs (2009) and Ioannou et al., (2015). It was found that three of the four narrative roles (professional, revenger and victim) descriptions were similar to the factor descriptions. However, Factor 1 hero/professional whilst similar to both hero and professional narrative role descriptions, was considered a new factor and relabelled 'thrill seeker'. Additionally, the identification of a specific affect for each of the four narrative roles was observed (positive, neutral, negative). A review of SSA and EFA findings from both Study 2 and Study 3 then occurred in addition to reflecting on the strengths and limitations of SSA and EFA. Overall, it was decided that EFA results on the NRQ provided a more robust understanding of this measure and these results were used to inform the structure of the NRQ and comprised the following narrative roles: thrill seeker (positive affect), professional (neutral affect), revenger (negative affect) and victim (negative affect).

The overarching aim of Study 4 was to develop a scoring key for the 32-item NRQ. Study 4 comprised three aims. Firstly, to explore the nature of the relationship between the four narrative roles. Secondly, to explore how narrative roles mean scores varied both between and within groups of MD (Axis I, Axis II and no formal diagnosis) and offence type (violent, sexual and general offenders). Thirdly, to ascertain whether core and fluid subscales and their respective items could contribute to the interpretation of the NRQ.

The results from Study 4 confirmed the presence of a linear relationship between the four narrative roles (hypothesis 1). This finding also supported the presence of emotion identified for each narrative role and in turn provided support for the use of the PANA model of emotion (Watson and Telegan, 1988) to further understand the relationship between the narrative roles. Secondly, there was emerging evidence of concurrent and construct validity of the NRQ following finding mean scores for narrative roles showed some differences across groups for Axis I and VO offenders, alongside differences found within the Axis I group (hypothesis 2). Finally, confirmation as to the presence of core and fluid subscales was found (hypothesis 3). The resultant outcome being the development of a scoring key and practitioners guide for the 32-item NRQ.

7.2 Contribution to Investigative and Forensic Psychology

There are several key findings from this research pertinent to forensic and investigative psychology. The first is that the NRQ can be considered a valid measure in assessing the presence of narrative roles for both MD and non-MD offenders. Specifically, the results from this research found that when the 33-item NRQ was administered to MDOs and analysed using the same analytic approach (SSA), the same four narrative roles found for incarcerated

offenders (Ioannou et al., 2015; Youngs and Canter, 2012) continued to be present. These findings suggest that narrative roles can be identified even when individuals experience MD at the time of offending, and thus the NRQ can be used with MDOs. Furthermore, whilst MD or offence type does not change the presence of narrative roles, the presence of MD (e.g. Axis I) and offence type (violent offending) may be distinguishable between narrative roles. For example, this research found that offenders with MD were more likely to have high scores on the victim narrative role compared to the thrill seeker narrative role. Therefore, information obtained about an individual offender (e.g. gender, offence type, MD) and their offending (e.g. weapon use, stranger offender) could further assist with the understanding of narrative roles. These findings also suggest that in addition to using the NRQ to identify narrative roles for an offender, there should also be a focus on understanding *what* offender characteristics tell us about narrative roles.

This is the only research to have compared both SSA and EFA results on the NRQ and thus becomes one of only a small number of studies that have used both approaches on the same data (Cohen, 2005; Maslovaty, Marshall, & Alkin, 2001; Tucker-Drob & Salthouse,2009; Cohen, 2005; Katz, 1986; Maslovaty, Marshall & Alkin, 2001). Whilst the main purpose of this research was not to engage in a methodological debate regarding the use of SSA compared to EFA, such a debate was inevitable. Whilst the advantages of SSA are that it enables exploration of the underlying structures for complex psychological data (Alt, 2018) and can be used on small sample sizes (Maslovaty et al., 2001), such as hard to reach populations like MDOs. The interpretive flexibility of SSA in the identification of regions is both a strength (for exploratory research) and weakness (for confirmatory findings). As a result, when EFA and SSA results were compared EFA provided further clarity regarding the hero and professional

narrative roles in a way SSA could not (e.g. the inability to identify regions within regions) which was further supported by am interpretative comparison of the EFA factors and SSA narrative role descriptions. Overall, the NRQ was considered more robust when comprised of 32 items as found by EFA, instead of 33 items found by SSA. EFA also consolidated the presence of four narrative roles originally found by SSA thus supporting construct validity. Whilst the original hero narrative role (SSA) was replaced with the thrill seeker narrative role (EFA), thrill seeker provided a clearer distinction between than previously defined hero and professional narrative roles described by Canter and Youngs (2009) and Ioannou et al., (2015). Overall, SSA is considered a beneficial analytic approach when developing new measures and exploring their structure, especially when the sample size is small. However, if a structure has been proposed and the sample size is appropriate than more confirmatory approaches such as EFA, CFA or SEM (Finch, 2019; Flora & Flake, 2017; Guo et al., 2017; Reio & Shuck, 2015) should be used to assess construct validity. In fact, if this approach had been adopted by Ioannou et al., (2015), then the structure of the NRQ its construct validity could have been established much earlier than now.

Finally, previous research on the NRQ has only ever explored the structure and presence of narrative roles (Goodlard, et al., 2018; Ioannou et al., 2015; 2017; Youngs & Canter, 2012) but never the relationship between narrative roles. Additionally, research on the emotions present for each narrative role has only ever been conducted through the introduction of emotions questionnaires in combination with the NRQ (Ioannou et al., 2017; Spruin et al., 2014). However, it has never been considered that the NRQ captures both narrative *and* emotion. The final key finding from this research was the identification of a linear relationship between the four narrative roles, including their affective states and the introduction of the

PANA model of emotion (Watson and Telegan, 1988). This linear relationship challenges the cyclical relationship of narrative roles for which they were originally founded (Canter & Youngs, 2009). Furthermore, the PANA model is considered a better fit in the understanding of emotions and narrative roles compared to previously proposed models (e.g. the Circumplex model of emotions (Russell, 1980 proposed by Canter & Youngs, 2017); Vector model (Bradley et. al., 1992 proposed by Spurin & Siesmaa, 2017) as it is considered the strongest of the three models when assessing "events, autobiographical memories, or random words" (Rubin & Talarico, 2009, p. 808) which is exactly what the NRQ does. Finally, the linear relationship between narrative role and emotion was further supported by the introduction of core and fluid items and their respective subscales, which also have never previously been considered. Overall, it was the combination of these findings that enabled the development of a scoring key and practitioners' guide for the 32-item NRQ, whereby narrative roles can now be identified based on 'presence', 'strength' and 'strength of interaction'.

7.3 Limitations

The present research is not without its limitations. The first key limitation applies to participant selection and demographic characteristics. Of the 151 MDOs identified for this research, only 115 met the inclusion criteria and only 70 participants chose to participate, resulting in volunteer bias (Rosenthal & Rosnow, 1975). Furthermore, only adult male MDOs who resided in MSU or FHA in South London were recruited resulting in selection bias (Nunan, Bankhead & Aronson, 2017). Furthermore, the MDOs responses to the NRQ were only compared to published results (as opposed to raw data) from adult male incarcerated offender located in the North of England and thus may be subject to sampling bias (Fournier,

2018). These limitations therefore impact on the generalizability and external validity of this research to offending populations (e.g. female offenders, adolescent offenders).

The second limitation was the inclusion criteria. Participants were expected to have a MD diagnosis, however 29% (n = 20) of all MDOs (N = 70) had no 'formal diagnosis' therefore they may or may not have had a MD. If these participants did have a MD, it is unknown as to whether they had an Axis I, Axis II diagnosis. However, this limitation was partially mitigated as participants with no formal diagnosis were allocated to their own specific group preventing any misattribution of diagnosis within the Axis I and Axis II diagnosis groups. Additionally, the 71 and 120 incarcerated offenders recruited for Youngs and Canter (2012) and Ioannou et al., (2015) studies did not disclose the presence or absence of a MD. Therefore, it is possible, given previous research suggesting incarcerated offenders have an elevated presence of MD compared to a general population (Baudette & Stewart; Torgersen, Kringlen & Cramer, 2001), that some offenders may have had an Axis I or Axis II diagnosis. Therefore, the difference between the 70 MDOs and 191 incarcerated offenders in relation to the presence of MD may not have been as distinctly different as originally thought.

The third limitation is the challenges associated with trying to recruit participants from a hard to reach population (MDOs) and the lack of access to the raw data from the published studies used for this research. Therefore, CFA or SEM was unable to be conducted for all participants data combined. Additionally the data was non-parametric and by repeatedly comparing MDOs SSA and EFA results to previously published studies (e.g. Canter and Youngs 2009; Youngs and Canter, 2012; Ioannou et al., 2015 and combined results from Youngs and Canter, 2012 & Ioannou et al., 2015), increased the chances of a Type I error

(Field, 2017). However, it was considered important to undertake these comparisons to ensure that the NRQ, the four original narrative roles, and presence of core and fluid items were comparable between incarcerated offenders and MDOs. Furthermore, whilst EFA was conducted on a smaller sample (N = 70) than recommended (Cattell, 1978; Gorshuch, 1983; Tabachnick & Fidell, 2013; Everitt, 1975), the findings mapped onto SSA which is not sensitive to sample size (Maslovaty et al., 2001). This alternate approach of comparing SSA to EFA results has provided a rich understanding of the NRQ and its four narrative roles and in turn the occurrence of a Type 1 error was potentially reduced.

The fourth limitation relates to participants' responses on the 64-item demographic sheet and NRQ which may have been influenced by social desirability bias (Edwards, 1957). This research attempted to mitigate social desirability bias by informing participants that their response to the 64-item demographic sheet would be cross-referenced with collateral file information, which preceded the NRQ. Additionally, MDOs participation in the current study was voluntary and had no impact on participants' current sentence of release planning. Therefore, there were no benefits or consequences for trying to portray themselves in a positive light. Self-report is not unusual when assessing or working with offending populations (Hare, 2003): the assessment of an individual's offending is typically explored via three types of methodology; the analysis of official records, self-report offending survey, and victimization surveys (Payne & Piquero, 2016). Whilst reliance on self-report may seem counter-intuitive (as criminality is associated with law breaking, non-conformist attitudes and deceit characteristic of offending behaviour) research examining the reliability of self-reports with offending populations, even psychopaths, has found that offenders often exhibit good insight

into their personality, and report traits accurately especially when there are no consequences to them by doing so (Miller, Jones & Lynam, 2011).

Furthermore, whilst some researchers propose official documentation is the most reliable method to measure an individual's criminal history (Nieves et. al. 2000), the self-report method provides an understanding of criminality from the perspective of the offender, enabling more meaningful criminological research (Short & Nye, 1957; Farrington, 2010). Investigative Psychology seeks to understand the meaning of crime from the perspective of the offender, including the motivation behind their behaviour and purpose to offend (Canter, 1994). Furthermore, the purpose of the NRQ is to identify an individual's perception of themselves at the time of their index offence as opposed to attempting to verify offence specific facts. As a result, self-report provides an opportunity to collect information regarding antisocial and criminal activity, which is not necessarily captured via official documentation (Farrington, 2010; Farrington, Piquero & Jennings, 2013). Whilst variation between different types of offenders and their self-report has been found, on the whole, offenders are considered more likely to affirm the information in official records, rather than deny such information (Maxfield, Weller & Widom, 2000; Payne and Piquero, 2016; Piquero, Schubert & Brame, 2014).

The fifth limitation of this research refers to the accuracy of retrospective memory recall. Of the 70 MDOs, there was a range of time frames between when participants committed their identified offence and completed the NRQ, specifically: 24% (n = 17) of participants had committed their offence 1-3 years prior to the interview; 17% (n = 19) of participants had committed their offence 4-6 years prior to interview; 19% (n = 13) of participants had committed their offence 7-10 years prior to interview and 30% (n = 21) of

participants had committed their offence 11 or more years prior to interview. Research on criminal narratives emphasises the importance on focusing on the participants 'experience' of the identified offence, as opposed to ensuring accuracy of 'facts' or others perception of the offence itself (Canter, 1994). Therefore, perfect recall is not as important as a participant's ability to connect with the perception of themselves at the time of the offence. However, the impact of retrospective memory recall cannot be ignored.

Blumstein (1986) proposed that memory difficulties are likely to increase as the time interview between the event and survey date increases. Furthermore, research on memory, suggests that memory is reconstructive and can therefore change over time (Neisser, 1981; Schacter, 2001; Vincente & Brewer, 1993). However, when memory has been researched on offenders' ability to recall an identified offence, it has been considered a valuable tool in understanding their belief systems (Gannon, Wright, Beech & Williams, 2006). Specifically, it has been proposed that offenders draw upon their inherent beliefs to make sense of, and describe social information (Murray & Boggo, 2003). Furthermore, Gannon et. al. (2006) propose that offenders may revert to their internalised schema or cognitive distortions to fill in any 'memory gaps'. The NRQ asks participants to answer each question based on their perception of themselves at the time of an identified offence, filling in gaps with cognitive distortions, beliefs or attitudes may indirectly strengthen their responses and identification with a specific statement, rather than dilute their response. Thus, participants' autobiographical memories may provide just as much insight into their beliefs systems and cognitive distortions, as the facts themselves.

Additionally, the methodology adopted for the current research attempted to mitigate memory recall errors by re-orienting participant to their identified offence by asking participants to complete a 64-item demographic sheet which included: identifying the nature of their offending; time and date of offending; victimology and offence specific behaviour prior to completing the NRQ. The majority of participants were able to respond to all questions, participants who were unable to answer all questions advised the researcher of this as opposed to fabricating or 'guessing' the information. Therefore, participants willingness to acknowledge when they could not recall information suggests an attempt to provide honest responses. Furthermore, when participants' responses were compared with collateral file information, a high level of consistency was found between self-report and official records. Thus increasing the researchers' confidence regarding the credibility of participants' responses in relation to the NRQ.

7.4 Future Directions

Whilst the presence of narrative roles continues to be supported, a key question yet to be answered is how can the 32-item NRQ (now referred to as 32-NRQ) its narrative roles contribute to the way in which offenders are treated, assessed and researched?

Research Directions

Due to the paucity of research on the 33-item NRQ and the lack of guidance on how to identify narrative roles, the ability for practitioners to use the NRQ was impossible and researchers varied in their approaches in how they assigned narrative roles (Ioannou et al., 2015; Goodlard, et al., 2018). The current research found both statistical and theoretical support for the 32-NRQ which can be used to assess both narrative role (thrill seeker,

professional, revenger and victim), emotions (positive, neutral, negative) and the presence, strength and strength of interaction between core and fluid sub factors. Additionally, norms have been established for MDO offenders (*n* = 70) with an Axis I (*n* = 31), Axis II (*n* = 19) and no formal diagnosis (*n* = 20), as well as MDOs who have engaged in VO (*n* = 39), SO (*n* = 18) and GO (*n* =13). However, norms have been obtained from an extremely small sample and the 32-item scoring key is yet to be tested.

Therefore, future research is recommended in the following areas. Firstly, CFA or SEM could be conducted on the results on the NRQ from the combined sample of 191 participants from Youngs and Canter (2009) and Ioannou et al., (2015) studies and the 70 MDOs from the current research. If the 32-NRQ and its four factors were supported, norms could then be developed for adult male incarcerated offenders overall and in relation to offence type (e.g. violent offending, sexual offending, arson). Secondly, researchers who have already have data from the 33-item or 36-item NRQ could now use the scoring key to assign narrative roles, following which clarity will be provided about the effectiveness of the scoring key. Thirdly, researchers who have not yet used the NRQ should use the 32-NRQ as opposed to the 33 or 36-item versions. Additionally, the 32-NRQ could be administered to different offending populations, genders and cultures to ascertain if the four narrative roles are global or show variation dependent on the population being assessed (e.g. females, adolescents). Finally, practitioners may also seek to use the 32-NRQ with individual offenders to obtain a client perspective of the measure and its' interpretative approach.

Implications for Forensic Practice

The strength of the 32-NRQ is that it can be applied to offenders irrespective of offence type or MD and has the potential to asses narrative role in relation to presence, strength and strength of interaction. Whilst there are already numerous well established measures to assess offenders cognitive distortions (e.g. Psychological Inventory of Criminal Thinking Styles (PICTS) (Walters, 2001); Abel and Becker Cognition Scale (ABCS) (Abel, 1989); Burt Rape Myth Acceptance Scale (RMAS) (Burt, 1980); Multiphasic Sex Inventory (MSI) (Nichols & Molinder, 1984). Therefore, there would be value in comparing findings from the 32-item NRQ with already established measures of offending, for example: cognitive distortions (e.g. PICTS, Walters 2001) and belief systems (e.g. Young Schema Questionnaire) to assess the relationship between criminal thinking styles and beliefs systems. This in turn may further inform the understanding of the four narrative roles and in turn assess the convergent validity of the 32-item NRQ. Such findings could support the development of case formulation which is central to forensic psychology practice (Harvey & Coulston, 2015; Sturmey, 2010). Specifically, practitioners could use the 32-NRQ to identify cognitive distortions, affect and motivation for offending to then inform treatment recommendations.

Whilst the 32-NRQ NRQ is not expected to be used in the same way as forensic risk assessment. Forensic risk assessments tend to be exclusively focused on a specific offending population (e.g. sex offenders (RSVP, Hart et. al., 2003), violent offenders (HCR-20 (V3) Douglas et. al., 2013), stalkers (SRP, MacKenzie et. al., 2013)). However, the 32-item NRQ and its four narrative roles can be applied to all offenders irrespective of offence type. Furthermore, there is emerging evidence of construct validity, whereby VO offenders were more likely to endorse a specific narrative role (Revenger or Victim) over any other narrative

role, thus supporting results found by Ioannou et al., (2015) where the main two narrative roles assigned to violent offenders were revenger and victim.

Therefore, future research should now begin to explore the construct validity of the 32-item NRQ and its four factors by researching if different types of offences (e.g. arson, rape, violence, stalking, terrorism), mental disorder (e.g. schizophrenia, depression, ASPD, BPD) and offending behaviour (e.g. use of threats towards victim, intra/extra familiar victims, weapon use, substance use) are more likely to be associated with certain narrative roles over another. Such findings in turn could contribute to the description of the narrative roles and move them from being theoretically tested to empirically supported. For example, an offender who identifies with the Thrill Seeker narrative role may more likely to be impulsive, show a sense of elation during their offending and more likely to target strangers. An offender who identifies with the Professional narrative role may be more likely to use weapons, show limited affect and engage in minimal verbal interaction with their victim(s). An offender who identifies with the Revenger narrative role may be more likely to target victims they know, presents as disgruntled and angry and uses excessive force. An offender who identifies with the Victim narrative role may be more likely to present as chaotic and confused, is apologetic during their offending and likely to experience an Axis I disorder.

7.5 Concluding Remarks

This research explored whether the NRQ could be applied to MDOs, withstand statistically robust analysis, and be developed so that it has practical utility. The research findings were that the NRQ can be applied to MDOs as much as it can be applied to incarcerated adult male offenders. Additionally, the NRQ was more statistically robust as a 32-item measure (supported by EFA) as opposed to a 33-item measure (supported by SSA). Three of the four original narrative roles were supported (Professional, Revenger and Victim), whilst a new narrative role of Thrill Seeker was identified, and the original Hero narrative role was dispersed across the Thrill Seeker and Professional narrative roles. The presence of core and fluid sub factor items were statistically supported, as was the generation of a linear relationship (rather than circular) between the four narrative roles. This linear relationship was also reflective of the PANA dimension model of affect, whereby positive and negative affect are considered two distinct dimensions. Finally, a scoring key and practitioners guide for the 32-NRQ was developed in addition to preliminary norms for MDOs in relation to participants as a whole, for type of mental disorder (Axis I, Axis II and no formal diagnosis), and for MDOs offence type (VO, SO and GO). Overall the development of the 32-NRQ scoring key is fundamental for future research as it enables researchers and practitioners alike to obtain consistency of findings, ensure the same construct is being measured and compare findings which in turn enables the narrative role framework to evolve.

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Appendices

APPENDIX A: UNIVERSITYOF HUDDERSFIELD ETHICAL APPROVAL

University of
HUDDERSFIELD
Inspiring tomorrow's professionals

30 July 2010

Ms Elizabeth Spruin / Ms Belinda Coulston (Siesmaa)
Research Students
School of Human and Health Sciences
University of Huddersfield

Dear Elizabeth / Belinda

School Research Ethics Panel (SREP) Submission
Title of Study: "Offending narratives, action patterns and experiences"

I confirm that your project, as titled above has received ethical approval from the School of Human and Health Sciences Research Ethics Panel, University of Huddersfield.

I also confirm that indemnity for this project will be covered by the insurance policy held by the University of Huddersfield, as it falls within the normal range of research activity.

With best wishes for the success of your research.

Yours sincerely

Prof Nigel King
Co-Chair, SREP
School of Human and Health Sciences

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An exempt charity and a centre of excellence for vocational education and research
POSITIVE ABOUT DISABLED PEOPLE
INVESTOR IN PEOPLE

APPENDIX B: NHS ETHICAL APPROVAL

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National Research Ethics Service
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Facsimile: 0208 8364862

01 March 2011

Miss Belinda Coulston (Siesmaa)
Chartered Forensic Psychologist
South London and Maudsley - NHS Foundation Trust
Lambeth Hospital - Landor House
108 Landor Road
Stockwell
SW9 9NT

Dear Miss Coulston (Siesmaa)

Full title of study:	**Identifying the presence of criminal narratives in a forensic psychiatric population and understanding how they are influenced by emotions, criminal thinking styles and schema modes.**
REC reference number:	**11/H0805/6**
Protocol number:	**N/A**
EudraCT number:	

Thank you for your letter of 16 February 2011. I can confirm the REC has received the documents listed below as evidence of compliance with the approval conditions detailed in our letter dated 31 January 2011. Please note these documents are for information only and have not been reviewed by the committee.

Documents received

The documents received were as follows:

Document	*Version*	*Date*
Covering Letter		16 March 2011
Participant Information Sheet	2	16 February 2011
Participant Consent Form	2	16 February 2011

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

11/H0805/6	**Please quote this number on all correspondence**

Yours sincerely

This Research Ethics Committee is an advisory committee to London Strategic Health Authority
The National Research Ethics Service (NRES) represents the NRES Directorate within the National Patient Safety Agency and Research Ethics Committees in England

Esther Richman
Committee Co-ordinator

E-mail: estherrichman@nhs.net

Copy to:

Professor Nigel King,
[R&D office for NHS care organisation at lead site]

APPENDIX C: 33-item Narrative Roles Questionnaire (NRQ)

NARRATIVE ROLES QUESTIONNAIRE
Participant Number: _____

For the crime you answered as the 'offence' in the demographic sheet, please tick the appropriate box to indicate the extent to which each of the statements below best describes **your experience** whilst offending **(based on your identified offence).**

	NOT AT ALL	*JUST A LITTLE*	*SOME*	*A LOT*	*VERY MUCH INDEED*
1. I was like a professional					
2. I had to do it					
3. It was fun					
4. It was right					
5. It was interesting					
6. It was like an adventure					
7. It was routine					
8. I was in control					
9. It was exciting					
10. I was doing a job					
11. I knew what I was doing					
12. It was the only thing to do					
13. It was a mission					
14. Nothing else mattered					
15. I had power					
16. I was helpless					
17. It was my only choice					
18. I was a victim					
19. I was confused about what was happening					
20. I was looking for recognition					
21.I just wanted to get it over with					
22. I didn't care what would happen					
23. What was happening was just fate					
24. It all went to plan					
25. I couldn't stop myself					
26. It was like I wasn't part of it					
27. It was a manly thing to do					
28. For me it was just like a usual days work					
29. I was trying to get revenge					
30. There was nothing special about what happened					
31. I was getting my own back					
32. I knew I was taking a risk					
33. I guess I always knew it was going to happen					

APPENDIX D - RECRUITMENT POSTER

PARTICIPANTS NEEDED FOR
RESEARCH IN NARRATIVES

Earn £5 for your participation!!!

What is the purpose of this research?
Life stories, just like any storyline or tale, may be analyzed in terms of plots, settings, scenes and themes, as well as characters and their roles. This process is called an 'inner narrative', such narratives help explain many aspects of criminal behaviour.

The present study explores the idea of 'offending narratives' and proposes that offending behaviour can be understood through in-depth analysis and understanding of these personal stories.

At the end of the interview you will be offered worth £5. Please contact a member of staff if you are interested

APPENDIX E – INFORMATION SHEET

Dear Potential Participant,

Regarding: Research study into offending narratives, action patterns and experiences.

Thank-you for taking the time to read about this research which is being carried out by Belinda Coulston and Elizabeth Spruin as part of their PhD degrees.

Before you make a decision about whether or not to take part, we hope you will take the time to read the information below.

What is the purpose of this research?
Life stories, just like any storyline or tale, may be analyzed in terms of plots, settings, scenes and themes, as well as characters and their roles. This process is called an 'inner narrative', such narratives help explain many aspects of criminal behaviour. The present study explores the idea of 'offending narratives' and proposes that offending behaviour can be understood through in-depth analysis and understanding of these personal stories.

Why do this research?
Research on inner narratives is a very new concept in the area of psychology, therefore by participating, you will be helping us to begin to understand how your personal story effects your offending behaviour.

Who can take part?
Adult males aged 18 years or older
Convicted of a violent or sexual offence (past or present)
No current legal charges or appeals pending
Willing to discuss one of your offences (past or present)

What happens if I decide to take part?
If you wish to engage in this research, you will be invited to attend a meeting with one of the researchers who will provide you with a consent form and demographic sheet (information about your background and forensic history). In addition, you will be asked to complete four paper and pencil tests which should take approximately 1-2 hours to complete. You will be paid £5 for your time. The purpose of these questionnaires are to explore the following: (a) the role you saw yourself enacting during an identified offence (b) emotions you experienced during an identified offence (c) statements you might use to describe yourself (interpersonal style) and (d) statements about your general beliefs and thinking patterns.

If you experience difficulties understanding or reading the questions, one of the researchers will assist you. The researchers will also be asking a select few individuals to take part in an interview to further explore their personal narrative and offending behaviour, where you will be paid a further £5. If this is something you would be willing to engage in, please inform the interviewers.

Will I be debriefed?
If you find that thinking about your offence brings up some difficult memories or emotions, the researchers will be willing to discuss these with you after each session. During this time, they will also assist you in identifying other supports you can access within the hospital setting to help you cope with any distress the research may have caused.

If the researchers become concerned about your welfare which you have not identified or reported, they will discuss this with you in the first instance, however they will also be required to report these concerns to appropriate individuals.

What happens if I change my mind?
If you agree to take part in the study, but then change your mind, or have started and then wish to stop, please inform either one of the researchers or a member of staff. Participation in this study is completely voluntary and consent to participate or choosing not to participate will not affect your care in anyway.

What will happen to the information I give?
All information collected about you in this study will be kept confidential and stored in anonymised form. Do not put your name on any of the forms except the consent form; this will be kept separate from the study data to ensure anonymity. After signing the consent form you will be allocated a participant number. All data will be entered into a password protected computer; your name will not be associated with any of your interview or questionnaire responses. All information will be kept in a locked filing cabinet, in a locked office, at the International Research Centre of Investigative Psychology which only research staff and their supervisors at the IRCIP will have access to. Results of the research will be made available to you if requested. The data from this study will be used to write a research report that will be used to complete the researchers degree and may be written up for publication, however no individuals will be identifiable within any published reports, as only general trends will be indicated. This research report will be accessible upon completion at the University of Huddersfield Library.

As this data will be collected for completion of a PhD, all raw data will be retained for the development of the thesis and future statistical analysis until passed. On completion of the dissertation, all identifiable information will be destroyed to - however anonymity data will be retained indefinitely for future statistical analysis if required. Due to the Data Protection Act 1998 and the Offender Management Act 2007, all raw data (questionnaires, interview recordings etc) will be kept securely for five years beyond the end of a study.

If you have any concerns prior to taking part in the study, you are asked to correspond with staff who will pass your message onto one of the researchers.

What do I do next?
If you wish to take part in the study, please advise a member of staff. Should you have any further questions, please do not hesitate to contact staff who will advise the researchers.

Thank you for taking the time to read through this information. We hope you will consider taking part in the study.

APPENDIX F: CONSENT FORM

Patient Identification Number for this trial: _____

CONSENT FORM

Title of Project: Offending narratives in a forensic psychiatric population (version 2)
Name of Researchers: Belinda Coulston and Elizabeth Spruin

Please initial box

1. I confirm that I have read and understand the information sheet dated 16/02/2011 (Version 2) for the above study and have had the opportunity to ask questions. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected. ☐

3. If I choose to withdraw from the project, I am aware that my research data will continue to be used unless I explicitly request that this data be withdrawn from the study. ☐

4. I understand that by agreeing to partake in the study, I am also giving my consent for the researchers to access collateral file information held by NHS regarding my offence history and details of my identified offence. ☐

5. I understand that my identity will be protected by use of a participant number in the research report and collected information will be held in anonymised form. ☐

6. I understand that on completion of the dissertations, all identifiable information will be destroyed - however anonymity data will be retained indefinitely under secure conditions for future statistical analysis if required. ☐

7. I understand that due to Data Protection Act 1998 and the Offender Management Act 2007, all information retrieved from the study will be kept securely for five years beyond the end of a study. ☐

8. I am aware of the limits of confidentiality and acknowledge that if I express any intention to harm myself or others during the course of the research, the researchers are under obligation to report this information to the appropriate individuals. ☐

9. I am aware that if the researchers become concerned about my welfare for which I have not reported, they will discuss this with me in the first instance, but will also report these concerns to appropriate individuals. ☐

10. I am aware that if I disclose past offences for which I have not been convicted or disclose that I am involved in, or plan to be involved in the commission of an offence, the researchers are under obligation to report this information to the appropriate authorities. ☐

11. I am aware that if I experience distress or personal difficulties at any point during my participation in this study, the researchers, with my consent, will withdraw me from the study and if needed, I will be provided with appropriate support. ☐

12. I am aware that the interviewers may wish to ask a select few participants to partake in an interview of my identified offence. **I would** be willing to partake in this if I was approached. ☐

13. I agree to take part in the above study. ☐

_____	_____	_____
Name of Patient	Date	Signature
_____	_____	_____
Name of Person taking consent (if different from researcher)	Date	Signature
_____	_____	_____
Researcher	Date	Signature

Copies: 1 for patient; 1 for researcher; 1 to be kept with hospital notes

APPENDIX G: DEMOGRAPHIC SHEET

DEMOGRAPHIC SHEET
Participant Number:_____

The purpose of the demographic sheet is to obtain background information regarding your offending history and details of one specific offence you have committed and been convicted of.

When completing Section 3. Offence Details, use this offence to answer the remaining sections. We would suggest that you answer this form in relation to your index offence, however if you choose to answer these questions in relation to a past offence, please indicate this.

1. DEMOGRAPHIC INFORMATION (please circle where appropriate)		
Current Age:	**Marital Status:** Single / Married / Divorced / Widowed / Separated	**Ethnicity:**
Nationality:	**Completed High School:** Yes / No **If no, what age did you leave?**	**Completed Higher Education:** Yes / No **If yes, what are your qualifications?**
Psychiatric Diagnosis:	**Age of Onset of Mental Illness:**	**Current Medication:**
2. OFFENDING HISTORY (please circle the convictions you have previously received).		
Age at first conviction:	**Number of Prior Convictions:**	**Number of times in prison (including now):**
Violent: Murder / Manslaughter / Grievous Bodily Harm /Assault / Common Assault / **Other:** *please specify*	**Sexual:** Rape / Attempted Rape / Indecent Assault / Exposure **Other:** *please specify*	**Other:** Burglary / Theft /Arson / Driving Offences / Drug Related Offences / Criminal Damage **Other:** p*lease specify*
Were you experiencing Mental Illness at the time of offending? Yes/No	**Were you compliant with medication at the time of offending?** Yes/No **If yes, medication type:**	**Do you believe your mental illness contributed/caused your offending behaviour?**

3. OFFENCE DETAILS		
Date of offence:	**Number of Convictions:**	**Age at offence:**
Were you experiencing Mental Illness at the time of the offence? Yes/No	**Were you compliant with medication at the time of the offence?** Yes/No **If yes, medication type:**	**Do you believe your mental illness contributed/caused your offending behaviour?**
Is the identified offence your index offence? Yes / No	**Sentence Length:**	**Did you plea:** Guilty / Not Guilty
3a. What convictions did you received for the above offence? Please refer to the lists below.		
Violent: Murder / Manslaughter / Grievous Bodily Harm /Assault / Common Assault **Other:** *please specify:*	**Sexual:** Rape / Attempted Rape / Indecent Assault / Exposure **Other:** *please specify:*	**Other:** Burglary / Theft /Arson / Driving Offences / Drug Related Offences / Criminal Damage **Other:** p*lease specify*:
Was anyone else involved in the commission of the offence: Yes / No	**If yes, how many others were involved?**	**What was your relationship to them?** Family Member / Friend / Stranger / Partner / Acquaintance. **Other:** *please specify*
Where did the offence occur? Victims home / Your home / Public area / pub **Other:** *please specify*	**What day did the offence occur?** Monday / Tuesday / Wednesday / Thursday / Friday / Saturday / Sunday	**What time did the offence occur (approx):** 5am-9am / 9am-1pm / 1pm-5pm / 5pm-9pm / 9pm-1am / 1am-5am
Did you threaten the victim with use of a weapon? Yes / No	**If yes, did you actually have a weapon?** Yes /No	**Did you use a weapon against the victim?** Yes / No
If yes, did you: a) Take the weapon with you b) Find the weapon at the location of the offence.	**What weapon(s) did you use?** Knife /Gun/ Bottle/ Hammer / Rock **Other:** *please specify*	**What was the purpose of the weapon:** To control the victim / to inflict harm on the victim / to frighten the victim / to get the victim to comply / for protection **Other:** *please specify*

5. PERONAL CIRCUMSTANCES AT THE TIME OF THE OFFENCE		
Were you employed / studying at the time of the offence? Yes / No	**If yes, was this:** Full-Time / Part-Time / Casual **What type of work/study was this?**	**If no, how did you support yourself financially?** Job seekers allowance / disability benefits / crime / family **Other:** *please specify*
Where were you living at the time of the offence? Alone in own accommodation / Parents home / Homeless / With partner / With friends / Probation Hostel **Other:** *please specify*	**Were you in a relationship at the time of the offence?** Yes / No	**Were you on licence/probation at the time of the offence?** Yes / No
Were you using substances at the time of the offence? Yes / No	**If yes, what substance(s) were you using:** Alcohol / Heroin / Cocaine / Amphetamines / Marijuana / Ecstasy. **Other:** *please specify:*	**Were you experiencing mental illness at the time of the offence?** Yes / No **If yes, what was this?**
6. VICTIM DETAILS		
Number of victim(s):	**Gender of victim(s):** Male / Female / Male and Female	**Age of Victim (s):** **If unsure, please circle each age bracket you think they were in:** Under 10 years old / 10-15 years old / 15-18 years old / 18-25 years old / 25-30 years old / 30-40 years old / 40-55 years old 55+ years old
Your relationship to the victim(s): Family Member / Partner / Ex-Partner / Friend /Acquaintance / Stranger - (known less than 24 hours) **Other:** *please specify:*	**How long did the offence against the victim(s) last for?** 5-30 minutes / 30 minutes to 1 hour / 1 to 2 hours / 2 to 5 hours / 5-12 hours/ 12-24 hours / 1+ days	**Injury to victim(s):** Death / Broken Bones / Mutilation / Sexual Assault / Beaten / Bruises / lacerations **Other:** *please specify:*

Did you blindfold or attempt to blindfold the victim? Yes / No **If yes, what did you use?**	**Did you attempt to silence the victim by gagging them?** Yes / No **If yes, what how did you do this?**	**Did you restrain or attempt to restrain the victim(s)?** Yes / No **If yes, what type of restraint did you use / attempt to use?**
What type of <u>verbal</u> communication did you have with the victim(s) during the offence: None / friendly conversation / compliments / made jokes / talked calmly / belittled / criticized / threatened / yelled abuse **Other:** *please specify:*	**Did you steal from the victim(s)?** Yes / No **If yes, what did you steal?**	**Did you attempt to conceal your identity?** Yes / No **If yes, how did you try to do this?**

APPENDIX H: SSA regions of NRQ (MDOs) compared to other research

SSA Region (Axis II)	Item (NRQ Question)	Youngs and Canter (2012)	Ioannou et al., (2015)
Region 1	2 I had to do it	Revenger	Victim
n = 5	15 I had power	Professional	Revenger
	20 I was looking for recognition	**Hero**	**Hero**
	27 It was a manly thing to do	**Hero**	**Hero**
	32 I knew I was taking a risk	Professional	**Hero**
Region 2	1 I was like a professional	**Professional**	**Professional**
n = 14	3 It was fun	**Professional**	Hero
	5 It was interesting	**Professional**	Hero
	6 It was like an adventure	**Professional**	Hero
	7 It was routine	**Professional**	**Professional**
	8 I was in control	**Professional**	Revenger
	9 It was exciting	**Professional**	Hero
	10 I was doing a job	**Professional**	**Professional**
	11 I knew what I was doing	**Professional**	**Professional**
	13 It was a mission	Hero	Revenger
	24 It all went to plan	**Professional**	Hero
	28 For me it was just like a usual day's work	**Professional**	**Professional**
	30 There was nothing special about what happened	Hero	**Professional**
	33 I guess I always knew it was going to happen	**Professional**	Victim
Region 3	4 It was right	**Revenger**	**Revenger**
n = 7	12 It was the only thing to do	**Revenger**	Victim
	14 Nothing else mattered	**Revenger**	Professional
	21 I just wanted to get it over with	Victim	**Revenger**
	22 I didn't care what would happen	**Revenger**	Victim
	29 I was trying to get revenge	**Revenger**	**Revenger**
	31 I was getting my own back	**Revenger**	**Revenger**
Region 4	16 I was helpless	**Victim**	**Victim**
n = 7	17 It was my only choice	Revenger	**Victim**
	18 I was a victim	**Victim**	**Victim**
	19 I was confused about what was happening	**Victim**	**Victim**
	23 What was happening was just fate	Revenger	**Victim**
	25 I couldn't stop myself	Hero	Revenger
	26 It was like I wasn't part of it	Hero	**Victim**

Items in **bold** are the most frequently present narrative role in each SSA region

APPENDIX I –Four SSA regions Cronbach's alpha if item deleted

Table I1

Hero SSA Region (*n* = 5)		
Item No	**NRQ Question**	**Cronbach's Alpha if item deleted** ***p* < .05**
2	I had to do it	.67
15	I had power	.64
20	I was looking for recognition	.65
27	It was a manly thing to do	.65
32	I knew I was taking a risk	.66

Table I2

Professional SSA Region (*n* = 14)		
Item No	**NRQ Question**	**Cronbach's Alpha if item deleted** ***p* < .05**
1	I was like a professional	.88
3	It was fun	.87
5	It was interesting	.87
6	It was like an adventure	.87
7	It was routine	.88
8	I was in control	.88
9	It was exciting	.87
10	I was doing a job	.87
11	I knew what I was doing	.88
13	It was a mission	.87
24	It all went to plan	.87
28	For me it was just like a usual day's work	.88
30	There was nothing special about what happened	**.89**
33	I guess I always knew it was going to happen	.88

*Items in bold represent the Cronbach's alpha the professional region would obtain if that item were deleted

Table I3

Revenger SSA Region (n = 7)		
Item No	**NRQ Question**	**Cronbach's Alpha if item deleted p<.05**
4	It was right	.72
12	It was the only thing to do	.72
14	Nothing else mattered	.69
21	I just wanted to get it over with	.71
22	I didn't care what would happen	.67
29	I was trying to get revenge	.70
31	I was getting my own back	.68

Table I4

Victim SSA Region (n = 7)		
Item No	**NRQ Question**	**Cronbach's Alpha if item deleted p<.05**
16	I was helpless	.67
17	It was my only choice	.65
18	I was a victim	.61
19	I was confused about what was happening	.66
23	What was happening was just fate	**.73**
25	I couldn't stop myself	.67
26	It was like I wasn't part of it	.67

*Items in bold represent the Cronbach's alpha the victim region would obtain if that item were deleted

Appendix J - Four Factors Cronbach's alpha if item deleted

Factor *n* = *α* = p < .05	**NRQ Item**	**Factor Cronbach's alpha if item deleted** α = *p* < .05
Factor 1 *n* = 8 α = .89, *p* < .05	3: It was fun	.87
	5: It was interesting	.87
	6: It was like an adventure	.87
	8: I was in control	**.90**
	9: It was exciting	.87
	10: I was doing a job	.88
	13: It was a mission*	.89
	15: I had power*	**.90**
Factor 2 *n* = 10 α = .82, *p* < .05	1: I was like a professional	.81
	7: It was routine	.79
	11: I knew what I was doing	.79
	20: I was looking for recognition	.81
	24: It all went to plan	.79
	27: It was a manly thing to do	.80
	28: For me it was just like a usual day's work	.78
	30: There was nothing special about what happened	.81
	32: I knew I was taking a risk	.79
	33: I guess I always knew it was going to happen	.81
Factor 3 *n* = 8 α = .76, *p* < .05	2: I had to do it*	.73
	4: It was right	.75
	12: It was the only thing to do	.75
	14: Nothing else mattered	.73
	21: I just wanted to get it over with	.75
	22: I didn't care what would happen	.71
	29: I was trying to get revenge	.75
	31: I was getting my own back	.73
Factor 4 *n* = 6 α = .73, *p* < .05	16: I was helpless	.70
	17: It was my only choice	.69
	18: I was a victim	.64
	19: I was confused about what was happening	.68
	25: I couldn't stop myself	.70
	26: It was like I wasn't part of it	.71

Items in **bold** did not increase, nor decrease the internal consistency of the identified Cronbach's alpha

Note: item 23 was not included as it was not loaded on the 32-item NRQ

Appendix K - Four factors items compared to Study 1 SSA regions

Factor (n =)	**Item (NRQ Question)**	**Study 1** SSA Region
Factor 1 (n = 8)	3 It was fun	**Professional**
	5 It was interesting	**Professional**
	6 It was like an adventure	**Professional**
	8 I was in control	**Professional**
	9 It was exciting	**Professional**
	10 I was doing a job	**Professional**
	13 It was a mission	**Professional**
	15 I had power	Hero
Factor 2 (n = 10)	1 I was like a professional	**Professional**
	7 It was routine	**Professional**
	11 I knew what I was doing	**Professional**
	20 I was looking for recognition	Hero
	24 It all went to plan	**Professional**
	27 It was a manly thing to do	Hero
	28 For me it was just like a usual day's work	**Professional**
	30 There was nothing special about what happened	**Professional**
	32 I knew I was taking a risk	Hero
	33 I guess I always knew it was going to happen	**Professional**
Factor 3 (n = 8)	2 I had to do it	Hero
	4 It was right	**Revenger**
	12 It was the only thing to do	**Revenger**
	14 Nothing else mattered	**Revenger**
	21 I just wanted to get it over with	**Revenger**
	22 I didn't care what would happen	**Revenger**
	29 I was trying to get revenge	**Revenger**
	31 I was getting my own back	**Revenger**
Factor 4 (n = 6)	16 I was helpless	**Victim**
	17 It was my only choice	**Victim**
	18 I was a victim	**Victim**
	19 I was confused about what was happening	**Victim**
	25 I couldn't stop myself	**Victim**
	26 It was like I wasn't part of it	**Victim**

Items in **bold** are the most frequently present SSA region for each factor

Appendix L – Four Factors items compared to previous research findings

Factor (*n* =)	**Item (NRQ Question)**	**Youngs & Canter (2012)** Narrative Role	**Ioannou et al., (2015)** Narrative Role
Factor 1 (*n* = 8)	3 It was fun	**Professional**	Hero
	5 It was interesting	**Professional**	Hero
	6 It was like an adventure	**Professional**	Hero
	8 I was in control	**Professional**	Revenger
	9 It was exciting	**Professional**	Hero
	10 I was doing a job	**Professional**	**Professional**
	13 It was a mission	Hero	Revenger
	15 I had power	**Professional**	Revenger
Factor 2 (*n* = 10)	1 I was like a professional	**Professional**	**Professional**
	7 It was routine	**Professional**	**Professional**
	11 I knew what I was doing	**Professional**	**Professional**
	20 I was looking for recognition	Hero	Hero
	24 It all went to plan	**Professional**	Hero
	27 It was a manly thing to do	Hero	Hero
	28 For me it was just like a usual day's work	**Professional**	**Professional**
	30 There was nothing special about what happened	Hero	**Professional**
	32 I knew I was taking a risk	**Professional**	Hero
	33 I guess I always knew it was going to happen	**Professional**	Victim
Factor 3 (*n* = 8)	2 I had to do it	**Revenger**	Victim
	4 It was right	**Revenger**	**Revenger**
	12 It was the only thing to do	**Revenger**	Victim
	14 Nothing else mattered	**Revenger**	Professional
	21 I just wanted to get it over with	Victim	**Revenger**
	22 I didn't care what would happen	**Revenger**	Victim
	29 I was trying to get revenge	**Revenger**	**Revenger**
	31 I was getting my own back	**Revenger**	**Revenger**
Factor 4 (*n* = 6)	16 I was helpless	**Victim**	**Victim**
	17 It was my only choice	Revenger	**Victim**
	18 I was a victim	**Victim**	**Victim**
	19 I was confused about what was happening	**Victim**	**Victim**
	25 I couldn't stop myself	Hero	Revenger
	26 It was like I wasn't part of it	Hero	**Victim**

Appendix M - Ioannou et al., (2015) SSA results

Image used with the permission from the authors. Image is on page 390 from:

Ioannou, M., Canter, D., Youngs, D., & Synnott, J. (2015). Offenders' Crime Narratives Across Different Types of Crimes. *Journal of Forensic Psychology Practice, 15(5),* 383-400, DOI: 10.1080/1528932.2015.1065620.

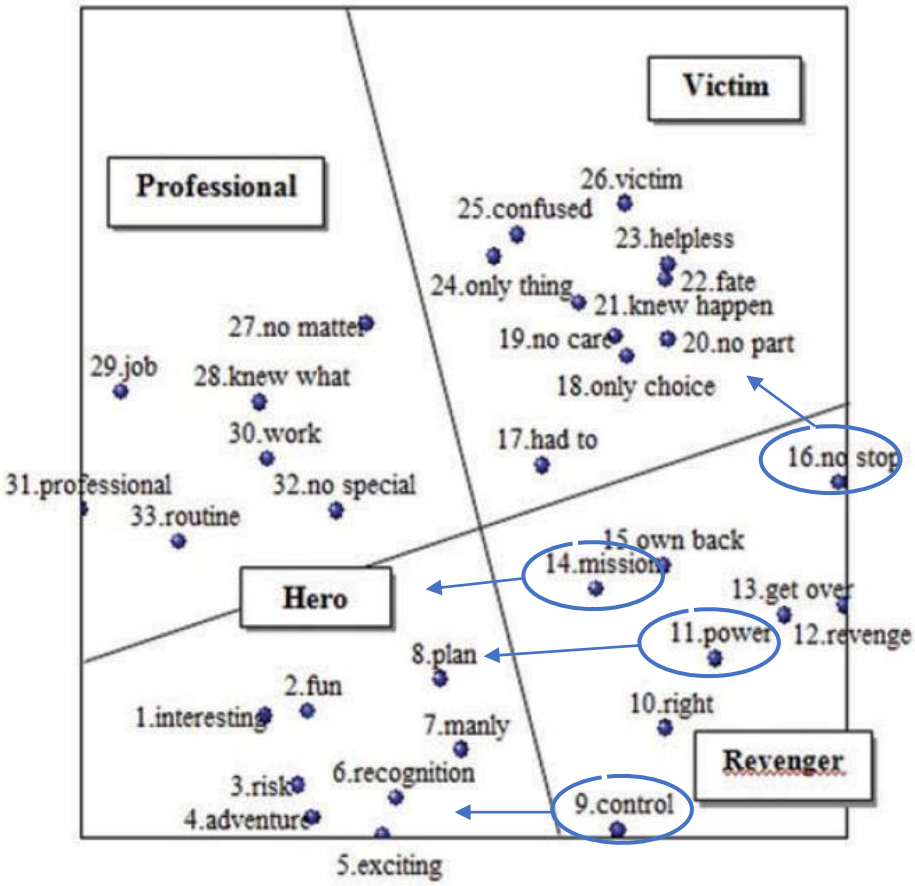

FIGURE 1 1 by 2 projection of the Three-Dimensional Smallest Space Analysis (SSA) of Narrative Offense Roles with regional interpretation.
Coefficient of Alienation = 0.15251.

Appendix N – Youngs and Canter (2012) SSA results

Image used with the permission from the authors. Image is on page 298 from:

Youngs, D., & Canter, D. (2012). Offenders' crime narratives as revealed by the Narrative Roles Questionnaire (NRQ). *International Journal of Offender Therapy and Comparative Criminology, 57(3)*, 289-311, DOI: 10.1177/036624X11434577.

298 *International Journal of Offender Therapy and Comparative Criminology 57(3)*

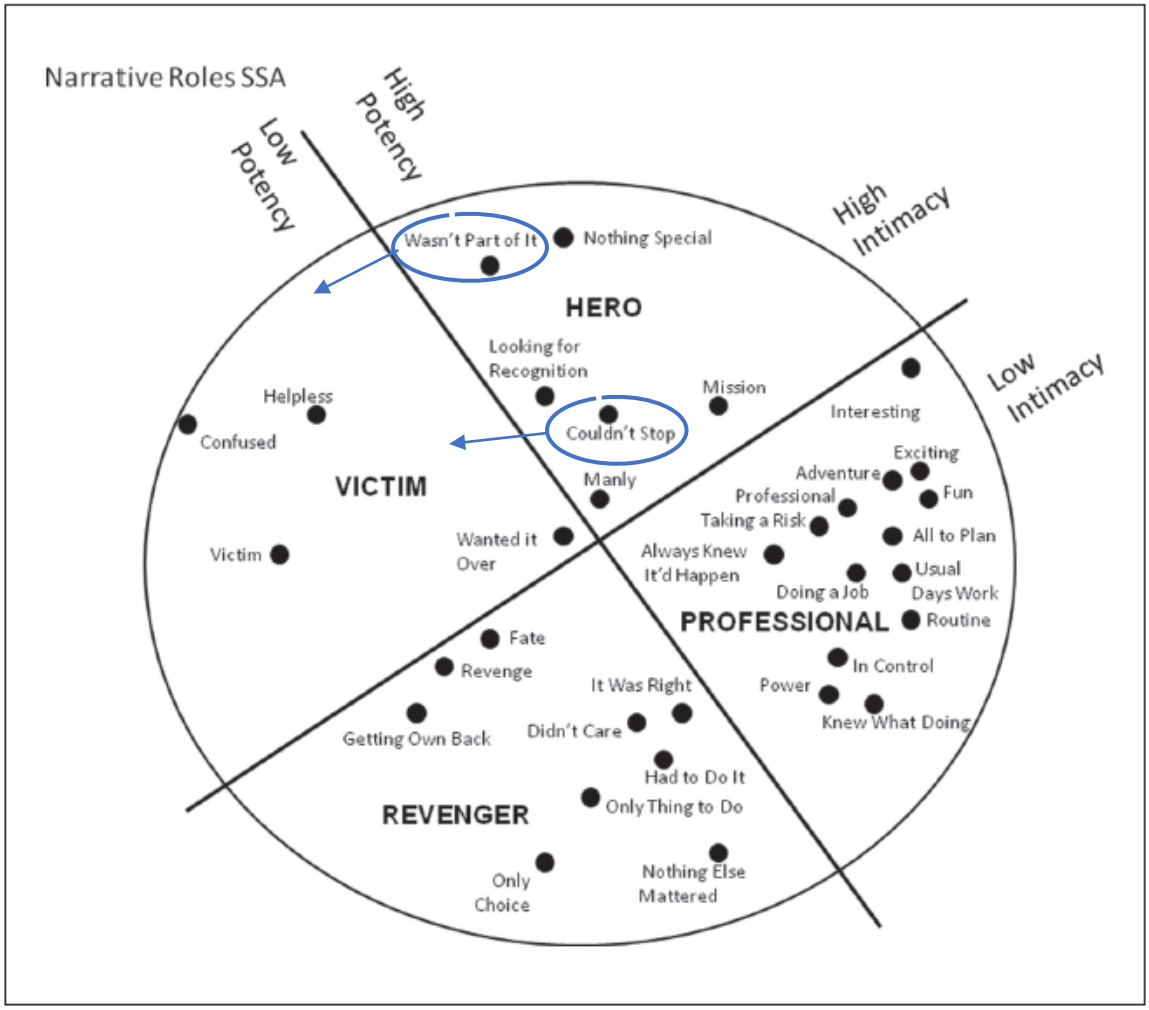

Figure 1. SSA-I Results for 71 offenders' responses on Roles Questionnaire.
Note: SSA-I = Smallest Space Analysis.

Appendix O

Table 1: 32-Item NRQ Mean and Standard Deviation Scores for Mentally Disordered Offenders

	All MDOs *N* = 70		**Axis I** *N* = 31		**Axis II** *N* = 19		**No Formal Diagnosis** *N* =20		***Violent Offenders** *N* = 39		***Sex Offenders** *N* =18		***General Offenders** *N* = 13	
Factor Type	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Thrill Seeker (N = 8)	2.00	1.01	2.01	1.13	1.91	1.03	2.07	.81	1.98	1.03	2.02	1.05	2.03	.94
Professional (*N* = 10)	2.12	.83	2.20	.85	1.75	.68	2.34	.87	2.07	.84	1.86	.65	2.59	.90
Revenger (*N* = 8)	2.44	.92	2.42	1.00	2.34	.89	2.56	.84	2.48	1.00	2.53	.79	2.19	.84
Victim (*N* = 6)	2.50	.98	2.89	.95	2.32	1.01	2.07	.80	2.63	.95	2.4	1.00	2.24	1.04
CoreThrill Seeker (*n* = 4)	1.93	1.13	1.92	1.23	1.89	1.17	2.01	.96	1.85	1.12	2.05	1.16	2.04	1.19
CoreProfessional (*n* = 4)	2.04	.95	2.07	1.00	1.66	.54	2.35	1.09	2.04	.97	1.69	.58	2.50	1.15
CoreRevenger (*n* = 2)	2.35	1.54	2.18	1.50	2.53	1.61	2.45	1.57	2.42	1.65	2.36	1.35	2.12	1.53
CoreVictim (*n* = 4)	2.47	1.35	2.98	1.33	2.39	1.26	1.75	1.14	2.63	1.37	2.58	1.36	1.84	1.16
FluidThrill Seeker (*n* = 4)	2.06	1.02	2.10	1.16	1.93	.99	2.13	.88	2.11	1.09	1.98	1.05	2.04	.82
FluidProfessional (*n* = 6)	2.17	.85	2.28	.87	1.82	.83	2.33	.80	2.09	.85	1.97	.79	2.65	.81
FluidRevenger (*n* = 6)	2.47	.98	2.51	1.14	2.27	.92	2.59	.74	2.50	1.06	2.58	.88	2.22	.88
FluidVictim (*n* = 4)	2.51	1.05	2.85	1.09	2.29	1.12	2.23	.78	2.63	1.07	2.31	.97	2.44	1.12

*Refers to Mentally Disordered Offenders convicted of that offence type

Note: These Mean and Standard Deviation scores should be used as a guide only due to the small sample sizes.

Appendix P

32-item Narrative Roles Questionnaire (32-NRQ)

A PRACTITIONERS GUIDE

The 32-item Narrative Roles Questionnaire (32-NRQ) (see Appendix A) identifies the narrative role(s) an offender adopts at the time of an identified offence. The 32-NRQ is comprised of four subscales (narrative roles): Thrill Seeker, Professional, Revenger and Victim, each of which are comprised of core and fluid items. Participants answer each of the 32 statements based on what 'best describes their experience whilst offending' for a specific offence. Each item is rated on 5 -point Likert scale ranging from 1 to 5 (1=not at all, 2 = just a little, 3 = some, 4 = a lot, 5 = very much indeed).

32-NRQ Subscale (Narrative Role) Descriptions

Thrill Seeker is comprised of eight items including five core subscale items (item 3, 5, 6, 9 & 10) and three fluid subscale items (item 8, 13 & 15). The Thrill Seeker narrative role describes an offender who is on a pilgrimage and believes they have power and control over the situation. This type of offender is likely to experience positive affect whilst offending.

Professional is comprised of ten items including four core subscale items (item 7, 11, 26 & 27) and six fluid subscale items (item 1, 20, 23, 29, 31 & 32). The Professional narrative role describes an offender who adopts a professional and calculated approach to their offending and views offending as a way to maintain their masculinity, alongside seeking recognition from others. This type of offender is likely to experience minimal affect whilst offending.

Revenger is comprised of eight items including two core subscale items (item 28 & 30) and six fluid subscale items (item 2, 4, 12, 21 & 22). The Revenger narrative role describes an offender who is preoccupied by revenge and seeks a quick resolution. Furthermore, they believe they had no other choice but to offend and feels justified in offending, irrespective of the consequences. This type of offender is likely to experience negative affect whilst offending.

Victim is comprised of six items including two core subscale items (item 16 & 19) and four fluid subscale items (item 17, 18, 24 & 25). The Victim narrative role describes an offender who is confused, disconnected and views themselves as a helpless victim who could not control their actions, nor believes they had any other alternative other than offending. This type of offender is likely to experience negative affect whilst offending.

32-NRQ SCORING AND INTERPRETATON

To identify the **'presence'** of a narrative role, calculate the mean score of ALL items for each **subscale** (e.g. thrill seeker, professional, revenger, victim). The higher the mean score, the more an individual identifies with that narrative role, the lower the mean score the less the individual identifies with that narrative role.

To determine the **'strength'** of a narrative role, calculate the mean score of the **core subscale** items for the identified subscale (e.g. narrative role). The higher the mean score the stronger the narrative role, the lower the mean score the weaker the narrative role.

To determine the **'strength of interaction'** between narrative roles, calculate the mean score of the **fluid subscale** items for the identified subscale (e.g. narrative role). The higher

the fluid subscale mean score, the stronger the interaction between two related narrative roles. The lower the fluid subscale mean score, the weaker the interaction between two related narrative roles.

Fluid Subfactor Related narrative roles:

- The *Thrill Seeker* fluid sub factor determines the strength of interaction with the *Professional* narrative role.
- The *Professional* fluid sub factor determines the strength of interaction with the *Thrill Seeker* narrative role.
- The *Revenger* fluid subscale determines the strength of interaction with the *Professional* narrative role.
- The *Victim* fluid subscale determines the strength of interaction with the *Revenger* narrative role.

Once mean scores have been calculated, refer to the Mean (M) and Standard Deviation (SD) scores in Appendix B. **Note:** these norms are only applicable to Mentally Disordered Offenders and should be used with caution due to the small sample sizes.

Appendix A

32-item Narrative Roles Questionnaire (32-NRQ)

Please answer this questionnaire based on ONE **specific offence**. Please read each statement, followed by ticking the appropriate box to indicate the extent to which each of the statement best describes **your experience** whilst offending**.**

	NOT AT ALL	***JUST A LITTLE***	***SOME***	***A LOT***	***VERY MUCH INDEED***
1. I was like a professional					
2. I had to do it					
3. It was fun					
4. It was right					
5. It was interesting					
6. It was like an adventure					
7. It was routine					
8. I was in control					
9. It was exciting					
10. I was doing a job					
11. I knew what I was doing					
12. It was the only thing to do					
13. It was a mission					
14. Nothing else mattered					
15. I had power					
16. I was helpless					
17. It was my only choice					
18. I was a victim					
19. I was confused about what was happening					
20. I was looking for recognition					
21.I just wanted to get it over with					
22. I didn't care what would happen					
23. It all went to plan					
24. I couldn't stop myself					
25. It was like I wasn't part of it					
26. It was a manly thing to do					
27. For me it was just like a usual days work					
28. I was trying to get revenge					
29. There was nothing special about what happened					
30. I was getting my own back					
31. I knew I was taking a risk					
32. I guess I always knew it was going to happen					

Appendix B

Table 1: 32-Item NRQ Mean and Standard Deviation Scores for Mentally Disordered Offenders

	All MDOs *N* = 70		**Axis I** *N* = 31		**Axis II** *N* = 19		**No Formal Diagnosis** *N* =20		***Violent Offenders** *N* = 39		***Sex Offenders** *N* =18		***General Offenders** *N* = 13	
Factor Type	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Thrill Seeker (*N* = 8)	2.00	1.01	2.01	1.13	1.91	1.03	2.07	.81	1.98	1.03	2.02	1.05	2.03	.94
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Victim (*N* = 6)	2.50	.98	2.89	.95	2.32	1.01	2.07	.80	2.63	.95	2.4	1.00	2.24	1.04
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*Refers to Mentally Disordered Offenders convicted of that offence type

Note: These Mean and Standard Deviation scores should be used as a guide only due to the small sample sizes.