Assessment and treatment perspectives on offenders with disabilities

Wing Ting To

Promotor: Prof. Dr. Stijn Vandevelde

Co-promotor: Prof. Dr. Stijn Vanheule

Proefschrift ingediend tot het behalen van de academische graad van Doctor in de Psychologie

2015

Begeleidingscommissie:

Prof. Dr. Stijn Vandevelde (promotor) I Universiteit Gent, Vakgroep Orthopedagogiek
Prof. Dr. Stijn Vanheule (co-promotor) I Universiteit Gent, Vakgroep Psychoanalyse en Raadplegingpsychologie
Prof. Dr. Wouter Vanderplasschen I Universiteit Gent, Vakgroep Orthopedagogiek
Prof. Dr. Kurt Audenaert I Universiteit Gent, Vakgroep Psychiatrie en Medische psychologie
Prof. Dr. Tom Vander Beken I Universiteit Gent, Vakgroep Strafrecht en Criminologie

Examencommissie:

Prof. Dr. Geert De Soete (voorzitter) I Universiteit Gent, Decaan Faculteit Psychologie en Pedagogische Wetenschappen
Prof. Dr. Ann Buysse I Universiteit Gent, Vakgroep Experimenteel-Klinische en Gezondheidspsychologie
Prof. Dr. Petri J.C.M. Embregts I Tilburg University, Departement Tranzo
Prof. Dr. Tom Vander Beken I Universiteit Gent, Vakgroep Strafrecht en Criminologie
Prof. Dr. Stijn Vandevelde (promotor) I Universiteit Gent, Vakgroep Orthopedagogiek
Prof. Dr. Stijn Vanheule (co-promotor) I Universiteit Gent, Vakgroep Psychoanalyse en Raadplegingpsychologie

Acknowledgements

What started as two research projects at the University College Ghent ended in a 4-year adventure, writing up this dissertation. Looking back on the past four years, I would like to thank all the people who supported me and inspired me during this journey.

First of all, I want to thank all people who were willing to participate in my studies. Thanks for sharing your knowledge, thoughts and feelings with me and for completing all surveys and tests. My special thanks are extended to the directors, staff-members and practitioners from all organizations that supported me during this project – PC Sint-Jan-Baptist, UPC St.-Kamillus, Openbaar Psychiatrisch Zorgcentrum Rekem, Gevangenis Gent, Werking Ontgrendeld, Gevangenis Merksplas, Project ABAGG, De Kiem, De Pelgrim, De Sleutel, PC Sint-Amandus, Zonnestraal vzw, PC Sint Amadeus, Zonnehoeve|Living+. Thanks for all the time you invested in making these studies possible, for answering all my questions and for making me feel welcome.

Without the Research Fund of the University College Ghent this project would not have been possible. Thank you Prof. Dr. Bert Hoogewijs, principal of the University College Ghent, and Maurice Walgraeve, head of the Faculty of Education, Health and Social Work, for giving me this opportunity to conduct two fantastic research projects. Warm thanks go to the members of the steering committee of the first research project and sincere thanks go to all organizations that collaborated closely with us in both research projects - Platform Forensisch Psychiatrisch Centrum Gent, Overlegplatform Geestelijke Gezondheidszorg Oost-Vlaanderen vzw and Ghent University, Department of Special Education, Department of Penal Law and Criminology and Department and Department of Psychiatry and Medical Psychology.

I am very thankful to Prof. Dr. Stijn Vandevelde, my supervisor, for his continuous support, encouragement and trust. I will always be grateful for the faith you had in me and for the opportunities you gave me. I am also very honored to be your first PhD student. Many thanks as well to my co-supervisor, Prof. Dr. Stijn Vanheule. Your supporting and constructive remarks always offered me clear views on the directions of my dissertation.

I also want to thank the other members of the doctoral guidance committee for their constructive feedback. Thanks to Prof. Dr. Wouter Vanderplasschen, Prof. Dr. Kurt Audenaert and Prof. Dr. Tom Vander Beken.

Furthermore, I would like to express my great appreciation to the co-supervisors of the two research projects at the University College Ghent. Thanks to Stefaan De Smet, Prof. Dr. Veerle Soyez & Prof. Dr. Wouter Vanderplasschen for your valuable advice during the research process.

Thanks to all my (ex-) colleagues at the University College Ghent and Ghent University for being supportive and genuine thanks to all the students who, through their thesis or assignments helped me with the collection of the data.

Many thanks to all my friends for being there for me during this adventure. I enjoyed the fun moments with you all when I was not working on my dissertation and appreciate the support and pep-talks to continue this project. Thanks for all the encouraging messages even when I moved to the other side of the Atlantic Ocean. Bedankt!

I also want to thank Prof. Dr. Hart and Prof. Dr. Filbey for giving me the opportunity to work in their research lab at the University of Texas at Dallas, while finishing my dissertation. Thanks for the great research experience.

I am deeply thankful to my mom. Without you, this dissertation would never have been written. Thanks for always believing in me in all that I wanted to pursue in my life. You have supported me in every possible way. Xie Xie!

I have saved the last word of acknowledgment to my husband, Sven. I want to thank you for your endless support, but mostly for being my other half, for standing by my side and being able to cope with all my insecurities. You experienced the pleasures and sorrows of this dissertation with me and you have been my most important support through this journey. Thanks with all my heart!

Wing Ting To, January 2015

Table of Contents

CHAPTER 1

GENERAL INTRODUCTION

ABSTRACT

The general introduction of this dissertation starts with characterizing the group of people whom we would propose to label as ‘offenders with disabilities’. Since many terms are interchangeably used in the literature to label this group (e.g. mentally ill offenders, interned offenders, legally insane offenders, etc.), we have chosen to use the general term ‘offenders with disabilities’, as this encompasses the complexity that is not captured by many other concepts and because it refers to the influence of disorders and impairments on a person’s daily life. The term ‘offenders with disabilities’ is used for offenders who lack the criminal responsibility for their committed crime because of mental disorders or intellectual disabilities, and who would be referred to in Belgium as ‘interned’ mentally ill offenders; as well as for offenders with mental health problems which are not directly related to the committed crime. The group of ‘offenders with disabilities’ consists of persons with a wide variety of mental health, criminogenic, intellectual and other needs. Besides a general characterization of ‘offenders with disabilities’, we will more specifically focus on some aspects with regard to internment, intellectual disabilities, substance abuse and their inter-relations in this population. Furthermore, the aims, research questions and an overview of the different chapters are presented. The first part of the dissertation, which consists of two studies, will be dedicated to treatment perspectives on offenders with disabilities. The second part of the dissertation will focus on screening and assessment. As it is impossible to study the latter aspect in offenders with disabilities being considered as one group, this part of the dissertation will focus on persons with an intellectual disability and a substance abuse problem.

1.1. Offenders with disabilities

1.1.1. Offenders with disabilities

A. Terminology

Different terms have been used to label offenders with disabilities, which include mentally disordered offenders (Blackburn, 2004), mentally disordered criminal offenders (Dahlin et al., 2009; Gotlieb, Gabrielsen, & Korner, 2013), forensic clients (Sakdalan, Shaw, & Collier, 2010; Wong, Gordon, & Deqiang, 2007) and interned mentally ill offenders (Vandevelde et al., 2011), amongst others. The term offenders with disabilities refers to a heterogeneous and difficult to define group of people, including persons who have committed a wide variety of offences and who experience a wide range of mental health problems (Quinsey, Khanna, & Malcom, 1998; Rice & Harris, 1997) and/or intellectual disabilities. The term may be used both for (1) offenders with mental health problems or disabilities which are not directly related to the committed crime as well as for (2) offenders who lack the criminal responsibility for their committed crime because of mental disorders or intellectual disabilities, and who would be referred to in Belgium as 'interned' mentally ill offenders (Salize et al., 2007; Vandevelde et al., 2011). This dual meaning adds to the complexity of the concept.

In this dissertation, we have chosen to use the general term 'offenders with disabilities', as this encompasses the complexity that is not captured by many other concepts and because it refers to the influence of disorders and impairments on a person's daily life, which we think is important from a more support-oriented view. Yet, as the different studies in this dissertation focused on specific sub-populations within this broad group and because the articles where submitted or published in different journals (with different guidelines for authors and editor's requirements), the terminology for each of the studies may slightly vary. In the general introduction and discussion (chapter 1 and chapter 6), we have tried to consistently use the umbrella term 'offenders with disabilities', except for the Belgian situation where the term 'interned mentally ill offenders' is used. In study 1 and 2 (Chapter 2 and 3), the term 'mentally ill offenders' or 'interned mentally ill offenders' are used to refer to offenders who lack the criminal responsibility for their committed crime because of mental disorders or intellectual disabilities. In study 3 and 4, we have used the terms 'persons with an intellectual disability' and 'persons with a substance abuse problem' to refer to our

research population. Overall, when referring to other studies we have tried to stay as close as possible to the terminology as it was used in the article.

B. Legal framework

In most countries the standard policy holds that offenders who lack criminal responsibility (because of mental disorders or intellectual disabilities) are not to be punished but referred to and detained ('interned') in forensic psychiatric institutions for specialized care (Salize, Dressing, & Kief, 2007). However, a disproportionately high number of offenders with mental health problems have been reported in prison populations (Andersen, 2004; Fazel & Danesh, 2002; Fazel & Lubbe, 2005; Fazel & Seewald, 2012; Markowitz, 2006; Prins, 2014).

Complex legal frameworks and judicial procedures have been implemented internationally to regulate the referral of offenders who lack criminal responsibility to forensic psychiatric institutions (Salize et al., 2007). Under the Belgian law, these offenders fall under the internment measure (Vandevelde et al., 2011). Offenders can be interned if they have committed an offence for which they are not considered responsible at the moment of the trial as a consequence of either a status of insanity or a serious mental deficiency disabling the person to fully control his/her acts (Cosyns, D'Hondt, Janssen, Maes, & Verellen, 2007). This internment measure is not a punishment but a measure of safety to protect the society, while also providing appropriate psychiatric care and is similar to other countries (De Smet et al., 2014; Vandevelde et al., 2011).

C. Prevalence

International research on the prevalence of offenders who lack criminal responsibility residing in prison is lacking and research on the prevalence of psychiatric morbidity in prison populations is limited (Salize et al., 2007). Prevalence figures in prison populations show a high fluctuation in the number of inmates with mental disorders (Andersen, 2004; Fazel & Danesh, 2002; Fazel & Lubbe, 2005; Fazel & Seewald, 2012; Markowitz, 2006; Prins, 2014) ranging from 2% to 94% (Andersen, 2004; Assadi et al., 2006; Bland, Newman, Thompson, & Dyck, 1998; Davidson, Humphreys, Johnstone, & Owens, 1995; Goyal, Singh, Gargi, Goyal, & Grag, 2011; Gunn, Maden, & Swinton, 1991; Naidoo & Mkize, 2012; Prins, 2014; Teplin, 1990) depending on the research design, the definition of the mental disorder (Prins, 2014; Toch, 2007), the disorders included, and the setting (Andersen, 2004). Furthermore, offenders who lack criminal responsibility can reside outside prison walls, which further obscures a general estimate of their prevalence.

In Belgium, offenders who lack criminal responsibility and who are interned, can reside in general or forensic settings, including private psychiatric hospitals, psychiatric nursing homes, sheltered living projects, psychiatric wards of correctional facilities, institutions and departments of 'Social Defence' (Cosyns et al., 2007; Vandevelde et al., 2011). In 2004, Belgium counted a total of 3306 interned mentally ill offenders, whereof 848 residing in prison (day prevalence figure cited in Cosyns et al., 2007). This number has even increased to 1103 interned mentally ill offenders in prison in March 2011 according to the Federal Public Service of Justice (Federale Overheidsdienst Justitie, 2012). Moens and Pauwelyns (2012) found that 1157 interned mentally ill offenders were residing in prison in 2011, out of the total of 4093 interned mentally ill offenders in Belgium. As far as the specific Flemish situation concerns, the northern Dutch-speaking part of Belgium, the lack of therapeutic placements is even more severe as compared to the Walloon region (Vandevelde et al., 2011).

D. Characteristics

Offenders who lack criminal responsibility have similar characteristics to both offender populations and mentally disordered populations (Rice & Harris, 1997). The mental disorders from which offenders suffer cover a broad range (Adams & Ferrandino, 2008; Rice & Harris, 1997) and are suggested to be more prevalent than in the general population according to several review studies (Andersen, 2004; Fazel & Danesh, 2002; Gunn et al., 1991; Sirdifield, Gojkovic, Brooker, & Ferriter, 2009). However, the prevalence rates for major mental disorders in offenders residing in prison vary widely. A review study of Sirdifield and colleagues (2009) reported rates of personality disorders which range from 14% in prisoners in Sweden (Fazel & Grann, 2004) to 88% in prisoners in England and Wales (Lader, Singleton, & Meltzer, 2003). Rates of anxiety disorders were found to vary from 1.4% (Fazel & Grann, 2004) to 55% (Butler, Allnut, Cain, Owens, & Muller, 2005) and rates of psychosis vary from 5.3% (Nielssen & Misrachi, 2005) to 25% (Tye & Mullen, 2006). A more recent review study of Fazel and Seewald (2012) reviewed the prevalence of psychotic disorder and major depression in prisoners. They estimated the prevalence of psychosis to be 3.6% in male and 3.9% in female prisoners. The prevalence of major depression was estimated to be 10.2% in male and 14.1% in female prisoners (Fazel & Seewald, 2012). Co-existing mental disorders have also been frequently reported in prisoners (Sirdifield et al., 2009). For instance, the study by Young (2003) found that about 45% of the prisoners showed comorbidity for a major mental disorder and a substance abuse disorder. Recent research on the characteristics of offenders, who are not responsible for their offences due to their mental disorder or intellectual disability, whether or not residing in prison, is scarce.

In Belgium, the most prevalent diagnosis of interned mentally ill offenders in institutions of the Federal Public Service of Justice (i.e. psychiatric annexes of correctional facilities, institutions and departments of Social Defense and regular correctional facilities) reported in 2004 (Cosyns et al., 2007) were personality disorders (53%), substance use disorders (37%), psychotic disorders (34.3%), sexual disorders (27.7%) and intellectual disabilities (26%). This study further showed that almost 75% of the interned mentally ill offenders in prison have a dual or even triple diagnosis. In most of the cases, this co-morbidity entails the combined occurrence of a substance-related disorder and another major mental disorder (DSM-IV, Axis I and Axis II). More recent official figures regarding the characteristics of interned mentally disordered offenders for Belgium are, however, not available (Vandevelde et al., 2011).

E. Treatment and challenges

The treatment of offenders who lack criminal responsibility is challenging due to the dual objective of protecting society on the one hand, while treating offenders on the other hand (Adshead & Sarkar, 2005; Steadman, Morrissey, & Robbins, 1985). The balance between 'treatment' and 'control' is delicate in forensic mental health services as acknowledged by many authors (Adams & Ferrandino, 2008; Adshead & Sarkar, 2005; Fitzpatrick et al., 2010). Furthermore, there is no easy solution to solve this encounter between treatment versus control (Adams & Ferrandino, 2008). According to Robertson and colleagues (2011) forensic mental health services have theoretical roots in two different paradigms: a risk paradigm (assessment and management of risk) and a psychopathology paradigm (treatment of mental illness). The Risk-Need Responsivity (RNR) model of offender rehabilitation (Andrews & Bonta, 2010) is the most prevailing model in the risk centered approaches for forensic mental health care. This model has been introduced from the general offender setting to the forensic context with mental illness being incorporated as one additional factor, however, there is little evidence to support the use of the RNR model in the forensic population (Robertson, Barnao, & Ward, 2011). Furthermore, it has been suggested that offenders who lack criminal responsibility due to mental disorder require a much broader treatment approach that exceeds just management of risk, focusing on criminogenic needs (risk factors) as well as non-criminogenic needs (Howells, Day, & Thomas-Peter, 2004; Robertson et al., 2011). For example, Blackburn (1995: 133) has suggested that the objective should be on *"increasing personal effectiveness, of which avoiding further offending is only one component"*. Recent publications on the rehabilitation of offenders further emphasized the importance of pursuing a more holistic treatment, rather than only

concentrating on risk reduction (Andrews & Bonta, 2010; Barnao, Robertson, & Ward, 2010; Robertson et al., 2011; Ward & Brown, 2004; Ward, Yates, & Willis, 2012).

In this respect, the Good Lives Model of Offender Rehabilitation is a promising strengths-based approach, because of its focus on the offender's important personal goals, while reducing and managing their risk for future offending (Ward & Brown, 2004; Ward et al., 2012). According to this model management of risk is an important but not a sufficient condition for the rehabilitation of offenders (Ward & Brown, 2004: 244). The model suggests that the best way to reduce risk for future offending is "*to equip clients with internal and external resources to live a good or better life - a life that is socially acceptable and personally meaningful* (Ward et al., 2012: 95). The Good Lives Model of Offenders Rehabilitation postulates that offenders, as all human beings, actively strive towards the realization of primary human goods (valued aspects of human functioning and living). These primary goods are actions, experiences, or situations that are intrinsically beneficial (Ward & Brown, 2004). Eleven classes of primary goods are proposed: (1) Life (including healthy living and functioning), (2) Knowledge, (3) Excellence in play, (4) Excellence in work, (5) Excellence in agency, (6) Inner peace, (7) Friendship, (8) Community, (9) Spirituality, (10) Happiness, and (11) Creativity (Ward et al., 2012). Primary goods emerge out of basic needs while secondary or instrumental goods provide concrete ways to secure these goods (Ward & Brown, 2004). Human needs can be perceived as states of deprivation that motivates people to seek certain outcomes or experiences (goods) in order to successfully meet the need, for example if a person experiences feelings of loneliness (a need), he will be motivated to seek interaction with other people (good of relatedness) in order to meet this need (Barnao et al., 2010: 203). It is crucial that secondary goods are appropriate and socially acceptable means of securing primary goods, such that they are incompatible with offending (Ward et al., 2012). Offending represents maladaptive strategies or attempts to obtain primary goods within the context of personal limitations (e.g. impulsivity, cognitive impairment, experience of trauma) and environmental disadvantages (e.g. criminal peers, poverty, marginalization) and needs to be changed into adaptive strategies (Barnao et al., 2010). Thus, from the perspective of the Good Lives Model in Forensic Mental Health (Good Lives Model-Forensic Modification, GLM-FM) (Barnao et al., 2010; Robertson et al., 2011), criminogenic needs and mental disorders are seen as hurdles towards living a good and personally fulfilling life and are tackled within a broader strength-based framework (Ward & Brown, 2004; Ward et al., 2012). In figure 1, we have enlarged the GLM-FM by adding intellectual disabilities next to mental disorders as one of the obstacles in obtaining a good and socially accepted life.

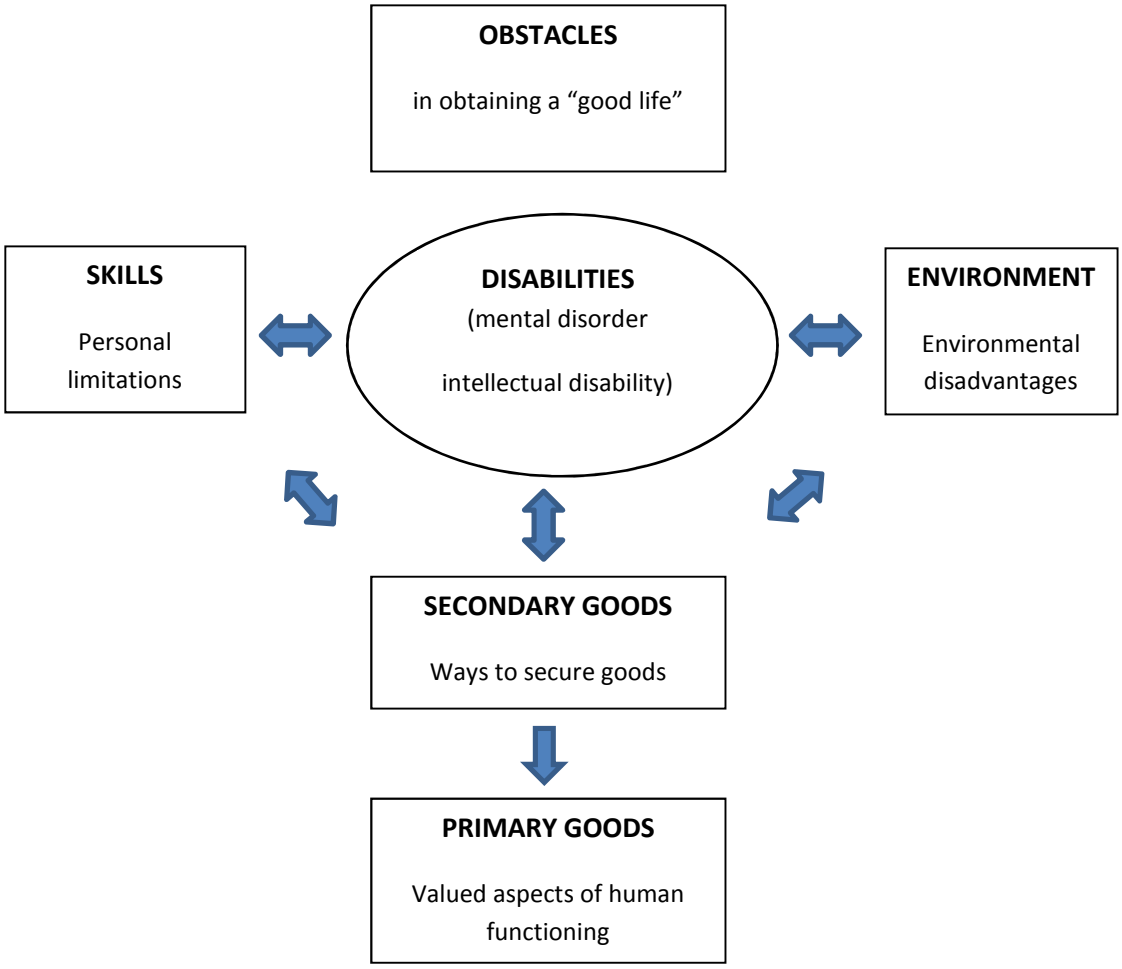

Figure 1. The Good Lives Model – modification for offenders with disabilities (figure adapted from and based on the Good Lives Model-Forensic Modification, GLM-FM; Barnao et al., 2010, p. 207)

Research on the treatment results of offenders who lack criminal responsibility due to mental disorders or intellectual disabilities is scarce (Knabb, Welsh, & Graham-Howard, 2011; Morgan et al., 2012; Rice & Harris, 1997). Only a few treatment methods are empirically validated for this specific group, whereof most efficacious treatment options are based upon research in other populations, such as cognitive behavioral therapy (Knabb et al., 2011). Therefore, many forensic treatment institutions adopt evidence-based treatments for offenders with disabilities that are validated on other populations (Hodel & West, 2003; Hoffman & Kluttig, 2006; Knabb et al., 2011). The assumption that the treatment of mental disorder in offenders is not different from treatment with mentally disordered non-offenders remains largely untested (Robertson et al., 2011). Thus, clinicians are establishing treatments for offenders with disabilities without sufficient scientific support on its

effectiveness for this specific group (Blackburn, 2004; Hodgins & Müller-Isberner, 2000; Morgan et al., 2012; Rice & Harris, 1997). This is all the more problematic since characteristic needs and wishes of offenders are not taken into account. Furthermore, interventions for mental disorders and associated issues with interventions designed to address offending have been blended in treatments for offenders with disabilities (Robertson et al., 2011). This mix of interventions is in line with the suggestion of Rice and Harris (1997) stating that the treatment of offenders with mental disorders requires the merging of theory, assessment, and treatment techniques both for the offenders in general and persons with mental disorders in general. Therefore, a comprehensive treatment program should include both treatments for psychiatric symptoms as well as treatments that address criminal behavior (Rice & Harris, 1997). However, combining such divergent perspectives creates an uneasy hybrid which can raise more conceptual, ethical and practical issues than it solves (Barnao et al., 2010; Robertson et al., 2011). For example, while clinicians do seem to manage the seemingly competing duties of treatment versus protecting the society on a daily basis, this mixed approach is inadequate in complex situations where there is conflict between these two perspectives (Robertson et al., 2011). In this regard, the Good Lives Model–forensic modification (GLM-FM), through its objective of addressing offending, mental disorders as well as an individual's goals, might bypass the tensions inherent in balancing the conflicting roles of treatment and the duty to protect society (Barnao et al., 2010; Robertson et al., 2011). The GLM-FM may provide the clinician with a broad and flexible framework for addressing offending, treating mental disorders, as well as supporting other clinical needs when working with this complex and demanding population (Robertson et al., 2011).

1.1.2. Offenders with an intellectual disability: terminology, prevalence and characteristics

Intellectual disability is defined as a disability characterized by significant limitations in intellectual functioning as well as in adaptive behavior, which covers many everyday social and practical skills, and the disability originates before the age of 18 (American Association on Intellectual and Developmental Disabilities, 2014). The American Association on Intellectual and Developmental Disabilities (2014), however, stresses that additional factors need to be taken into account when defining intellectual disability, such as the community environment typical of the individual's peers and culture. Offenders with an intellectual disability comprise a substantial group in forensic settings (Fazel, Xenitidis, & Powell, 2008; Vandevelde et al., 2011).

There has been substantial discussion about whether this group is over-represented in the criminal justice system (Herrington, Hunter, & Harvey, 2005; McBrien, 2003). Some authors claimed that persons with intellectual disabilities are over-represented in the prison populations in comparison to the prevalence of intellectual disability in the general population (Hayes, 1997, 2005; Holland, Clare, & Mukhopadhyay, 2002), whereas other authors (Holland & Persson, 2011; Murphy, Harnett, & Holland, 1995) found they were not. Inconsistencies in the prevalence data due to methodological differences in studies make it hard to provide any general estimate of intellectual disability among offenders, which is likely to remain the case until large scale methodologically sound surveys can be conducted (Lindsay, Hastings, & Beech, 2011; McBrien, 2003). In many studies targeting offenders with disabilities in the broad sense applied in this dissertation, the primary interest is not intellectual disability per se, as this is usually only one aspect among the broader characteristics studied (McBrien, 2003). Recent review studies estimate the prevalence of offenders with an intellectual disability ranging between 0.5 and 1.5% in prison populations (Fazel et al., 2008) and between 2 and 10% in the criminal justice system (Lindsay, 2011). Research in Belgium indicates that approximately one out of five of the interned mentally ill offenders residing in prison has an intellectual disability (Verlinden, Maes, & Goethals, 2009), which is consistent with earlier research (Vanden Hende, Caris, & De Block-Bury, 2005).

Variations in prevalence rates can be attributed to a number of factors such as the differences in methods used in identifying intellectual disability (Herrington, 2009; Herrington et al., 2005; Holland et al., 2002; Loucks, 2006; McBrien, 2003), whether assessments are conducted individually or in groups (Loucks, 2006), the level of training of the people administering the assessment (Holland et al., 2002; Loucks, 2006), the different definitions used (Herrington, 2009), different sampling procedures (Herrington, 2009), different inclusion criteria (Lindsay et al., 2011; Lindsay, Hastings, Griffiths, & Hayes, 2007), the variations across countries in policies for diverting offenders with an intellectual disability out of the criminal justice system (Herrington, 2009; Holland et al., 2002; Loucks, 2006; Mason & Murphy, 2002; McBrien, 2003), and the stage of the criminal justice system at which the research is conducted (Lindsay et al., 2007; Loucks, 2006). Some authors (MacEachron, 1979, Noble & Conley, 1992, cited in McBrien, 2003) suggest that the diagnosis of intellectual disability is the most important explanation for the variance in estimates - not because of the criteria for definition vary but because of the procedure for measurement. Although there are numerous variations of definitions used for intellectual disability in the literature, the majority include the three factors of intellectual disability (i.e. intellectual functioning, adaptive functioning and origination before the age of 18) (Jones, 2007) as

defined by the American Association on Intellectual and Developmental Disabilities (2014). More important is the wide range of methods that have been used to ascertain the presence of intellectual disability, including administrative definitions, psychiatric diagnosis, educational background, self-report, direct measurement of intellectual functioning and adaptive behavior (McBrien, 2003). Even when a proper assessment of intellectual functioning has been done, research that uses both a measure of intellectual functioning and adaptive behavior to ascertain an intellectual disability in an offender population is scarce (Herrington, 2009; Mason & Murphy, 2002; McBrien, 2003). Further, all studies that have used a measure to assess adaptive behavior, such as the Vineland Adaptive behavior scales, have been carried out by self-report (Hayes, Shackell, Mottram, & Lancaster, 2007; Herrington, 2009), which may affect its validity, as it is designed to be administered by a third party who knows the person well.

The difficulties in prevalence studies similarly influence the identification of specific characteristics in offenders with an intellectual disability (Jones, 2007) and limit the extent to which comments can be made about their characteristics (Holland et al., 2002). Furthermore, it seems that the setting in which data is collected is likely to influence the results and subsequent conclusions drawn about the study (Lindsay et al., 2011; O'Brien et al., 2010; Wheeler et al., 2009). For example, Hogues and colleagues (2006) examined a number of characteristics of offenders with an intellectual disability across community and across medium/low/high secure settings. They found that the rates of arson in the index offence depended on the setting, with low rates in the community sample and higher rates in the medium secure setting. In the absence of population studies, it is suggested that the type of offences committed by persons with an intellectual disability are similar to those of persons without an intellectual disability (Hodgins, Mednick, Brennan, Schulsinger, & Engberg, 1996; Holland et al., 2002; Jones, 2007). Further, studies that have investigated the characteristics of persons with an intellectual disability within the criminal justice system have concluded that they share certain features with the offenders in the general population (Holland et al., 2002;Jones, 2007; O'Brien et al., 2010). These include being young, male, psychosocial disadvantage, unemployment and co-morbid mental health needs (Holland et al., 2002; Jones, 2007; O'Brien et al., 2010). However, the fact that several studies have shown that offenders with an intellectual disability may have quite similar psycho/socio/criminal profiles to their non-ID counterparts, does not preclude the need to address their needs differently (Crocker, Côté, Toupin, & St-Onge, 2007). Offenders with an intellectual disability residing in prison were found more likely to have elevated rates of psychiatric comorbidity (e.g. depression, substance dependence) and unmet treatment needs compared to their non-ID counterparts (Dias, Ware, Kinner, & Lenox, 2013).

Furthermore, in comparison to non-forensic persons with an intellectual disability, offenders with an intellectual disability are found to be more likely to have a diagnosis of borderline to mild IQ, they are found more likely to have previously used drugs or alcohol and their average length of stay in an institution is significantly longer (Raina & Lunsky, 2010). In general, it does seem that people with a severe intellectual disability are unlikely to be found in the criminal justice system (Holland et al., 2002; Jones, 2007; Lyall, Holland, & Collins, 1995). Many studies suggest a higher percentage of individuals with mild to borderline intellectual disability (Jones, 2007; Raina & Lunsky, 2010). McBrien (2003) further warns that one of the most prevalent vulnerable groups amongst offenders consist of those who do not have an intellectual disability as formally defined but who have much lower cognitive and adaptive abilities. As many studies used non-ID counterparts as a comparison group, just a few studies compared them with a clinical population of non-forensic psychiatric patients with an intellectual disability (Lunsky et al., 2011; Raina & Lunsky, 2010; Reed, Xenitidis, Murphy, & Russell, 2004). Understanding this specific population through such research design is important in order to identify the unique profile and needs that may set them apart from other service users. The only study which has compared the three groups, namely offenders with an intellectual disability, offenders without an intellectual disability, and non-offenders with an intellectual disability, concluded that offenders with an intellectual disability exhibit more severe symptoms, have fewer resources and need a higher level of care than other offenders (Lunsky et al., 2011). Individuals with an intellectual disability are burdened with multiple personal and social disadvantages that significantly increase their vulnerability when they come in contact with the criminal justice system (Crocker et al., 2007; Glaser & Deane, 1999). Some authors have suggested that intellectual disabilities might reduce the ability to cope with the demands of the criminal justice system (Clare & Gudjonsson, 1993; Gudjonsson & Sigurdsson, 2003; Hayes, 2005; Jones, 2007; Kinsler, Saxman, & Fishman, 2004). For example, they are more susceptible to suggestibility and eventual false incrimination (Gudjonsson & Sigurdsson, 2003; Loucks, 2006) and when incarcerated they are more vulnerable to be physically, sexually, emotionally or financially victimized (Denkowski & Denkowski, 1985). They tend not to cope well with the harshness of the prison environment and do not fit within the general prison population (Glaser & Deane, 1999; Smith, Aglozinne, Schmid, & Hennly, 1990). They are likely to have difficulties understanding and adjusting to rules (Kinsler et al., 2004; Loucks, 2006) and regimes and end up being targeted and excluded from available programs, due to their impairments (Loucks, 2006). Possible frustration connected to being excluded can lead to acting out, violence or social isolation, thereby increasing their vulnerability to problems such as mental distress and suicide (Loucks, 2006). Furthermore, for intellectually disabled prisoners it seems to be much more difficult to move out of the maximum security unit to a less restrictive

environment (Glaser & Deane, 1999). When institutionalized their average length of stay in an institution is significantly longer (Butwell, Jamieson, Leese, & Taylor, 2000; Raina & Lunsky, 2010) and yet again it is more difficult to move to lower security (Butwell et al., 2000). Communication and comprehension difficulties may comprise their access to various services and programs (Crocker et al., 2007). If they are in treatment, they are unlikely to benefit from conventional programs designed to address offending behavior (Herrington et al., 2005; Loucks, 2006) and they are at higher risk of re-offending because of the unidentified needs and consequent lack of support (Loucks, 2006). They are described by Meyer's (2004) as a 'floating population beneath the surface', not receiving the services and treatment interventions they need, being placed in situations of potential risk from other residents, and being evaluated for discharge according to factors which may be inappropriate to their condition. Therefore, it is of great importance to timely and accurately identify this group of persons with an intellectual disability so that appropriate interventions, protective measures and dispositions can be implemented at all stages of the criminal justice system (Hayes, 2005; Kinsler et al., 2004).

In Flanders, the Northern Dutch-speaking part of Belgium, only descriptive studies were conducted regarding interned mentally offenders with an intellectual disability (Vanden Hende et al., 2005; Verlinden et al., 2009). The studies showed that it mostly concerned male interned mentally ill offenders (95%- Vanden Hende et al., 2005; 93%- Verlinden et al., 2009) with an intellectual disability and that about 70% of the interned mentally ill offenders with an intellectual disability also had another mental disorder (Verlinden et al., 2009). The most prevalent mental disorders consist of substance abuse disorder (28%), impulse control disorder (21%), personality disorder (21%), psychotic disorder (16%), and sexual/gender identity disorders (10%) (Verlinden et al., 2009). Most interned mentally ill offenders with an intellectual disability further had previous support and care mostly in a psychiatric facility (39%) and in an intellectual disability service (21%).

1.1.3. Offenders with a substance abuse problem: terminology, prevalence and characteristics

Many terms in literature describe people who use or abuse alcohol and/or (illicit) drugs. These include drug addiction, problematic drug use, dependence, addictive behavior, alcoholism, substance use, substance abuse, and substance use disorder (Kelly, Dow, & Westerhoff, 2010; Klaue, 1999). The term that is currently used in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (American Psychiatric Association, 2013) is substance use disorder. In comparison, the DSM-IV made a distinction

between substance abuse and substance dependence. The DSM-5 combines both into 'substance use disorder' and introduced a range of severity from mild to severe. Substance use disorder is described as a pathological pattern of behaviors related to use of the substance characterized by two or more features occurring at any time in the same twelve-month period: hazardous use, social or interpersonal problems related to substance use, neglected major roles to substance use, tolerance, withdrawal, substance often longer than intended, a desire or unsuccessful effort to control substance use, much time invested in activities to obtain the substance, important social, occupational or recreational activities are given up because of substance use, craving and the substance use is continued despite the knowledge that physical/psychosocial problems have been caused or exacerbated by the substance. As a general estimate for severity, a mild substance disorder is suggested by the presence of two or three symptoms, moderate by four or five symptoms, and severe by six or more symptoms (American Psychiatric Association, 2013: 483-484). As this dissertation has been carried out while the DSM-IV was still in use the term substance abuse has been applied to indicate the presence of dysfunction in the person's use of alcohol or other drugs that it interferes with different life domains such as health, occupational functioning, social functioning with or without physiological dependence or tolerance. However, similar to Taggart, McLauglin, Quinn, and Milligan (2006) and Chaplin, Gilvarry, and Tsakanikos (2011) the full definition of substance abuse as described in the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) was not used in this dissertation, given that some aspects of the definition, such as role obligation, were considered less relevant for certain subgroups of offenders with disabilities, such as persons or offenders with an intellectual disability (Taggart, McLaughlin, Quinn, & Milligan, 2006). In this dissertation substance abuse was conceptualized as defined by Vanderplasschen, Mostien, Claeys, Raes, & Van Bouchaute (2001: 22): *"Problems occurring in one or more life domains resulting from alcohol, psychotropic drugs and illegal substance use*".

Alcohol and illicit substance abuse have been linked with criminal behavior (Andersen, 2004; Coker, Smith, Westphal, Zonana, & McKee, 2014; Kopak, Vartanian, Hoffman, & Hunt, 2014; Rice & Harris, 1997; Wilson, Draine, Hadley, Metraux, & Evans, 2011). High prevalence rates of alcohol and drug abuse and dependence have been found in offender populations (Andersen, 2004; Butler, Allnutt, Cain, Owens, & Muller, 2006; Elsayed, Al-Zahrani, & Rashad, 2010; Fazel, Bains, & Doll, 2006). Review studies in prison populations, however, reported large variations in prevalence figures (Butler et al., 2006; Fazel et al., 2006). The review study of Fazel, Bains, and Doll (2006) estimated the prevalence of alcohol abuse and dependence in male prisoners ranging from 18% to 30% and the prevalence of drug abuse and dependence varied from 10 to 48% in male prisoners, whereas Butler and

colleagues (2006) found that 21.6% was diagnosed with an alcohol use disorder and 67.5% diagnosed with any substance use disorder. Although the prevalence figures are highly variable, researchers found it to be much higher in prisoners than in the general populations (Butler et al., 2006; Fazel et al., 2006; Sirdifield et al., 2009).

Studies on the prevalence of substance abuse and dependence in offenders with mental disorders are limited. A recent study on the psychiatric court records of offenders with mental disorders (Elsayed et al., 2010) revealed that substance abuse or dependence was the most common diagnosis (56% of the sample). For the incarcerated interned mentally ill offenders in Belgium, a general prevalence rate of 37% for a substance use disorder was found (Cosyns et al., 2007). Furthermore, a considerable amount of comorbidity was found between substance abuse disorders, major mental disorder and personality disorder (Blackburn, 2004; Hodgins, 1995; Rice & Harris, 1997; Sirdifield et al., 2009) with substance use disorder being the highest comorbid (co-occuring) disorder (Cosyns et al., 2007; Elsayed et al., 2010). For example, the Belgian figures showed that 59% of the incarcerated interned mentally ill offenders with a personality disorder as a main diagnosis also had a substance use disorder and for incarcerated interned mentally ill offenders with a psychotic disorder as main diagnosis 52.8% also had a substance use disorder (Cosyns et al., 2007).
Criminally involved substance abusers may represent the most severe affected subgroup of abusers and thereby those mostly in need of professional care according to Anderson (2004). Offenders with co-occurring disorders may pose more of a challenge to rehabilitation and risk reduction than any single disorder (Blackburn, 2004), as disorders may interact with each other and because treatment strategies for the individual disorder may be at odds with each other (Adams & Ferrandino, 2008). O'grady (2001, cited in Robertson et al. 2011: 7) commented on the dearth of published literature on the treatment of substance abuse in secure settings. This is despite the observation that cases involving a combination of substance abuse, mental disorder and violence represent the core work of forensic psychiatry (Marshall, 1998). An integrated approach to substance abuse and mental health issues is recommended with this population (Snowden, 2011), since substance use seems to be a 'driving force' behind recidivism in offenders with or without a mental disorder (Hakansson & Berglund, 2012; Lund, Hofvander, Forsman, Anckarsäter, & Nilsson, 2013; Pickard & Fazel, 2013; Wilson et al., 2011).

1.2. Persons with an intellectual disability and a substance abuse problem that come in contact with the criminal justice system

1.2.1. Persons with an intellectual disability and a substance abuse problem

In the last two decades, there has been a heightened interest in the prevalence, nature, and treatment of persons with an intellectual disability (ID) who abuse substances (Burgard, Donohue, Azrin, & Teichner, 2000; Chapman & Wu, 2012; Christian & Poling, 1997; Cocco & Harper, 2002; Degenhardt, 2000; Lance & Longo, 1997; Lottman, 1993; McGillicuddy, 2006; Mutsaert, Blekeman, & Schipper, 2007). This attention has become more noticeable since the deinstitutionalization era, which has resulted in increased autonomy for persons with an intellectual disability in community living. Although community living has many benefits for persons with an intellectual disability (Van Gennep, 1997; Van Hove & van Loon, 2010; Young, 2006), it may also lead to negative consequences, such as increased stressful events and a greater exposure to alcohol and illicit drugs (Christian & Poling, 1997; Lottman, 1993). In time, this exposure can result to substance abuse and other related problems (Burgard et al., 2000; Christian & Poling, 1997; Clarke & Wilson, 1999; Edgerton, 1986; Krishnef & DiNitto, 1981; Westermeyer, Phaobtang, & Neider, 1988). Although some reasons of why people with an intellectual disability use alcohol and illegal substances are comparable to those without disabilities, such as ‘stress reduction’ and ‘pleasure’ (Cocco & Harper, 2002; Westermeyer et al., 1988), there are some specific motives of persons with an intellectual disability who abuse substances regarding social attention seeking, such as ‘to be included’, ’to overcome loneliness’ and ‘to be liked’ (Christian & Poling, 1997; Degenhardt, 2000; Wenc, 1981). These types of motives might be more significant for persons with an intellectual disability, because of the greater social isolation they might experience due to stigma, because of the limited avenues for contact with non-disabled peers, and because of their limited social skills (Degenhardt, 2000). Huang (1981) found that the reason of ‘fitting in’ was more prevailing than the perceived pleasure associated with substance use in adolescents with an intellectual disability compared to adolescents without an intellectual disability. A more recent study of Taggart, McLauglin, Quinn and McFarlane (2007) examining 10 persons with an intellectual disability who abuse drugs found that the most often self-reported reasons for substance use were ‘escape from past trauma’ and ‘loneliness’. Further, some factors that could elevate the risk of substance abuse in persons with an intellectual disability were suggested by Moore and Polsgrove (1991), including medical factors (e.g. compromised drug tolerance, self-medication and over-medication), intrapersonal and interpersonal factors (e.g. low self-esteem, poor self-regulation, and

susceptibility to peer pressure) and environmental factors (e.g. presence of negative role models & excessive amounts of time). McGuillicuddy and Blane (1999) also identified some cognitive limitations that could increase the likelihood of substance abuse, such as illiteracy, short attention span, memory deficits, and a tendency to distort abstract cognitive concepts.

The prevalence rates of persons with an intellectual disability and a substance abuse problem vary across studies due to methodological differences (Chapman & Wu, 2012; Clarke & Wilson, 1999; Sturmey, Reyer, Lee, & Robek, 2003; Taggart et al., 2006). According to Sturmey and his colleagues (2003) the prevalence is estimated between 0.5% and 2%. Studies have suggested that persons with an intellectual disability have lower or similar rates of alcohol and illicit substance abuse (Chapman & Wu, 2012; Edgerton, 1986; Krishnef & DiNitto, 1981; McGillicuddy, 2006; Westermeyer, Kemp, & Nugent, 1996). However, persons with an intellectual disability who use alcohol and/or illicit drugs seem to be at greater risk for developing substance abuse problems (Burgard et al., 2000; Degenhardt, 2000; Didden, Embregts, van der Toorn, & Laarhoven, 2009; Krishnef & DiNitto, 1981; McGillicuddy, 2006; Moore & Polsgrove, 1991; Slayter & Steenrod, 2009; Westermeyer et al., 1996) and other negative consequences in numerous domains of functioning that are (in)directly associated to substance (ab)use (Didden et al., 2009; Krishnef & DiNitto, 1981; McGillivray & Moore, 2001; Taggart et al., 2006; Westermeyer et al., 1988). Also, persons with impaired cognitive function (mild to borderline intellectual disability) are likely to be at greater risk of substance abuse and associated problems (Chapman & Wu, 2012).

Identifying and supporting this group of persons with an intellectual disability and a substance abuse problem is of paramount importance because this group is often deprived from treatment, falling between two service systems. Furthermore, they may be at risk for being involved in the criminal justice system (McGillivray & Moore, 2001). The first concern for this specific population is the lack of appropriate treatment, because mainstream addiction and intellectual disability services often lack the appropriate resources to identify and treat this specific group (Degenhardt, 2000; Lance & Longo, 1997; Lottman, 1993; McGillicuddy, 2006; Ruf, 1999; Slayter & Steenrod, 2009; Sturmey et al., 2003; Taggart, Huxley, & Baker, 2008; Tyas & Rush, 1991; VanderNagel, Kiewik, Buitelaar, & DeJong, 2011). Intellectual disability services indicated that they do not have the knowhow and skills required to assess, treat, or manage substance use and the related problems, whereas addiction services reported difficulties serving persons with an intellectual disability (Chapman & Wu, 2012; Clarke & Wilson, 1999). Compared with substance abusers without an intellectual disability, substance abusers with an intellectual disability were less likely to

receive treatment or to remain in treatment once started (Chapman & Wu, 2012). Some studies further revealed an association between substance use problems and other mental disorders in persons with an intellectual disability (Chaplin, Gilvarry, & Tsakanikos, 2011; Chapman & Wu, 2012; Slayter, 2010; VanderNagel et al., 2011) complicating the treatment for these individuals. The second concern for this specific group is the possible relation between substance abuse and criminal behavior, which has been suggested in several studies for persons with an intellectual disability (Chaplin et al., 2011; Chapman & Wu, 2012; Didden et al., 2009; McGillivray & Moore, 2001).

1.2.2. Persons with an intellectual disability and a substance abuse problem that come in contact with the criminal justice system

Up until now research on the relationship between substance abuse and criminal offending in persons with an intellectual disability is scarce. However, offenders with an intellectual disability have been regularly associated with substance abuse, given the high rate of substance abuse history in offenders with an intellectual disability. Männynsalo, Putkonen, Lindberg and Kotilainen (2009) examined the link between intellectual disability, offending and mental disorders based on pre-trial forensic psychiatric examination reports. They found substance abuse to be the most prevalent in a Finnish forensic population with an intellectual disability. Almost half of the offenders were diagnosed with alcohol abuse (45%) or dependence and 68% with any substance abuse or dependence. The American study of Dwyer and Frierson (2006) also found that substance abuse was the most prevalent mental disorder in murder defendants with an intellectual disability. Based on pre-trial forensic psychiatric evaluations for murder defendants with an intellectual disability, they found that 62% had a substance use disorder and 33% used substances at the time of the offence. An Australian study of Klimecki, Jenkinson, and Wilson (1994) reviewing characteristics and reoffending rates of previous prison inmates with an intellectual disability reported that 45.1% of the first offenders with an intellectual disability, 71.4% of second offenders with an intellectual disability, 66.6% of the third offenders with an intellectual disability, and 87.5% of fourth offenders with an intellectual disability had a history of substance abuse. They further suggested that substance abuse is an important antecedent of recidivism. Similarly, Cockram, Jackson and Underwood (1998) reported that 65% of the offenders with an intellectual disability were identified as having an alcohol and/or other drug problem by their family carers. Specific research concerning alcohol use in offenders with an intellectual disability showed similar results. Hayes and Carmody (1990) reported that 66% of the offenders with an intellectual disability were either alcohol abusers or were reported as intoxicated at the time of their offence. In a subsequent research Hayes (1996) examined

two cohorts of offenders with an intellectual disability in New South Wales courts. She reported 90% of both groups had used some alcohol on the day of the offence. Given the high rates of substance abuse history in offenders with an intellectual disability reported in these descriptive studies, McGillivray and Moore (2001) conducted a comparative study to compare the use and knowledge about alcohol and illicit drugs between offenders and non-offenders with an intellectual disability in order to examine a possible association between substance use and offending behavior in this population. They found that persons involved in the criminal justice system reported use of larger quantities of alcohol and illicit drugs at a more frequent rate than non-offenders. Furthermore, more than half of the offenders with an intellectual disability reported that they were under the influence of alcohol and/or illicit drugs at the time of the offence. Based on these studies conducted in the criminal justice system a possible relationship between substance abuse and offending behavior in persons with an intellectual disability appeared likely (McGillivray & Moore, 2001). Questions remain how to prevent (young) adults with an intellectual disability and challenging behavior such as substance abuse from slipping into an antisocial lifestyle and subsequent offending (Männysalo, Putkonen, Lindberg, & Kotilainen, 2009). It is also unclear how to deal with multi-problem clients suffering from the effects of an intellectual disability combined with other life challenges such as mental illness and substance abuse out of the jails as 'institution of last resort' (Kinsler et al., 2004).

1.3. Aims of the dissertation

As outlined above, the assessment and treatment of offenders with disabilities (including mental disorders and intellectual disabilities) are characterized and influenced by the inherent tension between two important objectives: protecting society on the one hand versus supporting and treating the offender with special needs on the other hand. Given the fact that the focus in offender rehabilitation is still often exclusively laid on crime reduction by tackling risk factors associated with criminal recidivism (in line with the RNR-paradigm) and the current trend on complementing this view by more strengths-based approaches with attention for non-criminogenic needs (in line with the GLM-paradigm), this dissertation entails research on the integration of risk management and goods promotion in the vulnerable group of offenders with disabilities. As the knowledge base concerning 'what works' and 'how it works' on supporting offenders with disabilities towards a more inclusive life in society is rather small and for a major part still depending on our knowledge about non-offending persons, more research on how offenders with disabilities could be supported and treated is definitely needed.

Therefore, this dissertation has two inter-related aims, that both address 'offenders with disabilities' who seem not 'to fit' in the 'standard' available treatment services because of complex and entangled support needs.

The first aim involves getting more insight into treatment perspectives on offenders who lack criminal responsibility due to mental disorders or intellectual disabilities in secure forensic institutions, as perceived by both professionals as well as the offenders with disabilities themselves. Both perspectives may offer valuable information on how support and treatment, taking the tension between 'treatment and control' into account, may be conceptualized and implemented. The second aim deals with screening and assessment and entails the specific problem of substance (ab)use in persons with an intellectual disability who may or may not be involved in the criminal justice system. As persons with intellectual disabilities are not always recognized by treatment staff in substance abuse treatment and other services (e.g. correctional establishments) as having a disability, we aim to study the psychometric properties of an easy-to-administer screening tool for intellectual disabilities. This is important, because persons with intellectual disabilities are often falling between different service systems and may be at risk for being involved in the criminal justice system due to their specific support needs.

These aims are subdivided in the following research questions:

1. What are experts' opinions on the content and organization of treatment for offenders who lack criminal responsibility?
2. How do offenders who lack criminal responsibility perceive treatment in secure forensic institutions?
3. What are the characteristics and consequences of substance (ab)use in persons with an intellectual disability as perceived by treatment staff members?
4. Are there valid tools available to screen intellectual disabilities in persons with a substance abuse problem in Dutch mental health settings?

1.4. Research goals and methodology

In order to tackle the above mentioned research questions, four studies (each representing a chapter) were conducted. These studies were clustered into two sections of two studies, that each corresponded with one of the research questions described above. Part 1 of this dissertation (Chapters 2 & 3) specifically focused on the treatment perspectives of mentally ill offenders in secure forensic services, whereas part 2 (Chapters 4 & 5) focused on

screening and assessment of substance abusers with an intellectual disability who may or may not be involved in the criminal justice system.

The decision to divide this dissertation in two parts related to the two different research projects on which this dissertation is based. The first project entailed a research project concerning the treatment of interned mentally ill offenders entitled '*Treatment of mentally ill offenders in forensic psychiatric centers. An exploratory multi-method study on effective treatment models and conditions to apply in a forensic psychiatric center'*. The project was funded by the Research Fund of University College Ghent and was conducted in the Faculty of Education, Health and Social Work of the same University College. The project aimed at formulating recommendations on the content and organization of the treatment of interned mentally ill offenders in new established forensic psychiatric centers in Flanders. Given the pending issues on how to treat this heterogeneous group of interned mentally ill offenders, the research project aimed at collecting treatment perspectives of professionals and interned mentally ill offenders themselves to help build a consistent treatment framework using different research methods. The second project encompassed a research project exploring the group of persons with an intellectual disability and a substance abuse problem. This research project with the title *'Substance abuse in persons with an intellectual disability. The development of adjusted instruments for screening and assessment'* was also funded by the Research Fund of University College Ghent and was conducted in the Faculty of Education, Health and Social Work of the same University College. The project aimed at exploring this specific group of persons with an intellectual disability and a substance abuse problem in Flanders as well as validating instruments to identify this population.
Although both projects have been carried out independently of each other, the integrated findings offer further insight with regard to treatment perspectives and screening in offenders with disabilities and complex support needs.

Part 1

The first cluster of studies related to the first general aim and assessed how experts and interned mentally ill offenders perceive treatment. The first study investigated the experts' perception on some pending treatment-related issues. The second study analyzed the treatment perspectives of the interned mentally ill offenders themselves.
The first study (Chapter 2) of this dissertation revealed expert opinions regarding pending issues on how to treat mentally ill offenders. Fourteen international experts participated in a four-round Delphi study on the content and organization of treatment for mentally ill offenders in a forensic psychiatric center. Using this method for consensus-building, we

aimed at shedding light on agreements and disagreements with regard to 49 statements pertaining to treatment in a forensic psychiatric center.
The second study 2 (Chapter 3) explored how interned mentally ill offenders who reside in a prison or forensic treatment setting in Flanders perceive treatment. Seventeen interned mentally ill offenders were interviewed about the treatment they received, after a period of participant observation to get acquainted with the setting and the interned mentally ill offenders. Exploring how interned mentally ill offenders perceive their treatment may be essential in responding to their complex needs.

Part 2

The second cluster of studies dealt with screening and assessment of intellectual disabilities in substance (ab)users who may or may not be involved in the criminal justice system. One study identified the characteristics of persons with an intellectual disability who use or abuse substances in Flanders in terms of the nature and consequences of their substance (ab)use, based on a survey amongst treatment staff members. The second study investigated the validity of a screening tool for intellectual disabilities in substance abusers who reside in mental health settings.
The third study (Chapter 4) focused on the group of substance users and abusers with an intellectual disability in Flanders to investigate the nature and consequences of their substance (ab)use and to examine whether the two groups differed significantly from each other. Data was collected through a questionnaire forwarded to caregivers in intellectual disability and addiction services in Flanders. This study was the first to investigate the characteristics of substance users and abusers with an intellectual disability in Flanders.
The fourth study (Chapter 5) aimed at investigating the validity of the Dutch version of the Hayes Ability Screening Index (HASI) (Hayes, 2000) for screening intellectual disability in substance abusers in mental health services. This instrument has been shown to be a valid, user-friendly and time-saving instrument for screening intellectual disability in an offender as well as in a non-offender psychiatric sample. In total, the HASI was administered to 90 Dutch-speaking adults with a substance abuse problem together with the Wechsler Adult Intelligence Scale III (WAIS-III) (Wechsler, 2004), which was used as the criterion for validity.

In the last chapter of this dissertation (Chapter 6), the findings from the previous chapters are summarized and discussed in relation to the overall research objectives. The strengths and limitations of this study are described and the implications for clinical practice and suggestions for future studies are presented.

This dissertation consists of four research articles of which one article has been accepted for publication and three articles have been published in an ISI-ranked peer-reviewed journal. As a result of making each research paper self-containing and making sure that it met the editor's requirements, the content of some research papers may overlap and the terminology between the papers may differ (e.g. the term substance misuse is used in Chapter 4 in accordance with comparable studies such as Taggart et. al., 2006).

References

Adams, K., & Ferrandino, J. (2008). Managing mentally ill inmates in prison. *Criminal Justice and Behavior, 35*, 913-927.

Adshead, G., & Sarkar, S. P. (2005). Justice and welfare: two ethical paradigms in forensic psychiatry. *Australian and New Zealand Journal of Psychiatry, 39*, 1101-1017.

American Association of Intellectual and Developmental Disabilities (2014). *Definition of intellectual disability*. Retrieved from http://www.aaidd.org/content_100.cfm?navID=21.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders.* Washington, London: American Psychiatric Publishing.

Andersen, H. S. (2004). Mental Health in prison populations. A review – with special emphasis on a study of Danish prisoners on remand. *Acta Psychiatrica Scandinavica, 110*, 5-29.

Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct*: Elsevier.

Assadi, S. M., Noroozian, M., Parkravannejad, M., Yahyazadeh, O., Aghayan, S., & Shariat, S. V. (2006). Psychiatric morbidity among sentenced prisoners: prevalence study in Iran. *British Journal of Psychiatry, 188*, 159-164.

Barnao, M., Robertson, P., & Ward, T. (2010). Good Lives Model Applied to a Forensic Population. *Psychiatry, Psychology and Law, 17*, 202-217.

Blackburn, R. (2004). "What works" with mentally disordered offenders. *Psychology, Crime & Law, 10*, 297-308.

Bland, R. C., Newman, S. C., Thompson, A. H., & Dyck, R. J. (1998). Psychiatric Disorders in the population an in prisoners. *Int J Law Psychiatry, 21*, 273-279.

Burgard, F. J., Donohue, B., Azrin, N. A., & Teichner, G. (2000). Prevalence and treatment of substance abuse in the mentally retarded population: an empirical review. *Journal of Psychoactive Drugs, 32*, 293-298.

Butler, T., Allnut, S., Cain, D., Owens, D., & Muller, C. (2005). Mental disorder in the New South Wales prisoner population. *Australian and New Zealand Journal of Psychiatry, 39*, 407-413.

Butler, T., Allnutt, S., Cain, D., Owens, D., & Muller, C. (2006). Mental disorders in Australian prisoners: A comparison with a community sample. *Australian and New Zealand Journal of Psychiatry, 10*, 272-476.

Butwell, M., Jamieson, E., Leese, M., & Taylor, P. J. (2000). Trends in special (high-security) hospital: 2: Residency and discharge episodes, 1986-1995. *The British Journal of Psychiatry, 176*, 260-265.

Chaplin, E., Gilvarry, C., & Tsakanikos, E. (2011). Recreational substance use patterns and co-morbid psychopathology in adults with intellectual disability. *Research in Developmental Disabilities, 32*, 2981-2986. doi: DOI 10.1016/j.ridd.2011.05.002

Chapman, S. L. C., & Wu, L. T. (2012). Substance abuse among individuals with intellectual disabilities. *Research in Developmental Disabilities, 33*, 1147-1156. doi: DOI 10.1016/j.ridd.2012.02.009

Christian, L., & Poling, A. (1997). Drug abuse in persons with mental retardation: A review. *American Journal on Mental Retardation, 102*, 126-136.

Clare, I. C. H., & Gudjonsson, G. H. (1993). Interrogative suggestibility, confabulation and acquiescence in people with mild learning disabilities (mental handicap): Implications for reliability during police interview. *British Journal of Clinical Psychology, 32*, 295-301.

Clarke, J. J., & Wilson, D. N. (1999). Alcohol problems and intellectual disability. *Journal of Intellectual Disability Research, 43*, 135-139.

Cocco, K., & Harper, D. (2002). Substance use in people with mental retardation: A missing link in understanding community outcomes. . *Rehabilitation Counseling Bulletin, 46*, 33-40.

Cockram, J., Jackson, R., & Underwood, R. (1998). People with an intellectual disability and the criminal justice system: the family perspective. *Journal of Intellectual and Developmental Disability, 23*, 41-56.

Coker, K. L., Smith, P. H., Westphal, A., Zonana, H. V., & McKee, S. A. (2014). Crime and psychiatric disorders among youth in the US population: An analysis of the National Comorbidity survey-Adolescent supplement. *Journal of the American Academy of Child & Adolescent Psychiatry, 53*, 888-898.

Cosyns, P., D'Hondt, C., Janssen, D., Maes, E., & Verellen, R. (2007). Geïnterneerden in België: De cijfers. *Panopticon, 28*, 46-61.

Crocker, A. G., Côté, G., Toupin, J., & St-Onge, B. (2007). Rate and characteristics of men with an intellectual disability in pre-trial detention. *Journal of Intellectual & Developmental Disability, 32*, 143-152.

Dahlin, M. K., Gumpert, C. H., Torstensson-Levander, M., Svensson, L., & Radovic, S. (2009). Mentally disordered criminal offenders: Legal and criminological perspectives. *International Journal of Law and Psychiatry, 32*, 377-382.

Davidson, M., Humphreys, M. S., Johnstone, E. C., & Owens, D. G. C. (1995). Prevalence of psychiatric morbidity among remand prisoners in Scotland. *The British Journal of Psychiatry, 167*, 545-548.

De Smet, S., Van Hecke, N., Verté, D., Broekaert, E., Ryan, D., & vandevelde, S. (2014). Treatment and control: A qualitative study of older mentally ill offenders' perceptions

on their detention and care trajectory. *International Journal of Offender Therapy and Comparative Criminology*, 1-22. doi: 10.1177/0306624X14521129

Degenhardt, L. (2000). Interventions for people with alcohol use disorders and an intellectual disability: A review of the literature. *Journal of Intellectual and Developmental Disabilities, 25*, 135-146.

Denkowski, G. C., & Denkowski, K. M. (1985). The mentally retarded offender in the state prison system: Identification, prevalence, adjustment, and rehabilitation. *Criminal Justice and Behavior, 12*, 55-70.

Dias, S., Ware, R. S., Kinner, S. A., & Lenox, N. G. (2013). Co-occurring mental disorder and intellectual disability in a large sample of Australian prisoners. *Australian and New Zealand Journal of Psychiatry, 47*(938-944).

Didden, R., Embregts, P., van der Toorn, M., & Laarhoven, N. (2009). Substance abuse, coping strategies, adaptive skills and behavioral and emotional problems in clients with mild to borderline intellectual disability admitted to a treatment facility: A pilot study. *Research in Developmental Disabilities, 30*, 927-932. doi: DOI 10.1016/j.ridd.2009.01.002

Dwyer, R. G., & Frierson, R. L. (2006). The presence of low IQ and mental retardation among murder defendants referred for pretrial evaluation. *Journal of Forensic Sciences, 51*, 678-682.

Edgerton, R. (1986). Alcohol and drug use by mentally retarded adults. *American Journal of Mental Deficiency, 90*, 602-609.

Elsayed, Y. A., Al-Zahrani, M., & Rashad, M. M. (2010). Characteristics of mentally ill offenders from 100 psychiatric court reports. *Annals of General Psychiatry, 9*. doi: 10.1186/1744-859X-9-4

Fazel, S., Bains, P., & Doll, H. (2006). Substance abuse and dependence in prisoners: A systematic review. *Society for the Study of Addiction, 101*, 181-191.

Fazel, S., & Danesh, J. (2002). Serious mental disorders in 230000 prisoners: A systematic review of 62 surveys. *Lancet, 359*, 545-554.

Fazel, S., & Grann, M. (2004). Psychiatric morbidity among homicide offenders: A Swedish population study. *American Journal of Psychiatry, 161*, 2129-2131.

Fazel, S., & Lubbe, S. (2005). Prevalence and characteristics of mental disorders in jails and prisons. . *Current Opinion in Psychiatry, 18*, 550-554.

Fazel, S., & Seewald, K. (2012). Severe mental illness in 33588 prisoners worldwide: systematic review and meta-regression analysis. *The British Journal of Psychiatry, 200*, 364-373.

Fazel, S., Xenitidis, K., & Powell, J. (2008). The prevalence of intellectual disabilities among 1200 prisoners - A systematic review. *International Journal of Law and Psychiatry, 31*, 369-373.

Fitzpatrick, R., Chambers, J., Burns, T., Doll, H., Fazel, S., Jenkinson, C., & al., e. (2010). A systematic review of outcome measures used in the mental health research with consensus panel opinion. *Health Technology Assessment, 14*, 1-94.

Federale Overheidsdienst Justitie (2012). *Justitie in cijfers 2011*. Brussel: Federale Overheidsdienst Justitie.

Glaser, W., & Deane, K. (1999). Normalization in an abnormal world: A study of prisoners with an intellectual disability. *International Journal of Offender Therapy and Comparative Criminology, 43*, 338-356.

Gotlieb, P., Gabrielsen, G., & Korner, A. (2013). Mentally disordered non-psychotic criminal offenders- Treatment instead of punishment. *Nordic Journal of Psychiatry, 67*, 400-406.

Goyal, S. K., Singh, P., Gargi, P. D., Goyal, S., & Grag, A. (2011). Psychiatric morbidity in prisoners. *Indian J Psychiatry, 53*, 253-257.

Gudjonsson, G., & Sigurdsson, J. (2003). The relationship of compliance with coping strategies and self-esteem. *Eur I Pscyhol Assess, 19*, 117-123.

Gunn, J., Maden, A., & Swinton, M. (1991). Treatment needs of prisoners with psychiatric disorders. *BMJ, 303*, 338-341.

Hakansson, A., & Berglund, M. (2012). Risk factors for criminal recidivism - a prospective follow-up study in prisoners with substance abuse. *BMC Psychiatry, 12*. doi: 10.1186/1471-244X-12-111

Hayes, S. (1996). *People with an intellectual disability and the criminal justice system: two rural courts*. Research Report no. 5. Sydney: New South Wales Law Reform Commission.

Hayes, S. (1997). Prevalence of intellectual disability in local courts. *Journal of Intellectual & Developmental Disability, 22*, 71-85.

Hayes, S. (2000). *Hayes Ability Screening Index: manual*. Syndey: Faculty of Medicine, University of Syndey.

Hayes, S. (2005). Diagnosing intellectual disability in a forensic sample: Gender and age effects on the relationship between cognitive and adaptive functioning. *Journal of Intellectual and Developmental Disability, 30*, 97-103.

Hayes, S. & Carmody, J. (1990). Helping those imprisoned for alcohol related crimes. In J. Vernon (Eds.). *Alcohol and crime: Proceedings of a conference held 4-6 April 1989* (pp.179-186). Canberra: Australian Institute of Criminology.

Hayes, S., Shackell, P., Mottram, P., & Lancaster, R. (2007). The prevalence of intellectual disability in a major UK prison. *British Journal of Learning Disabilities, 35*, 162-167.

Herrington, V. (2009). Assessing the prevalence of intellectual disability among young male prisoners. *Journal of Intellectual Disability Research, 53*, 397-410.

Herrington, V., Hunter, G., & Harvey, S. (2005). Meeting the health care needs of offenders with learning disabilities. *Learning Disability Practice, 8*, 28-32.

Hodel, B., & West, A. (2003). A cognitive training for mentally ill offenders with treatment-resistent schizophrenia. *The Journal of Forensic Psychiatry & Psychology, 14*, 554-568.

Hodgins, S. (1995). Assessing mental disorders in the criminal justice system: feasibility versus clinical accuracy. *International Journal of Law and Psychiatry, 19*, 15-28.

Hodgins, S., Mednick, S. A., Brennan, P. A., Schulsinger, F., & Engberg, M. (1996). Mental disorder and crime: Evidence from a Danish cohort. *Archives of Genera Psychiatry, 53*, 489-496.

Hodgins, S., & Müller-Isberner, R. (2000). *Violence, crime and mentally disordered offenders. Concepts and methods for effective treatment and prevention.* . Chichester: Wiley.

Hoffman, K., & Kluttig, T. (2006). Psychoanalytic and group-analytic perspectives in forensic psychotherapy. *Group Analysis, 39*, 9-23.

Hogue, T. E., Steptoe, L., Taylor, J. L., Lindsay, W. R., Mooney, P., Pinkney, L., Johnston, S., Smith, A. H., & O'Brien, G. (2006). A comparison of offenders across three levels of security. *Criminal Behavior and Mental Health, 16,* 13-28.

Holland, H., Clare, I. C. H., & Mukhopadhyay, T. (2002). Prevalence of 'criminal offending' men and women with intellectual disability and the characteristics of 'offenders': implications for research and service development. *Journal of Intellectual Disability Research, 46*, 6-20.

Holland, S., & Persson, P. (2011). Intellectual disability in the Victorian prison system: Characteristics of prisoners with an intellectual disability released from prison in 2003-2006. *Psychology, Crime & Law, 17*, 25-41.

Howells, K., Day, A., & Thomas-Peter, B. (2004). Changing violent behavior: Forensic mental health and criminological models compared. . *The Journal of Forensic Psychiatry & Psychology, 15*, 391-406.

Huang, A. M. (1981). The drinking behavior of the educable mentally retarded and the non-retarded student*. J Alcohol Drug Education, 26*, 41-50

Jones, J. (2007). Persons with intellectual disabilities in the criminal justice system: Review of issues. *International Journal of Offender Therapy and Comparative Criminology, 51*, 723-733.

Kelly, J. F., Dow, S. J., & Westerhoff, C. (2010). Does our choice of substance-related terms influence perceptions of treatment needs? An empirical investigation with two commonly used terms. *Journal of Drug Issues, 40*, 805-818.

Kinsler, P. J., Saxman, A., & Fishman, D. B. (2004). The Vermont defendant accomodation project: A case study. *Psychology, Public Policy, and Law, 10*, 134-161.

Klaue, K. (1999). Drugs, addiction, deviance and disease as social constructs. *Bulletin on Narcotics, 51*, 47-57.

Klimecki, M. R., Jenkinson, J., & Wilson, L. (1994). A study of recidivism among offenders with an intellectual disability. *Australian and New Zealand Journal of Developmental Disabilities, 19*, 209-219.

Knabb, J. J., Welsh, R. K., & Graham-Howard, M. J. (2011). Treatment alternatives for mentally disordered offenders: A literature review. *Psychology, Crime & Law, 2*, 122-131.

Kopak, A. M., Vartanian, L., Hoffman, N. G., & Hunt, D. A. (2014). The connections between substance dependense, offense type, and offence severity. *Journal of Drug Issues, 44,* 291-307.

Krishnef, C. H., & DiNitto, D. M. (1981). Alcohol abuse among mentally retarded individuals. *Mental Retardation, 19*, 151-155.

Lader, D., Singleton, N., & Meltzer, H. (2003). Psychiatric morbidity among young offenders in England and Wales. *International Review of Psychiatry, 15*, 144-147.

Lance, P., & Longo, M. D. (1997). Mental health aspects of developmental disabilities. *The Habilitative Mental Healthcare Newsletter, 16*, 61-64.

Lindsay, W. R. (2011). People with intellectual disability who offend or are involved with the criminal justice system. *Current Opinion in Psychiatry, 24*, 377-381.

Lindsay, W. R., Hastings, R. P., & Beech, A. R. (2011). Forensic research in offenders with intellectual & Developmental disabilities 1: prevalence and risk assessment. *Psychology, Crime & Law, 17*, 3-7.

Lindsay, W. R., Hastings, R. P., Griffiths, D. M., & Hayes, S. (2007). Trends and challenges in forensic research on offenders with intellectual disability. *Journal of Intellectual & Developmental Disability, 32*, 55-61.

Lottman, T. J. (1993). Access to generic substance abuse services for persons with mental retardation. *Journal of Alcohol and Drug Education, 39*, 41-55.

Loucks, N. (2006). No One Knows: Offenders with learning difficulties and learning disabilities. Review of prevalence and associated needs. London: Prison Reform Trust.

Lund, C., Hofvander, B., Forsman, A., Anckarsäter, H., & Nilsson, T. (2013). Violent criminal recidivism in mentally disordered offenders: A follow-up study of 13-20 years through different sactions. *International Journal of Law and Psychiatry, 36*, 250-257.

Lunsky, Y., Gracey, C., Koegl, C., Bradley, E., Durbin, J., & Raina, P. (2011). The clinical profile and service needs of psychiatric inpatients with intellectual disabilities and forensic involvement. *Psychology, Crime & Law, 17*, 9-23.

Lyall, I., Holland, A. J., & Collins, S. (1995). Offending by adults with learning disabilities: identifying needs in one health district. *Mental Handicap Research, 8*, 99-109.

MacInnes, D., Kinane, C., Beer, D., Parrott, J., Craig, T., Eldridge, S., Marsh, I., Krotofil, J., Priebe, S. (2013). Study to assess the effect of a structured communication approack on quality of life in secure mental health settings (Comquol): Study protocol for a pilot cluster randomized trial. *Trials, 14*, 257.

Männysalo, L., Putkonen, H., Lindberg, N., & Kotilainen, I. (2009). Forensic psychiatric perspective on criminality associated with intellectual disability: a nationwide register-based study. *Journal of Intellectual Disability Research, 53*, 279-288.

Markowitz, F. E. (2006). Psychiatric hospital capacity, homelessness, and crime and arrest Rates. *Criminology, 44*, 45-72.

Marshall, J. (1998). Comorbidity of severe mental illness and substance misuse. *Journal of Forensic Psychiatry, 9*, 9-12.

Mason, J., & Murphy, G. H. (2002). Intellectual disability among people on probation: Prevalence and outcome. *Journal of Intellectual Disability Research, 46*, 230-238.

McBrien, J. (2003). The intellectually disabled offender: Methodological problems in identification. *Journal of Applied Research in Intellectual Disabilities, 16*, 95-105.

McGillicuddy, N. (2006). A review of substance use research among those with mental retardation. *Mental Retardation and Developmental Disability Research Reviews, 12*, 41-47.

McGillicuddy, N., & Blane, H. T. (1999). Substance use in individuals with mental retardation. *Addictive Behaviors, 24*, 869-878.

McGillivray, J. A., & Moore, M. R. (2001). Substance use by offenders with mild intellectual disability. *Journal of Intellectual & Developmental Disability, 26*, 297-310.

Moens, I., & Pauwelyn, L. (2012). *Geen opsluiting maar sleutels tot integratie. Voorstellen voor een gecoördineerd zorgtraject voor geïnterneerden*. Brussel: Zorgnet Vlaanderen.

Moore, D., & Polsgrove, L. (1991). Disabilities, developmental handicaps and substance misuse: a review. *The International Journal of the Addictions, 26*, 65-90.

Morgan, R. D., Flora, D. B., Kroner, D. G., Mills, J. F., Varghese, F., & Steffan, J. S. (2012). Treating offenders with mental illness: A research synthesis. *Law and Human Behavior, 36*, 37-50.

Murphy, G. H., Harnett, H., & Holland, A. J. (1995). A survey of intellectual disability amongst men on remand in prison. *Journal of Applied Research in Intellectual Disabilities, 8*, 81-98.

Mutsaert, K., Blekeman, J., & Schipper, H. (2007). Licht verstandelijke gehandicapten en middelengebruik. Wat is er tot op heden bekend? Utrecht: Trimbos-instituut.

Myers, F. (2004). *On the borderline? People with learning disabilities and/or autistic spectrum disorder in secure, forensic and other specialist centres*. Scotland: Scottisch Development Centre for Mental Health.

Naidoo, S., & Mkize, D. L. (2012). Prevalence of mental disorders in a prison population in Durban, South Africa. *Afr J Psychiatry, 15*, 30-35.

Nielssen, O., & Misrachi, S. (2005). Prevalence of psychoses in reception to male in prison in New South Wales. *Australian and New Zealand Journal of Psychiatry, 39*, 453-459.

O'Brien, G., Taylor, J. L., Lindsay, W. R., Holland, A. J., Carson, D., Steptoe, L., . . . Wheeler, J. R. (2010). A multi-centre study of adults with learning disabilities referred to services for antisocial or offending behaviour: Demographis, individual, offending and service characteristics. *Journal of Learning Disability and Offending Behaviour, 1*, 5-15.

Pickard, H., & Fazel, S. (2013). Substance abuse as a risk factor for violence in mental illness: some implications for forensic psychiatric practice and clinical ethics. *Current Opinion in Psychiatry, 26*, 349-354.

Prins, M. P. H. (2014). Prevalence of mental illness in U.S. state prison: A systematic Review. *Psychiatric Services, 65*. doi: 10.1176/appi.ps.201300166

Quinsey, V. L., Khanna, A., & Malcom, P. B. (1998). A retrospective evaluation of the regional treatment centre sec offender treatment program. *Journal of Interpersonal Violence, 13*, 621-644.

Raina, P., & Lunsky, Y. (2010). A comparison study of adults with intellectual disability and psychiatric disorder with and without forensic involvement. *Research in Developmental Disabilities, 31*, 218-223.

Reed, S., Xenitidis, K., Murphy, D. G. M., & Russell, A. (2004). People with learning disabilities in a low secure in-patient unit: comparison of offenders and non-offenders. *British Journal of Psychiatry, 158*, 499-504.

Rice, M. E., & Harris, G. T. (1997). The treatment of mentally disordered offenders. *Psychology, Public Policy, and Law, 3*, 126-183.

Robertson, P., Barnao, M., & Ward, T. (2011). Rehabilitation frameworks in forensic mental health. *Agression and Violent Behavior, 16*, 472-484.

Ruf, G. (1999). Addiction treatment for people with mental retardation and learning disabilities: Why we need specialized services. *3*(2). http://www.thenadd.org/cgibin/checkmember.pl?page=pages/membership/bulletins/v2n3a2.

Sakdalan, J., Shaw, J., & Collier, V. (2010). Staying in the here-and-now: Pilot study on the use of Dialectical Behaviour Therapy groups skills training with forensic clients with intellectual disability. *Journal of Applied Research in Intellectual Disabilities, 54*, 568-572.

Salize, H. J., Dressing, H., & Kief, C. (2007). *Mentally Disordered Persons in European Prison Systems – Needs, Programmes and Outcome (EUPRIS)*. Mannheim: Central Institute of Mental Health.

Sirdifield, C., Gojkovic, D., Brooker, C., & Ferriter, M. (2009). A systematic review of research on the epidemiology of mental health disorders in prison populations: A summary of findings. *The Journal of Forensic Psychiatry & Psychology, 20*, 78-101.

Slayter, E. (2010). Disparities in access to substance abuse treatment among people with intellectual disabilities and serious mental illness. *Health & Social Work, 35*, 49-59.

Slayter, E., & Steenrod, S. (2009). Addressing alcohol and drug addiction among people with mental retardation in nonaddiction settings: A need for cross system collaboration. *Journal of Social Work Practice in the Addictions*, 71-90.

Smith, C., Aglozinne, B., Schmid, R., & Hennly, T. (1990). Prison adjustment of youthful inmates with mental retardation. *Mental Retardation, 29*, 177-181.

Snowden, P. (2011). Substance misuse and violence: The scope and limitations of forensic psychiatry's role. *Advances in Psychiatric Treatment, 7*, 189-195.

Steadman, H. J., Morrissey, J. P., & Robbins, P. C. (1985). Reevaluating the custody-therapy conflict paradigm in correctional mental health settings. *Criminology, 23*, 165-179.

Sturmey, P., Reyer, H., Lee, R., & Robek, A. (2003). *Substance-related disorders in persons with mental retardation*. Kingston, NY: NADD Press.

Taggart, L., Huxley, A., & Baker, G. (2008). Alcohol and illicit drug misuse in people with learning disabilities: implications for research and service development. *Advances in Mental Health Learning Disabilities, 2*, 11-21.

Taggart, L., McLaughlin, D., Quinn, B., & McFarlane, C. (2007). Listening to people with intellectual disabilities who misuse alcohol and drugs. *Health and Social Care in the Community, 15,* 360-368.

Taggart, L., McLaughlin, D., Quinn, B., & Milligan, V. (2006). An exploration of substance misuse in people with intellectual disabilities. *Journal of Intellectual Disability Research, 50*, 588-597.

Teplin, L. A. (1990). The prevalence of severe mental disorder among urban jail detainees: comparison with the epidemiologic catchment area program. *Am J Public Health, 80*, 663-669.

Toch, H. (2007). Prevalence estimates; the numbers game. *Correctional Mental Health Report, 8*, 67-68.

Tyas, S., & Rush, B. (1991). The treatment of disabled persons with alcohol and drug problems: Results of a survey of addiction services. *Journal of Studies on Alcohol, 54*, 275-282.

Tye, C. S., & Mullen, P. E. (2006). Mental disorders in female prisoners. *Australian and New Zealand Journal of Psychiatry, 40*, 266-271.

Van Gennep, A. T. G. (1997). Paradigma-verschuiving in de visie op de zorg voor mensen met een verstandelijke beperking. *Tijdschrift voor Orthopedagogiek, 36*, 189-201.

Van Hove, G., & van Loon, J. (2010). Personen met een verstandelijke beperking. In G. V. H. Broekaert (Ed.), *Handboek Bijzondere Orthopedagogiek* Antwerpen, Amsterdam: Garant.

Vanden Hende, M., Caris, K., & De Block-Bury, L. (2005). Ontgrendeld: Een beschrijvend wetenschappelijk onderzoek naar geïnterneerden met een verstandelijke handicap en hun verblijf in de Vlaamse gevangenissen. Gent.

VanderNagel, J., Kiewik, M., Buitelaar, J., & DeJong, C. (2011). Staff perspectives of substance use and misuse among adults with intellectual disabilities enrolled in Dutch disability services. . *Journal of Policy and Practice in Intellectual Disabilities, 8*, 143-149.

Vanderplasschen, W., Mostien, B., Claeys, P., Raes, V., & Van Bouchaute, J. (2001). *Conceptnota organisatiemodel zorgcircuit middelenmisbruik*. Gent: Orthopedagogische Reeks Gent.

Vandevelde, S., Soyez, V., Vander Beken, T., De Smet, S., Boers, A., & Broekaert, E. (2011). Mentally ill offenders in prison: The Belgian case. *International Journal of Law and Psychiatry, 34*, 71-78.

Verlinden, S., Maes, B., & Goethals, J. (2009). Personen met een verstandelijke beperking onderhevig aan een interneringsmaatregel. Leuven.

Ward, T., & Brown, M. (2004). The Good Lives Model and conceptual issues in offender rehabilitation. *Pcyhology, Crime and Law, 10*, 243-257.

Ward, T., Yates, P. M., & Willis, G. M. (2012). The Good Lives Model and the risk need responsivity model: A critical response to Andrews, Bonta, and Wormith (2011). *Criminal Justice and Behavior, 39*, 94-110.

Wechsler, D. (2004). *WAIS-III, nederlandstalige bewerking*. Lisse: Swets Test Publishers

Wenc, F. (1981). The developmentally disabled substance abuser. *Alcohol Health and Research World*, 42-46.

Westermeyer, J., Kemp, K., & Nugent, S. (1996). Substance disorder among persons with mild retardation. *The American Journal on Addictions, 5*, 23-31.

Westermeyer, J., Phaobtang, T., & Neider, J. (1988). Substance use and abuse among mentally retarded persons: A comparison of patients and a survey population. *American Journal of Drug and Alcohol Abuse, 14*, 109-123.

Wheeler, J. R., Holland, A. J., Bambrick, M., Lindsay, W. R., Carson, D., Steptoe, L., . . . O'Brien, G. (2009). Community services and people with intellectual disabilities who engage in anti-social or offending behaviour: referral rates, characteristics, and care pathways. *The Journal of Forensic Psychiatry & Psychology, 20*, 717-740.

Wilson, A. B., Draine, J., Hadley, T., Metraux, S., & Evans, A. (2011). Examining the impact of mental illness and substance use on recidivism in county jail. *International Journal of Law and Psychiatry, 34*, 264-268.

Wong, S. C. P., Gordon, A., & Deqiang, G. (2007). Assessment and treatment of violence-prone forensic clients: an integrated approach. *The British Journal of Psychiatry, 49*, 66-74.

Young, D. (2003). Co-occurring disorders among jail inmates: Bridging the treatment gap. *Journal of Social Work Practice in Addiction, 3*, 63-85.

Young, L. (2006). Community and cluster centre residential services for adults with intellectual disability: Long-term results from an Australian-matched sample. *Journal of Intellectual Disability Research, 50*.

CHAPTER 2

TREATMENT OF INTERNED MENTALLY ILL OFFENDERS IN A FORENSIC PSYCHIATRIC CENTER (FPC): RESULTS OF A DELPHI STUDY[1]

[1] Based on To, W.T., Vandevelde, S., Soyez, V., De Smet, S., Boers, A., & Vanheule, S. (2014). Treatment perspectives on interned mentally ill offenders in a Forensic Psychiatric Center (FPC): a Delphi study on experts' opinions. *Psychology, Crime & Law, 20*, 61-77

ABSTRACT

The study aims to map the treatment perspectives of international experts on treating mentally ill offenders in a Forensic Psychiatric Center using the Delphi method. The four-round Delphi study reveals high conformity on the proposed treatment-related issues. However, some points of divergence remain. Three controversies underpinning these disagreements are discussed. The first regards the treatment and control debate, the second concerns the dual role of assessment in forensic mental health care and the third describes potential entry conditions for treatment in a Forensic Psychiatric Center. Further research is needed to scientifically underpin the above mentioned debates. In this regard, the study suggests a close collaboration between practitioners and researchers.

2.1. Introduction

Recently, there has been increased interest in the precarious situation of mentally ill offenders (MIOs). A disproportionately high number of people with mental disorders has been reported in prison populations (Andersen, 2004; Black, Arndt, Hale, & Rogerson, 2004; Brugha et al., 2005; Fazel & Danesh, 2002; Fazel & Lubbe, 2005; Markowitz, 2006; Torrey, 1995). International figures vary widely from 2% to 94% (e.g. Assadi et al., 2006; Bland, Newman, & Thompson, 1998; Davidson, Humphreys, Johnstone, & Owens, 1995; Goyal, Singh, Gargi, Goyal, & Grag, 2011; Gunn, Maden, & Swinton, 1991; Naidoo & Mkize, 2012; Teplin, 1990; for review see Andersen, 2004), depending on the research methodology, the definition of mental illness (Toch, 2007), the disorders included, and the setting (Andersen, 2004). Yet, available figures on mentally ill offenders in European prisons is described as 'alarmingly' scarce (Dressing, Kief, & Salize, 2009). Besides the absence of a systematic collection of statistics on mental disorders in most European prisons, there has been an increasing concern regarding the availability and provision of adapted treatment both inside (e.g. Adams & Ferrandino, 2008; Arboleda-Flórez, 2009; Salize, Dressing, & Kief, 2007) and outside prison walls (e.g. Arboleda-Flórez, 2006; Rice & Harris, 1997). These issues have especially grown in importance in Belgium, since the development of a forensic treatment service in this country is still in its infancy (e.g. Boers, Vandevelde, Soyez, De Smet, & To, 2011; Casselman, 2000; Cosyns, Van Peteghem, Raes, & Sabbe, 2006; Naudts et al., 2005). Therefore, the Belgian situation lends itself well for a profound analysis and discussion of the challenges concerning the treatment of mentally ill offenders, which can be relevant for the situation in other countries.

In Belgium, the law provides the possibility to the judge to ask for the internment of mentally ill offenders. Offenders can be interned "if they have committed a delinquent act for which they are 'declared irresponsible' or 'severely diminished responsible' (…) at the moment of the trial as a consequence of either a status of insanity or a serious mental deficiency which makes the person unable to (fully) control his acts" (Vandevelde et al., 2011: 72). This internment procedure is considered a safety measure to protect society. With regard to the offender, internment aims to provide psychiatric treatment. However, this measure has not always been applied properly (Vandevelde et al., 2011), since mentally ill offenders have not always received treatment according to the current standards of psychiatric care (Cosyns, Koeck, & Verellen, 2008). This situation is most pressing in correctional settings, as up to a quarter of Belgian mentally ill offenders reside in prison in which they are often deprived from adequate treatment (De Clerck, 2010; Vandevelde et al., 2011).

In order to adequately address the treatment needs of incarcerated mentally ill offenders, the concept of a continuum of forensic mental health care could offer promising opportunities to treat and care for mentally ill offenders in a continuous and coordinated manner (Cosyns, 2005; De Clerk, 2010; Mental Health Commission, 2011; Vandevelde et al., 2011). Therefore, in 2006, the Belgian Government decided to build two Forensic Psychiatric Center's (FPCs), where interned mentally ill offenders can reside in a secure treatment and care institution (De Clerck, 2010). This can be considered a necessary first step in the development of a continuum of forensic mental health care (Cosyns, 2005).

Despite these first initiatives, the content and organization of the treatment programs in the upcoming FPCs are still unclear. International literature has pointed to different treatment perspectives on several treatment-related issues (e.g. Barlow & Wolfson, 1997; Clearly & Warren, 1998; Menger, 2008; Mezey, Hassell, & Bartlett, 2005; Parhar, Wormith, Derkzen, & Beauregard, 2008). More specifically, in Belgium, the study of Boers et al. (2011) also revealed different opinions on various treatment-related issues. The study inventoried the current practices of 18 Belgian institutions, using interviews and document analysis, concluding that the different treatment perspectives might stem from the heterogeneity of the clients. The study focuses on treatment aspects (e.g. treatment objectives & therapeutic approach), structural-organizational aspects (e.g. staff, continuum of forensic mental health care & inclusion and exclusion criteria) and setting-specific aspects. These divergences have raised the question as to what experts think about good treatment of mentally ill offenders and how they integrate these ideas in a consistent treatment framework. Therefore, this study aims to map the perspectives of (inter)national experts on these treatment-related issues using the Delphi method. Starting from these data we more generally elaborate on the challenges with regard to the treatment of mentally ill offenders.

2.2. Method

Experts' opinions on treating mentally ill offenders in a FPC were gathered by means of the Delphi method. This method is a structured research process that utilizes a series of questionnaire rounds to achieve consensus of opinion (Keeney, Hasson, & McKenna, 2001) about a complex problem (Brown, 1968) or to make decisions when there is insufficient or contradictory information (Hasson, Keeney, & McKenna, 2000; Jones & Hunter, 1995). It was applied in this study because of the specific features in light of our research question: (1) it enabled us to guide various opinions towards a final decision (McKenna, 1994; Helmer, 1983, Linestone & Turoff, 1975 and Dalkey, 1972, cited in Yousuf, 2007); (2) it allowed for the anonymous inclusion of experts across several locations and expertises (Jairath &

Weinstein, 1994); (3) it avoided the (in)advertent dominance of a specific expert on the consensus process (Jairath & Weinstein, 1994; Keeney et al., 2001, 2006; Sumsion, 1998); (4) it allowed for the efficient and rapid collection of expert opinions in an inexpensive and practical way (McKenna, 1994; Sumsion, 1998); (5) the participants had time to consider their responses, which might not be possible in the context of face-to-face meetings (Sumsion, 1998; Yousuf, 2007); and (6) it attempted to address the 'what could/should be'-issues, whereas common surveys rather try to identify the 'what is'- answers (Miller, 2006 cited in Hsu & Sandford, 2007).

2.2.1. Delphi panel

Both Belgian and internationally recognized experts with elaborate knowledge on the treatment of mentally ill offenders were included in the Delphi panel. They were carefully selected by reviewing recent (inter)national peer reviewed literature, international lectures on the treatment of mentally ill offenders and through consultation of a steering committee of the research project (which consisted of 18 Belgian forensic mental health professionals from the academic field as well as the mental health practice and from a wide range of disciplines, e.g. legal, nursing, psychiatric,…). The experts were selected based on their treatment experience with mentally ill offenders. For international experts, treatment experience was defined as experience in treating mentally ill offenders in institutions similar to the future Belgian FPC. For Belgian experts, on the other hand, treatment experience was defined as experience in treating mentally ill offenders who are likely to be admitted to the future FPC.

In total, 39 experts were identified and contacted. They were informed on the Belgian situation of mentally ill offenders and the study's aim and procedure. Twenty of the 39 experts agreed to participate in the initial qualitative round of the Delphi study and were asked to sign an informed consent form. Eventually, only 10 of the 20 respondents contributed in this first round. One non-respondent explicitly reported no longer wanting to join in the Delphi study, due to time constraints. Information on other non-respondents was not obtained. Given the exploratory character of this first round, the total sample of initial participants (20 - 1=19) was re-invited to participate in the remainder of the Delphi process. For the successive rounds, only 'round 2'-participants were invited, thus maintaining a stable Delphi panel of 14 experts with experience in treating mentally ill offenders. Although no clear rules exist on the minimum or maximum number of experts in a Delphi panel (Keeney et al., 2006), a group size of at least 13 experts was aimed at, since Dalkey et al. (1972, cited in Ludwig, 1997) found a high reliability of group responses for such a sample size. In

our Delphi panel, 9 of 14 experts had additional research experience regarding the topic under study and 9 of the 14 experts had both policy experience and experience in treating mentally ill offenders. The Delphi panel comprised five women and nine men. The panel included seven international experts (Finland, Germany, United Kingdom, Denmark, Norway and 2 experts from the Netherlands). The others were Belgian. The majority (10 out of 14) of the experts were psychiatrists. The response rate was 73.7% in round 2, 92.9% in round 3 and 71.4 % in the last round of the Delphi process. This implies that the response rate of 70% recommended by Sumsion (1998) was achieved.
The importance of completing all rounds of the Delphi study was emphasized in the onset of the procedure, and repeated in the personally addressed reminder e-mails that were sent to non-responders in order to minimize attrition.

2.2.2. Delphi process

The Delphi process consisted of four rounds, which were conducted in English, using LimeSurvey (i.e. an online application to conduct surveys, http://www.limesurvey.org/) and e-mail correspondence. Results of each round were analyzed and fed back to the experts in a report containing the overall group results (defined as the median, the associated interquartile range and a bar chart with the distribution of the absolute numbers of responses) and the experts' own response for each statement. The experts were then asked to reexamine their own opinions in light of the overall group results.

The first qualitative round of the Delphi process comprised 9 open-ended questions designed to elicit as many ideas as possible on the potential content and organization of treatment in an FPC in Belgium. This first Delphi round resulted in a list of 49 statements and two additional questions, which were fed back to the participants through a structured questionnaire.

In the second round of the Delphi process, the expert panel rated the 49 statements using a 6-point scale ranging from 'strongly agree' (1) to 'strongly disagree' (6) and filled out two additional questions when applicable (depending on the score on the preceding statement). The data were analyzed using SPSS and were treated as ordinal data, reporting medians and interquartile ranges (IQR). The numerical definition of group consensus was based on the consensus rule applied in the study of Green (1982, cited in Hsu & Sandford, 2007). Statements that were rated 4 or higher on the 6-point scale by at least 80% of the participants and that had a median of 5 or 6 were judged to have reached group consensus in a negative way, indicating general disagreement with the statement. Statements that were

rated 2 or lower on the 6-point scale by at least 80% of the participants and that had a median of 1 or 2 were judged to have met group consensus in a positive way, indicating an overall agreement with the statement.

In the third round of the Delphi process, the experts were asked to re-rate the statements for which no group consensus was reached. Furthermore, they were asked to elucidate their own scores. Along with the numerical results of this third round, the reasons for agreement and disagreement were anonymously summarized in a feedback report (cf. Michelbrink, 2006).

In the fourth and final round of the Delphi process, the experts were –once more- asked to re-rate the statements for which no group consensus was reached. In this round counter-arguments or critiques against the arguments formulated in the third round were additionally asked, following the Delphi procedure of Brown (1968). The search for arguments in the third round, as well as the subsequent feedback of the other experts in the fourth round, served as a stimulant for experts to identify considerations they might have neglected through inadvertence. Additionally, this methodology allows participants to give weight to factors they were initially inclined to dismiss as unimportant (Brown, 1968; Hasson et al., 2000).

2.3. Results

2.3.1. Consensus items

Group consensus was reached for 80% of all statements (i.e. 39 of 49 statements) (See Appendix). After round 2 consensus was found for 30 of 49 statements. After round 3, consensus was reached for four additional statements, and after round 4 for another four statement. For an overview of all consensus statements we refer to the appendix. The statements where consensus was not reached are presented in Table 1.

In the following sections, the results are classified under eight themes: (1) treatment objectives, (2) classification subgroups, (3) diagnosis and assessment, (4) treatment, (5) therapeutic approach, (6) evidence-based practice, (7) staff and (8) transmural collaboration (i.e. collaboration of the FPC with external community based services). Rationales for agreeing or disagreeing with the statements, given by different experts, are also presented.

Table 1. Overview of statements where consensus was not reached in the study.

1.	The treatment objectives of a forensic psychiatric center that you have scored 4, 5, or 6 are equally important (statement 6)
2.	Some types of psychiatric disorders cannot be treated within the same ward of a forensic psychiatric center (statement 7)
3.	It would be better to classify the mentally ill offenders in a forensic psychiatric center based on their support needs instead of their psychiatric disorder (statement 8)
4.	In a forensic psychiatric center female mentally ill offenders are spatially separated from the male mentally ill offenders (statement 9)
5.	Diagnosis and assessment should preferably be undertaken in the forensic psychiatric center (statement 11)
6.	The crime analysis is the criterion on which treatment options in a forensic psychiatric center are based (statement 23)
7.	A minimal motivation of the mentally ill offender to change is essential to achieve an effective treatment in a forensic psychiatric center (statement 25)
8.	For successful outcomes in a forensic psychiatric center inclusion and exclusion criteria can be imposed (i.e. the forensic psychiatric center can refuse the treatment of certain mentally ill offenders) (statement 26)
9.	A forensic psychiatric center has primarily the character of a care and support institution with a correctional nature (statement 28)
10.	A forensic psychiatric center has primarily the character of a correctional facility with a caring and supporting nature (statement 29)

2.3.2. Treatment objectives

Overall, the panel of experts agreed on the necessity of the following objectives for treating mentally ill offenders in an FPC: 1. relapse prevention, 2. treatment of the psychiatric disorder, 3. improving quality of life, 4. promoting reintegration into society, and 5. activating and motivating mentally ill offenders as a preliminary treatment (statements 1–5, see appendix for the full statements). However, no consensus could be found regarding the equivalence of the treatment objectives (statement 6). Some experts argued that the treatment objective of treating mentally ill offenders in an FPC should be ‘multi-factorial’, i.e. consisting of different factors or sub-objectives that are related to each other. By contrast, seven other experts stated that these treatment objectives are equally important. However, these treatment objectives do not necessarily have the same importance in every step of the treatment program. Five of the seven respondents who believed in a hierarchy of treatment

objectives, pointed to relapse prevention as the most important treatment objective when ranking these objectives according to importance.

2.3.3. Classification subgroups

Generally, participants disagreed with the statement that older mentally ill offenders (age 50+) should be spatially separated from the other mentally ill offenders (statement 10). The experts argued that although older and younger mentally ill offenders have different treatment needs, it is not necessary to separate them. Conversely, no conformity was reached for the other statements regarding the classification of subgroups within an FPC. Even though eight out of ten experts believed that mentally ill offenders with some types of psychiatric disorders could not be treated within the same ward of an FPC (statement 7), no consensus was reached according to the consensus rule. Experts particularly pointed to (aggressive) mentally ill offenders diagnosed with an anti-social personality disorder and sexual offenders to be segregated from other mentally ill offenders, due to their specific treatment needs. However, other suggested separating subgroups within a specific time frame: 'some types of psychiatric disorders cannot be treated within the same ward of an FPC at the beginning, but can be treated together at the end of the treatment'. Furthermore, no consensus could be reached whether it would be better to classify mentally ill offenders according to their support needs rather than to their psychiatric diagnosis (statement 8), even though only one out of ten experts disagreed with this statement. The majority of participants believed that it would be better to classify according to support needs. They argued that DSM-based psychiatric diagnoses cannot grasp the heterogeneity and complexity of offenders' problems. As such, mentally ill offenders should be approached in a tailor-made way, starting from their personal problems: 'treat individuals more than disorders' and 'think of people as "people" and not prescriptive disorders'. Finally, no agreement was found for the last statement regarding the spatial separation of males and females (statement 9). Three out of ten experts suggested a mixed division, arguing that a society representative setting should be strived for. Yet, the majority of experts would separate men from women in an FPC, mainly because of security reasons and differences in treatment needs. Nevertheless, some nuances were formulated. For example, one expert stated that female mentally ill offenders should be separated from male mentally ill offenders as regards their personal room and restrooms, while living spaces should be mixed. Another suggestion consists of separating men and women in the beginning of the treatment, and subsequently changing towards a mixed ward: 'separate wards are needed in the beginning, where the focus is on the treatment of the psychiatric disorder' and '…at an open rehabilitation stage, then accommodations may be successfully made to house both males and females.

However for the most part, when the focus is on providing containment, assessment and treatment, this is best done when they are spatially separated.'

2.3.4. Diagnosis and assessment

Experts agreed that diagnosis and assessment in an FPC should follow a standardized procedure (statement 13) and that assessment always serves a dual goal: risk assessment and assessment of treatment needs (statement 15). They also agreed that assessment should be organized before or at the beginning of a treatment episode and thereafter at regular intervals throughout the treatment process (statement 16). Diagnosis and assessment should preferably be undertaken at a central admission ward of an FPC where newly enrolled mentally ill offenders can reside temporarily (statement 12). However, no consensus was found for the statement that diagnosis and assessment should preferably be undertaken in the FPC (statement 11). The experts argued that diagnosis and assessment within an FPC is advantageous, as clinicians with the broadest expertise in diagnosis and assessment in the forensic setting will be present in such FPCs. Two Belgian experts also pointed to the problem of 'incorrect, incomplete or conflicting diagnoses' of prior expertise reports and the 'big difference in quality of the reports of psychiatric experts'. Finally, the participants agreed on the statement that the allocation of mentally ill offenders in an FPC to the most appropriate treatment unit is only possible after assessment based on a comprehensive battery of screening and assessment instruments (statement 14).

2.3.5. Treatment

No consensus could be reached regarding the character (treatment or care versus correctional character) of an FPC (statements 28–29). However, most participants preferred an FPC having primarily the character of a treatment, care or support institution, without neglecting correctional aspects. Disagreement remained on whether an FPC should impose inclusion and exclusion criteria (statement 26). An argument for imposing inclusion and exclusion criteria was specialization, which contributes to improved treatment outcomes according to some experts. Conversely, other experts believed no inclusion and exclusion criteria should be imposed, as in many cases no alternatives are available for the high-risk population entering such a setting (FPCs could be considered as 'the last resorts'). Furthermore, the debate on whether mentally ill offenders should show a minimal level of motivation to change in order to achieve treatment gains did not result in a consensus (statement 25). Some experts believed that minimal motivation is needed in order to obtain sustainable treatment results, while others stated that initial motivation is often absent in this

population. According to these participants the motivation to reside outside the prison walls can be sufficient to initiate motivation to change, presuming that good treatment is provided. In general, the experts emphasized the importance of motivating mentally ill offenders as a fundamental component in the treatment of mentally ill offenders. Finally, consensus was not found on whether crime analysis is a criterion on which treatment in an FPC should be based (statement 23). Seven out of ten experts believed that crime analysis is the basis for treating mentally ill offenders in an FPC, stating that the specialty of forensic psychiatry lies in preventing crime. The remaining three experts acknowledged that crime analysis is important, but not as crucial as psychiatric treatment, care and support.

2.3.6. Therapeutic approach

In general, the experts largely agreed on the statements regarding the therapeutic approaches to be used within an FPC (statements 34–36). They suggested that techniques belonging to different therapeutic approaches, such as a psychodynamic approach, behavioral and cognitive approach, relational approach, humanistic approach, should be used (statement 34) and that the effective interventions from the different therapeutic approaches (statement 35) should be integrated. Furthermore, the experts stated that the FPC treatment teams should start from a shared vision on treatment (statement 36).

2.3.7. Evidence-based practice

Group consensus was attained for all statements concerning evidence-based practice. All experts strongly agreed with the statement that in an FPC continuing education is desirable to ensure that current best evidence is underpinning interventions (statement 39). Furthermore, they believed that an FPC should work closely with researchers to continuously evaluate the treatments offered in the FPC (statement 37). Moreover, they suggested that an FPC should preferably have a scientific forensic research center unit that develops evidence-based methods and counsels in the development of the forensic mental health care (statement 38). Ideally, scientific research should support clinical practice.

2.3.8. Staff

The participants agreed on all statements concerning staff issues. There was consensus on the fact that practitioners in an FPC should work within multidisciplinary teams (statement 40), where a certain hierarchy within the team is present (statement 42), and where the responsibility of each member is clearly established (statement 41). Furthermore, there was

agreement that staff has a significant impact on the effectiveness of treatment (statement 47) and that staff members should possess specific skills and attitudes, gained through specific training to work in a forensic psychiatric setting (statement 43). The panel of experts also agreed that there should not be a clear distinction between the staff responsible for the treatment of the mentally ill offenders and the staff responsible for the safety of the FPC (statement 44). They argued that safety is an important part of treatment and indicated that a security team that monitors the FPC could be deployed. Finally, the experts agreed that providing support and feedback to staff should be structurally built into the FPC (statement 46) and that a work climate where practitioners can ask advice, can express doubts and can admit assessment errors should be considered as a sign of effective professionalism (statement 45).

2.3.9. Transmural collaboration

Regarding the two statements considering transmural care (i.e. cooperation with other institutions; statements 48 and 49), consensus was reached: all experts agreed that intensive aftercare of mentally ill offenders requires close collaboration with external community based services. Generally, it was stated that an FPC only provides added value when it connects to a continuum of forensic mental health services.

2.4. Discussion

2.4.1. Main findings

High conformity in the expert panel emerged as an important finding in this study, as agreement was found for 80% of all proposed statements. The experts agreed that the proposed treatment objectives (relapse prevention, treatment of psychiatric disorder, reintegration into society, improvement of quality of life, activation and motivation) were important and shared opinions regarding diagnosis, assessment and treatment of mentally ill offenders. Concerning the therapeutic approaches to be implemented within an institution, experts made a plea for an integrative therapeutic approach, in which ideas from different therapeutic schools are combined. Further, prominent agreement was also found for perspectives regarding staffing, evidence-based practice and transmural collaboration.
Disagreement was mainly found with respect to the equivalence of treatment objectives, for the perspectives regarding the classification of mentally ill offenders in subgroups (classification based on support needs versus psychiatric disorder, classification based on

gender and classification of some types of psychiatric disorders) and for some statements regarding treatment (motivation of mentally ill offenders, crime analysis as the basis for treatment, inclusion and exclusion criteria in the FPC and the character of the FPC). In our understanding, the underlying controversies underpinning these disagreements can be summarized as (1) the balance between treatment and control, (2) the dual role of assessment and (3) the aspects with regard to potential treatment conditions. These underlying controversies are widely acknowledged in international literature (e.g. Adams & Ferrandino, 2008; Adshead & Sarkar, 2005; Fitzpatrick et al., 2010; Steadman, Morrissey, & Robbins, 1985; Weinberger & Sreenivasan, 1994) and will be discussed in relation to the Delphi results.

An important aspect relating to the first controversy (treatment and control balance) is the conflict between different treatment goals: patient versus public welfare (Adshead & Sarkar, 2005; Steadman et al., 1985). The Delphi experts are in favor of a multi-factorial goal when treating mentally ill offenders. However, there is no consensus whether these treatment objectives are equally important. The balance between treatment and control is delicate in forensic psychiatry as acknowledged by many authors (e.g. Adams & Ferrandino, 2008; Adshead & Sakar, 2005; Fitzpatrick et al., 2010): "*the treatment-custody conflict was recognized early on by Clemmer (1940), and since that time it has become clear that there is no simple and easy solution for the conflict*" (Adams & Ferrandino, 2008: 917). This conflict also has an influence on the character of a forensic institution. Opinions of our Delphi panel concerning the character of future FPCs (treatment or care versus correctional character) remain divided. This is remarkable, since several studies stress the importance of the character and design of a ward environment (Dix & Williams, 1996; Karlin & Zeiss; 2006; Watson, 1998), as the design can provide an important and effective tool in the pursuit of a humane, efficient containment and a reduction of severe pathology (Gross, Sasson, Zarhy, & Zohar, 1998). Therefore, we believe that developing a shared vision on the character of the institution and the treatment objective(s) are of utmost importance when developing a treatment program. In this respect, extensive discussion regarding the broader treatment and control debate is essential.

The second controversy concerns the dual role of assessment in forensic mental health care. According to Adams and Ferrandino (2008: 915) assessment serves two purposes: (1) to identify inmates who are likely to be a danger to themselves or others and (2) to identify mental health problems or potential mental health problems and evaluate their need for treatment. This controversy is reflected in the more general aforementioned debate on treatment and control (Vandevelde et al., 2011). Here too, it is important to have a good

vision on the purpose of assessment as it resonates a different approach in forensic mental health. When risk management is the main focus, reflecting a risk centered approach to assessment and treatment such as the Risk-Need Responsivity (RNR) model of Andrews and Bonta (1994, 2010), disagreement nonetheless remains in the Delphi panel whether crime analysis should be the basis for the treatment in an FPC. Although crime analysis is seen as an important basis for treating mentally ill offenders, some experts stress the complexity of problems. This is in line with the findings of Ax and colleagues (2007) who argue that a multidimensional approach, which addresses several problems at once is especially beneficial and gives rise to a more individualized and holistic approach. Such holistic perspective is also supported by the strength based approach, like the Good Lives Model (GLM) (Ward, 2003; Ward & Steward, 2003), which emerged as an alternative approach for the RNR model. This model goes beyond the risk centered approach and views criminogenic needs (or dynamic risk factors) as internal or external obstacles to the acquisition of primary goods, while focusing on the individuals' strength (cf. review rehabilitation frameworks in forensic mental health, Robertson, Barnao & Ward, 2011). When risk management is not the main focus of assessment, another discussion occurs about whether assessment should focus on the psychiatric disorder or the degree of support need. The Delphi experts stress the importance of not solely focusing on the psychiatric diagnosis when treating mentally ill offenders, as it is relevant to approach forensic clients from their individual support needs. However, there is no consensus on whether it is better to classify mentally ill offenders based on their support needs rather than their psychiatric disorder. As a consequence, it remains unclear which features should be assessed in order to provide appropriate treatment services. Clearly, more research and discussion is needed to clarify this, as Vandevelde et al. (2011) state that assessment with no treatment purposes could be considered a 'waste of time' and even unethical. We believe that at the level of specific treatment facilities, clear choices should be made, and these choices should be monitored over time.

The third controversy regards the potential treatment conditions. Although the Delphi experts believe that 'untreatable' or 'therapy-resistant' mentally ill offenders exist, often referring to psychopaths and sexual offenders, further research is needed to study this population more in depth (e.g. existence of 'untreatable' MIO, definition of 'untreatable' MIO, prevalence of 'untreatable' mentally ill offenders). The experts state that even though some mentally ill offenders cannot be 'cured', they can receive care and their quality of life can be improved. The question arises whether an FPC is the last resort for those mentally ill offenders, since there is no consensus within the Delphi panel whether inclusion or exclusion criteria can be imposed in such FPC. In other words, should the FPC be the last resort for 'untreatable'

mentally ill offenders or should it be considered as a treatment step in the continuum of forensic mental health care? The latter offers a less pessimistic view on 'treatability', which is in line with the conclusions of several review studies on the treatability of psychopathy (D'Silva, Duggan, & McCarthy, 2004; Salekin, Worley, & Grimes, 2010). Indeed, *"the validity of the untreatability assumption remains unanswered"* (Felthous, 2011: 404) which is also supported by the robust literature on favorable response of sexual paraphilias to treatment in offenders (e.g. Abracen & Looman, 2001; Lösel & Schmucker, 2005; Rösler & Witztum, 2000; Wood, Grossman, & Fitchtner, 2000). In any case, strategies should be developed to prevent the clogging of the FPCs by potential 'untreatable' patients. In this regard, a close and structural collaboration with aftercare and long-stay institutions is crucial for whom a 'cure' is unrealistic (Blackburn, 2004). Furthermore, permanent registration of mentally ill offenders in the continuum of forensic mental health care, with the aim of mapping the flow of mentally ill offenders and preventing the clogging in any link of the continuum, is needed (Cosyns, D'Hondt, Janssen, Maes, & Verellen, 2007). This is necessary to identify difficulties in the transition process between different forensic mental health care services, like from high to medium secure services (Grounds et al., 2004; Higgo & Shetty, 1991; Tetley, Evershed, & Krishnan, 2010). With regard to further research, we believe that 'untreatability' should be examined empirically as well as clinically: using a case study or twin approach (e.g. Müller-Isberner, 2011), for example, it can be explored at which level and in relation to which kind of interventions treatments are unsuccessful for certain offenders. Another debate within this controversy is whether a minimal motivation of the mentally ill offenders to change is necessary to achieve an effective treatment. According to Parhar et al. (2008), complete ignorance of the offenders' motivation for treatment may equate to coercion into treatment, which may not lead to the best treatment outcomes, particularly when treatment is located in custodial settings. In this respect, the issue emerges whether to view an individuals' motivation for treatment as a selection criterion, i.e. treat only those individuals that are motivated, or a treatment need, i.e. an attempt to instill a desire for treatment in individuals who are unmotivated (McMurran, 2002, cited in McMurran and Ward, 2010). Overall, the Delphi experts consider enhancing motivation both an important treatment objective as well as a substantial part of treatment. Therefore, treatment interventions to motivate mentally ill offenders can be relevant. However, additional research on how and why these interventions, such as motivational interviewing, works is necessary (Miller & Rollnick, 2001, 2008).

Further research to clarify the abovementioned controversies is definitely needed, carried out in close collaboration between practitioners and researchers. Due to the complex nature of forensic psychiatric treatment, a structural embedment of research programs and/or

departments in treatment facilities or well-developed partnerships between research institutions and treatment services could be an interesting and relevant pathway.

2.4.2. Limitations of the study

Despite specific attention, the response rate in the final rounds of the Delphi study was rather low, though in line with what is commonly observed in Delphi studies (McKenna, 1994). Furthermore, the results might be dominated by the view of psychiatrists, since 10 of 14 experts were psychiatrists. This might have limited a wide range of expertise across other forensic mental health professionals. Another limitation was the stringency of our applied consensus rule, possibly causing an artificial disagreement. When, for example, only a percentage-rule of 70% is used, it would have resulted in 96% consensus (i.e. 47 out of 49 statements) instead of 80%. We can further speculate whether the divergence of the 10 statements in the last Delphi round (round 4) can be solved by introducing a subsequent fifth round. The intention to elaborate a fifth Delphi round, where respondents would have a last chance to re-rate the statements, taking the information of the previous round into account (i.e. the counter-arguments and critique against the arguments given in the previous) was not performed due to the reductions in response rate in our study. Starkweather, Gelwicks and Newcomer (1975) argue that the number of rounds could be decreased in order to minimize reductions in the amount of new information and the reductions in response rates resulting from respondent fatigue. Moreover, it is stated that after three rounds questionnaires stability and consensus should have been reached (Walker & Selfe, 1996, cited in Keeney et al. 2001, 2006). Thus, the ‘law of diminishing returns’ will eventually have occurred (Keeney et al., 2006). Disagreement could also be the consequence of unclear statements. Although the formulation of each statement was carefully evaluated by the research team and 2 independent colleagues, some terms in the statements could have remained ambiguous, such as ‘crime analyses’ in statement 23. This term might be interpreted in various ways, causing misunderstandings and consequently disagreement. Furthermore, the results can be influenced by the language used in the study, as the researchers and the majority of the Delphi panel (13 of 14 experts) are not native English speakers. Lastly, we have to be aware that the existence of a consensus does not mean that the ‘correct’ answer has been found (Jones & Hunter, 1995; Keeney et al., 2001).

2.4.3. Conclusion and future research

In this Delphi study the treatment perspectives of international experts on treating mentally ill offenders were mapped. We especially focused on the points of divergence and described

three underlying controversies underpinning these disagreements. The first controversy regards the treatment and control debate. This underlying controversy shines through in several topics in the Delphi study (e.g. the equivalence of treatment objective and the character of the FPC). An extensive discussion regarding this issue is needed, since most ethical dilemmas in this field are the result of the unavoidable conflict between control and treatment. With this controversy in mind, choices have to be made driven by scientific research. The second controversy concerns the dual role of assessment in forensic psychiatry and is reflected in the aforementioned more general debate on treatment and control. Therefore, a clear vision on what to assess in order to provide appropriate treatment services is crucial. The third controversy describes the potential entry conditions for treatment. Research is needed to study the population of 'untreatable' mentally ill offenders and the possible inclusion and exclusion criteria that can be imposed in treatment settings, for example a minimal motivation for treatment.

In order to scientifically underpin the debate on the abovementioned controversies, further research is definitely needed. Due to its complex nature, a close collaboration between practitioners and researchers is essential, which could possibly be strived for by means of structurally integrating research in forensic psychiatric treatment programs and facilities, such as Forensic Psychiatric Centers.

References

Abracen, J., & Looman, J. (2004). Issues in the treatment of sexual offenders: Recent developments and directions for further research. *Aggression and Violent Behavior, 9*, 229-246.

Adams, K., & Ferrandino, J. (2008). Managing mentally ill inmates in prison. *Criminal Justice and Behavior,35*, 913-927.

Adshead, G., & Sarkar, S. P. (2005). Justice and welfare: two ethical paradigms in forensic psychiatry. *Australian and New Zealand Journal of Psychiatry, 39*, 1011-1017.

Andersen, H. S. (2004). Mental Health in prison populations. A review – with special emphasis on a study of Danish prisoners on remand. *Acta Psychiatrica Scandinavica,110*, 5-59.

Andrews, D. A., & Bonta, J. (1994). *The psychology of criminal conduct*. Cincinnati: Anderson Press.

Andrews, D. A., & Bonta, J. (2010). Rehabilitating criminal justice policy and practice. Psychology. *Public Policy, and Law, 16*, 39-55.

Arboleda-Flórez, J. (2006). Forensic Psychiatry: contemporary scope, challenges and controversies. *World Psychiatry, 5,* 87-91.

Arboleda-Flórez, J. (2009). Mental patients in prisons. *World Psychiatry,8,* 187-189.

Assadi, S. M., Noroozian, M., Parkravannejad, M., Yahyazadeh, O., Aghayan, S., & Shariat, S. V. (2006). Psychiatric morbidity among sentenced prisoners: prevalence study in Iran. *British Journal of Psychiatry, 188,* 159-164.

Ax, R. K., Fagan, T. J., Magaletta, P. R., Morgan, R. D., Nussbaum, D., & White, T. W. (2007). Innovations in correctional assessment and treatment. *Criminal Justice and Behavior, 34*, 893-905.

Barlow, F., & Wolfson, P. (1997). Safety and security: a survey of female psychiatric inpatients. *Psychiatric Bulletin, 21,* 270-272.

Boers, A., Vandevelde, S., Soyez, V., De Smet, S., & To, W. T. (2011). Het zorgaanbod voor geïnterneerden in België. *Panopticon, 2,*17-38.

Black, D. W., Arndt, S., Hale, N., & Rogerson, R. (2004). Use of the Mini International Neuropsychiatric Interview (MINI) as a screening tool in prisons: Results of a preliminary study. *The Journal of American Academy of Psychiatry and the Law, 32,* 158-162.

Blackburn, R. (2004). “What works” with mentally disordered offenders. *Psychology, Crime & Law, 10*, 297-308.

Bland, R. C., Newman, S. C., & Thompson, A. H. (1998). *Psychiatric Disorders in the population an in prisoners, 21*, 273-279.

Brown, B. B. (1968). *Delphi process: A methodology used for the elicitation of opinions of experts*. Rand document nr. P-3925. Santa Monica: The Rand Corporation.

Brugha, T., Singleton, N., Meltzer, H., Bebbington, P., Farrell, M., Jenkins, R., et al. (2005). Psychosis in the community and in the prisons: A report from the British National Survey of Psychiatric Morbidity. *The American Journal of Psychiatry, 162,* 774-780.

Casselman, J. (2000). Forensisch Psychiatrische Eenheden: Nu of nooit! *Tijdschrift Klinische Psychologie, 30,* 148-152.

Clearly, M., & Warren, R. (1998). An exploratory investigation into women's experiences in a mixed sex psychiatry admission unit. *Australian and New Zealand Journal of Mental Health Nursing, 7,* 33-40.

Cosyns, P. (2005).Werkgroep Forensisch Psychiatrisch Zorgcircuit. Syntheseverslag mei 2005. Unpublished report.

Cosyns, P., D'Hondt, C., Janssen, D., Maes, E., & Verellen, R. (2007). Geïnterneerden in België: De cijfers. *Panopticon, 28,* 46-61.

Cosyns, P., Koeck, S., & Verellen, R. (2008). De justitiabele met een psychische stoornis in Vlaanderen. *Tijdschrift voor Psychiatrie,50*, 63-68.

Cosyns, P., Van Peteghem, P., Raes, M., & Sabbe, B. G. C. (2006). De forensische psychiatrie in Vlaanderen op een keerpunt? *Tijdschrift voor Psychiatrie, 48,* 511-513.

Davidson, M., Humphreys, M. S., Johnstone, E. C., Owens, D. G. C. (1995). Prevalence of psychiatric morbidity among remand prisoners in Scotland. The British Journal of Psychiatry, 167, 545-548.

De Clerck, S. (2010). Straf- en strafuitvoeringsbeleid. Overzicht & ontwikkeling. Brussels.

Dix, R., & Williams, K. (1996). Psychiatric intensive care units, a design for living. *Psychiatric Bulletin, 20*, 527-529.

Dressing, H., Kief, C., & Salize, H. J. (2009). Prisoners with mental disorders in Europe. *The British Journal of Psychiatry, 194*, 88-90.

D'Silva, K., Duggan, C., & McCarthy, L. (2004). Does treatment really make psychopaths worse? A review of the evidence. *Journal of Personality Disorders, 18*, 163-177.

Fazel, S., & Danesh, J. (2002). Serious mental disorders in 230000 prisoners: A systematic review of 62 surveys. *Lancet, 359,* 545-554.

Fazel, S., & Lubbe, S. (2005). Prevalence and characteristics of mental disorders in jails and prisons. *Current Opinion in Psychiatry, 18,* 550-554.

Felthous, A. R. (2011). The "untreatability" of psychopathy and hospital commitment in the USA. *International Journal of Law and Psychiatry, 34*, 400-405.

Fitzpatrick, R., Chambers, J., Burns, T., Doll, H., Fazel, S., Jenkinson, C.,et al. (2010). A systematic review of outcome measures used in the mental health research with consensus panel opinion*. Health Technology Assessment, 14,* 1-94.

Goyal, S. K., Singh, P., Gargi, P. D., Goyal, S., & Grag, A. (2011). Psychiatric morbidity in prisoners. *Indian J Psychiatry, 53*, 253-257.

Gross, R., Sasson, Y., Zarhy, M., & Zohar, J. (1998). Healing Environment in Psychiatric Hospital Design. *General Hospital Psychiatry, 20*, 108-114.

Grounds, A., Gelsthorpe, L., Howes, M., Melzer, D., Tom, B. D. M., Burgha, T. et al. (2004). Access to medium secure psychiatric care in England and Wales. 2: A qualitative study of admission decision-making. *The Journal of Forensic Psychiatry and Psychology, 15*, 32-49.

Gun, J., Maden, A., & Swinton, M. (1991). Treatment needs of prisoners with psychiatric disorders. *BMJ, 303*, 338-341.

Hasson, F., Keeney, S., & McKenna, H. (2000). Research Guidelines for the Delphi survey technique. *Journal of Advanced Nursing, 32*, 1008-1015.

Higgo, R., & Shetty, G. (1991). Four years' experience of regional secure unit. *Journal of Forensic Psychiatry, 2*, 203-210.

Hsu, C. C., & Sandford, B. A. (2007). The Delphi Technique: Making sense of consensus. *Practical Assessment, Research & Evaluation, 12*, 1-8.

Jairath, N., & Weinstein, J. (1994). The Delphi methodology (Part one): a useful administrative approach. *Canadian Journal of Nursing Administration, 7*, 29-40.

Jones, J., & Hunter, D. (1995). Consensus methods for medical and health services research. *BMJ, 311,* 376-380.

Karlin, B. E., & Zeiss, R. A. (2006). Environmental and Therapeutic Issues in Psychiatric Hospital Design: Toward Best Practices. *Psychiatric Services, 57*, 1376-1378.

Keeney, S., Hasson, F., & McKenna, H. (2001). A critical review of the Delphi technique as a research methodology for nursing. *International Journal of Nursing Studies, 38,* 95-200.

Keeney, S., Hasson, F., & McKenna, H. (2006). Consulting the oracle: ten lessons from using the Delphi technique in nursing research. *Journal of Advanced Nursing, 53*, 205-212.

Lösel, F., & Schmucker, M. (2005). The effectiveness of treatment for sexual offenders: A comprehensive meta-analysis. *Journal of Experimental Criminology, 1*, 117-146.

Ludwig, B. (1997). Predicting the future: Have you considered using a Delphi methodology? *Journal of Extention, 35*, 1-4.

Markowitz, F. E. (2006). Psychiatric hospital capacity, homelessness, and crime and arrest Rates. *Criminology, 44,* 45-72.

McKenna, H. P. (1994). The Delphi technique: a worthwhile research approach for nursing? *Journal of Advanced Nursing, 19,* 221-1225.

McMurran, M., & Ward, T. (2010). Treatment readiness, treatment engagement and

behaviour change. *Criminal Behaviour and Mental Health, 20,* 75-85.

Menger, A. (2008). professioneel werken in gedwongen kader*. Justitiële Verkenningen, 34,* 42-56.

Mental Health Commission (2011). Forensic mental health services for adults in Ireland. Retrieved 18 June 2012, from http://www.mhcirl.ie/Publications /Forensic_Mental_Health_Services_for_Adults_in_Ireland_Position_Paper_Feb_2011.pdf

Mezey, G., Hassell, Y., & Bartlett, A. (2005). Safety of women in mixed-sex and single-sex medium secure units: staff and patient perceptions. *British Journal of Psychiatry, 187,* 579-582.

Michelbrink, F. (2006). *Praktijkgericht onderzoek in zorg en welzijn*. Amsterdam: SWP.

Miller, W. R., & Rollnick, S. (1991). *Motivational Interviewing: preparing people to change addictive behaviour*. New York: Guilford.

Miller, W. R., & Rollnick, S. (2008). *Motiverende gespreksvoering: een methode om mensen voor te bereiden op verandering*. S.I.: Ekklesia.

Müller-Isberner, R. (2011, November). *Untreatable? There might be exceptions!* Paper presented at the Conference on the Treatment of Psychopathy, Bergen, Norway.

Naidoo, S., & Mkize, D. L. (2012). Prevalence of mental disorders in a prison population in Durban, South Africa. *Afr J Psychiatry, 15*, 30-35.

Naudts, K. H., Cosyns, P., MCinerny, T., Audenaert, K., Van Den Eynde, F., & Van Heeringen, C. (2005). Editorial: Belgium and its internees: a problem for human rights and a stimulus for service change. *Criminal Behavior an Mental Health, 15*, 148-153.

Parhar, K. K., Wormith, S., Derkzen, D. M., & Beauregard, D. M. (2008). Offender coercion in treatment. *Criminal Justice and Behavior, 35*, 1109-1135.

Rice, M. E., & Harris, G. T. (1997). The treatment of mentally disordered offenders. *Psychology, Public Policy, and Law, 3*, 126-183.

Robertson, P., Barnao, M., & Ward, T. (2011). Rehabilitation frameworks in forensic mental health. *Aggression and Violent Behavior, 16*, 472-484.

Rösler, A., & Witztum, E. (2000). Pharmacotherapy of Paraphilias in the Next Millenium. *Behavioral Sciences and Law, 18*, 43-56.

Salekin, R. T., Worley, C., & Grimes, R. D. (2010). Treatment of Psychopathy: A Review and Brief Introduction to the Mental Model Approach for Psychopathy. *Behavioral Sciences and the Law, 28*, 235-266.

Salize, H. J., Dressing, H., & Kief, C. (2007). *Mentally Disordered Persons in European Prison Systems – Needs, Programmes and Outcome (EUPRIS).* Mannheim: Central Institute of Mental Health.

Starkweather, D. B., Gelwicks, L., & Newcomer, R. (1975). Delphi forecasting of health care organisations. *Inquiry ,12,* 37-46.

Sumsion, T. (1998). The Delphi technique: An adaptive research tool. *British Journal of Occupational Therapy, 61*,153-156.

Steadman, H. J., Morrissey, J. P., & Robbins, P. C. (1985). Reevaluating the custody-therapy conflict paradigm in correctional mental health settings. *Criminology, 23,* 165-179.

Teplin, L. A. (1990). The prevalence of severe mental disorder among urban jail detainees: comparison with the epidemiologic catchment area program. *Am J Public Health, 80,* 663-669.

Tetley, A. C., Evershed, S., & Krishnan, G. (2010). Difficulties in the pathways from high to medium secure services for personality-disordered patients. *The Journal of Forensic Psychiatry & Psychology, 21*, 189-201.

Toch, H. (2007). Prevalence estimates; the numbers game. *Correctional Mental Health Report, 8*, 67-68.

Torrey, E. F. (1995). Jails and prisons –America's new mental hospitals. *American Journal of Public Health, 85,* 1611-1613.

Vandevelde, S., Soyez, V., Vander Beken, T., De Smet, S., Boers, A., & Broekaert, E. (2011). Mentally ill offenders in prison: The Belgian case. *International Journal of Law and Psychiatry, 34,* 71-78.

Ward, T. (2002). Good lives and the rehabilitation of offenders: promises and problems. *Aggression and Violent Behavior, 7,* 513-528.

Ward, T., & Stewart, C. (2003). Criminogenic needs and human needs: A theoretical model. *Psychology, Crime and Law, 9,* 125-143.

Watson, W. (1998). Designed to cure: the clinician-led development of England's regional secure units. *The Journal of Forensic Psychiatry, 9,* 519-531.

Weinberger, L. E., & Sreenivasan, S. (1994). Ethical and professional conflicts in correctional psychology. *Professional Psychology: Research and Practice, 25*,161-167.

Wood, R. M., Grossman, L. S., & Fichtner, C. G. (2000). Psychological Assessment, Treatment, and Outcome with Sex Offenders. *Behavioral Sciences and the Law, 18,* 23-41.

Yousuf, M. I. (2007). Using experts' opinions through Delphi technique. *Practical Assessment, Research & Evaluation,12*, 1-8.

Appendix. Results of all consensus statements

Items	Median	IQR
Consensus in round 2		
The practitioners in an FPC work within multidisciplinary teams (statement 40)	6	0
In an FPC continuing education is desirable to keep ensure current best evidence is underpinning interventions (39)	6	0,25
A work climate in an FPC where practitioners can ask advice, can express doubts and can admit assessment errors are considered as a sign of effective professionalism (45)	6	0,25
The objective of treating mentally ill offenders in an FPC is relapse prevention (1)	6	1
Assessment in an FPC always has a dual function: risk assessment and assessment of the treatment needs of the mentally ill offenders (15)	6	1
The treatment of mentally ill offenders in an FPC designed to take account of the capacities and limitations of the mentally ill offenders (individualized treatment) (19)	6	1
In an FPC the progress of the treatment of any mentally ill offender is monitored and evaluated (27)	6	1
In an FPC the responsibility of each practitioner within the treatment team is clear (41)	6	1
The FPC uses techniques belonging to different therapeutic approaches and combines the effective interventions from different therapeutic approaches (35)	6	1,25
The staff in an FPC possesses specific skills and attitudes, gained through a specific training, to work in a forensic psychiatric setting (43)	6	1,25
Assessment in an FPC should be organized before or at the beginning of the treatment and thereafter at regular intervals (16)	5,5	1
The treatment of mentally ill offenders in an FPC is integral (i.e. simultaneously focused on different problem areas and their relationship) (18)	5,5	1
Providing support and feedback to practitioners is structurally built into the FPC (46)	5,5	1,25
An FPC works with a system of gradually increasing freedom (i.e. mentally ill offenders in a FPC can gradually have more freedom in their movements) (21)	5,5	2
The treatment of mentally ill offenders in an FPC is organized in phases (17)	5	2
The objective of treatment of mentally ill offenders in an FPC is the treatment of the psychiatric disorder (2)	5	1,25
The atmosphere in an FPC is predominantly supporting and stimulating (30)	5	1
The objective of treating mentally ill offenders in an FPC is to promote the reintegration into society (4)	5	1,25
An FPC has a 'longstay' unit where mentally ill offenders with no prospect of reintegration into the society can live in a secure and protected organization (32)	5	1,25
In an FPC there exists a certain hierarchy within the treatment team (42)	5	1,25
Diagnosis and assessment in an FPC follow a standardized procedure (13)	5	2
In an FPC each mentally ill offender follows an individualized treatment program (20)	5	2
In an FPC the social network of the mentally ill offender is involved in the treatment (22)	5	2
The treatment teams in an FPC act from a common vision on treatment methodology and philosophy (36)	5	2
An FPC works closely with scientific researchers to continuously evaluate the treatments offered in the FPC (37)	5	2
The staff in an FPC has a significant impact on the effectiveness of treatment (47)	5	2
An FPC can only provide a added value when it forms a link with the forensic (psychiatric) continuum of care (48)	5	1
For the intensive aftercare of mentally ill offenders the FPC works closely with external community based services (49)	5	1
The atmosphere in an FPC is predominantly repressive (31)	2	1,25
The FPC only uses techniques belonging to one therapeutic approach (for example psychodynamic approach, behavioral and cognitive approach, relational approach, humanistic approach…) (34)	1	1,25
Consensus in round 3		
In an FPC administering (sedative) drugs independent of the intention to control symptoms of the psychiatric disorder is not permissible (24)	5	1
The objective of treating mentally ill offenders in an FPC is to improve the quality of life of mentally ill offenders (3)	5	1,5
The objective of treating mentally ill offenders in an FPC is to activate and to motivate the mentally ill offenders as a preliminary treatment (5)	5	1,5
In an FPC there is a clear distinction between staff responsible for the treatment of the mentally ill offenders and staff responsible for the safety of the FPC (44)	2	0,5
In an FPC aged mentally ill offenders (age of 50+) are spatially separated from the other mentally ill offenders (10)	2	2
Consensus in round 4		
Diagnosis and assessment should preferably be undertaken at a central admission ward of the FPC where newly enrolled mentally ill offenders can reside (12)	5	1
The allocation of mentally ill offenders in an FPC to the most appropriate treatment unit is only possible after assessment based on a comprehensive battery of assessments (14)	5	1,25
An FPC has a scientific forensic research unit that develops evidence-based methods and counsels the development of the forensic mental health care (38)	5	1,5
Untreatable mentally ill offenders do not exist (33)	1	1

CHAPTER 3

THE TREATMENT PERSPECTIVES OF MENTALLY ILL OFFENDERS IN MEDIUM AND HIGH SECURE FORENSIC SETTINGS IN FLANDERS[2]

[2] Based on To, W.T., Vanheule, S., De Smet, S., & Vandevelde, S. (Accepted). The treatment perspectives of mentally ill offenders in medium and high secure forensic settings in Flanders. *International Journal of Offender Therapy and Comparative Criminology*.

ABSTRACT

There is an increasing interest in mentally ill offenders' (MIOs) treatment experiences in forensic settings. This study focuses on the treatment perspectives of mentally ill offenders in treatment as well as in prison settings in Flanders. Seventeen mentally ill offenders were interviewed about the treatment they received. Data were analyzed using thematic analysis in order to derive key themes whilst acknowledging the individuality of the participants' experiences. Treatment perspectives of mentally ill offenders in both settings revolved around similar themes, including 'good' staff and privacy. However, their views differed on two themes: mentally ill offenders in treatment settings reported on feelings of lacking control and experiencing too much pressure, whereas mentally ill offenders in prison settings reported the opposite. The positive experiences in prison settings may complicate the transition from prison to a forensic treatment setting. The study further underscores the major challenge to create more opportunities for mentally ill offenders to meet their needs of self-determination in secure forensic treatment settings.

3.1. Introduction

There is an increasing interest in gaining clients' personal perspectives on care in forensic mental health services (Coffey, 2006; Faulkner & Morris, 2003; Morrison, Burnard, & Philips, 1996; Ryan et al., 2002; Sainsbury, Krishnan, & Evans, 2004; Wood, Thorpe, Read, Eastwood, & Lindley, 2008), contrary to the past, when little attention was paid to psychiatric service users' own views on their treatment (Rogers, Pilgrim, & Lacey, 1993). Persons with mental health problems were seen to lack the objectivity in determining the appropriateness and quality of treatment they received (Lebow, 1982) and were deemed unable to give valid opinions (Weinstein, 1979). However, mental illness does not preclude people from offering clear, valid, and objective perspectives in the services they receive (Hoge et al., 1998; Lidz et al., 1995). Service users' views can inform professional responses to their complex needs (Coffey, 2006) and may help to determine health needs, which could lead to improvements in quality of life and increased satisfaction with services (Sullivan, 2003).

Mentally ill offenders (MIOs) residing in forensic institutions often have complex support needs and multiple problems to address in treatment. A Belgian study showed that approximately 75% of the imprisoned mentally ill offenders had a double or triple psychiatric diagnosis (Cosyns, D'Hondt, Janssen, Maes, & Verellen, 2007). Another study found that 45% of imprisoned mentally ill offenders showed co-morbidity of a major mental illness and a substance abuse disorder (Young, 2003). The treatment of mentally ill offenders in forensic settings is further challenging due to the dual objective of protecting society on the one hand, while treating the mentally ill offenders on the other hand. Recent publications on the rehabilitation of mentally ill offenders emphasized the importance pursuing treatment, rather than only concentrating on risk reduction (Andrews & Bonta, 2010; Barnao, Robertson, & Ward, 2010; Robertson, Barnao, & Ward, 2011; Ward & Brown, 2004; Ward, Yates, & Willis, 2012). In this respect, the Good Lives Model of Offender Rehabilitation (Ward & Brown, 2004; Ward et al., 2012) is a promising strengths-based approach because of its focus on the offender's personal hopes, quality of life and well-being, while addressing the offender's criminogenic needs (Ward et al., 2012). From this standpoint, efforts to disclose how mentally ill offenders perceive treatment may be regarded as paramount in responding to the mentally ill offenders' complex support needs.

Previous international research on the service users' perspectives in forensic mental health services mostly focused on specific subgroups of mentally ill offenders such as older mentally ill offenders (De Smet et al., 2014; Schroeder, 2013), forensic patients with

personality disorders (Ryan et al., 2002; Sainsbury et al., 2004) or mentally ill offenders with an intellectual disability (Wood et al., 2008), as forensic mental health users are no homogenous group. A review study of Coffey (2006) pointed out that service users in forensic mental health valued the therapeutic relationship and that providing supportive yet challenging therapeutic assistance was helpful. Furthermore, institutional controls were seen as punitive and negative experiences of professional responses were reported in relation to self-harming behavior, control and restraining procedures and failing to establish clear therapeutic boundaries. Also, restrictions on liberty were a concern, and, lastly, communication of information needed to be improved.

In order to gain insight into the factors that might facilitate or hinder treatment of mentally ill offenders, the current study aims to assess the perspectives of medium- and high-risk mentally ill offenders on their treatment (admission, treatment, and discharge process) in forensic institutions in Flanders, the northern part of Belgium. This is an interesting case, as the development of forensic psychiatric treatment services, housing high- and medium-risk mentally ill offenders, is still in its infancy (e.g. Boers, Vandevelde, Soyez, De Smet, & To, 2011; Cassellman, 2000; Cosyns, Van Peteghem, Raes, & Sabbe, 2006; Naudts et al., 2005; To et al., 2014). Therefore, the situation in Flanders, lends itself well for a profound analysis of mentally ill offenders' perspectives to help shape treatments, which can be relevant for other countries as well.

Focusing on the personal treatment experiences of mentally ill offenders, a qualitative approach was adopted to address the following research questions:

- How do mentally ill offenders, who are admitted to a medium secure forensic (where medium-risk mentally ill offenders reside) or correctional institution (where medium- and high-risk mentally ill offenders reside), experience their admission and various aspects of their treatment?
- What are the differences in service users' experiences of medium secure forensic institutions versus correctional institution?

3.2. Method

3.2.1. Settings and participants

The study was conducted in Belgium where mentally ill offenders who are not considered responsible for their offences are subject to an internment measure. This internment procedure, which is undefined in duration, is considered a safety measure to protect society

while providing psychiatric treatment to mentally ill offenders. This study targeted medium- and high-risk interned mentally ill offenders residing in forensic institutions in Flanders. Participants were selected from 2 types of forensic residential settings where medium- and high-risk mentally ill offenders of Flanders currently reside: treatment settings as well as correctional settings (where high-risk mentally ill offenders currently reside).

Treatment settings consisted of eight treatment wards located in all medium secure forensic institutions existent in Flanders. All institutions had similar inclusion- and exclusion criteria. Examples of exclusion criteria are psychopathy, high-risk, sexual offences and intellectual disability. Examples of inclusion criteria include being adult, or having a predominantly psychotic or personality disorder. Two out of three institutions organized their wards based on the key psychopathological disorder (psychotic and personality disorder) and then by the progress in treatment, whereas the third institution mainly structured the wards on the progress of the treatment, having patients with mixed psychopathological disorders in one ward. Only one institution included female mentally ill offenders. Although all institutions were organized in a similar way, having a ward program (ward activities and duties) and an individual therapeutic program (individualized therapy and duties), the atmosphere and ward rules differed from institution to institution, even from ward to ward. For example, wards differed in their policies regarding the access to their room, whether patients can have a key of their room, the degree of privacy in the ward and so on. Furthermore, all wards differed in size (from 6 to 27 beds) as well as in the patient composition (e.g. mixed gender versus only male, mixed disorder versus predominantly one disorder, the phase of treatment).

Correctional settings consisted of two correctional institutions in Flanders where mentally ill offenders resided if no proper treatment alternatives were available. Currently, all high-risk mentally ill offenders reside in prisons, since at the time of this study, high secure forensic treatment institutions were still absent in Flanders. Care for mentally ill offenders in correctional settings was provided by one or more multidisciplinary teams who work independently from the prison system and who comply with the medical confidentiality. In contrast to a treatment setting there are no ward programs, since these mentally ill offenders are locked up in individual or shared prison cells, sometimes even with inmates who are not interned. The therapeutic programs are provided for mentally ill offenders on a voluntary basis, since the goal is to motivate mentally ill offenders to participate and not to force them to comply. Therapeutic activities are often less extensive compared to treatment settings because of staff shortages.

Participants were only included in the study when it was reasoned by the institution's psychiatrist that they were capable (1) to give their informed consent, (2) to communicate in Flemish, and (3) to participate in an interview. All of the participants have been assessed by an expert-psychiatrist as part of the internment procedure under the Belgian Law and were considered 'not criminally responsible' due to a mental illness or intellectual disability.
In order to obtain the perspectives of a diverse sample of medium- and high-risk mentally ill offenders - including mentally ill offenders with different psychopathological disorders and at different stages of their treatment – a modified, stratified sample method was used to ensure maximum variation and heterogeneity. For the treatment settings, a sample matrix was developed combining the different psychopathological disorders (predominantly personality or psychotic disorder) with the different phases of their treatment (continuum in treatment plan) in order to randomly select one participant from each category in the matrix. Medium secure forensic institutions have two or three treatment phases represented in different wards. The first treatment phase takes place in a closed reception ward, where the focus lies in observation and starting up treatment. There is usually no or limited access to the outside world (e.g. outside activities are always under the supervision of staff). The last treatment phase occurs in an open ward, where the emphasis is on treatment and re-socialization. Some institutions have an extra treatment phase between the first and last treatment phase. Such wards concentrate on treatment and access to the outside world is usually determined individually. In the prison settings, only a distinction in disorders (predominantly personality or psychotic disorder) was made, since there is no distinction in treatment phases. Table 1 shows the sample matrix where the distribution of the sample is demonstrated by setting, treatment phase and psychopathological disorder.

Seventeen mentally ill offenders took part in the study, whereof 16 men and 1 women (only 1 medium secure forensic institution included women). All participants were interned because of their mental illness.

Table 1. Sample matrix

Treatment Setting 1	*Phase treatment*	I	II	III
	Psychotic	1	1	1
	Personality	1	1	1**
Treatment Setting 2	*Phase treatment*	I	II	III
	Psychotic	*	1	1
	Personality	*	1	1
Treatment Setting 3	*Phase treatment*	I		III
	Psychotic	*		1
	Personality	1		1
Prison Setting 1				
	Psychotic	1		
	Personality	1		
Prison Setting 2				
	Psychotic	1		
	Personality	1		

*The institutions stated that participants in this subgroup were not suitable for the study and could not be included into the study
**Female mentally ill offender. For the sake of readability and for the sake of protecting the privacy of the participants, the neutral masculine form will be used in the entire manuscript.

3.2.2. Procedure

A period of participant observation was first integrated to get acquainted with the forensic setting and the participants. Then, semi-structured interviews took place.

Participant observation. A period of participant observation was adopted to examine the forensic setting, its treatment and to install a relation of trust with the participants to maximize the potential to participants' personal perspectives on the treatment. Participants were reassured that their responses were confidential and that these would not be passed on to the clinical team. The principal researcher, a female clinical psychologist, was independent of all clinical teams and had no clinical contact or responsibility for the participants. The observation period varied from 7 days in correctional setting to 17 days in treatment settings. In both settings the participant observation started with a period of observing each ward facility and its organization. Thereafter, therapeutic treatment sessions were allowed to be observed when all participants had given their consent.

Semi-structured interviews. Semi-structured interviews aimed at mapping participant's perspectives on the treatment they receive, and were based on an interview schedule to obtain information to the purpose of the study. However, it was sufficiently flexible to allow

participants to talk about their experiences. The interview format covered the following themes: experience(s) of previous admissions, experience(s) of admission process, experience(s) of change of wards, overall experience of treatment received (daily activity, individual therapy, group therapy,…), experience(s) of the relationship with multidisciplinary team; experience(s) of the relationship with other patients. The average length of interview was one hour. The interviews were digitally audio recorded and transcribed verbatim.

3.2.3. Data analysis

The interviews were transcribed verbatim. Then, thematic analysis was used in order to derive key themes, while acknowledging the individuality of participants' experience (Braun & Clarke, 2006). An inductive and semantic approach was applied within thematic analysis to identify themes that are strongly linked to the data (Patton, 1990). By using an inductive or data-driven thematic analysis, the themes identified may bear little relation to the specific questions that were asked in the interview (Braun & Clarke, 2006).Furthermore, it was not the aim to fit the themes into an existing coding frame or specific theory using data-driven thematic analysis (Braun & Clarke, 2006). Following the semantic approach in thematic analysis, themes were identified at a semantic level and not at an interpretative level (Braun & Clarke, 2006). Thus, the first analyses were descriptive in nature, paraphrasing the most remarkable participants' perceptions on treatment not involving any form of interpretative work. Then, going over each list of remarkable perceptions on treatment of each participant, connections between the perceptions of different participants were explored and themes or categories were identified. These themes were regularly discussed among the first two and the last author, which made it possible to 'test' in consecutive stages of the analysis process whether or not the emerging themes were consistent with the data and how these themes could be further refined. The second author was involved in the process of checking the confirmability of the themes detected.

3.2.4 Ethical approval

Ethical approval was granted by the University Hospital Ghent (Belgium) for the forensic care settings (2010/514) and by the Ethics Committee of the Faculty of Psychology and Educational Sciences at Ghent University (2011/66) for the correctional settings. Ethical approval was always obtained in collaboration with the participating institutions prior to collecting the data.

3.3. Results

This study revealed 7 themes from mentally ill offenders' treatment experiences in treatment settings and 4 recurrent themes from mentally ill offenders' treatment experiences in prison settings. The 7 themes emerging from the participants' experiences in treatment settings are: (1) the feeling of lacking control, (2) the pressure to perform, (3) their label of interned mentally ill offender, (4) the feeling of responsibility and trust, (5) privacy, (6) staff, and (7) living with other mentally ill offenders. The recurrent themes emerging from the participants' experiences in prison settings are: (1) feeling of control, (2) no pressure to perform, (3) privacy and (4) staff. In order to determine whether themes emerged predominantly from participants' experiences in treatment or prison settings frequency counts were made for each theme across the participants. These figures are shown in Table 2. The specific themes are illustrated by quotes of mentally ill offenders.

Table 2. Frequencies of themes in service users' account

Theme	Treatment setting n=13	Prison setting n=4
Lack of control	7	<-> control 2
Pressure to perform	6	<-> no pressure to perform 3
Label interned mentally ill offender	6	0
Responsibility and trust	6	0
Privacy	6	4
Staff	11	4
Living with other MIOs	12	0

Lack of control. The experience of lacking control figured strongly in the perspective of the mentally ill offenders in *treatment settings* in great contrast to the perspective of mentally ill offenders in prison settings. Lack of control was especially stated in the first treatment phase in forensic treatment settings where mentally ill offenders are controlled by many external ward rules and restrictions upon their ability to control day-to day things. Participant observation revealed that ward rules and restrictions were present in all wards in different forms. There were general ward rules and restrictions that apply for every ward member (e.g. wake up hour) and individual rules only applicable for individual ward members (e.g. limited control over their finances). Some rules and restrictions were written down in a document or in the form of a poster visible in the shared areas; others were verbally communicated and known by all ward members. Especially, in the first treatment phase many general ward rules and restrictions were applied for every ward member and often written down in documents.

These rules were often applied to provide structure for the mentally ill offenders (e.g. day structure) or for security or organizational reasons and were perceived as obstructive to the participant's feeling of control. In the interviews, participants reported experiencing the ward rules and restrictions as stressful, childlike, too strict, too rigid, and not adjusted to the individual needs of each person. Especially in the first phase of treatment, regulations like a strict day structure, limited access to facilities like the fridge, no access to their room during day time, no key to their room, staying in a locked room at night for security reasons and therefore not able to smoke at night in their locked room were experienced as negative. They complained about having no control over small things in a ward setting. This is illustrated in the following quotes of mentally ill offenders talking about the rigid rules in the first phase of treatment in comparison to later phases of treatment:

> *"There are too many rules, e.g. if you want to cook something, you cannot cook whenever you want. You can only cook between 4 and 5 pm, later than that it is not possible. Also, smoking in your room is not allowed anymore, so when your room is closed at night [because of security reasons] you can't smoke any cigarettes." (MIO in his 30's, treatment phase 3, talking about the first treatment phase)*

Only one mentally ill offender residing in a forensic treatment setting noted that the ward rules were needed. Another mentally ill offender reasoned that some ward rules should be personalized and adjusted to the individual needs of each person. Lack of control in treatment settings was further experienced in terms of not having control over their money, not having control over their sex life, not having the freedom to access or lock their own room and having to ask staff members everything:

> *"The only thing that bothers me is the fact that I have to ask everything and almost have to beg to get something. I am so sick and tired of that." (MIO in his 40's, treatment phase 3)*

Mentally ill offenders in *prison settings* did not report feelings of lacking control given their incarceration. All 4 imprisoned mentally ill offenders, having experienced treatment in forensic mental health institutions in the past, preferred being in prison rather than going to a forensic mental health institution. One of the main reasons for their preference for prison settings is their perception of opportunities for choice (e.g. go to therapy or stay in cell), in other words their feeling of having some control in prison (e.g. deciding how to spend their time in own cell) and thus experiencing some freedom, even in a penitentiary context. Two of the four mentally ill offenders in prison expressed this awareness of more freedom in prison

and refused to apply for an intake in forensic mental health institutions which is the most common way for mentally ill offenders to get out of prison working towards integration into society. These mentally ill offenders were young (one mentally ill offender was in his 20's and one mentally ill offender was in his 30's) and both had opportunities to get admitted in a medium secure forensic treatment center.

> *"I hate the fact that the therapies in forensic treatment centers are compulsory. For instance, in that particular forensic treatment institution the rooms were locked during the day, so you were sitting with the whole group encaged in the living room. So you are in a way locked up, but the difference with prison is that in prison you will have your own cell to be in alone… prison works better for me compared to a forensic treatment institution, because I have more space to do my own thing. I am incarcerated, but nevertheless I do feel freer because I can do my own thing, like meditating." (MIO in his 30's, prison)*

Pressure to perform. The pressure to perform every day in treatment was reported by mentally ill offenders in *forensic treatment settings* in all phases of treatment. Every day mentally ill offenders sense the pressure to perform well in treatment out of fear of being sent back to prison if rules were violated.

> *"I am so afraid to make a misstep here. I always fear for that... they can always send you back to prison: when you don't cooperate or if you do not do what you need to do." (MIO in his 20's, treatment phase 2)*

The constant fear of being sent back to prison demotivates people and creates elevated levels of stress for mentally ill offenders in forensic treatment settings. There was no pressure experienced by mentally ill offenders in *prison settings* to do well in treatment, as treatment is not mandatory in prison and as there is nothing that serves as a threat when you are unmotivated for treatment in prison. Three out of four mentally ill offenders residing in prison reported feeling more calm in a less uptight prison setting.

Label of interned mentally ill offender. Internment is an indefinite measurement, in contrast to a sentence. Not knowing when the measurement ends often makes mentally ill offenders hopeless. Mostly mentally ill offenders in treatment settings described this label of internment as very burdensome and stressful in all phases of the treatment. The uncertainty about when the internment measurement will end is damning while in treatment.

> *"An offender gets a sentence and knows when he is a free man again. An interned mentally ill offender have to wait and does not know when it ends and that is making me crazy, you do not have an idea when it ends." (MIO in his 20's, treatment phase 2)*

Furthermore, their experience of being more susceptible to be send back to prison because of their label is burdensome and perceived as unfair.

Trust and responsibility. The importance of having the feeling back of trust and responsibility in treatment settings is endorsed by six mentally ill offenders**.** Mentally ill offenders feel the urge to be trusted again. In a later phase of treatment, mentally ill offenders appreciate being trusted and they see it as an opportunity to take responsibility.

> *"A positive thing about this ward is that they have faith in you, you get responsibility. It sounds banal and simple, but it is a big difference. If they trust you, you get the key of the fridge; you can take out and put in whatever you want. That's trust." (MIO in his 40's treatment phase 3)*

The sense of responsibility is very strong in the last phase of treatment. mentally ill offenders are pushed to take responsibility as they will need this in society to which they return.

> *"In this ward you do need to take back your responsibility, because in the first and second ward staff partly took that over. Here it's up to you to show them how well you cope with this responsibility." (MIO in his 40's treatment phase 3)*

Privacy. The need for privacy is stressed by mentally ill offenders in *treatment* (in all treatment phases) as well as in *prison settings,* often represented by the need of having an own room. Examining the ward organization through participant observation had elucidated that, in both settings, bedrooms were allocated on a first come, first served basis. Thus, new coming mentally ill offenders will typically have to share a room with other mentally ill offenders, while others will then have the opportunity to move to a 'better' room (e.g. a room alone). Given the shortage of space in prison, mentally ill offenders will often find ways to enforce a private cell. Two mentally ill offenders in prison disclosed in the interview that they have found a way to get an own room by for instance working in prison (workers in prison are privileged to have an own room) or by threatening to hurt any cell mate if they need to share a cell. The importance of having an own room or space to rest and unwind is endorsed by many mentally ill offenders.

> *"In the first ward I was so angry, because I was always surrounded by people and I did not have any privacy … I was so happy that I had my own room, because it wasn't fun constantly being around people you cannot stand. Before when I shared a room with 3 other persons, it was as if I was in prison. You cannot flee from those persons and as long as you cannot be on your own, you find no rest. Here, I have my own room and that made me calmer." (MIO in his 20's, treatment phase 2)*

Lack of privacy is also reported when consulting staff members of the treatment team. One mentally ill offender argued that the lack of privacy while meeting with the psychiatrist resulted in no more requests to see the psychiatrist. He argued that it is a bit strange to have a psychiatrist consultation in an open space where staff members are present.

> *"First of all you have to make an appointment to see the psychiatrist in person; so there has to be a reason to meet him… but to have an appointment while the staff is present, that's a bit weird…that's the reason I don't see the necessity to talk to the psychiatrist 'in private'." (MIO in his 20's, treatment phase 2)*

*Staff***.** The importance of 'good' staff was mentioned by most mentally ill offenders in *treatment* and *prison settings*. Mentally ill offenders in treatment settings expressed positive as well as negative experiences with staff, while mentally ill offenders in prison settings only expressed positive experiences. The majority of mentally ill offenders in prison (4 mentally ill offenders) as well as in treatment settings (6 mentally ill offenders) reported having a good relationship with the staff. Four mentally ill offenders in forensic mental health settings described their relationship with staff members as good, but somewhat artificial and professional.

> *"Staff is very friendly here. Well, friendly. They do their best to be friendly, but I think it is all a bit professional. They are friendly because they have too… it is their job." (MIO in his 40's, treatment phase 3)*

Two mentally ill offenders suggested staff to be more pro-active towards patients in treatment. One mentally ill offender thought staff members of the first phase of the treatment was a bit patronizing. He could not stand the sarcasm and cynicism of these staff members.

Living in group with other mentally ill offenders. Living in group with other mentally ill offenders was an issue that had been reported by almost all mentally ill offenders in forensic treatment settings. Negative experiences of living with mentally ill offenders were mostly

expressed in relation to mixed treatment wards or mixed therapies where patients with different pathologies come together. This experience is expressed by mentally ill offenders in all stages of treatment and is especially perceived as noisy, stressful and chaotic when the group size is large.

> *"I experienced the first ward as a very stressful ward, because you had to deal with so many different people who had different problems. It was very difficult… everybody is doing their own thing. It was very chaotic." (MIO in his 20's, treatment phase 2)*

Mentally ill offenders reported that living in a group is not easy, but is something you get used to. However, after a certain time of living in a group; they look forward to live on their own. Mentally ill offenders also reported positive experiences living with other mentally ill offenders. Most of them had a good buddy in the same ward or enjoyed having company all the time, never feeling alone in the ward. Furthermore, they stated that the group helped putting things in perspective and motivate them to go to therapies.

3.4. Discussion

By exploring the personal experiences of mentally ill offenders on their treatment in both treatment and prison settings, this study aims at mapping factors that might facilitate or hinder treatment of mentally ill offenders in forensic treatment centers. The most important results will be discussed in relation to international findings and future suggestions will be formulated.

The results of this study revealed interesting differences in treatment experiences between MIOs in treatment settings as opposed to mentally ill offenders in prison settings.

Firstly, when describing their present and past treatment experiences similar themes emerged from mentally ill offenders in both settings, however, their views on particular themes differed. Some themes that were raised in relation to treatment settings also appeared in prison settings, other themes might not have been applicable or less applicable in prison settings because of the specific context, for example the theme *'living with other mentally ill offenders'.* This theme is less relevant in prison settings as there are usually no day rooms and mentally ill offenders mostly stay in their prison cell. Overall, mentally ill offenders in treatment as well as in prison settings certified the importance of good staff and

enough privacy in this study. However, experiences of mentally ill offenders in prison settings mainly noted positive experience with *staff* members compared to mentally ill offenders in treatment settings. In line with the findings of De Smet et al. (2014), mentally ill offenders in this study appreciated the support from the staff from prison care teams and the activities that they organized despite the staff shortages in prison. Generally, mentally ill offenders in prison settings felt that staff appeared to genuinely invest in their well-being, whereas mentally ill offenders in treatment settings presented some hesitation in the authenticity of the staff's understanding. This ambivalence in the patient-staff relationship was also described in the study of Johansson and Eklund (2003: 343): *"it feels like the staff uses empty phrases as if they get money for saying certain things, but that they don't fully understand*". Yet, in previous research the quality of the helping relationship has been perceived as an important vehicle to improve care (e.g. Björkman, Hansson, Svensson, & Berglung, 1995; Johansson & Eklund, 2003; Koivisto, Janhonen, & Vaisanen, 2004; Schroeder, 2013; Shatell, McAllister, Hogan, & Thomas, 2006; Shatell, Starr, & Thomas, 2007). Regarding *privacy*, mentally ill offenders from both settings expressed their need for privacy, mostly in terms of an own room or a private space to be able to rest and unwind. The importance of patient privacy was also described in the study of Morrison and his colleagues (1996) conducted in a small forensic unit and in the earliest studies of consumer satisfaction conducted in the 1970s (Raphael & Peers, 1972). Thus, although living with other mentally ill offenders can offer some positive experiences in treatment settings, e.g. motivating each other, the possibility to withdraw in a quiet room to escape from the noise and presence of the other mentally ill offenders is desired by all mentally ill offenders. On the issues of *not having enough control* and *experiencing too much pressure* to perform in forensic institutions, the opinions of mentally ill offenders in treatment settings differed from mentally ill offenders in prison settings. Participants indicated having more control and freedom in prison settings, and having no pressure to perform compared to forensic treatment settings. They experienced less rules and obligations in prisons compared to forensic treatment settings. Participants in forensic treatment settings described frustrations of losing control over many activities that we take for granted, which is in line with the findings of Wood and his colleagues (2008). Experiencing 'feeling controlled' and 'being forced to be cooperative' corresponds with aspects which are characteristic for all therapeutic environments. These aspects include confronting clients by giving feedback in order to stimulate personal change, transferring responsibility as much as possible to the clients themselves, and providing structure and safety by offering clear rules and regulations, amongst other (Boers et al., 2011; Fortune et al., 2014). A therapeutic environment and 'good staff members' who are attentive for the therapeutic alliance (Ross et al., 2008), enable clients to gradually take more control and responsibility within a climate of trust and safety

(Fortune et al., 2014). So, even though risk management in a forensic setting unavoidably means a certain degree of control, these findings highlight the importance of remaining mindful of the effects that this has upon the individual (Wood et al., 2008). Furthermore, it seems that mentally ill offenders in prison settings do not experience any pressure to perform in prison settings compared to treatment settings as a prison setting is usually the last resort for mentally ill offenders.

Secondly, this study found negative experiences to be far more pronounced in treatment settings than in prison settings. Positive as well as negative experiences were described by mentally ill offenders in treatment settings, whereas mentally ill offenders in prison settings mainly expressed positive experiences in prison compared to their past forensic treatment experiences. This is in line with the recent findings of De Smet and his colleagues (2014). They found that older mentally ill offenders reported more positive and less negative experiences regarding penitentiary settings when compared with institutional care settings. In this study all examined mentally ill offenders in prison stated to be better-off in prison than in a forensic treatment setting, expressing some aversion of medium secure forensic treatment institutions. Although they were incarcerated, they felt more free (in their choice) and less 'under pressure' in prison. They rather stayed in prison than applied for an admission in forensic mental health institutions. A direct transfer to non-forensic mental health care is seen as the only solution to get out of prison by the mentally ill offenders in prison settings, as they want to avoid forensic mental health. Non-forensic mental health care is further seen to be a shorter pathway to regain full freedom by the examined mentally ill offenders in prison. However, when a detained mentally ill offender is ready to be treated in less secure condition, transfer to an institution with an intermediate level of security is often considered to be safer than direct discharge to the community (Bailey & MacCulloch, 1992). The difficulties in the classic transfer from prison to medium secure forensic treatment settings have been witnessed by a medium secure forensic treatment institution and penitentiary institution in Flanders. They observed that some mentally ill offenders refused an admission in a medium secure treatment institution after they received more information about the treatment or because of past experiences in forensic treatment settings. The importance of improving the transfer process had also been emphasized by Skelly (1994 a,b) as the route from high to medium secure facilities might be ineffective – manifested by a high readmission rate back to high secure institutions. They examined the experience of mentally ill offenders on the transfer from a high to a medium secure institution and found that mentally ill offenders often experienced this as a 'backward step' with all the restrictions and stress that reduce the quality of life (Skelly, 1994a). The most institutionalized patients (i.e. mentally ill offenders detained for more than 10 years according to Skelly, 1994a) in their study saw little gain in

their transfer and actively desired to remain at the high secure institution. The MIOs who were less overtly institutionalized (i.e. mentally ill offenders detained for less than 10 years according to Skelly, 1994a) on the other hand, had difficulty coming with the new demands of transfer rather than in a wish to avoid the demands altogether (Skelly, 1994a). This is in line with our findings. However, three out of our four mentally ill offenders in prison settings in this study were detained for less than 10 years, indicating that extensive institutionalization (using the cut-off of 10 years for institutionalization according to Skelly, 1994a) is coincidental rather than causative for this perspective.

Although it is difficult to compare our findings with other studies that assess service users views, because of slightly different target groups and different research methods, our findings correspond with the findings of the study of Wood and his colleagues (2008) with regard to the themes ‘lack of control’, ‘relationship with staff’ and ‘living with other service users’. The study also corresponds with the study of Ryan and his colleagues (2002) concerning the themes ‘staff quality’. Furthermore, our results relate to the finding of De Smet and his colleagues (2014) with respect to the theme ‘quality staff’ and to the findings of Morrison and his colleagues (1996) concerning ‘privacy’.

The findings of this study could be related to some concepts of the Good Lives Model of Offender Rehabilitation (GLM; Barnao et al., 2010; Ward & Brown, 2004; Ward et al., 2012) which aims at equipping the individuals with skills and resources to obtain primary human goods in socially acceptable and personally meaningful ways (Barnao et al., 2010; Robertson et al., 2011; Ward & Brown, 2004; Ward & Steward, 2003). The GLM is a positive strength-based approach that focuses on the patient rather than the risk reduction (Barnao et al., 2010). That is, individual patients are seen as self-determining agents rather than disembodied carriers of risk (Ward & Maruna, 2007) as interpreted in more risk centered approaches, such as the Risk-Need Responsivity model (Andrews & Bonta, 2010). An exclusive risk-centered approach to forensic treatment often limits treatment to those factors assessed as contributing to risk and fail to encompass a consideration of universally accepted needs that are essential to well-being (Barnao et al., 2010). Based on the results of this study, we can identify an important primary good or human need emerging from mentally ill offenders experiences in forensic treatment: *agency* (i.e. autonomy and self-directedness) (Deci & Ryan, 2000; Ward & Brown, 2004). Agency relates to the themes of ‘lack of control’ and the importance of ‘responsibility and trust’ experienced by the mentally ill offenders in this study and reflect the need for more autonomy in forensic treatment in terms of less external regulations in treatment and more responsibility. Residing in a secure forensic mental health institution may be seen as an environmental constraint in adapting secondary

goods to meet the need of self-determination (Barnao et al., 2010). Although challenging, opportunities can be created to promote the attaint of this highly valued good by for example, allowing mentally ill offenders to contribute to decision making about treatment plans (Barnao et al., 2010). Another potential of the GLM is its focus on the importance of a strong therapeutic relationship with the offender (Ward & Brown, 2004) which relates to the theme of 'good' staff reported in this study. This positive strength-based approach could lead to reduced recidivism (Bouman, Ruiter, & Rooney, 2009) and can provide evidence for a policy that focuses on offenders' individual strengths (Vanhealemeesch, Vander Beken and Vandevelde, 2014).

The present study has a number of limitations. The strength of the study, providing a deeper understanding of mentally ill offenders' treatment experience without relying on a set format of a questionnaire, also reflects its limitations (Wood et al., 2008). The disadvantage of carrying out a qualitative study is the limited sample of 17 research participants in this study. Similarly, the participants were recruited from a clear-cut geographical area (Flanders), however reflecting the potential candidates for the forensic psychiatric treatment center in the same area (including medium- and high-risk mentally ill offenders in that area). Further, we only included one female mentally ill offender in this study. This is an effect of the dearth of treatment possibilities for female mentally ill offenders in Flanders, as only one medium secure forensic treatment center accepts female mentally ill offender for treatment. Lastly, the subsamples of mentally ill offenders from treatment settings and mentally ill offenders from prison settings were not equally spread; having a smaller sample of only four mentally ill offenders in prison settings. In light of these limitations, the generalizability of the findings is limited. Therefore, these findings are best regarded as an exploration of topics and areas where improvements need to be considered, as revealed by the mentally ill offenders themselves.

3.5. Conclusions

This study has demonstrated that the personal treatment experiences of mentally ill offenders in treatment as well as prison settings revolved around similar themes. Mentally ill offenders from both settings emphasized the importance of privacy and 'good' staff in treatment. However, the views differed on two other themes. The feeling of lacking control and the feeling of too much pressure in treatment was described by mentally ill offenders in treatment settings, whereas mentally ill offenders in prison settings experienced the opposite. Feeling less pressured and perceiving opportunities for choice by mentally ill offenders in prison settings may complicate the transition from prison to a less secure treatment setting

even more. This paper adds to the current knowledge of how mentally offenders perceive treatment and how this may influence the application of the Good Lives Model in this population, as there are only a limited number of publications – up until now – on the GLM in forensic mental health (Robertson et al., 2011). According to Barnao and his colleauges (2010), who have adapted the GLM to the Good Lives Model of forensic mental health (GLM-FM), mental illness may prevent offenders in their striving for a fulfilling life. Interestingly, treatment for this mental illness may both positively and negatively influence the pursuit of a 'good' life, as it "may provide alternative ways of achieving primary human goods, serving as a transient way of achieving goods such as relatedness, community, excellence in work and play and inner peace that can later be replaced by more normative means as individuals develop the requisite skills. On the other hand, treatment may at times unintentionally present obstacles to the attainment of primary goods through restrictions on a person's autonomy and, depending on the range and quality of care provided, curtailing or blocking access to other primary goods such as knowledge, creativity, excellence in work and play, relationships." (Robertson et al., 2011: 480). Keeping this in mind, our study clearly points to the major challenge to create more opportunities for mentally ill offenders to meet their needs of self-determination in secure (forensic treatment) settings. It also may offer an explanation as to why many mentally ill offenders show conflicting and hostile relationships towards staff members in forensic mental health services as well-intentioned and necessary treatment efforts may be perceived as frustrating rather than supportive. The findings may have important implications for the rehabilitation of offenders, whether it is from a Risk-Need Responsivity-oriented or GLM-based point of view, as treatment outcomes for a great part depend on the way we are able to cope with responsivity issues within the therapeutic alliance between staff members and clients.

References

Andrews, D.A., & Bonta, J. (2010). The psychology of criminal conduct. 5th edition. Elsevier.

Bailey, J., MacCulloch, M. (1992). Characteristics of 112 cases discharged directly to the community from a new special hospital and some comparisons of performance. *Journal of Forensic Psychiatry, 3,* 91-112.

Barnao, M., Robertson, P., & Ward, T. (2010). Good lives model applied to forensic population*. Psychiatry, Psychology and Law, 17,* 202-217

Björkman, T., Hansson, L., Svensson, B., & Berglung, I. (1995). What is important in psychiatric outpatient care? *Quality of care from the patient's perspective. International Journal for Quality in Health Care, 7,* 355-362.

Boers, A., Vandevelde, S., Soyez, V., De Smet, S., & To, W.T. (2011). Het zorgaanbod voor geïnterneerden in België. *Panopticon, 2*, 17-38.

Bouman, Y.H.A., de Ruiter, C., & Rooney, J. (2009). Recent life events and subjective well-being of personality disordered forensic outpatients. *International Journal of Law and Psychiatry, 32,* 348-354.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

Casselman, J. (2000). Forensisch psychiatrische eenheden: Nu of nooit! *Tijdschrift Klinische Psychologie, 30*, 148-152.

Coffey, M. (2006). Researching service user views in forensic mental health: A literature review. *The Journal of Forensic Psychiatry & Psychology, 17*, 73-107.

Cosyns, P., D'Hondt, C., Janssen, D., Maes, E., & Verellen, R. (2007). Geïnterneerden in België: De cijfers. *Panopticon, 28*, 46-61.

Cosyns, P., Van Peteghem, P., Raes, M., & Sabbe, B.G.C. (2006). De forensische psychiatriein Vlaanderen op een keerpunt? *Tijdschrift voor Psychiatrie, 48,* 511-513.

Deci, E.L., & Ryan, R.M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.

De Smet, S., Van Hecke, N., Verté, D., Broekaert, E., Ryan, D., & Vandevelde, S. (2014). Treatment and control: A qualitative study of older mentally ill offenders on their detention and care trajectory. *International Journal of Offender Therapy and Comparative Criminology*. DOI:10.1177/0306624X14521129.

Faulkner, A, & Morris, B. (2003). *User involvement in forensic mental health s-research and development.* Liverpool, UK: NHS National Programme on Forensic Mental Health Research and development.

Fortune, C.A., Ward, T., & Polaschekt, D.L.L. (2014). The Good Lives Model and therapeutic environments in forensic settings. *Therapeutic Communities, 35*, 95-104.

Hoge, S.K., Lidz, C.W., Eisenberg, M., Monahan, J., Bennett, N., Gardner, W., et al. (1998). Family, clinicians, and patient perceptions of coercion in mental hospital admission: a comparative study. *International Journal of Law and Psychiatry, 21*, 131-146.

Johansson, H., & Eklund, M. (2003). Patients' opinion on what constitutes good psychiatric care. *Scandinavian Journal of Caring Sciences, 17*, 339-346.

Koivisto, K., Janhonen, S., & Vaisanen, L. (2004). Patients' experience of being helped in an inpatient setting. *Journal of Psychiatric and Mental Health Nursing, 11*, 268-275.

Lebow, J. (1982). Consumer satisfaction with mental health treatment. *Psychological Bulletin, 91*, 244-259.

Lidz, C. Hoge, S., Gardner, W., Bennett, N., Monahan, J., Mulvey, E. & Roth, L. (1995). Perceived coercion in mental hospital admission. *Archives of General Psychiatry, 52*, 1034-1040.

Morrison, P., Burnard, P., & Philips, C. (1996). Patient satisfaction in a forensic unit. *Journal of Mental Health, 5*, 369-377.

Naudts, K.H., Cosyns, P., MCinerny T., Audenaert, K., Van Den Eynde, F., & Van Heeringen, C. (2005). Editorial: Belgium and its internees: A problem for human rights and a stimulus for service change. *Criminal Behavior and Mental Health, 15*, 148-153.

Patton, M.Q. (1990). *Qualitative evaluation and research methods*. Sage Publications: Newbury Park, USA.

Raphael, W., & Peers, V. (1972). *Psychiatric hospitals viewed by their patients*. London. King's Fund.

Robertson, P., Barnao, M., & Ward, T. (2011). Rehabilitation frameworks in forensic mental health. *Aggression and Violent Behavior, 13*, 472-484.

Rogers, A., Pilgrim, D., & Lacey, R. (1993). *Experiencing psychiatry: users' view of services*. Londeon, Macmillan/MIND

Ross, E.C., Polaschek, D.L.L., & Ward, T. (2008). The therapeutic alliance: A theoretical revision for offender rehabilitation. *Aggression and Violent Behavior, 13*, 462-482.

Ryan, S., Moore, E., Taylor, P.J., Wilkinson, E., Lingiah, T.,& Christmas, M. (2002). The voice of detainees in a high security setting on services for people with personality disorder. *Criminal behavior and Mental Health, 12*, 254-268.

Sainsbury, L, Krishnan, G. & Evans, C. (2004). Motivating factors for male forensic patients with personality disorder. *Criminal Behaviour and Mental Health, 14*, 29-38.

Schroeder R. (2013). The seriously mentally ill older adult: Perceptions of the patient-provider relationship. *Perspectives in Psychiatric Care, 49,* 30-40.

Shattell, M.M., McAllistar, S., Hogan, B., & Thomas, S.P. (2006). "She took my hand, help me out": mental health patients' experiences of being understood. *Archives of Psychiatric Nursing, 20*, 234-241.

Shattell, M.M., Starr, S.S., & Thomas, S.P. (2007). “Take my hand, help me out’: Mental health service recipients” experience of the therapeutic relationship. *International Journal of Mental Health Nursing, 16*, 274-284

Skelly, C. (1994a). The experience of special hospital patients in regional secure units. *Journal of Psychiatric and Mental Health Nursing, 1*, 171-177.

Skelly, C. (1994b). From special hospital to regional secure unit: a qualitative study of the problems experienced by patients. *Journal of Advanced Nursing, 20*, 1056-1063.

Sullivan, M. (2003). The new subjective medicine: Taking the participant’s point of view on health care. *Social Science and Medicine, 56,* 1595-1604.

To, W.T., Vandevelde, S., Soyez, V., De Smet, S., Boers, A., & Vanheule, S. (2014). Treatment perspectives on interned mentally ill offenders in a forensic psychiatric center (FPC): A Delphi study on experts’ opinions. *Psychology, Crime & Law, 20*, 61-77.

Vanhaelemeesch, D., Vander Beken, D., Vandevelde, S. (2014). Punishment at home: Offenders’ experience with electronic monitoring. European Journal of Criminology, 11, 273-287.

Weinstein, R. (1979). Patient attitudes towards mental hospitalization: A review of quantitative research. *Journal of Health and Social Behaviour, 13*, 237-258.

Ward, T., & Brown, M. (2004). The Good Lives Model and conceptual issues in offender rehabilitation. *Psychology, Crime & Law, 10*, 243-257.

Ward, T., & Maruna, S. (2007) *Rehabilitation: Beyond the risk paradigm*. London: Routlegde.

Ward, T., & Steward, C.A. (2003). Good lives and the rehabilitation of sexual offenders. In T. Ward, D.R. Laws and S.M. Hudson (Eds.), *Sexual Deviance: Issues and controversies* (pp.21-44). Thousand Oaks, CA: Sage.

Ward, T., Yates, P.M., & Willis, G.M. (2012). The Good Lives Model and the risk need responsivity model: A critical response to Andrews, Bonta, and Wormith (2011). *Criminal Justice and Behavior, 39*, 94-110.

Wood, H., Thorpe, L., Read, S., Eastwood, A., Lindley, M. (2008). Service user satisfaction in a low secure forensic learning disability unit? *Mental health and Learning Disability Research and Practice, 5*, 176-191.

Young, D. (2003). Co-occurring disorders among jail inmates: Bringing the treatment gap. Journal of Social Work Practice in the Addictions 3, 63-85.

CHAPTER 4

SUBSTANCE USE AND MISUSE IN PERSONS WITH INTELLECTUAL DISABILITIES (ID): RESULTS OF A SURVEY IN ID AND ADDICTION SERVICES IN FLANDERS[3]

[3] Based on To, W.T., Neirynck, S., Vanderplasschen, W., Vanheule, S., & Vandevelde, S. (2014). Substance use and misuse in persons with intellectual disabilities (ID): Results of a survey in ID and addiction services in Flanders. *Research in Developmental Disabilities, 35*, 1-9.

ABSTRACT

Little is known about the characteristics of substance users with Intellectual Disabilities (ID). Nevertheless, this group is assumed to be at greater risk of developing substance misuse problems. This study focuses on substance users and misusers with ID, and investigates whether the two groups differ significantly in terms of the nature and consequences of their substance (mis)use. Information regarding the characteristics of the substance (mis)users, the substances used, the negative consequences of substance (mis)use, and the service use was collected through a questionnaire forwarded to ID and addiction services in Flanders. Caregivers identified 104 substance users and misusers with ID. Overall, few differences were observed between users and misusers. This finding underscores that substance use in persons with ID can have important consequences. Substance misusers, however, were found to have more mood changes, more suicidal ideation/thoughts, and more negative long-term consequences on their health, daily activity, and relationships due to substance misuse. Substance use and misuse were associated with mental health problems and were suggested to be a risk factor for offending behavior. To provide appropriate support for this specific population, an individualized approach is suggested that supports better intersectoral collaboration between services.

4.1. Introduction

In the last two decades, researchers and practitioners have shown an increasing interest in the prevalence, nature, and treatment of persons with an intellectual disability (ID) who misuse substances (Burgard, Donohue, Azrin, & Teichner, 2000; Chapman & Wu, 2012; Christian & Poling, 1997; Cocco & Harper, 2002; Degenhardt, 2000; Lance & Longo, 1997; Lottman, 1993; McGullicuddy, 2006; Mutsaert, Blekeman, & Schipper, 2007). This interest has become more prominent since the deinstitutionalization era, which has resulted in increased autonomy for people with ID in community living. Although it is undeniable that community living has many advantages for persons with ID (Van Gennep, 1997; Van Hove & van Loon, 2003; Young, 2006), community living may also cause negative consequences, such as increased stressful events and a greater exposure to alcohol and illicit drugs (Christian & Poling, 1997; Lottman, 1993). Eventually, this exposure can lead to substance misuse and other related problems (Burgard et al., 2000; Christian & Poling, 1997; Clarke & Wilson, 1999; Edgerton, 1986; Krishnef & DiNitto, 1981; Westermeyer, Phaobtong, & Neider, 1988).

Previous studies have indicated that persons with ID who use alcohol and/or illicit drugs seem to be at greater risk for developing substance misuse problems (Burgard et al., 2000; Degenhardt, 2000; Didden, Embregts, van der Toorn, & Laarnhoven, 2009; Krishef & DiNitto, 1981; McGillicuddy, 2006; Moore & Polsgrove, 1991; Slayter & Steenrod, 2009; Westermeyer, Kemp, & Nugent, 1996) and other negative consequences in several domains of functioning that are (in)directly related to substance (mis)use (Didden et al., 2009; Krishnef & DiNitto, 1981; McGillivray & Moore, 2001; Taggart, McLaughlin, Quinn, & Milligan, 2006; Westermeyer et al., 1988). For example, Westermeyer and his colleagues (1996) indicated that persons with ID appear to have a remarkably low tolerance for alcohol, which becomes apparent in marked changes in behavior or personality after only two or three alcoholic drinks. These findings suggest a blurred line between substance use and misuse in persons with ID. A better understanding of the nature of substance use and misuse in persons with ID and, more importantly, of its negative impact on this specific population is a necessary step toward supporting these vulnerable persons. Such an understanding is especially important because this group is often deprived from treatment and falls through the cracks between services. Mainstream addiction and ID services often lack the appropriate resources to identify and treat this specific population (Degenhardt, 2000; Lance & Longo, 1997; Lottman, 1993; McGilllicudy, 2006; Ruf, 1999; Slayter & Steenrod, 2009; Sturmey, Reyer, Lee, & Robek, 2003; Taggart, Huxley, & Baker, 2008; Tyas & Rush, 1991; VanderNagel, Kiewik,

Buitelaar, & DeJong, 2011). Compared with substance misusers without ID, persons with ID are less likely to receive treatment or to remain in treatment once started (Chapman & Wu, 2012).

In this context, Taggart and his colleagues (2006) conducted a survey on substance misuse in persons with ID in both ID and addiction services in Northern Ireland. Questionnaires were forwarded through the managers of ID and addiction services to their team. Team members who had a person on their caseload with ID that was misusing substances were questioned about this person's characteristics, substance misuse, and how it affected his/her well-being to identify the types of services and supports required to meet the heterogeneous needs of this population. The study identified 67 adults with ID who were misusing substances. Alcohol was the main substance of misuse. Three-quarters of the sample misused alcohol for more than 5 years. Being male and young, having a borderline/mild ID, living independently, and having mental health problems were reported to be risk factors. Substance misuse was frequently associated with a range of distressing negative behaviors, which resulted in substantial problems.

However, the study by Taggart and his colleagues (2006) only examined a sample of substance misusers, leaving the larger group of substance users unexplored. Consequently, a question that remains unanswered is whether substance misuse places people with ID at risk for adverse effects on wellbeing and negative (mental) health outcomes or whether substance use in general entails similar problems.

Therefore, the current study aims to characterize the nature and consequences of substance use in a sample of substance users and misusers with ID known to ID or addiction services. In addition, the study aims to provide information regarding the service utilization of these specific groups of people with ID.

4. 2. Method

4.2.1. Setting and participants

This research was conducted in Flanders, the northern part of Belgium. The new support policy for persons with ID set out by the Flemish Ministry of Public Welfare and Public Health, named Perspective 2020, focuses on the citizenship model and person-centered support for persons with multiple problems, advocating intersectoral collaboration between various services in different fields, including special education, mental health, addiction and ID.

Therefore, the Flemish situation lends itself well to an analysis of needs, service use, and intersectoral collaborations for the group of substance users and misusers with ID.

Based on the methodology used by Taggart and his colleagues (2006), the present study investigated the perspectives of caregivers in ID and addiction services about their adult client with ID who uses or misuses substances. To identify all addiction services in Flanders, a collaboration with the Regional Board on Mental Health Care of East-Flanders (PopovGGZ) was set up to contact all Regional Boards on Mental Health Care in Flanders to provide the contact information of each addiction service within their region. Intellectual disability services were approached by consulting the website of the Flemish agency for persons with a disability (http://www.vaph.be), where the contact information of all disability services in Flanders is published.

All of the identified ID and addiction services in Flanders were sent an e-mail that explained the aim and nature of the study and included a link to an online questionnaire. The contact person in each of the identified ID and addiction services was further asked to spread the e-mail including the link to the online questionnaire to the caregivers in their service, if they agreed to participate in the study. The anonymous caregivers, who received this e-mail through the contact person of the service, were asked to complete the online questionnaire anonymously if they had an adult with ID in their caseload that was using substances on a regular basis. They were asked to report anonymous information about their client by means of the questionnaire. Criteria to participate in the study were as follows: (1) client is aged 18 years or older, (2) client has an intellectual disability as defined by the definition of the American Association of Intellectual and Developmental Disabilities (2012), namely "*Intellectual disability is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18",* and (3) client uses substances on a regular base. To discriminate users from misusers, a question was added whether misuse was present at the moment of participation. Substance misuse was conceptualized as defined by Vanderplasschen, Mostien, Claeys, Raes, & Van Bouchaute (2001: 22): "*problems occurring in one or more life domains resulting from alcohol, psychotropic drug and illegal substance use*". Similar to Taggart and his colleagues (2006) and Chaplin, Gilvarry, and Tsakanikos (2011), we did not use the Diagnostic and Statistical Manual of Mental Disorders–IV (DSM-IV) definition of substance abuse, because some aspects of the definition such as role obligation were considered to be less relevant for persons with ID (Taggart et al., 2006). The substances included in the current study were alcohol, illicit drugs, and non-prescribed

medication. Other substances such as nicotine and caffeine, in accordance with the study of Taggart and his colleagues (2006), were not included in this study.

In total, 104 informants completed the questionnaire. However, for each item in the questionnaire the sample size may vary depending on the applicability of the question and due to missing responses of the informants. Therefore, all results are accompanied by the absolute values between parentheses, revealing the sample size on which the result is based. All informants completed a questionnaire about one person with ID who was regularly using substances. The majority of persons with ID using or misusing substances were identified by informants working in ID services (68.3%, 71 of 104). The informants had a supporting and educational function (78.9%, 56 of 71). Other informants working in ID services who completed the questionnaire were psychologists and masters in special education/orthopedagogics (9.9%, 7 of 71) or service coordinators (11.3%, 8 of 71). Informants in addiction services (31.7%, 33 of 104) were mostly addiction counselors and community service workers (54.5%, 18 of 33). Other informants in the addiction services who completed the questionnaire were psychologists or psychiatrists, (24.2%, 8 of 33) or had a coordinating function (21.2%, 7 of 33).

4.2.2. Questionnaire

The online questionnaire was based on the questionnaire used in the study by Taggart and his colleagues (2006), which was then adapted to the Flemish situation. Questions concerning substance use and misuse were altered based on the Flemish version of the European Addiction Severity Index (EuropASI, McLellan, 1992, adjusted by Raes, 1996) and questions were added to collect additional information, mostly on the service use and collaboration between ID and addiction services in Flanders. Furthermore, some response alternatives were changed and/or added after pilot tests in collaboration with members of the Regional Board on Mental Health Care of East-Flanders. The questionnaire included open- and closed-ended questions with several response alternatives. For the questions concerning the long-term impact of substance (mis)use on the substance user's life, a 5-point (ordinal) scale ranging from 1 (*no influence)* to 5 (*high influence)* was used.

The questionnaire was divided into five parts. The first part requested information on the informant who completed the questionnaire (e.g., type of service, position). The second part inquired about the client who uses or misuses substances (e.g., age, gender, level of ID). The third part consisted of questions about the substance use or misuse and the short- and long-term consequences of the use or misuse (e.g., type of substance, length of use, how

substance use or misuse has affected their health). The fourth part included questions about the clients' service use and the last part asked about the collaboration between ID and addiction services.

4.2.3. Ethical considerations

The Ethics Committee of the Faculty of Psychology and Educational Sciences at Ghent University granted ethical approval for the current study in terms of collecting confidential information on anonymous clients through anonymous caregivers from different services (2013/39).

4.2.4. Analysis

The Statistical Package for Social Sciences (SPSS, PASW Statistics 18) was used to analyze the data. Depending on the type of data, different methods were used, as follows: *t* tests (continuous data, e.g., age), Mann-Whitney *U* tests (ordinal data, e.g., long-term impact on substance user's health, daily activity and personal relationships), and χ^2 tests (nominal data, e.g., gender, level of ID, and living situation).

4.3. Results

4.3.1. Client characteristics

The informants reported a total of 104 substance (mis)users with ID. The sample consisted of 44 substance users and 60 substance misusers. Their characteristics are listed in Table 1. The majority of the sample was male, had a partner, had no children, and had attended school, primarily in special schools for persons with ID. The age distribution of the identified group ranged between 21 and 75 years old, with a mean age of 39 years (n=103). No significant differences were found between the group of substance users and the group of substance misusers regarding age ($t(102)=1.13$, n.s.), gender ($\chi^2=0.29$, n.s., n=104) or whether they had a partner ($\chi^2=0.001$, n.s., n=104) or children ($\chi^2=0.001$, n.s., n=104). Substance users did not differ significantly from misusers in regards to education, i.e. whether they had education ($\chi^2=0.001$, n.s., n=104) and whether they had attended a regular school or a special school for persons with ID ($\chi^2=0.004$, n.s., n=104). Concerning work status, a significant difference was found between substance users and misusers ($\chi^2=10.84$,

p<0.05, n=86), as substance misusers reported significantly less paid work than users (see Table 1).

Most identified users and misusers were reported to have a mild ID and lived independently in their own home, as presented in Table 1. The level of disability (χ^2=2.13, n.s., n=94) nor living situation (χ^2=0.58, n.s., n=99) differed significantly between the group of users and the group of misusers. In both groups, the majority was reported to have a moderate ability to live an independent life.

Table 1. Characteristics of substance (mis)users

Variable	**Response category**	**Number of cases (n=104)**	**%**
Gender	Male	90/104	86.5
	Female	14/104	13.5
Partner	Yes	66/104	63.5
	No	38/104	36.5
Children	Yes	23/104	22.1
	No	81/104	77.9
Education	Regular education	28/97	28.9
	Specialized education for persons with ID	69/97	71.1
Work status *	Working: use - misuse	25/43 - 18/43	58.1 - 41.9
	Not working: use - misuse	10/43 - 33/43	23.3 - 76.7
Level of disability (IQ)	Mild (50/55-70)	79/94	84
	Moderate (35/40-50/55)	13/94	13.8
	Severe (20/25-35/40)	2/94	2.1
	Profound (>20/25)	/	/
Ability to live an independent life	Low: use - misuse	7/24 - 17/24	15.9 - 28.3
	Moderate: use - misuse	24/59 - 35/59	54.5 - 58.3
	High: use - misuse	13/21 - 8/21	29.5 - 13.3
Living situation	Live independently in own home	66/99	66.7
	Live with family	11/99	11.1
	Live in residential facility	22/99	22.2
Physical problem	Yes	56/104	53.8
	No	48/104	46.2
Psychiatric diagnosis	Yes	45/104	43.3
	No	59/104	56.7

*p<0.05

Nevertheless, a marginal significant difference was found concerning the ability to live an independent life (χ^2=50.07, *p*=0.08, n=104), indicating that substance misusers were experiencing more difficulties to live an independent life.

Overall, more than half of the respondents reported physical problems (53.8%, 56 of 104), and less than half of the sample reported a psychiatric disorder (43.3%, 45 of 104) (See Table 1). Of the clients without a psychiatric diagnosis, 22% was suspected to have psychiatric problems (13 of 59). Substance users did not significantly differ from misusers regarding health problems such as physical (χ^2=0.45, n.s., n=104) and psychiatric disorders (χ^2=1.41, n.s., n=104).

4.3.2. Characteristics of substance use and misuse among persons with ID

The substances used and misused are listed in Table 2. Alcohol was reported to be used by 77.9% of the total sample (81 of 104), followed by cannabis by 39.4% (41 of 104) and cocaine by 12.5% (13 of 104). There were no significant differences between substance users and misusers concerning the used substances, except for alcohol, as persons with ID consuming alcohol were more likely to be misusing (than using) (χ^2=6.35, *p*<0.05, n=104). Furthermore, no significant differences were found for using alcohol in combination with illicit drugs (χ^2=1.98, n.s., n=81). The use of alcohol in combination with illicit drugs was found for over half of the persons who used or misused alcohol (51.9%, 42 of 81). The identified poly-substance users were significantly more likely to be 30 years or younger (χ^2=23.00, *p*<0.001, n=81). No significant differences were found between poly-substance users and persons who only used alcohol in regards to gender, level of disability, and the ability to live an independent life or mental health status.

With regard to alcohol, 28.6% of the sample used alcohol on a daily basis (18 of 63) and 93.5% had used alcohol for more than 5 years (58 of 62). Concerning cannabis use, 31.3% used cannabis on a daily basis (10 of 32) and 80% had used cannabis for more than 5 years (28 of 35). Regarding the frequency (daily versus not daily) and length of use or misuse (5 years or less versus more than 5 years), no differences were found between users and misusers of alcohol (frequency, χ^2=3.21, n.s., n=63; length of (mis)use, χ^2=0.81, n.s., n=62) and cannabis (frequency, χ^2=1.90, n.s., n=35; length of (mis)use, χ^2=1.50, n.s., n=35).

Substances were reported to be used or misused mostly at home (47.9%, 46 of 96) and in bars or clubs (29.2%, 28 of 96) and, to a lesser extent, at the house of family or friends

(9.4%, 9 of 96), in public places other than bars and clubs (4.2%, 4 of 96) or other places (9.4%, 9 of 96). Furthermore, the identified persons mostly used alone (46.2%, 48 of 104) or with friends (38.5%, 40 of 104), mostly with friends without ID (27.9% versus 10.6% with friends with ID). Regarding the latter variables, no differences were found between users and misusers (location, χ^2=4.25, n.s, n=87; companion, χ^2=1.23, n.s, n=96).

Table 2. Type(s) of used substance(s) (n=104)

Substance	**Number of cases (%)**	**Group**	**Number of cases (%)**
Alcohol*	81 (77.9)	Users	29 (35.8)
		Misusers	52 (64.2)
Cannabis	41 (39.4)	Users	17 (41.5)
		Misusers	24 (58.5)
Cocaine	13 (12.5)	Users	5 (38.5)
		Misusers	8 (61.5)
Amphetamine	11 (10.6)	Users	4 (36.4)
		Misusers	7 (63.6)
Heroin	10 (9.6)	Users	4 (40)
		Misusers	6 (60)
Non-prescribed medication	6 (5.8)	Users	1 (16.7)
		Misusers	5 (83.8)
Methadone / Buprenorphine (substitutions)	5 (4.8)	Users	1 (20)
		Misusers	4 (80)
XTC	3 (2.9)	Users	1 (33.3)
		Misusers	2 (66.7)
Hallucinogens	1 (1)	Users	0 (0)
		Misusers	1 (100)

*p<0.05

4.3.3. Consequences of substance use and substance misuse for person with ID

Consequences or effects of substance use and substance misuse were questioned for the short term, i.e., on the substance (mis)users' behavior while under the influence, and the long term, i.e., on the substance (mis)users' life.

First, a wide range of effects while under the influence was reported on the behavior of substance users with ID as shown in Table 3. This includes mood changes (75%, 78 of 104),

aggression - both verbal (43.3%, 45 of 104) and physical (26%, 27 of 104) - , partner and family conflicts (37.5%, 39 of 104), conflicts with caregivers (28.8%, 30 of 104), problems with the police or offending behavior (20.2%, 21 of 104), and suicidal ideation/thoughts (13.5%, 14 of 104). No significant differences were found between users and misusers regarding the effects of substances on their behavior, except for having mood changes and suicidal ideation/thoughts (see Table 3). Persons who misuse substances were more likely to have unpredictable mood changes compared with substance users (χ^2=5.25, p<0.05, n=104). Suicidal ideation/thoughts were also more prevalent in this group (χ^2=8.20, p<0.05, n=104). In addition, persons identified as having a diagnosed psychiatric disorder were more likely to have suicidal ideation/thoughts compared to those who did not report a mental health problem (χ^2=11.87, p=0.001, n=104).

Second, the influence of substance use on health status, daily activities and personal relationships of individuals with ID was reported on a 5-point (ordinal) scale, resulting in median scores of 3 (health), 3 (daily activities), and 4 (personal relationships). Significant differences were found between substance users and misusers for the influence on physical and mental health (U=767, p<0.001, n=104; the mean ranks of substance users and misusers were 39.93 and 61.72, respectively), the influence on daily activity (U=757, p<0.001, n=104; the mean ranks of substance users and misusers were 39.72 and 61.88, respectively), and personal relationships (U=922, p=0.007, n=104; the mean ranks of substance users and misusers were 43.45 and 59.13, respectively), such that substance misusers' lives were influenced more by substance use on the 3 identified domains as compared to the life of substance users.

Table 3. Effects of (mis)use on clients' behavior (n=104)

Behavior	Number of cases (%)	Group	Number of cases (%)
Mood changes*	78 (75)	Users	28 (35.9)
		Misusers	50 (64.1)
Verbal aggression	45 (43.3)	Users	16 (35.6)
		Misusers	29 (64.4)
Conflict with partner or family	39 (37.5)	Users	15 (38.5)
		Misusers	24 (61.5)
Conflict with caregivers	30 (28.8)	Users	13 (43.3)
		Misusers	17 (56.7)
Physical aggression	27 (26)	Users	10 (37)
		Misusers	17 (63)
Problems with police or offender behavior	21 (20.2)	Users	10 (47.6)
		Misusers	11 (52.4)
Suicidal ideation/thoughts *	14 (13.5)	Users	1 (7.1)
		Misusers	13 (92.9)
Physically injures self	9 (8.7)	Users	2 (22.2)
		Misusers	7 (77.8)
Exploited by others	8 (7.7)	Users	1 (12.5)
		Misusers	7 (87.5)
Exploiting others	8 (7.7)	Users	3 (37.5)
		Misusers	5 (62.5)

*$p<0.05$

4.3.4. Current and past service use and collaboration between ID and addiction services

The majority of the clients was receiving care from ID services, as they were identified by informants working in ID services (68.3%, 71 of 104). The informants were further questioned about past service use and contacts with other services for supporting clients. The majority (62.8%, 59 of 94) reported the use of ID or addiction services in the past. No differences were found between substance users and misusers regarding past service use (χ^2=1.87, n.s., n=94). Concerning collaboration between ID and addiction services, over half of the informants (57.6%, 53 of 92) reported that they had not collaborated with services beyond the own sector in the care for their client. However, collaboration was more likely to be set up for substance misusers than users (χ^2=4.86, p<0.05, n=92).

4.4. Discussion

This study examined the situation of 104 substance users and misusers with ID who utilized ID or addiction services in Flanders, of whom 44 were substance users and 60 were substance misusers. This anonymous information was gathered through professionals working with these persons. The characteristics of the identified clients and their substance (mis)use, the effects of substance use and misuse on their behavior and life, and their service use will be discussed in relation to the international literature.

4.4.1. Characteristics of the identified clients and their substance (mis)use

This study showed few differences between substance users and misusers, except for work status; substance misusers were less likely to be employed than users. The majority of the persons who were identified as substance users or misusers had a mild ID, were male, tended to be younger, and had been drinking hazardously for more than 5 years. This finding is in line with the findings of Taggart and his colleagues (2006), as well as the observation that no person with profound ID was identified in the current study. Most of the identified persons lived independently, although mostly with external support. Substances were primarily used at home, alone, or with friends (mostly friends without ID). These characteristics indicate that these people live a quite independent life, which is similar to the findings of Taggart et al. (2006) and is in line with the suggestion of Edgerton (1986) and Rimmer, Braddock, & Marks (1995). They suggested that the reasons for greater substance misuse in people with borderline and mild ID may relate to an increased level of physical or financial independence and the opportunity to access substances. In addition, an isolated group of persons with ID who mostly use alone at home rather than in public places was identified. As DiNitto and Krishnef (1983) assumed, the use of substances may further isolate persons with ID who are often already quite isolated. Therefore, a higher level of cognitive functioning (i.e., mild or borderline ID), independent community living, and isolation may be risk factors for identifying those individuals who are at risk of developing enduring substance use-related problems (Taggart et al., 2006). This finding not only underscores the relevance of early screening of substance use and misuse problems in this population, but also stresses the importance of maintaining good social relationships and providing sufficient social support. Additional research is needed on appropriate and accessible screening and assessment instruments to identify ID and substance use and misuse problems, as well as on the advantages of social support for this group.

This study primarily identified alcohol (mis)users with ID, followed by cannabis (mis)users with ID. This is consistent with the findings of Chaplin et al. (2011) and VanderNagel et al. (2011). Yet, this study also identified 12% cocaine (mis)users, which is considerably high, but in line with Chaplin and his colleagues' (2011) finding of 12% occasional and heavy cocaine users. Furthermore, more than half of the sample of identified alcohol (mis)users combined alcohol (mis)use with (mis)use of illicit drugs. As also shown by VanderNagel and his colleagues (2011), poly-substance users were more likely to be younger than 30 years.

In addition to substance (mis)use problems, a remarkable number of informants reported that their client also had a psychiatric disorder. This finding supports previous studies that examined *triple diagnosis* (i.e., an intellectual disability, a mental health problem and a substance-related problem) (e.g., Barnhill, 2000; Taggart et al., 2006; Slayter, 2010) and is in line with a number of studies that indicate high psychiatric co-morbidity (e.g., Slayter, 2010; Sturmey et al., 2003; Taggart et al., 2006; VanderNagel et al., 2011). Furthermore, there is some evidence that having a psychiatric disorder may be a risk factor for substance-related problems in persons with ID (Slayter, 2008; Taggart et al., 2006), although many questions remain regarding the causality and the direction of the relationship between two or more co-occurring disorders (see Mueser, Drake, & Wallach, 1998).

4.4.2. Effects on behavior and well-being

The current findings show a wide range of substance-related problems that affect people's life and well-being. Consistent with the findings of Taggart and his colleagues (2006), the informants mainly reported mood changes and verbal aggression as consequences of substance (mis)use. Remarkably, offending was reported as a consequence of substance (mis)use by one-fifth of the informants. This has also been demonstrated in previous studies (Chaplin et al., 2011; Chapman & Wu, 2012; Didden et al., 2009; McGillivray & Moore, 2001), suggesting a possible link between substance misuse and offending behavior in persons with ID. Substance (mis)use in persons with ID may thus be a risk factor for involvement in the criminal justice system (McGillivray & Moore, 2001).

In the current study, we did not find significant differences between substance users and misusers regarding the impact of substance (mis)use on individuals' behavior, except for mood changes and suicidal ideation/thoughts. Hence, attention should be given to substance misusers and substance users. Most negative consequences of substance (mis)use on behavior (e.g., offending behavior) do not seem to differ between the two groups, which emphasizes that substance use in persons with ID may have important consequences.

Nevertheless, mood changes and suicidal ideation/thoughts were found to be more likely in substance misusers compared to substance users. Furthermore, clients with a psychiatric diagnosis were more likely to have suicidal ideation/thoughts than those who did not have a mental health problem. Therefore, special care and attention should be paid to the specific group of persons with a triple diagnosis.

Regarding the influence of substance (mis)use on mental health, daily activity, and personal relationships, significant differences were found between substance users and misusers. The influence of substance misuse on physical and mental health, daily activity, and personal relationships was higher than that of substance use, which was in line with our expectations.

4.4.3. Current and past service use and collaboration between services

In the present study, the majority of substance (mis)using persons with ID were receiving support from ID services. However, this might be the result of the broad definition of substance use (instead of misuse) in this study. More importantly, most of the identified substance users and misusers with ID had received care from ID or addiction services in the past. Furthermore, the majority of the service providers had not collaborated with services beyond the own sector in their care for the reported client. Given the new support policy in Flanders for persons with ID advocating intersectoral collaboration between services to achieve person-centered support for persons with multiple problems, this study recommends structural communication and collaboration between local ID and addiction services toward an integration of services, as suggested by many authors (e.g., Broekaert & Vanderplasschen, 2003; Huxley, Coppola, & Day, 2005; McLaughlin, Taggart, Quinn, & Milligan, 2007). However, some authors believe that the two service systems support different treatment paradigms that may impede collaboration. Whereas becoming abstinent through the establishment of behavioral limitations is commonly used in addiction services, ID services typically focus on self-determination regardless of cognitive limits, which might be contradicting goals (e.g., Slayter, 2007, 2008). This illustrates caregivers' challenging task in supporting persons with an intellectual disability and a substance misuse problem. Both extremes of the continuum of harsh control and elimination of all risks, on the one hand, and a *laissez faire, laissez passer* attitude, on the other hand, can lead to potential harmful situations (Morisse, Vandemaele, Claes, Claes, & Vandevelde, 2013). The first approach conflicts with the notion of self-determination and inhibits a person-centered approach. It could lead to negative consequences, such as 'bounded empowerment' (Jingree & Finlay, 2008:34), in which service-users are offered independence as long as it falls within the constraints of safety. Among other difficulties, this raises questions regarding who judges a

situation or behavior as potentially dangerous. A laissez faire, laissez passer attitude, on the other hand, can be considered as a misinterpretation of 'real' empowerment, which always implies interdependence rather than independence (Van Hove & van Loon, 2010). We believe that thorough dialogue between clients, caregivers, and/or other relevant actors, embedded in the context of each individual case, may shed light on how to address these – on the first sight – contradicting principles. Tailored treatment that starts from individual needs and vulnerabilities and the choices of people with ID may enable the integration of different treatment paradigms. In our opinion, a permissive and supporting environment that aims at empowerment and agency does not rule out interventions that are focused on (self-) control and (self-) regulation (Morisse et al., 2013). On the contrary, confrontation by peers, treatment staff, or others may be extremely powerful in a *permissive milieu*, as exemplified in therapeutic communities for persons with personality disorders or substance abuse problems (Kennard, 1998; Vandevelde, Broekaert, Yates, & Kooyman, 2004).

4.4.4. Limitations

The results of this study should be interpreted in the context of a number of shortcomings. First, this study examined the reports of a small and non-representative sample of informants who were willing to participate in the study. We relied on the perspectives of these informants concerning their client, which may be a source of bias. Second, the informants only reported on identified users of ID or addiction services. Substance users who did not utilize these services were not identified and included in the study. The identification of substance users and misusers in the current sample further relied on the clinical skills of the informants to identify this population and to detect other psychiatric problems. Lastly, the study failed to include the perspective of the substance (mis)users with ID.

4.5. Conclusions

This study has demonstrated that substance misusers and substance users with ID experience negative consequences due to their (mis)use. Overall, few differences were found between the two groups. This underscores the importance of closely monitoring substance use in persons with ID. Substance misusers were found to have more mood changes, more suicidal ideation/thoughts, and more negative long-term consequences on health, daily activities and personal relationships due to substance misuse. Substance use and misuse were frequently associated with mental health problems (triple diagnosis) and might be risk factors for offending behavior. Consequently, a clear need was demonstrated

for appropriate and accessible screening and assessment instruments to identify intellectual disabilities and substance use and misuse problems by front-line care staff in various settings (e.g., criminal justice services, mental health services, ID services, addiction services). Early identification can decrease the risk of developing enduring substance misuse problems. Furthermore, the study suggests that an individualized approach that addresses this complex problem in a comprehensive manner supports intersectoral collaboration between different services.

References

American Association of Intellectual and Developmental Disabilities (2013). Definition of intellectual disability. Retrieved from http://www.aaidd.org/content_100.cfm?navID=21.

Barnhill, J. (2000). *Triple diagnosis: substance abuse, mental illness and mental retardation*. New York: Proceedings of the NADD international conference.

Broekaert, E., & Vanderplasschen, W. (2003). Towards the integration of treatment systems for substance abusers: Report on the second international symposium on substance abuse treatment and special target groups. *Journal of Psychoactive Drugs, 35,* 237-245.

Burgard, J. F., Donohue, B., Azrin, N. A., & Teichner ,G. (2000). Prevalence and treatment of substance abuse in the mentally retarded population: an empirical review. *Journal of Psychoactive Drugs, 32*, 293-298.

Chaplin, E., Gilvarry, C., & Tsakanikos, E. (2011). Recreational substance use patterns and co-morbid psychopathology in adults with intellectual disability. *Research in Developmental Disabilities, 32,* 2981-2986.

Chapman, S. L. C., & Wu, L. T. (2012). Substance abuse among individuals with intellectual disabilities. *Research in Developmental Disabilities, 33*, 1147-1156.

Christian, L., & Poling, A. (1997). Drug abuse in persons with mental retardation: A review. *American Journal of Mental Retardation, 102*, 126–136.

Clarke, J. J., & Wilson, D. N. (1999). Alcohol problems and intellectual disability. *Journal of Intellectual Disability Research*, *43*, 135-139.

Cocco, K., & Harper, D. (2002). Substance use in people with mental retardation: A missing link in understanding community outcomes. *Rehabilitation Counseling Bulletin, 46*, 33–40.

Degenhardt, L. (2000). Interventions for people with alcohol use disorders and an intellectual disability: A review of the literature*. Journal of Intellectual and Developmental Disabilities, 25*, 135–146.

Didden, R., Embregts, P., van der Toorn, M., & Laarhoven, N. (2009). Substance abuse, coping strategies, adaptive skills and behavior and emotional problems in clients with mild to borderline intellectual disability admitted to a treatment facility: A pilot study. *Research in Developmental Disabilities, 30*, 927–932.

DiNitto, D., & Krishef, C. (1983). Drinking patterns of mentally retarded persons. *Alcohol Health and Research World, 8*, 40–42.

Edgerton, R. (1986). Alcohol and drug use by mentally retarded adults. *American Journal of Mental Deficiency, 90*, 602–609.

Huxley, A., Copello, A., & Day, E. (2005). Substance misuse and the need for integrated services. *Learning Disability Practice, 96,* 14-17.

Jingree, T., & Finlay, W. M. L. (2008). 'You can't do it… it's theory rather than practice': staff use of the practice/principle rhetorical device in talk on empowering people with learning disabilities. *Discourse and Society, 19*, 705-726.

Kennard, D. (1998). *An introduction to therapeutic communities.* London: Jessica Kingsley Publishers Ltd.

Krishnef, C. H., & DiNitto, D. M. (1981). Alcohol abuse among mentally retarded individuals. *Mental Retardation, 19*, 151-155.

Lance, P., & Longo, M. D. (1997). Mental health aspects of developmental disabilities. *The Habilitative Mental Healthcare Newsletter, 16*, 61-64.

Lottman, T. J. (1993). Access to generic substance abuse services for persons with mental retardation. *Journal of Alcohol and Drug Education, 39*, 41–55.

McGillicuddy, N. (2006). A review of substance use research among those with mental retardation. *Mental Retardation and Developmental Disability Research Reviews, 12*, 41–47.

McGillivray, J., & Moore, M. (2001). Substance use by offenders with mild intellectual disability. *Journal of Intellectual and Developmental Disability, 26*, 297–310.

McLaughlin, D., Taggart, L., Quinn, B., & Milligan, V. (2007). The experiences of professionals who care for people with intellectual disability who have substance-related problems. *Journal of Substance Use, 12*, 1-11.

Moore, D., & Polsgrove, L. (1991). Disabilities, developmental handicaps and substance misuse: A review. *The International Journal of the Addictions, 26,* 65-90.

Morisse, F., Vandemaele, E., Claes, C., Claes, L., & Vandevelde, S. (2013). Quality of life in persons with intellectual disabilities and mental health problems: an explorative study. *The Scientific World Journal*, Article ID 491918, 8 pages, retrieved from http://dx.doi.org/10.1155/2013/491918

Mueser, K. T., Drake, R. E., & Wallach, M. A. (1998). Dual Diagnosis: A review of etiological theories. *Addictive Behaviors, 23*, 717-734.

Mutsaert, K., Blekeman, J., & Schipper, H. (2007). *Licht verstandelijk gehandicapten en middelengebruik. Wat is er tot op heden bekend?* Utrecht: Trimbos-instituut.

Rimmer, J. H., Braddock, D., & Marks, B. (1995). Health characteristics and behaviors of adults with mental retardation residing in three living arrangements. *Research in Developmental Disabilities, 16*, 489–499.

Ruf, G. (1999). Addiction treatment for people with mental retardation and learning disabilities: Why we need specialized services. NADD newsletter (3(2)). Kingston, NY:NADD Press. Retrieved from

http://www.thenadd.org/cgibin/checkmember.pl?page=pages/membership/bulletins/v2n3a2.

Slayter, E. (2007). Substance abuse and mental retardation: Balancing risk management with the “Dignity of Risk”. *Family and Society, 88*, 651.

Slayter, E. (2008). Understanding and overcoming barriers to substance abuse treatment access for people with mental retardation. *Journal of Social Work and Disability Rehabilitation, 7*, 63–80.

Slayter, E. (2010). Disparities in access to substance abuse treatment among people with intellectual disabilities and serious mental illness. *Health & Social Work, 35*, 49-59.

Slayter, E., & Steenrod, S. (2009). Addressing alcohol and drug addiction among people with mental retardation in nonaddiction settings: A need for cross system collaboration. *Journal of Social Work Practice in the Addictions, 9*, 71–90.

Sturmey, P., Reyer, H., Lee, R., & Robek, A. (2003). *Substance-related disorders in persons with mental retardation.* Kingston, NY: NADD Press.

Taggart, L., McLaughlin, D., Quinn, B., & Milligan, V. (2006). An exploration of substance misuse in people with intellectual disabilities. *Journal of Intellectual Disability Research, 50*, 588–597.

Taggart, L., Huxley, A., & Baker, G. (2008). Alcohol and illicit drug misuse in people with learning disabilities: implications for research and service development. *Advances in Mental Health Learning Disabilities, 2*, 11-21.

Tyas, S., & Rush, B. (1991). The treatment of disabled persons with alcohol and drug problems: Results of a survey of addiction services*. Journal of Studies on Alcohol, 54*, 275-282.

VanderNagel, J., Kiewik, M., Buitelaar, J., & DeJong, C. (2011). Staff perspectives of substance use and misuse among adults with intellectual disabilities enrolled in Dutch disability services. *Journal of Policy and Practice in Intellectual Disabilities, 8*, 143–149.

Vanderplasschen, W., Mostien, B., Claeys, P., Raes, V., & Van Bouchaute, J. (2001). *Conceptnota organisatiemodel zorgcircuit middelenmisbruik*. Gent: Orthopedagogische Reeks Gent.

Vandevelde, S., Broekaert, E., Yates, R., & Kooyman, M. (2004). The development of the therapeutic community in corrections: a comparative retrospective account on the ‘democratic’ Maxwell Jones TC and the ‘hierarchical’ concept-based TC. *International Journal of Social Psychiatry, 50*, 66-79.

Van Gennep, A. T. G. (1997). Paradigma-verschuiving in de visie op de zorg voor mensen met een verstandelijke beperking. *Tijdschrift voor Orthopedagogiek, 36,* 189-201.

Van Hove, G., & van Loon, J. (2010). Personen met een verstandelijke beperking. In E. Broekaert, & G. Van Hove (Eds.), *Handboek Bijzondere Orthopedagogiek* (pp.17-43). Antwerpen, Amsterdam: Garant.

Westermeyer, J., Kemp, K., & Nugent, S. (1996). Substance disorder among persons with mild retardation. *The American Journal on Addictions, 5*, 23–31.

Westermeyer, J., Phaobtang, T., & Neider, J. (1988). Substance use and abuse among mentally retarded persons: a comparison of patients and a survey population. *American Journal of Drug and Alcohol Abuse, 14,* 109-123.

Young, L. (2006). Community and cluster centre residential services for adults with intellectual disability: Long-term results from an Australian-matched sample. *Journal of Intellectual Disability Research, 50*, 419-431.

CHAPTER 5

SCREENING FOR INTELLECTUAL DISABILITY IN PERSONS WITH A SUBSTANCE ABUSE PROBLEM: EXPLORING THE VALIDITY OF THE HAYES ABILITY SCREENING INDEX IN A DUTCH-SPEAKING SAMPLE[4]

[4] Based on To, W.T., Vanheule, S., Vanderplasschen, W., Audenaert, K., & Vandevelde, S. (2015). Screening for intellectual disability in persons with a substance abuse problem: Exploring the validity of the Hayes Ability Screening Index in a Dutch-speaking sample. *Research in Developmental Disabilities, 36*, 498-504.

ABSTRACT

There is an increasing interest in screening instruments to detect Intellectual Disability (ID) in a quick and accurate way in mental health services as well as in the criminal justice system in order to provide appropriate support for people with undetected needs caused by ID. An instrument that has been proven to be useful in both settings is the Hayes Ability Screening Index (HASI). This study assessed the validity of the Dutch version of the HASI in persons with a substance abuse problem residing in mental health services, whether or not mandated to treatment by court order. The HASI was conducted along with the Wechsler Adult Intelligence Scale III as the criterion for validity to 90 participants. Additionally, the influence of psychiatric disorder and medication use on the HASI result was examined. A significant positive relationship was found between the two instruments, demonstrating convergent validity. Using a Receiver Operating Characteristic (ROC) curve analysis, the discriminative ability of the HASI with a cut-off score of 85 was found to be adequate, yielding in a good balance between sensitivity and specificity. The HASI was not distorted by the presence of the substance abuse problem or other psychiatric illnesses and medication did not influence the HASI scores in this study. These findings indicate that the HASI provides a time-efficient and resource-conscious way to detect ID in persons with a substance problem, thus addressing a critical need in mental health settings.

5.1. Introduction

There is an increasing interest in the early identification of intellectual disability (ID) in persons who come in contact with the criminal justice system (CJS) (e.g. Ford et al., 2008; Hayes, 2002; McKenzie, Michie, Murray, & Hales, 2012; Sondenaa, Rasmussen, Palmstierna, & Nottestad, 2008) and/or the mental health system (MHS) (e.g. Sondenaa, Bjorgen, & Nottestad, 2007; Sondenaa, Nygard, Nottestad, & Linaker, 2011).

In criminal justice settings, some authors have suggested that intellectual disabilities might reduce the ability to cope with the demands of the CJS (Clare & Gudjonsson, 1993; Gudjonsson & Sigurdsson, 2003; Hayes, 2005; Jones, 2007). For example, clients with ID tend to be unaware of their legal rights, tend to over-estimate the power of police and other authority figures, and tend to be more compliant or suggestible, especially in relation to authority figures (e.g. Clare & Gudjonsson, 1993; Gudjonsson & Sigurdsson, 2003; Hayes, 2005; Jones, 2007). Therefore, it is of great importance to timely and accurately identify ID, so that appropriate interventions, protective measures and dispositions can be implemented at all stages of the criminal justice process (Hayes, 2005).

In mental health settings, the failure to systematically identify clients with ID might interfere with standard treatment protocols, which often do not systematically take into account the specific needs of individuals with ID. Early identification is important in order to provide appropriate support and treatment that takes into account clients' cognitive limitations. When the presence of ID is not recognized, the individual may wrongfully be considered as being uncooperative, behaviorally disordered, or psychological disturbed (Hayes, 2005, 2007). A misinterpretation of behavior or misdiagnosis, e.g. of a mental illness instead of ID, may lead to a placement in a unit which is inappropriate to meet the needs of the individual and will ultimately result in ineffective interventions (Hayes, 2005, 2007). More specifically, this appears to be critical in mainstream addiction services, where the appropriate resources to identify and treat this specific population are often lacking (Degenhardt, 2000; Lance & Longo, 1997; Lottman, 1993; McGilllicudy, 2006; Ruf, 1999; Slayter & Steenrod, 2009; Sturmey, Reyer, Lee, & Robek, 2003; Taggart, Huxley, & Baker, 2008; Tyas & Rush, 1991; VanderNagel, Kiewik, Buitelaar, & De Jong, 2011). It is acknowledged that compared to substance abusers without ID substance abusers with ID are less likely to receive treatment or to remain in treatment (Chapman & Wu, 2012). During treatment, cognitive impairments in patients with substance abuse problems contribute to poorer treatment outcomes, including decreased treatment retention and less abstinence (Copersino et al., 2009). Interestingly,

research has shown a possible link between substance abuse and offending behavior in persons with ID, indicating that substance (ab)use in persons with ID may be a risk factor for involvement in the CJS (McGillivray & Moore, 2001; To, Neirynck, Vanderplasschen, Vanheule, & Vandevelde, 2014).

A routine screening or comprehensive assessment for intellectual disability is, however, not a standard procedure in the criminal justice and mental health systems, including addiction services. A diagnosis of 'intellectual disability' is defined by three aspects: 1. Significantly impaired intellectual functioning (i.e. an intelligence quotient of 70 or below), 2. Significantly impaired adaptive functioning, and 3. Onset before the age of 18 (American Association of Intellectual and Developmental Disabilities, 2010). Further, a diagnosis should be made by using valid and reliable assessments of intelligence (e.g. Wechsler Adult Intelligence Scale III) and adaptive functioning as well as taking the developmental history into account to determine if the disability was present before age 18. Such assessment of intellectual disability is often time-consuming, resource intensive and requires qualified personnel. Usually, referrals for full-scale diagnostic assessment generally only occur when intellectual difficulties are suspected, leading to an underestimation of the prevalence of intellectual disability in these settings (Hayes, 2007; Herrington, Hunter, & Harvey, 2005). Therefore, valid and reliable screening tools that provide an indication of intellectual disability should more globally be implemented in CJS and MHS. This might make professionals aware of possible ID in patients, and assist in decision-making about further diagnostic assessment.

A screening tool that has been used in the criminal justice and mental health systems is the Hayes Ability Screening Index (HASI; Hayes, 2000). It is a brief instrument to screen for intellectual disability. The HASI can be administered by any trained staff in 5 to 10 minutes. The screening results in a score or index which, when compared with an age-appropriate cut-off score, suggests whether referral for further assessment is necessary or not. The HASI has been shown to be a valid, user-friendly and time-saving instrument for screening ID in the Australian criminal justice system (Hayes, 2002). The study of Hayes (2002) found significant relationships with large effect size between the HASI and the Kaufman Brief Intelligence Test (KBIT; $r = 0.627$; $p < 0.05$) and the Vineland Adaptive Behavior Scales (VABS; $r = 0.497$; $p < 0.01$), indicating convergent validity. The Receiver Operating Characteristic (ROC) curve analysis with a HASI cut off score of 85 showed a sensitivity of 82.4% for the KBIT, 71.2% for VABS and specificity of 71.6% for the KBIT and 71.2% for the VABS. However, in an adolescent offender sample in the United Kingdom the HASI was reported not having adequate specificity to be helpful in identifying possible ID (Ford et al., 2008). Ford and his colleagues (2008) observed significant relationships between the HASI

and the Wechsler Adult Intelligence Scale -III (WAIS-III; $r = 0.553$; $p < 0.01$) and the VABS ($r = 0.377$; $p < 0.01$). However, the Receiver Operating Characteristic (ROC) curve analysis with a HASI cut off score of 85 only presented a specificity of 65.2% and a sensitivity of 80%. In Norway, the instrument has been demonstrated to be valid in an offender as well as in a non-offender sample, but a lower cut-off value than the original cut-off value of 85 was suggested (Sondenaa, Bjorgen, & Nottestad, 2007; Sondenaa, Nygard, Nottestad, & Linaker, 2011; Sondenaa, Rasmussen, Palmstierna, & Nottestad, 2008). In an offender sample of inmates of six prisons, Sondenaa and his colleagues (2008) found a significant relationship with large effect size between the HASI and the Wechsler Abbreviated Scale of Intelligence (WASI; $r = 0.717$; $p < 0.001$) and the Receiver Operating Characteristic (ROC) curve analysis with a HASI cut off score of 85 showed a sensitivity of 93.3% and specificity of 72.4%. The two non-offender samples also demonstrated the HASI to be valid. Sondenaa and colleagues (2007) found a significant relationship with large effect size between the HASI and the WAIS-III ($r = 0.81$; $p < 0.001$) and the Receiver Operating Characteristic (ROC) curve analysis with a HASI cut off score of 85 showed a sensitivity of 100% and specificity of 57%. In 2011, Sondenaa and colleagues (2011) observed a significant relationship with large effect size between the HASI and the WASI ($r = 0.67$; $p < 0.001$) and the Receiver Operating Characteristic (ROC) curve analysis with a HASI cut off score of 85 showed a sensitivity of 100% and specificity of 35.4%.

For the Dutch language version of the HASI the validity has never been examined. To address this gap, the present study investigates the validity of the HASI for substance abusers, whether or not mandated to treatment by court order. The study is carried out in Flemish (the northern Dutch-speaking part of Belgium) mental health services, using the Dutch version of the Wechsler Adult Intelligence Scale III (WAIS-III; Wechsler, 2004) as the criterion for validity. Additionally, this study examines whether having a psychiatric disorder affects the results on the HASI, since it has been suggested that the HASI might be over-inclusive, possibly identifying individuals suffering from a psychiatric illness as having an ID (Hayes, 2000, 2002). Finally, the possible impact of using psychotropic medication on the HASI performance is considered, as participants often use medication that might influence their performance.

5.2. Method

5.2.1. Sample

Participants were 90 Caucasian Dutch-speaking adults with a substance abuse problem receiving support from eight Flemish mental health services. The data collection took place in two phases. In the first phase, four addiction services were included into the study. This resulted in 73 participants, whereof no one had an IQ of 70 or below. Searching for persons with ID to validate the HASI, 17 additional participants were recruited from a broader array of mental health services than addiction services to search for participants with a substance abuse problem and a possible ID. In the second phase, four additional mental health institutions were included into the study, whereof two general mental health services and two care centers for persons with an intellectual disability. To be eligible for the study, the participants had to meet the following criteria: 1. substance abuse problem was conceptualized as defined by Vanderplasschen, Mostien, Claeys, Raes, and Van Bouchaute (2001: 22): "*problems occurring in one or more life domains resulting from alcohol, psychotropic drug and illegal substance use*", 2. abstinence of all drugs of abuse (other than nicotine) for at least two weeks to exclude acute intoxication or withdrawal, 3. age 18 or older, 4. not have been tested with the WAIS-III during the last two years, and 5. Dutch is the mother tongue.

5.2.2. Procedures and instruments

After providing informed consent, participants were asked some demographic questions, a question about psychiatric disorder ('have you ever been in treatment for a psychiatric disorder [not substance abuse or dependence]?' yes/no), a question about the voluntariness of their treatment (is this treatment voluntarily or under judicial conditions?' yes/no) and for a subgroup of the sample a question was asked about the perceived influence of their medication on concentration, attention and memory ('At this moment, do you have the feeling that you are less able to concentrate, are less attentive or that you are less able to recall things because of your medication?' influence/no influence). Related to the last self-report question a list of their current medication was asked along with the duration of this medication usage, the dosage, and any change of dosage in the last month in order to check this subjective feeling with the expertise of a psychiatrist who rated the medication schemes based on anonymous data.

Next, the instruments were administered to each participant at a single time point, which took up approximately 2.5h. Assessments were carried out by the first author, who is a clinical psychologist, and by master students of the Faculty Psychology and Special Education at Ghent University after extensive training and under supervision of the first author. The study measures included the Dutch version of the Hayes Ability Screening Index (HASI) and the Dutch version of the Wechsler Adult Intelligence Scale-III (WAIS-III). The tests were counterbalanced to preclude possible test order effects.

The HASI consists of four subtests: background information and three short tests measuring spelling, visuo-spatial and visuo-constructional ability. The first subtest contains four self-report questions sensitive to school difficulties, the subject's self-awareness about their learning difficulties, and the subject's social economic and social status. The second subtest is backward spelling. Subjects need to spell a five-letter word backwards. For the Dutch version of the HASI, the word 'GROND' (English: soil) is used. The third subtest is a puzzle task (based on the Trial Making test part B) where the subjects need to draw lines between a pattern of numbers and letters. The last subtest is the clock-drawing test. The subjects need to draw a large clock and put hands of the clock on a specific time. The assessment results in an index that had been found to correlate significantly with those on the Kaufman Brief Intelligence Test and on the Vineland Adaptive Behavior Scales (Hayes, 2002). The HASI also correlated significantly with the WASI (Sondenaa et al., 2008, 2011) and the WAIS-III (Ford et al., 2008; Sondenaa et al., 2007). Using the original HASI cut-off score of 85 (Hayes, 2002), previous research using a Receiver Operating Characteristic (ROC) curve analysis have reported a sensitivity of 100% using the WAIS-III (Sondenaa et al., 2007) or WASI (Sondenaa et al., 2011) as a criterion validity and a specificity of 35.4% when using the WASI (Sondenaa et al., 2011), and 57% when using the WAIS-III (Sondenaa et al., 2007) as a criterion for validity.

The Dutch version of the Wechsler Adult Intelligence Scale III (WAIS-III; Wechsler, 2004) was used as a criterion of validity in this study. The Wechsler intelligence scales yield in standard index scores for different facets of intelligence, as well as a full scale IQ, a verbal IQ and a Performance IQ. Standardized scores have a mean of 100 and a standard deviation of 15. A score which is two standard deviations or more below the mean, i.e. 70 or lower, indicates significantly impaired functioning and is clinical in terms of the diagnostic criteria for intellectual disability.

5.2.3. Data analysis

The data were analyzed using SPSS version 20. The convergent validity of the HASI was examined using Pearson two-tailed correlations between the HASI and the WAIS-III. The discriminant ability of the HASI was tested using a Receiver Operating Characteristic (ROC) curve analysis. Further, the influence of having a psychiatric disorder and the influence of the taken medication on the HASI score were examined using linear regression analysis, in which the full WAIS-III IQ score was also included as an independent variable. Lastly, to predict with what certainty the HASI classification can predict a correct WAIS-III classification a logistic regression was conducted.

5.2.4. Ethical approval

Ethical approval was obtained from the Ethics Committee of the University Hospital Ghent (2012/191) and from the Ethics Committee of the Faculty of Psychology and Educational Sciences at Ghent University (2012/11).

5.3. Results

5.3.1. Descriptive statistics

Information was obtained from 90 Caucasian Dutch-speaking adult clients with a substance abuse problem receiving support from eight Flemish mental health services. On average, the participants were 32 years old (*sd* = 9.795, min = 18; max = 64, n = 90). Most participants were male (83.3%, n = 90), did not had psychiatric treatment in their lifetime (74.4%, n = 90) and were voluntarily in treatment (87.8%, n = 90). Just over half of the participants (of a subgroup of the sample) did not report any possible influence of their current medication on concentration, attention and memory (57.6%, n = 33). The average IQ of the sample measured by the WAIS-III was 88.87 (*sd* = 15.09, n = 90), with a minimum of 50 and a maximum of 126. Eleven of the 90 participants met the criteria for ID in terms of WAIS-III IQ (score ≤ 70), 15 participants had an IQ score of 75 or below, and 36 had IQ scores of 85 of below. The average HASI score of the sample was 86.75 (*sd* = 10.20, n = 90) with a minimum of 53.7 and a maximum of 96.4.

5.3.2. Convergent validity

The convergent validity was indicated by a significant Pearson two-tailed correlation between the HASI scores and the WAIS-III full-scale IQ scores ($r = 0.694$; $p < 0.001$). Furthermore, the correlations between the HASI subtests and the WAIS-III were all significant: background information (Pearson two-tailed $r = 0.58$; $p < 0.001$), spelling (Pearson two-tailed $r = 0.50$; $p < 0.001$), puzzle (Pearson two-tailed $r = 0.46$; $p < 0.001$), and clock drawing (Pearson two-tailed $r = 0.45$; $p < 0.001$). The HASI also correlated significantly with the verbal subscale of the WAIS-III (Pearson two-tailed $r = 0.696$; $p < 0.001$) and the performance subscale of the WAIS-III (Pearson two-tailed $r = 0.629$; $p < 0.001$).

5.3.3. Discriminative ability

The HASI and the WAIS-III full-scale IQ scores are plotted in Figure 1, which illustrates the distribution of the scores. Overall, 72 participants were correctly classified by the HASI. The HASI reported 1 false negative result and 17 false positive results.

The ability of the HASI to discriminate between those with and without an intellectual disability measured by the WAIS-III in this sample was examined using a Receiver Operating Characteristic (ROC) curve analysis. The area under the curve was found to be 0.953, indicating a significant ability ($p < 0.001$) to discriminate between the two groups. Using the original HASI cut-off of 85, as suggested by Hayes (2002), it showed a sensitivity of 91%. The sensitivity is the percentage of the tested participants with an IQ of 70 or below that the HASI correctly identified as present. The specificity was found to be 80%. This is the percentage of the tested participants without an IQ of 70 or below whom the HASI correctly identified as not present. The sensitivity and specificity of the HASI at various cut-off scores are presented in Table 1. Increasing the cut-off from 85 by one point to 86 will increase the sensitivity to 100%, without losing to much specificity (from 80% to 79%).

Table 1. Receiver Operating Characteristic (ROC) curve analysis: scores on HASI and WAIS-III at IQ 70 (n = 90)

HASI	Area under ROC curve	Possible cut-off scores	Sensitivity	Specificity
	.95	84.95	0.91	0.80
		85.55	0.91	0.79
		86.40	100	0.79
		87.05	100	0.77

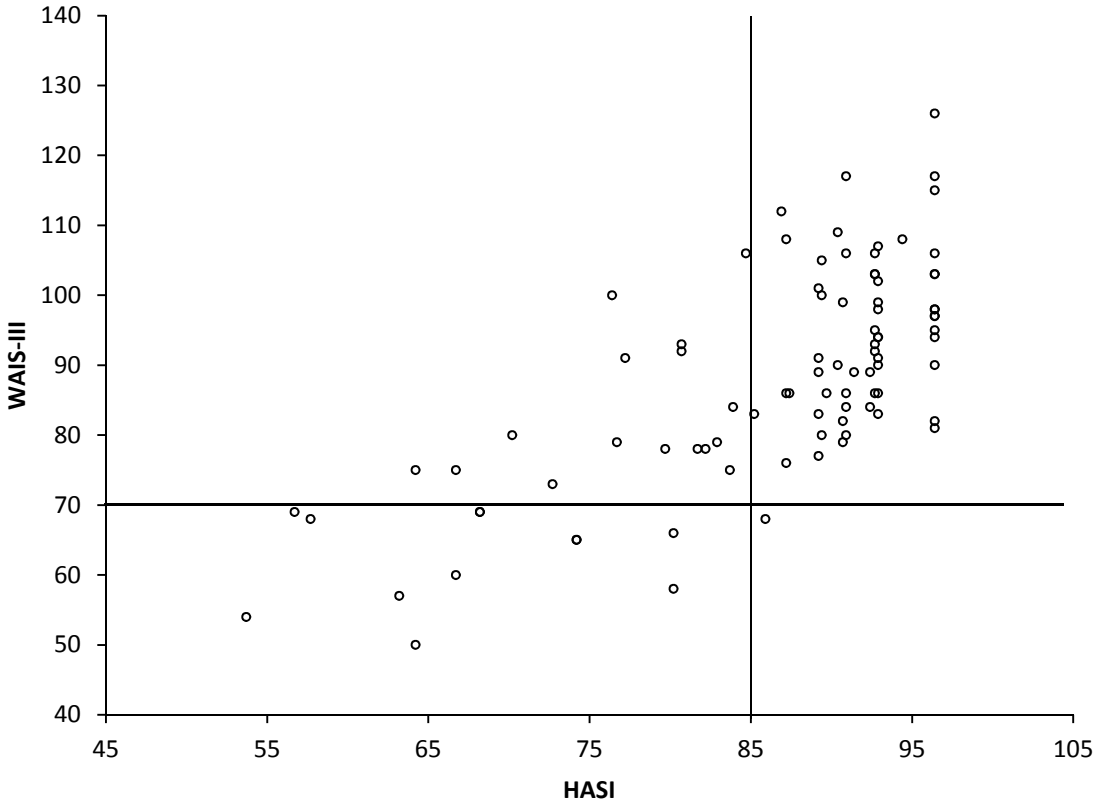

Figure 1. Scatter-plot and cut-off for HASI and WAIS-III

The influence of having a psychiatric disorder or not ('PSY') on the HASI score was examined using linear regression analysis, in which the full WAIS-III IQ score was also included as an independent variable. The WAIS-III score explained a significant amount of variance in the HASI score: the higher the score on the WAIS-III the higher the score obtained on the HASI (F = 81.69, p < 0.001, β = .469, R^2 = 48%). Adding the variable PSY to the model did not significantly contribute to explaining the variability in the HASI (ΔF = 0.189, p = 0.66, ΔR^2 = 0.1%).

For a subset of the sample (n = 61), the influence of current medication on concentration, attention and memory was self-reported. In total, 47 participants took medication at the moment of testing. The self-report question significantly correlated (Kendal Tau-b = 0.46; p < 0.01) with the assessment of the psychiatrist based on the information of their medication use at the time of the testing, indicating that their subjective perception of their medication influence was generally reliable. Since the subjective findings correlated significantly with the more objective evaluation of the psychiatrist, only the subjective experience is used in the analysis. The subjective influence of the taken medication or not ('MED') on the HASI score

was examined using linear regression analysis, in which the full WAIS-III IQ score was also included as an independent variable. Adding this variable MED to the model did not significantly contribute to explaining the variability on the HASI ($\Delta F = 0.838$, $p = 0.37$, $\Delta R^2 = 0.1\%$)

Lastly, to predict with what certainty the HASI classification (cut-off 85) can predict a correct WAIS-III classification a logistic regression was conducted. The dependent variable 'WAIS-III 2 categories' measured whether someone had an intellectual disability based on the WAIS-III and equaled 1 if the respondent had an IQ score of 70 or below and equaled 0 if otherwise. The analysis resulted in a significant effect (Wald = 11.45, $p = .001$, $\beta = 3.673$, Nagelkerke $R^2 = 41\%$), demonstrating that if a person is categorized as possibly intellectual disabled by the HASI, a probability of 62% is found that that person will be categorized as intellectually disabled by the WAIS-III.

5.4. Discussion

This study examined the validity of the HASI as a screening tool in mental health services for persons with a substance abuse problem. The convergent validity as well as the discriminative ability of the HASI was examined using the WAIS-III as a criterion of validity. This study further tested the possible influence of having a psychiatric disorder on the HASI score, and for a subgroup of the sample also examined whether medication had influenced the HASI performance.

In relation to the convergent validity, a significant positive relationship was found between the full scale IQ of the WAIS-III and the HASI score, indicating that the higher the IQ score of a person, the higher the HASI score will be. This finding is congruent with results from previous studies (Ford et al., 2008; Sondenaa et al., 2007, 2008, 2011). The correlation of 0.69 in this study lies within the range of results of previous studies using the WAIS-III as a criterion of validity: Sondenaa and his colleagues (2007) found a correlation of 0.81 in a psychiatric setting, whereas Ford and his colleagues (2008) found a correlation of 0.55 in an adolescent offender sample. This study found that the HASI correlated both significantly, but better with verbal IQs than the performance IQs from the WAIS-III, which is in line with the findings of Sondenaa et al. (2007).

The discriminant ability of the HASI was examined using ROC curve analysis. The analysis showed a sensitivity and specificity of the HASI (cut-off at 85) of 80% and above, which is

considered to be acceptable (Glascoe, 2005; McKenzie, Michie, Murray, & Hales, 2012). Consequently, we conclude that the HASI cut-off of 85 might be effective for use among persons with a substance abuse problem in general mental health services: it is sensitive enough in selecting persons with an intellectual disability, and at the same time also detects persons without an intellectual disability. The ability of the HASI to screen for ID in this specific group of persons with a substance abuse problem further demonstrated that the HASI is able to screen well, without being too over-inclusive identifying persons with a substance abuse problem as having an ID problem, as suggested by Hayes (2000, 2002). Improving the sensitivity to 100% in our sample while keeping the sensitivity of the instrument at a similar level could be achieved by increasing the cut-off score to 86. This finding is in contrast to the findings of Sondenaa et al. (2007, 2008, 2011) and Ford et al. (2008), who observed that with a higher cut-off score the HASI was too over-inclusive, and yielded a high number of false positives. They suggest lowering the cut-off score of 85 for better specificity. McKenzie and his colleagues (2012), on the other hand, recommended that a higher cut-off score should be adopted in forensic settings in order to increase the sensitivity of the screening tool, enabling the identification of potentially vulnerable individuals in line with the original idea of Hayes (2002). In this study, the original cut-off score of 85 proved to be adequate, as it yielded a good balance between sensitivity and specificity. Consequently, this screening instrument may help to bridge the gap between general mental health/addiction services and specialized services and thereby making it easier for people with undetected needs caused by ID to get appropriate support (Sondenaa et al., 2011).

This study also examined the possible influence of having a psychiatric disorder on the HASI performance in an attempt to refute the claim of over-inclusiveness of the HASI. After all, it has been suggested that the HASI score might be distorted by the presence of a substance disorder or another psychiatric illness (Hayes, 2000, 2002). Having a psychiatric disorder did not influence the HASI performance in this study. The presence of a psychiatric illness proved to have no effect on the HASI outcome. Therefore, we infer that based on this sample the HASI with the original cut-off score of 85 does not identify individuals with a substance abuse problem or suffering from a psychiatric illness instead of a possible intellectual disability, thereby broadening the scope of the usability of the HASI. Finally, this study also controlled for the possible influence of medication use on the HASI performance.

Although the HASI appears to be a quick and accurate method of identifying those persons with a substance abuse problem in mental health settings who may have an ID, this study has some limitations. Due to the sampling method, first addressing persons with a substance abuse problem in addiction services and then expanding the sample to the broad mental

health setting, a heterogeneous sample is used in this study. Furthermore, the ROC curve analysis is conducted on a small sample with unequal numbers in both groups. Ideally, a ROC curve analysis should be conducted in a sample of at least 100 participants (Schoonjans, 1998; Sondenaa, Bjorgen, & Nottestad, 2007) with equal numbers in both groups (Ford, 2008). Therefore, our results should be interpreted with caution. Additionally, the formal assessment of ID should also include adaptive measures rather than just IQ and confirming that intellectual problems were present since childhood (Sondenaa et al., 20007). At last, comorbid conditions aside from substance abuse were assessed via self-report. A more objective measure to assess comorbid conditions with standardized instruments would have been desirable.

5.5. Conclusions

The results of this study provide support for the validity of the HASI when used in persons with a substance abuse problem in mental health settings. This suggests that the HASI is a suitable instrument to use in this particular group for identifying those who are likely to have an ID, thus addressing a critical need in mental health settings. Furthermore, this study revealed that a possible presence of a psychiatric illness or medication use did not influence the HASI score. Further research is, however, needed to evaluate the instrument in a larger sample.

References

American Association of Intellectual and Developmental Disabilities (2010). *Definition of intellectual disability*. Retrieved from http://aaidd.org/intellectual-disability/definition.

Chapman, S.L.C., & Wu, L.T. (2012). Substance abuse among individuals with intellectual disabilities. *Research in Developmental Disabilities, 33*, 1147-1156.

Clare, I.C.H., & Gudjonsson, G.H. (1993). Interrogative suggestibility, confabulation and acquiescence in people with mild learning disabilities (mental handicap): Implications for reliability during police interview. *British Journal of Clinical Psychology, 32*, 295-301.

Copersino, M.L., Fals-Steward, W., Fitzmaurice, G., Schretlen, D.J., Sokoloff, J., & Weiss, R.D. (2009). Rapid cognitive screening of patients with substance disorder. *Experimental and Clinical Psychopharmacology, 17,* 337-344.

Degenhardt, L. (2000). Interventions for people with alcohol use disorders and an intellectual disability: A review of the literature*. Journal of Intellectual and Developmental Disabilities, 25*, 135–146.

Ford, G., Andrews, R., Booth, A., Dibdin, J., Hardingham, S., & Kelly, T.P. (2008). Screening for Learning disability in an adolescent population. *The Journal of Forensic Psychiatry & Psychology, 19*, 371-381.

Glascoe, F.P. (2005). *Standards for screening test construction.* http://www2.aap.org/sections/dbpeds/pdf/standards%20for%20screening%20test%20construction.pdf

Gudjonsson, G., & Sigurdsson, J. (2003). The relationship of compliance with coping strategies and self-esteem. *Eur I Pscyhol Assess, 19*, 117-123.

Hayes, S. (2000). *Hayes Ability Screening Index: manual*. Syndey: Faculty of Medicine, University of Syndey

Hayes, S. (2002). Early intervention or early incarceration? Using a screening test for intellectual disability in the criminal justice system. *Journal of Applied Research in Intellectual Disabilities, 15,* 120-128.

Hayes, S. C. (2005). Diagnosing intellectual disability in a forensic sample: gender and age effects on the relationship between cognitive and adaptive functioning. *Journal of Intellectual Disability, 30*, 97-103.

Hayes, S. (2007). Missing out: offenders with learning disabilities and the criminal justice system. *British Journal of Learning Disabilities, 35*, 146-153.

Herrington, V., Hunter, G., & Harvey, S. (2005). Meeting the health care needs of offenders with learning disabilities. *Learning disability practice, 8*, 28-32.

Jones, J. (2007). Persons with intellectual disabilities in the criminal justice system: Review of issues. *International Journal of Offender therapy and Comparative Criminology, 51*, 723-733.

Lance, P., & Longo, M.D. (1997). Mental health aspects of developmental disabilities. *The Habilitative Mental Healthcare Newsletter, 16*, 61-64.

Lottman, T. J. (1993). Access to generic substance abuse services for persons with mental retardation. *Journal of Alcohol and Drug Education, 39*, 41–55.

McGillicuddy, N. (2006). A review of substance use research among those with mental retardation. *Mental Retardation and Developmental Disability Research Reviews, 12*, 41–47.

McGillivray, J., & Moore, M. (2001). Substance use by offenders with mild intellectual disability. *Journal of Intellectual and Developmental Disability, 26*, 297–310.

McKenzie, K., Michie, A., Murray, A., & Hales, C. (2012). Screening for offenders with an intellectual disability: The validity of the Learning Disability Screening Questionnaire. *Research in Developmental disabilities, 33*, 971-795.

Ruf, G. (1999). *Addiction treatment for people with mental retardation and learning disabilities: Why we need specialized services*. NADD newsletter (3(2)). Kingston, NY:NADD Press. Retrieved from http://www.thenadd.org/cgibin/checkmember.pl?page=pages/membership/bulletins/v2n3a2.

Slayter, E., & Steenrod, S. (2009). Addressing alcohol and drug addiction among people with mental retardation in nonaddiction settings: A need for cross system collaboration. *Journal of Social Work Practice in the Addictions, 9*, 71–90.

Sturmey, P., Reyer, H., Lee, R., & Robek, A. (2003). *Substance-related disorders in persons with mental retardation.* NADD Press: Kingston, NY.

Schoonjans, F. (1998). MEDCALC: *Statistics for biomedical research software manual*. Mariakerke: MEDCALC.

Sondenaa, E., Bjorgen, T.G., & Nottestad, J.A. (2007). Validation of the Norwegian version of Hayes Ability Screening index for mental retardation. *Psychological reports, 101*, 1023-1030.

Sondenaa, E., Nygard, O., Nottestad, J.A., & Linaker, O.M. (2011). Validation and adaptation of the Norwegian version of Hayes Ability Screening Index for intellectual difficulties in a psychiatric sample. *Nord J Psychiatry, 65*, 47-51.

Sondenaa, E., Rasmussen, K., Palmstierna, T., & Nottestad, J. (2008). The prevalence and nature of intellectual disability in Norwegian prisons, Journal of Intellectual Disability Research, 52, 1139-1137.

Taggart, L., Huxley, A., & Baker, G. (2008). Alcohol and illicit drug misuse in people with learning disabilities: implications for research and service development. *Advances in Mental Health Learning Disabilities, 2*, 11-21.

To, W.T., Neirynck, S., Vanderplasschen, W., Vanheule, S., & Vandevelde, S. (2014). Substance use and misuse in persons with intellectual disabilities (ID): Results of a survey in ID and addiction services in Flanders. *Research in Developmental Disabilities, 35*, 1-9.

Tyas, S., & Rush, B. (1991). The treatment of disabled persons with alcohol and drug problems: Results of a survey of addiction services*. Journal of Studies on Alcohol, 54*, 275-282.

VanDerNagel, J., Kiewik, M., Buitelaar, J., & DeJong, C. (2011). Staff perspectives of substance use and misuse among adults with intellectual disabilities enrolled in Dutch disability services. *Journal of Policy and Practice in Intellectual Disabilities, 8*, 143–149.

Vanderplasschen, W., Mostien, B., Claeys, P., Raes, V., & Van Bouchaute, J. (2001). *Conceptnota organisatiemodel zorgcircuit middelenmisbruik*. Orthopedagogische Reeks Gent 12: Gent

Wechsler, D. (2004). *WAIS-III, nederlandstalige bewerking*. Lisse: Swets Test Publishers.

CHAPTER 6

GENERAL DISCUSSION

ABSTRACT

The final chapter of this dissertation starts with a summary of the main findings. Further, the implications for clinical practice of the different studies are discussed. Finally, the main limitations and strengths of this dissertation are addressed, leading to suggestions for future research.

6.1. Introduction

This dissertation focused on two groups of people with disabilities who do not seem to benefit from the 'standard' available treatments, because of their complex and entangled needs and who have an increased risk of getting involved with the criminal justice system for the first time or recurrently. In the two parts, the focus was laid on a different aspect of the treatment process (screening / assessment and treatment) for each target group. First, the broad group of offenders who lack criminal responsibility was considered in the context of treatment in forensic psychiatric centers. Second, the more specific group of persons with an intellectual disability and a substance abuse problem were examined with regard to their characteristics and possible ways to identify this group.

The objectives of this dissertation were twofold, each relating to one target population. First, we aimed at getting more insight into treatment perspectives on interned mentally ill offenders in secure forensic institutions, as perceived by both professionals as well as the interned mentally ill offenders themselves. Secondly, we explored screening and assessment of persons with an intellectual disability and a substance abuse problem who may or may not be involved in the criminal justice system.

These aims were divided into four research questions:

1. What are experts' opinions on the content and organization of treatment for offenders who lack criminal responsibility?
2. How do offenders who lack criminal responsibility perceive treatment in secure forensic institutions?
3. What are the characteristics and consequences of substance (ab)use in persons with an intellectual disability as perceived by treatment staff members?
4. Are there valid tools available to screen intellectual disabilities in persons with a substance abuse problem in Dutch mental health settings?

In order to answer these research questions, four separate studies were conducted based on quantitative (Study 2 - Chapter 3) and qualitative research (Study 3 & 4 - Chapter 4 & 5) methodologies or a combination of both (Study 1 - Chapter 2).

To gain insight into the perspectives of experts and interned mentally ill offenders on treatment in forensic treatment institutions, two studies were conducted. In the first study, the

perspectives of experts on the treatment of mentally ill offenders were explored through a Delphi method, aiming at obtaining consensus on several pending treatment-related issues (Chapter 2). In the second study, interned mentally ill offenders' perspectives on the treatment they received in a prison and/or treatment setting were analyzed (Chapter 3).

While the first two studies explored the treatment of offenders who lack criminal responsibility due to mental disorders or intellectual disability, the third and fourth study focused on screening and assessment of persons with an intellectual disability and a substance abuse problem. The third study investigated the characteristics of this group of substance users and abusers with an intellectual disability in Flanders (Chapter 4). The fourth study aimed to investigate the validity of the Dutch version of the Hayes Ability Screening Index (HASI) (Hayes, 2000) for screening intellectual disability in persons with a substance abuse problem in mental health services (Chapter 5).

First, we will summarize the main findings of these four studies. Second, the implications for clinical practice of the different studies will be discussed. Last, the main limitations and strengths of this dissertation will be addressed, leading to suggestions for future research.

6.2. Main findings

6.2.1. Treatment perspectives on mentally ill offenders

Experts' perspectives on the treatment of mentally ill offenders (Study 1- Chapter2)

Based on a screening of the available literature on the treatment of mentally ill offenders (persons with mental disorders or intellectual disabilities), unequivocal recommendations on how the content and organization of treatment could take shape for this heterogeneous group were reported to be lacking and different opinions on various treatment-related issues were revealed (Boers, Vandevelde, Soyez, De Smet, & To, 2011). In an attempt to reach a consistent treatment framework in a forensic psychiatric center, this first study was conducted to investigate the perspectives of experts on the content and organization of treatment for interned mentally ill offenders. Therefore, a group of 14 international forensic professionals participated in a consecutive survey about the 'ideal' content and organization of treatment for interned mentally ill offenders in a forensic psychiatric center. Using the Delphi-method for consensus-building, we shed light on agreements and disagreements with regard to 49 statements concerning the treatment of interned mentally ill offenders in a

forensic psychiatric center. The statements concerned treatment objectives, classification of subgroups, diagnosis, assessment and treatment.

We found that agreement was met for 80% of all proposed statements after four Delphi-rounds, which indicated high conformity in the expert panel. The experts agreed that the proposed treatment objectives (i.e. relapse prevention, treatment of psychiatric disorder, reintegration into society, improvement of quality of life, activation and motivation) were important and shared opinions regarding diagnosis, assessment, and treatment of interned mentally ill offenders. Concerning the therapeutic approaches implemented within an institution, experts made a plea for an integrative therapeutic approach, in which ideas from different therapeutic schools are combined. Further, prominent agreement was also found for perspectives regarding staffing, evidence-based practice, and collaborations with other institutions.

Disagreement was mainly found with respect to the equivalence of treatment objectives (whether treatment objectives were equally important or not), for the perspectives regarding the classification of interned mentally ill offenders in subgroups (classification based on support needs versus psychiatric disorder, classification based on gender and classification of some types of psychiatric disorders) and for some statements regarding treatment (motivation, crime analysis as the basis for treatment, inclusion and exclusion criteria in the forensic psychiatric center, and the character of the forensic psychiatric center). In our understanding, the underlying controversies underpinning these disagreements are widely acknowledged in international literature (Adams & Ferrandino, 2008; Adshead & Sarkar, 2005; Fitzpatrick et al., 2010; Steadman, Morrissey, & Robbins, 1985; Weinberger & Sreenivasan, 1994) and can be summarized as (1) the balance between treatment and control, (2) the dual role of assessment and (3) the aspects with regard to potential treatment conditions. First, the balance between treatment and control has been acknowledged by many authors (Adams & Ferrandino, 2008; Adshead & Sarkar, 2005; Fitzpatrick et al., 2010). In this study, this pending conflict is for instance reflected in the disagreement on what atmosphere or character a forensic institution should represent: treatment/care versus correctional. Secondly, the dual role of assessment is also reflected in the more general aforementioned debate on treatment and control. The study stressed that it is important to have a good idea of the purpose of assessment as it resonates a different approach in forensic mental health. The study reflects on the two rehabilitation frameworks in forensic mental health, namely Risk-Need Responsivity model and the Good Lives Model. Based on some related statements regarding this issue, we can conclude that it is still unclear what features should be assessed (e.g. crime analysis, psychiatric disorder, support need) in order

to provide appropriate treatment. However, the questionnaire did not provide the option to select more strength-based aspects or to select multiple aspects that treatment should be based on. Thus, disagreement on this issue might just be a reflection of indistinctness in the questionnaire to capture the perception of the experts on this aspect. The absence of consensus on any of the proposed aspects to base treatment on, such as crime analysis or psychiatric disorder, might indicate the need for a broader treatment approach that exceeds just management of risk or just treatment of the psychiatric disorder, which is in line with the Good Lives Model. Third, the controversy regarding the potential treatment conditions still remains and is reflected in this study in, for example, the debate about the treatability of mentally ill offenders and whether inclusion and exclusion criteria should be imposed in a forensic psychiatric center. Concerns about the clogging of forensic treatment services by potential 'untreatable' mentally ill offenders are raised and recommendations are formulated such as structural collaborations with after care and long-stay institutions, mapping the flow of interned mentally ill offenders in the continuum of forensic mental health care.

Interned mentally ill offenders' perspectives on treatment (Study 2- Chapter3)

Few studies to date have investigated the perspectives of the heterogeneous group of interned mentally ill offenders on their treatment, however efforts to disclose how they perceive their treatment may be crucial in responding to mentally ill offenders' complex treatment needs (Coffey, 2006). Therefore, the second study explored the treatment perspectives of interned mentally ill offenders who reside in a prison or forensic treatment institution in Flanders. In total, 17 interned mentally ill offenders were interviewed about the treatment they received. Semi-structured interviews were carried out on a one on one basis after a period of participant observation to get acquainted with the setting and the interned mentally ill offenders. Thematic analysis of the collected data allowed us to provide some key themes of what the interned mentally ill offenders perceived as important regarding their treatment and to investigate whether there are differences in perspectives between interned mentally ill offenders residing in prison and interned mentally ill offenders residing in a forensic treatment service.

The results showed that the perspectives of interned mentally ill offenders in prison as well as in a forensic treatment institution revolved around comparable themes, including the importance of having 'good' staff and the need for privacy (e.g. having an own room or a private space to be able to rest and unwind). However, experiences of interned mentally ill offenders in prison primarily noted positive experiences with staff members compared to interned mentally ill offenders in treatment settings. Different opinions between interned

mentally ill offenders in forensic treatment services were also found regarding two other themes, namely the feeling of lacking control and the experience of too much pressure. Interned mentally ill offenders in prison indicated having more control and freedom, and having no pressure to perform compared to interned mentally ill offenders in forensic treatment institutions. They experienced less rules and obligations in prisons compared to forensic treatment institutions. Interned mentally ill offenders in forensic treatment institutions described frustrations of losing control over many things that we take for granted, which is consistent with the findings of Wood and his colleagues (2008). Even though risk management in a forensic setting unavoidably means a certain degree of control, these findings highlight the importance of remaining mindful of the effects that this has upon the individual (Wood, Thorpe, Read, Eastwood, & Lindley, 2008). Therefore, rules that restrict the offenders' feeling of control and freedom should need to be minimized to individualized safety reasons and not imposed because of organizational reasons. For example, the bedrooms of interned mentally ill offenders should only be locked for interned mentally ill offenders where there is an actual risk of a safety problem and should not be automatically locked for all interned mentally ill offenders, because there is not enough staff at night. Further, the study showed that negative experiences were far more pronounced in forensic treatment institutions than in prison. Positive as well as negative experiences were described by interned mentally ill offenders in forensic treatment institutions, whereas interned mentally ill offenders in prison settings mainly expressed positive experiences in prison compared to their past forensic treatment experiences. The positive experiences in prison settings may complicate the transition from prison to a forensic treatment institution. The study further underscored the major challenge to create more opportunities for interned mentally ill offenders to meet their needs of self-determination in secure forensic treatment settings. In this regard, the Good Lives Model of Offender Rehabilitation (GLM) (Barnao, Robertson, & Ward, 2010; Ward & Brown, 2004; Ward, Yates, & Willis, 2012) is proposed in this study as the individual mentally ill offenders are seen as self-determining agents (Ward & Maruna, 2007) rather than disembodied 'carriers of risk' as interpreted in more risk centered approaches, such as in the Risk-Need Responsivity model (Andrews & Bonta, 2010). Some studies have shown that a positive strength-based approach focusing on quality of life, could lead to reduced recidivism (Bouman, Schene, & de Ruiter, 2009; Willis & Grace, 2008) and can provide evidence for a policy that focuses on offenders' individual strengths (Vanhaelemeesch, Vander Beken, & Vandevelde, 2014).

6.2.2. Screening and assessment of persons with an intellectual disability and a substance (ab)use problem

Assessment of substance users and abusers with an intellectual disability (Study 3 - Chapter 4)

To date little is known about the characteristics of substance abusers with an intellectual disability in Flanders and even less is known about the group of substance users with an intellectual disability, while this group is assumed to be at great risk of developing a substance abuse problem. In study 3, we focused on the group of substance users and abusers with an intellectual disability in Flanders to investigate whether the two groups differ significantly in terms of the nature and consequences of their substance (ab)use. Data was collected through a questionnaire forwarded to caregivers in intellectual disability and addiction services in Flanders. Caregivers identified 104 substance users (n= 44) and abusers (= 60). Both groups were examined on the nature and consequences of their substance (ab)use and were compared on possible similarities and differences.

Few differences were found between users and abusers with an intellectual disability. This finding underscored that substance use in persons with an intellectual disability can have important consequences. The majority of the persons who were identified as substance users or abusers had a mild intellectual disability, were male, tended to be younger, and had been drinking hazardously for more than 5 years. Most of the identified persons lived independently, although mostly with external support. Substances were primarily used at home, alone, or with friends (mostly friends without an intellectual disability). These characteristics indicated that these persons live a quite independent life, which was similar to the findings of Taggart, McLaughlin, Quinn, and Milligan (2006) and was consistent with the notions of Edgerton (1986) and Rimmer, Braddock, and Marks (1995). Our study primarily identified alcohol (ab)users with an intellectual disability, followed by cannabis (ab)users with an intellectual disability. Furthermore, more than half of the sample of identified alcohol (ab)users combined alcohol (ab)use with (ab)use of illicit drugs. In addition to substance (ab)use problems, a remarkable number of informants reported that their client also had a psychiatric disorder. Concerning the consequences of substance use and abuse in persons with an intellectual disability, offending was remarkably reported as a consequence of substance (ab)use by one-fifth of the informants, which suggested a possible link between substance abuse and offending behavior in persons with an intellectual disability. Therefore, early detection and intervention of substance use and abuse in persons with an intellectual disability is suggested to prevent them from engaging in offending behavior. No significant

differences were found between substance users and abusers. However, substance abusers were found to have more mood changes, more suicidal ideation/thoughts, and more negative long-term consequences on their health, daily activity, and relationships due to substance abuse. Thus, substance use and abuse were associated with mental health problems and were suggested to be a risk factor for offending behavior. To provide appropriate support for this specific population, an individualized approach is suggested that supports better inter-sectoral collaboration between services.

Screening for intellectual disability in persons with a substance abuse problem (Study 4 – Chapter 5)

Since the previous study has revealed the susceptibility of the group of substance abusers with an intellectual disability to get involved in the criminal justice system, easy-to-administer and accurate screening instruments are needed to identify this specific population in order to provide adapted support. Therefore, the aim of the fourth study was to validate the Dutch version of the Hayes Ability Screening Index (HASI) (Hayes, 2000) to screen for intellectual disability in substance abusers residing in mental health services, whether or not mandated to treatment by court order. In total, the Hayes Ability Screening Index was administered to 90 Dutch-speaking adults with a substance abuse problem together with the Wechsler Adult Intelligence Scale III (WAIS-III) (Wechsler, 2004), which was used as the criterion for validity.

The study showed a significant positive relationship between the two instruments, demonstrating convergent validity. Using a Receiver Operating Characteristic (ROC) curve analysis, the discriminative ability of the Hayes Ability Screening Index with a cut-off score of 85 was found to be adequate, yielding in a good balance between sensitivity and specificity. The Hayes Ability Screening Index was not distorted by the presence of the substance abuse problem or other psychiatric disorders and medication did not influence the HASI scores in this study. These findings indicated that the Hayes Ability Screening Index provided a time-efficient and resource-conscious way to detect intellectual disability in persons with a substance abuse problem, thus addressing a critical need in mental health settings.

6.3. Clinical relevance

This dissertation aimed to investigate how to screen, assess and support and/or treat persons with multiple and complex needs in existing services in order to impede them from (re-) offending. We focused on the heterogeneous group of offenders with disabilities and the

more specific group of persons with an intellectual disability and a substance abuse problem. We aimed at (1) addressing the needs of offenders with disabilities in treatment and (2) screening and assessment of persons with an intellectual disability and a substance abuse problem who may be at risk for offending.

6.3.1. Addressing the needs of the heterogeneous group of offenders with disabilities in treatment

Literature on the treatment of offenders with disabilities has mainly focused on specific treatment techniques (e.g. behavioral therapy, cognitive behavioral therapy, & cognitive analytic therapy) (Knabb, Welsh, & Graham-Howard, 2011) and/or specific groups of mentally ill offenders (e.g. mentally ill offenders with an intellectual disability, sexual offenders, & mentally ill offenders with a personality disorder) often overlooking the heterogeneity of the group of offenders with disabilities as a whole and the specific context of a forensic psychiatric treatment center. Since offenders with disabilities often have complex needs, emerging treatments must address a vast assortment of treatment variables, considering the disorder, the criminal act committed, and the location of treatment (Knabb et al., 2011). Research which provides empirically supported principles of 'what works' with mentally ill offenders is still limited (Blackburn, 2004; Morgan et al., 2012). Therefore, research that can provide clinicians with empirical guidance on what to develop or base their treatment on is lacking (Morgan et al., 2012), reinforcing the conclusion of Rice and Harris (1997: 164) that "*treatment outcome research on mentally ill offenders specifically is almost nonexistent*". Concrete recommendations on how the content and organization of treatment could take shape for this heterogeneous group in general forensic treatment institutiuons are lacking and different opinions on various treatment-related issues are found (Boers et al., 2011).

Forensic mental health has not yet developed a clear identity of its own, particularly from a theoretical standpoint (Robertson, Barnao, & Ward, 2011). According to Robertson (2011) modern forensic services have their theoretical roots in two different paradigms – the treatment of mental disorder (a psychopathology paradigm) and the management of risk (a risk paradigm). Although, the Belgian internment procedure has a dual goal, managing risk while treating the mentally ill offender, a more risk focused approach has been noted (Decoene, 2007). Nevertheless, it has been suggested that mentally ill offenders, with their myriad of needs require a much broader based treatment approach that transcends just treatment of risk (Blackburn, 2004; Robertson et al., 2011). Lately, increased attention is given to more strength-based approaches in offender rehabilitation, such as the Good Lives

Model of Offender Rehabilitation (GLM) (Barnao et al., 2010; Ward & Brown, 2004; Ward et al., 2012) as a reclaim on preceding foremost risk-centered approaches, such as the Risk-Need Responsivity model (Andrews & Bonta, 2010). This trend reflects a broader consideration of multiple factors to reduce recidivism as well as to contribute to a 'good' non-offending life, not only focusing on risk reducing factors but also focusing on the offenders' strengths to strive for a 'good' non-offending life. This model, i.e. the original Good Lives Model of offender rehabilitation, is further modified for the forensic population taking mental disorder into account (Good Lives Model –Forensic Modification, GLM-FM) (Barnao et al., 2010; Robertson et al., 2011). In this dissertation, we have slightly enlarged this model by explicitly including intellectual disability, next to mental disorder, as one of the obstacles in striving towards primary goods (cf. figure 1, p. 9). Barnao and his colleagues (2010) have described three case studies within a GLM-FM framework to illustrate how this modified model can provide a holistic approach to conceptualizing offending that occurs in a forensic context (i.e. in the context of mental illness) and in guiding a plan for treatment. However, there is no empirical evidence on the effectiveness of this model compared to the other models. These GLM (-FM) principles have not yet been integrated in current Belgian forensic treatment institutions, but might be a promising treatment and rehabilitation framework in forensic psychiatric treatment centers underpinning treatment in addressing the multiple and complex needs of this heterogeneous group of mentally ill offenders. This holistic model might do well in addressing offending (risk paradigm), mental disorders (psychopathology paradigm) as well as an individual's goals, and subsequently bypass the tensions inherent in balancing the conflicting roles of treatment and protecting society as suggested by Barnao and his colleagues (2010) and Robertson and his colleagues (2011) (cf. figure 1, page 9). The question remains whether this model will be successful in addressing and balancing the multiple needs of this demanding population and consequently integrating the risk and psychopathology paradigm.

The Delphi study (Study 1- Chapter 2) revealed that experts perceived different treatment objectives as important, including risk prevention, but also treatment of mental disorder and improvement of quality of life, demonstrating a broader based treatment approach than just a focus on risk prevention. However, disagreement was found whether treatment objectives were equally important or not, thus not fully underscoring the equality of the different treatment objectives. Further, the pending conflict between treatment and control was also reflected in disagreements on what the atmosphere or character of forensic institutions should represent (prison or treatment/care) and in uncertainty what features should be assessed (e.g. crime analysis, mental disorder, support need) in order to provide appropriate treatment. Hence, the experts' perceptions suggested that treatment of interned mentally ill

offenders is more than just treatment of risk, perceiving interned mentally ill offenders as persons with multiple needs rather than just as offenders. However, this was not extended to the implementation of a more holistic model, such as the Good Lives Model, as disagreement remained regarding the atmosphere in treatment services and the features to be assessed.

Further, the perspectives of the interned mentally ill offenders indicated the importance of their need of self-determination (Study 2 –Chapter 3). Interned mentally ill offenders in forensic treatment institutions expressed frustration of losing control over many activities. This expressed need of self-determination accord with the notion of the suggested Good Lives Model (GLM-FM) to perceive mentally ill offenders as self-determining actors (Barnao et al., 2010; Ward & Brown, 2004; Ward et al., 2012). The Good Lives Model appears to relate with the mentally ill offenders' support need, regarding self-determination, as it aims to enhance their motivation to change by promoting positive treatment goals (e.g. what can I do to pursue a good and meaningful life?), while reducing risk (Barnao et al., 2010) (cf. figure 1, page 9). This is in contrast to negative or avoidant treatment goals (e.g. not offending) in more risk centered approaches, which can impede their engagement in treatment (Barnao et al., 2010). A strength-based approach enhances people's motivation to change (Barnao et al., 2010) and can decrease recidivism (Bouman et al., 2009). However, there is a challenge in the clinical practice to create (even) more opportunities for mentally ill offenders to meet their needs of self-determination in secure forensic treatment settings.

Thus, based on the treatment perspectives of experts and the interned mentally ill offenders themselves there is some evidence suggesting a comprehensive treatment approach that focuses on factors that reduce risk as well as factors that improve mental health and that contribute to leading a 'good' non-offending life. Consequently, treatment fulfilling multiple and concrete needs of mentally ill offenders to live a 'good' non-offending life need to be considered. This also suggests an individualized and integrated approach focusing on the risk of reoffending as well as on the strengths and capacities of the mentally ill offender to improve their well-being in a non-offending way.

6.3.2. Screening and assessment of persons with an intellectual disability and a substance abuse problem who may be at risk for offending

Little is known on persons with an intellectual disability and a substance abuse problem in Flanders with regard to prevalence, characteristics, and consequences of their substance abuse. However, persons with an intellectual disability are considered to be at risk for

developing substance abuse problems (Burgard, Donohue, Azrin, & Teichner, 2000; Degenhardt, 2000; Didden, Embregts, van der Toorn, & Laarhoven, 2009b; Krishnef & DiNitto, 1981; McGillicuddy, 2006; Moore & Polsgrove, 1991; Slayter & Steenrod, 2009; Westermeyer, Kemp, & Nugent, 1996) and other negative consequences that are related to substance abuse, such as offending behavior (Chaplin, Gilvarry, & Tsakanikos, 2011; Chapman & Wu, 2012; Didden, Embregts, van der Toorn, & Laarhoven, 2009a; McGillivray & Moore, 2001). Treatment for this specific population is lacking, because mainstream addiction and intellectual disability services often do not dispose of suitable resources to detect and treat this specific population (Degenhardt, 2000; Lance & Longo, 1997; Lottman, 1993; McGillicuddy, 2006; Ruf, 1999; Slayter & Steenrod, 2009; Sturmey, Reyer, Lee, & Robek, 2003; Taggart, Huxley, & Baker, 2008; Tyas & Rush, 1991; VanderNagel, Kiewik, Buitelaar, & DeJong, 2011). Further, a possible relationship is suggested between substance abuse and involvement by persons with an intellectual disability in the criminal justice system (McGillivray & Moore, 2001), which we also found indications for in our third study. Thus, a better understanding of this specific population is needed in order to provide appropriate support.

Based on study 3 (Chapter 4) we got more insight into the characteristics of this population, the nature and consequences of their substance use and their service utilization in Flanders. Assessing the characteristics of this specific group, the study showed that the majority who were identified as substance users or abusers with an intellectual disability through intellectual disability and addiction services in Flanders had a mild intellectual disability, lived quite independently, used substances mostly alone at home rather than in public places. Consequently, attention need to be given that a higher level of cognitive functioning (i.e., mild or borderline intellectual disability), independent community living, and social isolation might be impeding factors for identifying those individuals who are at risk of developing enduring substance use-related problems (Taggart et al., 2006). Thus, this study underscored the relevance of early screening of this population, but also stressed the importance of maintaining good social relationships and providing sufficient social support avoiding them to fall through the cracks between services and slipping into an offending lifestyle. Alcohol was the substance found most prevalent in our sample, which is a socially accepted and commonly used substance in Flanders making the detection of problematic substance use challenging. Therefore, another way of screening this population might that be interesting is screening for intellectual disability in a substance using population instead of only screening for substance abuse in a population with an intellectual disability. Remarkably, little difference was found between substance users and abusers regarding the consequences of their substance use, which demonstrated that substance use in persons with an intellectual

disability may have important consequences. Therefore, substance users with an intellectual disability should also be monitored carefully as they may experience the same negative consequences as substance abusers, such as offending behavior. Another group that might value some more attention are substance (ab)users with an intellectual disability and a comorbid psychiatric disorder. This group was found to be substantial in our examined sample and was found to be more likely to have suicidal ideations than those who did not have a mental problem. These findings argue for a general screening of intellectual disability as well as a screening for mental illness in addiction services.

Given the significant consequences of substance use and abuse in persons with an intellectual disability, mental health services such as addictions services should preferably identify this population in an early stage in order to provide appropriate support and treatment that takes into account persons' cognitive limitations. However, a routine comprehensive assessment for intellectual disability is not a standard procedure, given that this is often time-consuming, resource intensive and requires qualified personnel. A short routine screening in mental health services could be a time-efficient and resource-conscious way to detect intellectual disability systematically in persons who use or abuse substances. In this regard, study 4 (Chapter 5) indicated that the Hayes Ability Screening Index (HASI) (Hayes, 2000) is a valid screening instrument to detect intellectual disability in persons with a substance abuse problem in mental health setting. The results showed that the instrument was not distorted by the presence of the substance abuse problem or other psychiatric disorders, thus demonstrating that it can be applied in the general mental health setting as well as in more specific services such as addiction services.

Study 3 (Chapter 4) also revealed the service utilization of this population in Flanders. Most detected persons with an intellectual disability and a substance (ab)use problem had received care from intellectual disability and/or addiction services in the past, however the majority of the current service providers stated never to have collaborated with services beyond the own sector in their care for the reported client. This indicated that although this group of persons with an intellectual disability and a substance (ab)use problem who are detected in the service system had received care, the majority of service providers had never communicated or collaborated with other sectors to tackle the multiple problems of their client. Therefore, as suggested by many other authors (Broekaert & Vanderplasschen, 2003; Huxley, Copello, & Day, 2005; McLaughlin, Taggart, Quinn, & Milligan, 2007) intersectoral collaboration between services as a first step to achieve person-centered support for persons with multiple problems is suggested.

6.4. Limitations of this dissertation

Before discussing the limitations, we would like to underscore that the study has some particular strengths. Most notably, we explored a heterogeneous and often hard to reach group of persons with multiple and complex needs. For example, study 3 (Chapter 4) is – to our knowledge- the first study in Flanders that characterizes the specific and quite unknown group of persons with an intellectual disability who (ab)uses substances. Second, we applied a mixed methods approach using quantitative as well as qualitative methods in order to recognize and better understand this complex group with their complex needs. Third, opinions of multiple informants are included in this dissertation giving a voice to offenders with disabilities and professionals.

Although most of the limitations of each separate study were already discussed in the specific chapters, the following section focuses on some overall limitations of this dissertation.

First, the dissertation, which is based on two distinct research projects, consists of four self-containing studies with diverse objectives and methods. This might have fragmented the research topic, focusing on different target groups, albeit with related support needs (mentally ill offenders and persons with an intellectual disability and a substance abuse problem) and examining different aspects of the treatment process (screening, assessment and treatment). This might have hindered the construction of a straightforward logic structure within this dissertation as a whole. However, in the introductory and closing chapter, the mutual coherence of the chapters is elaborated, explaining the underlying shared rationale of each study.

Second, the generalizability of our studies might be restricted, since apart from for the Delphi study (Chapter 2) all studies were limited to the broad region of Flanders, the northern Dutch-speaking part of Belgium. The restricted region and contextual differences might limit the generalization of our findings to the southern French-speaking part of Belgium and further abroad, with possible different treatment populations. Further, the samples are not representative for all interned mentally ill offenders or persons with an intellectual disability and substance abuse problem, as we have limited our data collection to participants who are known to services in order to reach these heterogeneous groups. In study 2 (Chapter 3) only interned mentally ill offenders who were residing in a prison or in one of the medium secure forensic treatment institution in Flanders and who were willing to voluntarily participate were

included in the study. This study, however, covered a broad area of forensic institutions in Flanders as data was collected in all medium secure forensic psychiatric treatment institutions in Flanders. In study 3 (Chapter 4) the information of persons with an intellectual disability and a substance (ab)use problem were provided by informants working in an intellectual disability and addiction service and thus relied on the perspectives of the informants, their skills to identify this population and their willingness to participate in the study. Inclusion in this particular study also depended on the service utilization of this target group in either intellectual disability and addiction services in Flanders. Lastly, study 4 (Chapter 5) similarly exclusively focused on service users in mental health services to validate the Hayes Ability Screening Index overlooking a specific group not in contact with any mental health services. Therefore, a possible bias in selecting the participants could have occurred in these studies. Furthermore, the sample sizes of all studies were limited, especially in the qualitative (Chapter 2) and Delphi study (Chapter 1). Nevertheless, this limitation was partly compensated by the deeper understanding in treatment perspectives that we gained through adopting such research methods. In the validation study of the Hayes Ability Screening Index (Study 4 - Chapter 5) a larger sample size with a more balanced distribution over the two groups of persons with and without an intellectual disability would have strengthened these findings.

Third, due to the exploratory character of this dissertation the research group is kept broad given the difficulty to define this heterogeneous group and in order to grasp the totality of the situation of treating mentally ill offenders with a diversity of problems. For the second target group ‘persons with an intellectual disability and a substance abuse problem’ broad definitions of substance abuse had been used to be able to explore this unknown group. Using formalized diagnostic criteria for substance use disorders (e.g. DSM-IV) would have excluded too many persons, as even substance users with an intellectual disability are known to be at risk to develop substance related problems (Didden et al., 2009b) and other negative consequences in several domains of functioning that are (in)directly related to substance (ab)use (Didden et al., 2009b; Taggart et al., 2006). Further, including adaptive measures rather than just intellectual functioning (measured by the WAIS-III) and confirming that intellectual problems were present since childhood would have created a more formal assessment of intellectual disability in the validation study (Study 4 - Chapter 5). The choice of only using IQ-scores was based on the practical reason given that adaptive measures are conducted through a proxy (e.g. parent, caregiver). Lastly, we only studied an instrument screening for intellectual disability in persons with a substance abuse problem. Instruments that screen or assess a substance use disorder in persons with an intellectual disability were not covered in this dissertation.

6.5. Recommendations for future research

In this dissertation we have explored two groups of persons with disabilities who seem not 'to fit' with the 'standard' available treatment services because of their complex and entangled needs and subsequently have an increased risk of getting involved with the criminal justice system for the first time or recurrently. Because of the explorative character of this dissertation, the following topics would be recommended to investigate in future research.

First, the studies that have focused on the group of mentally ill offenders have suggested that treatment of mentally ill offenders should be more than only focusing on the risk reducing factors, broadening the field for more strength-based approaches as suggested by the Good Lives Model in forensic mental health. An increasing number of studies have integrated principles of the GLM into interventions for sexual and violent offending with positive results (Lindsay, Ward, Morgan, & Wilson, 2007). However, more empirical research to scientifically underpin this approach is needed in the specific forensic field requiring the consideration of mental illness or intellectual disabilities within the assumptions of the Good Lives Model (cf. figure 1, page 9). Treatments that adopt the principles of the GLM into their interventions and that perceive the mentally ill offender's view on their situation and needs of care as central points of treatment discussions should be evaluated in a more systematic way. A very structured example of such a treatment evaluation is the pilot study of MacInnes and his colleagues (2013) using the mentally ill offender's self-reported quality of life as a primary outcome variable. They adopted a structured communication approach on quality of life in secure mental health settings (MacInnes et al., 2013). Mentally ill offenders had to rate their satisfaction with a range of life and treatment domains on a scale from 1 to 7 from 'couldn't be worse' to 'couldn't be better', then the mentally ill offenders and clinician can look at an overview of all domains and may discuss on how to improve the situation in those domains or compare the current ratings with previous ratings to monitor developments over time (MacInnes et al., 2013). The eleven domains covered are mental health, physical health, accommodation, job situation, leisure activities, friendship, relationship with family and/or partner, personal safety, practical help, meetings and medications (MacInnes et al., 2013). This is done monthly for over 6 months, with a follow-up period of 12 months and the study is still ongoing. The advantage of such approach is that it ensures that the mentally ill offender's perspective on their situation and needs are centralized on a variety of domains and that their view of how to improve the situation is made explicit and evaluated during the process (MacInnes et al., 2013).

Second, the study that assessed the characteristics of persons with an intellectual disability and a substance abuse problem, about whom is known little in Flanders, relied on the perspectives of care givers in intellectual disability and addiction services and their skills to identify this group. More empirical research incorporating the perspective of the target group and/or proxy is recommended to validate these findings. Further related to this issue, future research could use more formal screening or diagnostic instruments to identify this population when available and validated. Additionally, a broader recruitment strategy is suggested to be able to include persons with an intellectual disability and a substance abuse problem who are not in contact with either addiction or intellectual disability services.

Third, the Hayes Ability Screening Index has been found to be an adequate instrument to screen for intellectual disability in persons with a substance abuse problem in mental health setting. An alternative way to identify persons with an intellectual disability and a substance abuse problem would be to screen for or map the substance abuse problems in persons with an intellectual disability carried out in samples of persons with an intellectual disability, such as the promising Substance Use and Misuse in Intellectual Disability - Questionnaire (SumID-Q) (VanderNagel, Kiewik, Van Dijk, De Jong, & Didden, 2011) developed in the Netherlands. However, the cut-off to be labeled as a substance abuser should be examined carefully in such questionnaires, as our study in line with previous studies (Westermeyer et al., 1996) have pointed out that persons with an intellectual disability using substances experience similar negative consequences as their substance abusing counterpart.

References

Adams, K., & Ferrandino, J. (2008). Managing mentally ill inmates in prison. *Criminal Justice and Behavior, 35*, 913-927.

Adshead, G., & Sarkar, S. P. (2005). Justice and welfare: two ethical paradigms in forensic psychiatry. *Australian and New Zealand Journal of Psychiatry, 39*, 1101-1017.

Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct*: Elsevier.

Barnao, M., Robertson, P., & Ward, T. (2010). Good Lives Model Applied to a Forensic Population. *Psychiatry, Psychology and Law, 17*, 202-217.

Barnhill, J. (2000). *Triple diagnosis: substance abuse, mental illness and mental retardation*. New York: Proceedings of the NADD international conference.

Blackburn, R. (2004). "What works" with mentally disordered offenders. *Psychology, Crime & Law, 10*, 297-308.

Boers, A., Vandevelde, S., Soyez, V., De Smet, S., & To, W. T. (2011). Het zorgaanbod voor geïnterneerden in België. *Panopticon, 2*, 17-38.

Bouman, Y. H. A., Schene, A. H., & de Ruiter, C. (2009). Subjective well-being and recidivism in forensic psychiatric outpatients *International Journal of Forensic Mental Health, 8*, 225-234.

Broekaert, E., & Vanderplasschen, W. (2003). Towards the integration of treatment systems for substance abusers: Report on the second international symposium on substance abuse treatment and special target groups. *Journal of Psychoactive Drugs, 35*, 237-245.

Burgard, F. J., Donohue, B., Azrin, N. A., & Teichner, G. (2000). Prevalence and treatment of substance abuse in the mentally retarded population: an empirical review. *Journal of Psychoactive Drugs, 32*, 293-298.

Chaplin, E., Gilvarry, C., & Tsakanikos, E. (2011). Recreational substance use patterns and co-morbid psychopathology in adults with intellectual disability. *Research in Developmental Disabilities, 32*, 2981-2986. doi: DOI 10.1016/j.ridd.2011.05.002

Chapman, S. L. C., & Wu, L. T. (2012). Substance abuse among individuals with intellectual disabilities. *Research in Developmental Disabilities, 33*, 1147-1156. doi: DOI 10.1016/j.ridd.2012.02.009

Coffey, M. (2006). Researching service user views in forensic mental health: A literature review. *The Journal of Forensic Psychiatry & Psychology, 17*, 73-107.

Decoene, S. (2007). Aanbevelingen voor de ontwikkeling van een kwaliteitsvol forensisch zorgcircuit. *Tijdschrift KLinische Psychologie, 37*, 84-96.

Degenhardt, L. (2000). Interventions for people with alcohol use disorders and an intellectual disability: A review of the literature. *Journal of Intellectual and Developmental Disabilities, 25*, 135-146.

Didden, R., Embregts, P., van der Toorn, M., & Laarhoven, N. (2009a). Substance abuse, coping strategies, adaptive skills and behavior and emotional problems in clients with mild to borderline intellectual disability admitted to a treatment facility: A pilot study. *Research in Developmental Disabilities, 30*, 927-932.

Didden, R., Embregts, P., van der Toorn, M., & Laarhoven, N. (2009b). Substance abuse, coping strategies, adaptive skills and behavioral and emotional problems in clients with mild to borderline intellectual disability admitted to a treatment facility: A pilot study. *Research in Developmental Disabilities, 30*, 927-932. doi: DOI 10.1016/j.ridd.2009.01.002

Edgerton, R. (1986). Alcohol and drug use by mentally retarded adults. *American Journal of Mental Deficiency, 90*, 602–609.

Fitzpatrick, R., Chambers, J., Burns, T., Doll, H., Fazel, S., Jenkinson, C., & al., e. (2010). A systematic review of outcome measures used in the mental health research with consensus panel opinion. *Health Technology Assessment, 14*, 1-94.

Hayes, S. (2000). *Hayes Ability Screening Index: manual*. Syndey: Faculty of Medicine, University of Syndey.

Huxley, A., Copello, A., & Day, E. (2005). Substance misuse and the need for integrated services. *Learning Disability Practice, 96*, 14-17.

Knabb, J. J., Welsh, R. K., & Graham-Howard, M. J. (2011). Treatment alternatives for mentally disordered offenders: A literature review. *Psychology, Crime & Law, 2*, 122-131.

Krishnef, C. H., & DiNitto, D. M. (1981). Alcohol abuse among mentally retarded individuals. *Mental Retardation, 19*, 151-155.

Lance, P., & Longo, M. D. (1997). Mental health aspects of developmental disabilities. *The Habilitative Mental Healthcare Newsletter, 16*, 61-64.

Lindsay, W. R., Ward, T., Morgan, T., & Wilson, I. (2007). Self-regulation of sex offending, future pathways and the Good Lives Model: Applications and problems. *Journal of Sexual Agression, 13*, 37-50.

Lottman, T. J. (1993). Access to generic substance abuse services for persons with mental retardation. *Journal of Alcohol and Drug Education, 39*, 41-55.

McGillicuddy, N. (2006). A review of substance use research among those with mental retardation. *Mental Retardation and Developmental Disability Research Reviews, 12*, 41-47.

McGillivray, J. A., & Moore, M. R. (2001). Substance use by offenders with mild intellectual disability. *Journal of Intellectual & Developmental Disability, 26*, 297-310.

McLaughlin, D., Taggart, L., Quinn, B., & Milligan, V. (2007). The experiences of professionals who care for people with intellectual disability who have substance-related problems. *Journal of Substance Use,, 12*, 1-11.

Moore, D., & Polsgrove, L. (1991). Disabilities, developmental handicaps and substance misuse: A review. *The International Journal of the Addiction, 26*, 65-90.

Morgan, R. D., Flora, D. B., Kroner, D. G., Mills, J. F., Varghese, F., & Steffan, J. S. (2012). Treating offenders with mental illness: A research synthesis. *Law and Human Behavior, 36*, 37-50.

Rice, M. E., & Harris, G. T. (1997). The treatment of mentally disordered offender. *Psychology, Public Policy, and Law, 3*, 126-183.

Rimmer, J. H., Braddock, D., & Marks, B. (1995). Health characteristics and behaviors of adults with mental retardation residing in three living arrangements. *Research in Developmental Disabilities, 16*, 489–499.

Robertson, P., Barnao, M., & Ward, T. (2011). Rehabilitation frameworks in forensic mental health. *Agression and Violent Behavior, 16*, 472-484.

Ruf, G. (1999). Addiction treatment for people with mental retardation and learning disabilities: Why we need specialized services. *3*(2). http://www.thenadd.org/cgibin/checkmember.pl?page=pages/membership/bulletins/v2n3a2.

Slayter, E. (2010). Disparities in access to substance abuse treatment among people with intellectual disabilities and serious mental illness. *Health & Social Work, 35*, 49-59.

Slayter, E., & Steenrod, S. (2009). Addressing alcohol and drug addiction among people with mental retardation in nonaddiction settings: A need for cross system collaboration. *Journal of Social Work Practice in the Addictions*, 71-90.

Steadman, H. J., Morrissey, J. P., & Robbins, P. C. (1985). Reevaluating the custody-therapy conflict paradigm in correctional mental health settings. *Criminology, 23*, 165-179.

Sturmey, P., Reyer, H., Lee, R., & Robek, A. (2003). *Substance-related disorders in persons with mental retardation*. Kingston, NY: NADD Press.

Taggart, L., Huxley, A., & Baker, G. (2008). Alcohol and illicit drug misuse in people with learning disabilities: implications for research and service development. *Advances in Mental Health Learning Disabilities, 2*, 11-21.

Taggart, L., McLaughlin, D., Quinn, B., & Milligan, V. (2006). An exploration of substance misuse in people with intellectual disabilities. *Journal of Intellectual Disability Research, 50*, 588-597.

Tyas, S., & Rush, B. (1991). The treatment of disabled persons with alcohol and drug problems: Results of a survey of addiction services. *Journal of Studies on Alcohol, 54*, 275-282.

VanderNagel, J., Kiewik, M., Buitelaar, J., & DeJong, C. (2011). Staff perspectives of substance use and misuse among adults with intellectual disabilities enrolled in Dutch disability services. . *Journal of Policy and Practice in Intellectual Disabilities, 8*, 143-149.

VanderNagel, J., Kiewik, M., Van Dijk, M., De Jong, C., & Didden, R. (2011). *Handleiding SumID-Q, Meetinstrument voor het in kaart brengen van middelengebruik bij mensen met een lichte verstandelijke beperking*. Deventer: Tactus.

Vanhaelemeesch, D., Vander Beken, T., & Vandevelde, S. (2014). Punishment at home: Offenders' experiences with electronic monitoring. *European Journal of Criminology, 11*, 273-287.

Ward, T., & Brown, M. (2004). The Good Lives Model and conceptual issues in offender rehabilitation. *Pcyhology, Crime and Law, 10*, 243-257.

Ward, T., & Maruna, S. (2007). *Rehabilitation: Beyond the risk paradigm*. London: Routlegde.

Ward, T., Yates, P. M., & Willis, G. M. (2012). The Good Lives Model and the risk need responsivity model: A critical response to Andrews, Bonta, and Wormith (2011). *Criminal Justice and Behavior, 39*, 94-110.

Wechsler, D. (2004). *WAIS-III, nederlandstalige bewerking*. Lisse: Swets Test Publishers

Weinberger, L. E., & Sreenivasan, S. (1994). Ethical and professional conflicts in correctional psychology. *Professional Psychology: Research and Practice, 25*, 161-167.

Westermeyer, J., Kemp, K., & Nugent, S. (1996). Substance disorder among persons with mild retardation. *The American Journal on Addictions, 5*, 23-31.

Willis, G. M., & Grace, R. C. (2008). The Quality of community reintegration planning for chols molesters: effect on sexual recidivism. *Sexual Abuse: A Journal of Research and Treatment, 20*, 218-240.

Wood, H., Thorpe, L., Read, S., Eastwood, A., & Lindley, M. (2008). Service user satisfaction in a low secure forensic learning disability unit. *Mental health and Learning Disability Research and Practice, 5*, 176-191.

SAMENVATTING

Onderzoek wijst uit dat geïnterneerden vaak in de gevangenis verblijven waar ze ondanks de zorg van de aanwezige hulpverleners niet de aangepaste behandeling krijgen die ze nodig hebben. Een geïnterneerde is een persoon die strafbare feiten heeft gepleegd, maar ontoerekeningsvatbaar werd verklaard. Geïnterneerden worden niet gestraft, maar worden onderworpen aan een interneringsmaatregel met als doelstelling enerzijds de maatschappij te beschermen en anderzijds de geïnterneerde persoon te verplichten een psychiatrische behandeling te volgen. De geïnterneerdenpopulatie is een zeer heterogene groep bestaande uit personen met zeer diverse psychologische, criminogene, intellectuele en andere noden. Een geïnterneerde kan dus een persoon zijn met een psychische stoornis of een verstandelijke beperking of beide. Onderzoek heeft verder aangetoond dat geïnterneerden zelden een enkelvoudige diagnose hebben, maar vaak een dubbele of driedubbele diagnose. Een veelvoorkomende diagnose, al dan niet gecombineerd met een andere diagnose, is middelenmisbruik.

Verschillende studies suggereren een link tussen middelenmisbruik en grensoverschrijdend gedrag. Dit blijkt in bijzondere mate ook te gelden voor personen met een verstandelijke beperking. Meer en meer aandacht wordt dan ook besteed aan personen met een verstandelijke beperking die middelen gebruiken, gezien de mogelijke link met grensoverschrijdend gedrag enerzijds en het gebrek aan een aangepaste behandeling voor deze specifieke groep anderzijds. Ze vallen vaak tussen de mazen van het zorgnet omdat zowel de gehandicaptenzorg als de drughulpverlening doorgaans de know-how missen om deze specifieke groep te identificeren en te behandelen. Verder blijkt uit onderzoek dat personen met een beperking minder lang in behandeling blijven in vergelijking tot personen zonder een verstandelijke beperking. Ze vertonen verder vaak verschillende persoonlijke en sociale beperkingen die hun kwetsbaarheid significant verhoogt als ze in contact komen met het strafrechterlijk systeem. Onderzoek toont aan dat ze ernstigere symptomen vertonen, minder capaciteiten bezitten om met de situatie om te gaan en nood hebben aan een hogere mate van zorg in vergelijking tot andere geïnterneerden.

Evidence-based onderzoek naar de effectiviteit van de behandeling van geïnterneerden is beperkt en focust zich op specifieke therapieën of specifieke doelgroepen. Concrete wetenschappelijk onderbouwde aanbevelingen over de inhoud en organisatie van de behandeling van geïnterneerden binnen de context van een forensisch psychiatrische instelling die behandeling biedt aan een zeer diverse groep van geïnterneerden ontbreekt vooralsnog. Gezien de heterogeniteit en complexiteit van de problemen waarmee geïnterneerden worden geconfronteerd is het de vraag hoe een diagnostische en therapeutische aanpak bij deze populatie vorm kan krijgen.

Voorliggend doctoraatsonderzoek richt zich op twee groepen van personen met beperkingen die niet lijken gebaat te zijn met standaard beschikbare behandelingen, vanwege hun vele en complexe zorgbehoeften. Verder lijken ze een verhoogde kans te hebben om voor het eerst of herhaaldelijk in contact te komen met het strafrechterlijk systeem. De keuze om te focussen op twee diverse, maar gerelateerde groepen heeft te maken met twee verschillende onderzoeksprojecten die de basis vormen van dit doctoraatsonderzoek. In de twee delen wordt de focus gelegd op verschillende aspecten van het behandelingsproces (screening/assessment en behandeling).

In het eerste deel van deze doctoraatstudie bestudeerden we de zeer brede en heterogene groep geïnterneerden in de context van een forensisch psychiatrisch centrum met als doelstelling de visie over de behandeling van geïnterneerden van experten én geïnterneerden in kaart te brengen. In het tweede deel bestudeerden we de meer specifieke groep van personen met een verstandelijke beperking en een middelenproblematiek wat betreft hun kenmerken en mogelijke manieren om hen te identificeren. Op die manier wil dit doctoraat een bijdrage leveren aan het realiseren van een meer aangepaste behandeling van personen met multiple en complexe problematieken die mogelijks in contact komen met het strafrechterlijk systeem.

In het eerste onderzoeksluik werd aandacht besteed aan het in kaart brengen van de behandelingsperspectieven van experten en geïnterneerden op de algemene behandeling van geïnterneerden.

In een eerste studie (hoofdstuk 2) onderzochten we de mening van internationale experten over de inhoud en organisatie van de behandeling van geïnterneerden in een forensisch psychiatrisch centrum. Een groep van 14 internationale experten nam deel aan herhaalde bevragingen (Delphi methode) over de ‘ideale’ inhoud en organisatie van de behandeling van geïnterneerden. Aan de hand van de Delphi methode voor consensusvorming, kregen we meer inzicht in overeenkomsten en meningsverschillen over 49 stellingen met betrekking tot behandelingsaspecten van geïnterneerden in een forensisch psychiatrisch centrum.
De studie gaf aan dat er een grote overeenkomst bestond tussen de internationale experten in hoe ze de behandeling van geïnterneerden percipieerden in een forensisch psychiatrisch centrum. Voor 80% van de vooropgestelde stellingen waren de experten het met elkaar eens. Ze waren het eens over het belang van de vooropgestelde behandeldoelstellingen (i.e. hervalpreventie, behandeling van psychiatrische stoornis, reïntegratie in de maatschappij, verbeteren van kwaliteit ven leven, activatie en motivatie) en deelden dezelfde mening over

diagnosestelling, assessment en behandeling van geïnterneerden. Meningsverschillen waren vooral te vinden met betrekking to de belangrijkheid van de behandelingsdoelstellingen (zijn de vooropgestelde behandeldoelen even belangrijk of is er een hiërarchie in de doelstellingen van behandeling), de classificatie van geïnterneerden in subgroepen (classificatie op basis van zorgnoden of psychiatrisch stoornis, classificatie op basis van geslacht en classificatie op basis van types van psychiatrische stoornissen) en enkele stellingen over behandeling (motivatie van geïnterneerden, delict-analyse als basis voor behandeling, inclusie- en exclusiecriteria in een forensische psychiatrisch centrum en het karakter of de sfeer van een forensisch psychiatrisch centrum). De onderliggende tegenstellingen die deze meningsverschillen dreven werden in de literatuur breed en internationaal erkend. Een van de belangrijkste was de spanning tussen behandelen en controleren. Deze tegenstelling kwam bijvoorbeeld terug in onze studie als een gebrek aan consensus tussen de experten over de sfeer of karakter die een forensisch psychiatrisch centrum moet uitstralen: behandeling/zorg sfeer versus gevangenissfeer. Verder kwam dit ook tot uiting in de dubbele rol van beeldvorming, enerzijds risico-inschatting en anderzijds aspecten die met behandeling te maken hebben in kaart brengen. De studie benadrukte dat het belangrijk was om een goed beeld te krijgen op wat de doelstelling van beeldvorming is in een forensisch psychiatrisch centrum aangezien dit kan leiden tot een verschillende benadering in de behandeling. De studie ging in op de twee rehabilitatie modellen in de forensisch geestelijke gezondheidszorg, namelijk het Risk-Need Responsivity model en het Good Lives Model. Op basis van een aantal stellingen met betrekking tot deze kaders, konden we uit de studie besluiten dat het nog niet duidelijk is waar we de nadruk moeten leggen (bv. delictketen, psychiatrische stoornis, zorgnood) om de juiste behandeling aan te bieden. Het ontbreken van consensus over dit punt kan een aanwijzing zijn dat een bredere benadering gewenst is dan enkel risicomanagement of enkel de behandeling van de psychiatrische stoornis; een vaststelling die in lijn ligt van de assumpties van het Good Lives Model.

In een tweede studie (hoofdstuk 3) trachtten we aan de hand van diepte-interviews met geïnterneerden hun mening over de behandeling in de gevangenis en forensische behandelinstellingen in kaart te brengen na een periode van participerende observatie waarbij de onderzoeker de instelling en de geïnterneerden beter leerden kennen. Vertrekkende vanuit de persoonlijke verhalen van 17 geïnterneerden gingen we op zoek naar de belangrijke componenten die bijdroegen tot een voor hen ‘goede’ behandeling of een ‘goede’ behandeling juist verhinderden. Op deze manier wilden we aandacht geven aan de mening van de geïnterneerden zelf om inzicht te krijgen in welke elementen een behandeling kunnen belemmeren en welke elementen een behandeling kunnen bevorderen. Daarnaast

werd er onderzocht in hoeverre er verschillen waren tussen de perceptie van geïnterneerden die verbleven in de gevangenis en geïnterneerden die verbleven in een forensische behandelinstelling.
De studie toonde aan dat zowel de meningen van geïnterneerden in de gevangenis als de meningen van geïnterneerden in de forensische behandelinstellingen focusten op dezelfde thema's, zoals het belang van goed 'personeel' en de nood aan 'privacy' (bijvoorbeeld het hebben van een eigen kamer of ruimte om tot rust te komen). De geïnterneerden in de gevangenis bleken echter vooral positieve ervaringen met personeel te beschrijven, terwijl geïnterneerden in de forensische behandelinstellingen ook negatieve aspecten aanhaalden. Verschillende ervaringen tussen de twee groepen vonden we ook terug in twee andere thema's, namelijk een gevoel van een 'gebrek aan controle' en een gevoel van te veel 'druk om te presteren' in de behandeling. Geïnterneerden in de gevangenis gaven aan meer controle en vrijheid te ervaren en minder druk te voelen om te presteren in de gevangenis in vergelijking tot geïnterneerden die in forensische behandelinstellingen verbleven. Zij ervoeren minder 'regeltjes' en verplichtingen in de gevangenis dan in forensische behandelinstellingen. Hoewel risicomanagement en een zekere mate van controle in een forensische setting onvermijdelijk zijn, benadrukten deze bevindingen het belang van aandachtig te zijn voor de effecten dat dit kan hebben op de geïnterneerden. Het is een uitdaging om meer kansen te creëren voor geïnterneerden om tegemoet te komen aan hun nood tot zelfdeterminatie. Gezien de sterktegerichte benadering raakt dit aan de basisveronderstellingen van het Good Lives Model. In plaats van enkel te focussen op risico, gaat het Good Lives Model ervan uit dat mensen in eerste plaats zelf actief vorm willen geven aan hun leven.

In een tweede onderzoeksluik werd aandacht besteed aan het in kaart brengen en het screenen van de specifieke groep van personen met een verstandelijke beperking en een middelenproblematiek.

In de derde studie (hoofdstuk 4) onderzochten we, voor het eerst in Vlaanderen, de specifieke groep van personen met een verstandelijke beperking die middelen gebruiken of misbruiken. Er was weinig wetenschappelijke kennis over personen met een verstandelijke beperking die middelen misbruiken. Nog minder was er geweten over diegenen die middelen gebruiken, hoewel onderzoek aangaf dat ze een verhoogd risico hadden op het ontwikkelen van een middelenproblematiek en andere middelengerelateerde problemen. Via een vragenlijststudie doorgestuurd naar hulpverleners binnen de gehandicapten- en verslavingszorg in Vlaanderen onderzochten we de aard en de gevolgen van middelengebruik en -misbruik bij personen met een verstandelijke beperking. Daarnaast

vergeleken we of er verschillen of gelijkenissen waren tussen de twee groepen, namelijk diegenen die middelen gebruiken en diegene die middelen misbruiken.
Een vergelijking tussen de twee groepen toonde weinig verschillen tussen personen met een verstandelijke beperking die middelen gebruiken en personen met een verstandelijke beperking die middelen misbruiken. Deze bevinding benadrukte dat zelfs middelengebruik bij personen met een verstandelijke beperking belangrijke gevolgen kan hebben. Als we keken naar de gehele groep zagen we een vrij zelfstandige groep van personen met een verstandelijke beperking die vooral alcohol en cannabis gebruikten of een combinatie van alcohol met een ander middel. Een groot aantal hulpverleners gaven verder aan dat hun cliënt ook een bijkomende psychiatrische stoornis had. Wat de gevolgen van middelengebruik en -misbruik bij personen met een verstandelijke beperking betrof, rapporteerde een behoorlijk aantal hulpverleners grensoverschrijdend gedrag als een belangrijk gevolg van middelengebruik of -misbruik wat een mogelijke link tussen middelengebruik en grensoverschrijdend gedrag suggereerde. De bevindingen van deze studie illustreerden dan ook het belang van vroegtijdige identificatie en interventie van middelengebruikers en –misbruikers met een verstandelijke beperking om contact met het strafrechterlijk systeem te voorkomen.

Gezien het vorige onderzoek had gewezen op de kwetsbaarheid van de groep van personen met een verstandelijke beperking die middelen gebruiken of misbruiken om in contact te komen met justitie via grensoverschrijdend gedrag, richtten we ons in de vierde studie (hoofdstuk 5) op het valideren van een screeningsinstrument om deze groep snel en accuraat te identificeren met het oog op het aanbieden van een aangepaste ondersteuning. De validiteit van de Nederlandstalige versie van het screeningsinstrument Hayes Ability Screening Index (HASI) voor het screenen van verstandelijke beperking werd onderzocht bij middelenmisbruikers in de gezondheidszorg. In totaal werd de HASI afgenomen bij 90 Nederlandstalige volwassenen samen met de Wechsler Adult Intelligence Scale III (WAIS-III) die als criterium voor validiteit werd gebruikt.
De studie toonde een significant positieve relatie aan tussen de twee instrumenten wat wees op convergente validiteit. Via een Receiver Operating Characteristic (ROC) curve analysis gaf de HASI een adequaat onderscheidend vermogen met een cut-of score van 85, wat resulteerde in een goede balans tussen de sensitiviteit en specificiteit van het instrument. De score van de HASI werd niet beïnvloed door een mogelijke psychiatrische stoornis of medicatie. Deze studie toonde dat het gebruik van de HASI een tijdsefficiënte en adequate manier kan zijn om verstandelijke beperkingen te detecteren in personen met een middelenproblematiek. Verder onderzoek met een grotere steekproef en een meer gebalanceerde groep is echter aangewezen.

In de algemene discussie (hoofdstuk 6) wordt ten slotte ingegaan op de belangrijkste onderzoeksbevindingen en worden een aantal concrete implicaties voor de klinische praktijk toegelicht. Ten slotte worden de sterktes en beperkingen van de verschillende studies besproken en worden een aantal aanbevelingen voor verder onderzoek geformuleerd. Eén van de belangrijke besluiten is het belang om een bredere en sterktegerichte benadering te hanteren bij de behandeling van geïnterneerden die verder gaat dan enkel risico management of enkel de behandeling van de psychiatische stoornis, wat in lijn ligt van de assumpties van het Good Lives Model. Hoewel risicomanagement en een zekere mate van controle in een forensische setting onvermijdelijk zijn, wijzen de bevindingen van de experten alsook de geïnterneerden op het belang de focus op risico te verschuiven naar een breder behandelkader. Het Good Lives Model waarbij de nadruk ligt op het inspelen op vaardigheden en sterktes van personen om een sociaal acceptabel en voor hen betekenisvol leven te leiden lijkt ons een werkbare benadering. Op die manier kunnen de nodige handvatten voor de behandeling van geïnterneerden met meerdere en complexe noden op een zeer geïndividualiseerde wijze geboden worden. Voor de groep van personen met een verstandelijke beperking en een middelenproblematiek wordt benadrukt ook oog te hebben voor diegenen die middelen gebruiken, aangezien gelijkaardige negatieve gevolgen van middelengebruik worden aangehaald. Verder is het cruciaal deze specifieke groep vroegtijdig te identificeren om mogelijks grensoverschrijdend gedrag te voorkomen en om een aangepaste behandeling te kunnen aanbieden. Het identificeren van specifieke en complexe noden van beide groepen met meerdere en complexe beperkingen is hierin noodzakelijk. Daarnaast is het belangrijk om binnen de behandeling van deze personen steeds de gehele persoon centraal te stellen met aandacht voor hun ondersteuningsbehoeften, maar vooral ook met hun sterktes.