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**To treat or not to treat?**

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# General Discussion

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## INTRODUCTION

In general, media reports of sexual offending are met with social outcry and unrest. Especially when victims are (small) children, the image of a (sexually) distorted or devious perpetrator, even when he or she is a juvenile, is frequently used. In general, the conviction “once a sex offender, always a sex offender” still seems to exist among the general public, portraying juveniles as life course persistent sexual abusers. Even among professionals, the conviction that a biological predisposition (partially) caused sexual misconduct was common not that long ago (Vijselaar, Gijzeman, Bouwens, & Bertens, 2015).

In an attempt to do justice to the diversity of juveniles who have shown harmful sexual behavior, this dissertation is aimed at improving matched care for these juveniles; what ‘type’ of juvenile with harmful sexual behavior should be treated by (what ‘type’ of) intensive, mandated treatment, aimed at which individual treatment needs? Are there differences in approach or effects that could guide allocation of these juveniles to a better matched care? How can treatments improve their results by incorporating contemporary research findings into their practices? Making use of two Dutch samples of juveniles in intensive, mandated, sex offense specific treatment over a five year period, and synthesizing previous research by means of two meta-analyses, this dissertation integrates knowledge on the effects of treatment for juveniles with harmful sexual behavior, and explored the allocation to, aims, and effects of treatment for juveniles with harmful sexual behavior in the Netherlands.

In the Netherlands, a broad spectrum of treatment specifically aimed at juvenile sexual problem behavior is available. Juveniles with sexual problem behavior are generally treated separately from juveniles who have displayed predominantly aggressive or non-sexually transgressive problem behavior. However, indication criteria, adequately distinguishing between the available most intensive, mandated treatment types, are lacking. Furthermore, application of the dominant Risk-Need-Responsivity (RNR) model for offender rehabilitation (Andrews & Bonta, 2010) to juveniles with harmful sexual behavior constitutes a challenge. Juveniles with harmful sexual behavior form a notoriously heterogeneous group regarding their psychosocial treatment needs and (re)offending patterns. To date, no psychological typology has been found to represent a more at sexual recidivism risk subgroup. This makes it hard to identify juveniles in need of intensive mandated care at treatment admission. Adding to the difficulty of allocation are several persistent (erroneous) assumptions about juveniles with harmful sexual behavior (Worling, 2013). These assumptions play down the important individual differences in these juveniles regarding their level of treatment needs (i.e., their level of deviance, deficits or disorders), and the level of sexual (recidivism) risk these juveniles constitute, increasing the chance of providing a mismatched treatment intensity or type of care.

In this chapter, a summary of the research findings and their practical implications will be presented, followed by a discussion of the broader implications of the combined study results. The chapter concludes with a reflection on strengths and limitations of the studies conducted, the implications for future research and an overall conclusion.

## **SUMMARY OF RESULTS AND PRACTICAL IMPLICATIONS**

The first study addressed the question whether juveniles with harmful sexual behavior in intensive, mandated treatment in the Netherlands (i.e., Multisystemic Therapy - Problem Sexual Behavior; MST-PSB, Secure Youth Care for juveniles with Severe Sexual Problems; SYC-SSP, or Forensic Youth Care for juveniles with Severe Sexual Problems; FYC-SSP), were allocated according to RNR principles. Also, it described and compared background characteristics of these juveniles. It was found that juveniles with relatively less treatment needs (i.e., a lower sexual drive and impulsive/antisocial behavior and a higher problem insight, motivation, and community stability), and who were, consequently, at lower general recidivism risk, more often received community based MST-PSB. Estimated recidivism risk levels of juveniles in all three treatment modalities did not always support the need for risk reduction by the imposition of limitation of freedom of movement and maximum supervision provided. Based on the assessed sexual recidivism risk, 38% of the juveniles in FYC-SSP, 7% in SYC-SSP, and 24% in MST-PSB had received treatment that was too intensive, considered detrimental to the juvenile's treatment motivation and development. Taking the general overestimation of risk by actuarial risk assessments for juveniles into account, this finding is to be taken very seriously. Both referrers and treatment providers should more stringently adhere to admission criteria and only refer juveniles with more (specific) treatment needs, and consequently, a higher (sexual) recidivism risk. It was deemed important that a structured assessment of treatment needs and recidivism risk is administered and given more weight in the allocation to mandatory forms of treatment. Because of the restricted validity of actuarial assessments in predicting (sexual) recidivism by juveniles, the assessed treatment needs (i.e., etiology) were expected to provide the most valid base for treatment allocation purposes. Practical implications of the assessed background characteristics (e.g., relatively high age in combination with more prepubescent victims, more paraphilia, pervasive and personality disorders) and treatment needs (relatively high scores on sexual drive, intervention items, and community instability) of juveniles in FYC-SSP, appeared to be that stimulating moral development and learning to cope with an atypical sexual interest should be specific treatment targets. In contrast, practical implications of the background characteristics (e.g., more neglect, prior out of home placements, and disruptive disorders) and treatment needs of juveniles in SYC-SSP (relatively high scores on impulsive/antisocial behavior and community instability), implicated that SYC should focus less on specific

atypical sexual behavior and attitudes, and more on a broader set of (generalist) criminogenic needs. Improving personal adjustment (taking classes/qualifying for employment, anger management, and social skills training) and building (new) social networks could be key elements of treatment for this group of juveniles.

The second (quantitative review) study investigated the effect of treatment on recidivism by juveniles who have sexually offended. It also examined the potential moderating effect of type of recidivism, and several participant, treatment, and study characteristics by means of a multilevel meta-analysis. A small to moderate effect size was found ( $d = 0.37, p < .001$ ). However, after controlling for publication bias, a significant treatment effect was no longer present ( $d = 0.15, p = .176$ ). Type of recidivism did not moderate the effect of treatment, nor did participant or treatment characteristics. Regarding study characteristics, a shorter follow up time showed a trend for larger effect sizes. Secondly, effect size calculation based on proportions yielded larger effect sizes than calculation via mean frequency of offending. This indicates that the proportion of recidivism was significantly lower in treatment groups compared to comparison groups, but the mean number of offenses for every reoffender in the two groups did not significantly differ. Regarding the effect of treatment on recidivism, it was noted that the treatments researched compared themselves to other (possibly as effective) treatments, reducing differences in effect size as measured by Cohens  $d$ . Furthermore, the treatment forms were aimed at a highly heterogeneous group of juveniles, possibly influencing effectiveness. Thirdly, sexual recidivism rates are generally low. Relatively low sexual recidivism rates, however, do not imply that juveniles who have sexually offended are not in need of treatment to reduce recidivism risk, if only because their general recidivism rates are higher. Mixed offenders, who display more antisocial tendencies, have been shown to be at higher risk for recidivism and, therefore, in greater need of (intensive) treatment. The study did show sex offense specific treatment to have an equal effect on other types of recidivism. Thus, juveniles who have sexually offended and who display specific as well as general criminogenic needs may be best off in mandated, intensive treatment. Not all juveniles who have sexually offended display these features equally, therefore, not all juveniles who have sexually offended may be in need of sex offense specific treatment as to reduce recidivism risk.

The third (quantitative review) study examined the effects of treatment for juveniles with harmful sexual behavior on psychosocial functioning, as well as the potential moderating effects of outcome, treatment, participant, and study characteristics by means of a multilevel meta-analysis. A moderate overall effect size was found of  $d = 0.60 (p < .001)$ , indicating groups receiving treatment achieved an estimated 33% relative improvement on psychosocial functioning. Type of outcome measure did moderate the effect of treatment, indicating that effects on atypical sexual arousal (as measured by penile plethysmography

in 48% percent of the cases) were smaller compared to effects on other outcomes (i.e., overall functioning, delinquency and aggression, impulse control, social and coping skills, emotion and self-image, cognitions and sexual knowledge, and family functioning). The treatment effect on empathy also tended to be smaller. Most prominently, studies of weak quality produced larger effect sizes. Unexpectedly, non-established treatments had more effect than did established treatments, which may be explained by the use of less rigorous study designs. Treatment groups with a higher percentage of juveniles with similar age victims or mixed type problem behavior also yielded larger effect sizes. Lastly, evaluation of treatment effects by professionals produced higher effect sizes, compared to other sources of information (e.g., adolescent self-report). It was concluded that treatment aimed at psychosocial functioning seems promising. Even if some psychosocial factors have not (yet) been established as criminogenic, they represent real life problems for juveniles. Recent developments in treatment methods describe a return to more holistic treatment frameworks, which, for juveniles with harmful sexual behavior, might prove especially relevant since (sexual) recidivism rates are low, but individual treatment needs may be high.

The fourth study investigated the effects of intensive, mandated residential and non-residential treatment on psychosocial functioning among adolescents with harmful sexual behavior. It compared their psychosocial treatment needs at admittance and after having received cognitive-behavioral based residential treatment or multi-systemic contextual treatment. Results replicated the findings of the first study in that juveniles in residential treatment represent a group at higher risk for recidivism (more repeat offending, more sex-plus offending), and with higher (self-reported) treatment needs (i.e., higher orientation towards sex, more emotional loneliness, more impulsivity) than juveniles in non-residential treatment. In general, juveniles in intensive, mandated treatment reported low self-esteem relatively often (72%), specifically in SYC-SSP, emotional loneliness (65%) and impulsivity (59%) were also often reported. Residential cognitive behavioral based treatment and contextual multi-systemic treatment obtained equal positive changes on psychosocial treatment needs. However, many juveniles reporting a (sub)clinical treatment need at admittance also reported no significant change after treatment. Some juveniles even showed significant deterioration on aspects of their psychosocial functioning after treatment. The study results specifically indicated room for improvement of treatment effect with regard to self-esteem, locus of control, empathy, aggression, hypersexuality, and orientation onto sex, yielding 80 up until 92% of no change or even deterioration after treatment. The mandatory administration and risk oriented focus of the treatments studied were hypothesized to not provide the most fertile ground on which to improve results. Focusing less prominently on the sexual problem behavior and risks (possibly worsening self-esteem) and more

prominently on life-fulfillment (e.g., competence, relatedness, and autonomy) may prove useful to explicitly counteract universal detrimental aspects of having displayed harmful sexual behavior that juveniles face in general (i.e., stigma and social deprivation).

## DISCUSSION

The (level of) individual treatment needs of juveniles with harmful sexual behavior differ significantly. They do not form a homogeneous group regarding their offending patterns and the etiology of their problem behavior (Barbaree & Marshall, 2006; Fanniff & Kimonis, 2014; Hendriks, 2006; Ryan, Leversee & Lane, 2010; Seto & Lalumiere, 2010). A distinction is often made through use of the 'specialist' and 'generalist' view on juveniles with harmful sexual behavior (Van den Berg, 2015). The first -specialist- view focuses on specific explanations for the development and continuation of sexually transgressive behavior in juveniles. The second -generalist- view conceptualizes sexual offending as a subtype of general (juvenile) conduct problems, emphasizing similarities between juveniles who have sexually offended and those who display other forms of offensive behavior. Both views receive support in recent research (Fanniff & Kimonis, 2014; Seto & Lalumière, 2010), as sexually transgressive juveniles (especially those with child victims) indeed display specific intra- and interpersonal problems, but, at the same time, display an equal age of onset of problem behavior, and equal levels of antisocial thoughts, behavior patterns, and callous-unemotional traits (i.e., especially those juveniles with peer victims or mixed offending behavior, see also Drew, 2013; Hendriks, 2006; Leroux, Pullman, Montayne, & Seto, 2016).

To date, in accordance with the dominant RNR model for offender rehabilitation (Bonta & Andrews, 2007), empirically established recidivism risk factors and factors derived from theories on etiology (regarding sexual problem behavior specifically as well as regarding conduct problems in general), determine at what factors (deficits) treatment for these juveniles is aimed. Research on sexual recidivism by juveniles is hampered by low prevalence rates of official sexual reoffending (Caldwell, 2016), only small sample sizes are available for statistical analyses. Still, several sexual recidivism risk factors have been established (Carpentier & Proulx, 2011; Christiansen & Vincent, 2013; Worling & Långström, 2003). Several of these factors are, however, considered static; they represent past occurrences that cannot be altered (e.g., number of previous victims, type of offending behavior, age of onset). Those that are considered dynamic (to be influenced by treatment) are also designated as criminogenic treatment needs (e.g., antisocial attitudes, sexual deviation, social isolation, family functioning, school functioning). Intensive treatment programs tailored to juveniles with harmful sexual behavior indeed generally are aimed at remediating cognitive distortions (sexual as well as antisocial), improving social and relational skills, and

incorporate relapse prevention techniques (Bromberg & O'Donohue, 2014; Ryan, Leversee, & Lane, 2010; Veneziano & Veneziano, 2002). Importantly, establishing a correlation between a (historical) characteristic and recidivism does not yet establish its predictive validity, that is, whether change in a criminogenic treatment need is indeed related to a change in criminal offense recidivism (Baglivio, Wolff, Jackowski, & Greenwald, 2015).

The main treatment method in use is multimodal cognitive behavioral based treatment (CBT), as this treatment type has rendered the best results in reducing recidivism in general (Dopp, Borduin, & Brown, 2015; Hanson, Bourgon, Helmus, & Hodgson, 2009; Lösel & Schmucker, 2005; Schmucker & Lösel, 2015; Walker, McGovern, Poey, & Otis, 2004). The prominence of reducing sexual recidivism as a treatment aim, notably the first 'R' in the RNR model, does, however, remain problematic. The scarcity of sexual recidivism (with a contemporary weighted mean of 2.75%; Caldwell, 2016), makes risk assessment, and allocation based on recidivism risk levels, difficult. Our meta-analyses indicated treatments to be (more) effective in reducing recidivism, as (mostly) compared to treatment as usual, which represent treatments that are regularly administered but have not (yet) been found to be effective. This result, however, proved affected by publication bias, indicating smaller, possibly non-significant, differences in daily practice (Ter Beek et al., 2017b). Usually, established treatments are found to be more effective than 'treatment as usual'. Differences found in effects between treatment as usual and established treatments, however, are not always as expected for all (types of) clients, underscoring the importance of matched care and responsivity (Weisz et al., 2013).

As a result of the dominant risk focus, juveniles with harmful sexual behavior receive mandated care, specifically aimed at antisocial cognitions and possible atypical sexual preferences. They undergo restrictions in freedom during adolescence, a key developmental phase, when risk assessment does not always support the need for these restrictions (Ter Beek et al., 2017a). A focus on (sexual) deviance and deficits might even become an iatrogenic effect of treatment; a possible negative influence on self-image (Cecile & Born, 2009; Deci & Ryan, 2000; Gatti, Tremblay, & Vitaro, 2009). The stigmatization juveniles face by being labeled a sex offender is high. In some states in North America lifelong public registration is a consequence of an adjudication. In the Netherlands registration, although not public, also exists, hampering the acquirement of work, which is a potent protective factor (Spruit, Van der Put, Gubbels, & Bindels, 2017; Van den Berg, 2015).

Juveniles with harmful sexual behavior do, generally, self-report several (albeit non-criminogenic) treatment needs. For example, low self-esteem, emotional loneliness, and external locus of control (helplessness or defeatism) seem relatively often reported problems by these juveniles (Ter Beek et al., 2017d). Self-report, however, especially by juveniles with

harmful sexual behavior, generally is met with a certain amount of skepticism (Worling, 2013). The supposedly deceitful nature of delinquent juveniles, combined with an expected relatively low insight into one's own level of functioning (e.g., because of developmental problems or lower intellectual functioning) is reason for many practitioners to rely more on professional assessment of (criminogenic) treatment needs (Breuk, Clauser, Stams, Slot, & Doreleijers, 2007). Juveniles with harmful sexual behavior, however, generally tend to be less antisocial, and, therefore, arguably less deceitful than their non-sexually transgressive peers (Fanniff & Kimonis, 2014; Seto & Lalumière, 2010). Furthermore, risk assessment tools for juveniles with harmful sexual behavior were found not to be very accurate. They often overrate risks and, as a consequence, level of treatment need (Hempel, 2013). Additionally, our meta-analytic study on the effects of treatment on psychosocial functioning indicated professional judgment to produce divergent results on the effects of treatment as compared to self-report and parent-report, indicating professional judgment not to be free from bias itself (Ter Beek et al., 2017c; Van Vugt et al., 2012).

Several research practitioners have recently advocated a more positive and holistic (less risk focused) approach to juvenile sexual problem behavior (Dopp, Borduin, & Brown, 2015; Ward, Yates, & Willis, 2012; Worling, 2013). Although the importance of reserving intensive treatments for juveniles most at recidivism risk was substantiated, Lipsey (2009), through a meta-analytic review, described three factors to be of pivotal importance for the efficacy of juvenile offender treatment: 1) use of a 'therapeutic intervention philosophy', 2) serving high risk offenders, and 3) quality of implementation (i.e., treatment fidelity). The first factor mentioned, a 'therapeutic intervention philosophy', was defined as "*an approach that attempts to engage the juvenile in a supportive, constructive process of change*" (pp. 128), underscoring the importance of intrinsic motivation, and of the last 'R' in the RNR model (i.e., responsibility; tailoring treatment to individual characteristics such as cultural background, gender, age, cognitive abilities, and individual treatment motivation).

The Self Determination Theory (SDT) on intrinsic motivation by Ryan and Deci (2017) describes the mechanisms of human development, postulating that "*humans are active, growth-oriented organisms who are naturally inclined towards integration of their psychic elements into a unified sense of self and integration of themselves into larger social structures*" (Deci & Ryan, 2000, pp. 229). Through extensive research, they established three basic needs (or 'drives', or 'motivations') in every human being; the need for competence (feeling productive and useful), relatedness (feeling a part of or connected to others), and autonomy (feeling in charge of one's own life or being able to choose freely between alternatives). They describe how 'thwarting' of these needs (while growing up), creates alternative, defensive or self-protective processes, which, importantly, have functional utility. These processes include egocentrism and antisocial activities, such as harmful sexual behavior.

The Good Lives Model applies this paradigm to the treatment of juveniles with harmful sexual behavior. It proposes to primarily focus treatment on 'approach goals' (i.e., well-being, or the adequate prosocial fulfillment of basic needs), instead of on 'avoidance goals' (i.e., relapse prevention, remediating deficits; Ward, Yates, & Willis, 2012). It emphasizes the assessment of specific aspects of importance to the well-being of an individual juvenile. To achieve this, the juvenile self-reports (narratively) on what to him constitutes a 'good live'; what activities or situations provide joy and fulfillment? Thereby prominently assessing individual protective factors. The professional then assesses what basic needs are most important in the juvenile's live. The harmful sexual behavior is conceptualized as an inappropriate strategy to obtain these basic needs, or, well-being, the latter being inherently 'normal' or non-deviant. Secondly, in accordance with the RNR model, recidivism risk factors are assessed (Fortune, Ward, & Print, in preparation). This process constitutes a function analysis of (harmful) behavior and individual motivation, and importantly adds to a more holistic comprehension of the juvenile; understanding his choice of goal directed behavior in a more comprehensive manner, rather than focusing on risk factors alone, the latter running the risk of stimulating repression rather than growth (De Valk et al., 2016). In their response to recent criticism on the RNR model facilitating an excessive focus on risks, Andrews, Bonta and Wormith (2011) have endorsed the importance of targeting the well-being of higher risk cases as an element of ethical, professional, humane, and decent practice. They postulate that within the RNR model this practice is well described, positioned and endorsed through its last R; responsibility.

Aligning treatment goals with personal goals of the juvenile, does directly support 'agency' (e.g., self-direction or autonomy) and treatment motivation (Deci & Ryan, 2000; Koestner, Lekes, Powers, & Chicoine, 2002). Adolescents generally are particularly in need of agency or self-direction. Instead of 'undergoing' mandatory treatment (De Valk et al., 2017), aligning treatment goals with personal goals offers the opportunity to actively build towards (a shared) perspective and simultaneously reduce (risk of future) harmful behaviors. *"... needs (i.e., competence, autonomy and relatedness) are the linking pin between the affordances and demands of the social world on one hand and either people's natural tendencies toward growth and well-being or their accommodative tendencies toward self-protection with the accompanying psychological costs on the other hand"* (Deci & Ryan, 2000, pp. 262). Thus, when juveniles with harmful sexual behavior self-report issues, such as low self-esteem, emotional loneliness, and an external locus of control, they seem in need of treatment that assists them in regaining or building self-confidence (competence), self-direction (autonomy), and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2017). The effects of sex offender specific treatment on overall psychosocial functioning seem promising (Ter Beek et al., 2017c), indicating treatment to be able to assist juveniles in achieving personal life goals in a more prosocial manner. The most promising treatment effects are achieved on overall

psychosocial functioning, rule breaking and aggression, impulse control, social and coping skills, emotion and self-image, cognitions and sexual knowledge, and family functioning, aspects generally considered to be important protective factors for antisocial behavior (Lösel & Farrington, 2012).

Finally, some juveniles with harmful sexual behavior will not self-report or even portray psychosocial problems. This fact is generally met with certain skepticism, because harmful sexual behavior by juveniles is considered deviant and, as a consequence, juveniles displaying this behavior must also be somewhat deviant (Worling, 2013). However, alternative (non-intrapsychic) explanations for harmful sexual behavior are available. Peer group affiliation, including being easily influenced (common in juveniles), the influence of alcohol or drugs and situational characteristics, such as family dysfunction or a lack of (parental) monitoring in a difficult developmental phase, might contribute to harmful sexual behavior by juveniles (Dopp, Borduin, & Brown, 2015; Ryan, Leversee, & Lane, 2010; Van Outsem, 2009). Guidance or contextual treatment might still be important for these juveniles, but intensive individual treatment does not seem an adequate fit. Accepting the fact that not all juveniles with harmful sexual behavior are 'inherently deviant', is deemed imperative to a more matched care delivery and the achievement of better treatment results.

## **STRENGTHS AND LIMITATIONS**

Some aspects of the studies in this dissertation merit reflection. Firstly, in the studies conducted, restricted sample sizes were used. Most studies on juveniles with harmful sexual behavior encounter a small number of juveniles adjudicated or treated specifically for this type of problem behavior (Fanniff & Kimonis, 2014). Levels of unreported sexual problem behavior (dark numbers) are estimated to be relatively high, so these samples might constitute the 'tip of the iceberg' (White, 2011; Wittebrood, 2006). Official recidivism reports involve getting caught, and getting caught again (Yun & Lee, 2013). This means that the juveniles currently studied represent a subgroup of juveniles with harmful sexual behavior, namely those that get caught. This fact restricts the generalizability of the results to this specific group of sexually transgressive juveniles. And although sufficient studies were found to perform two multilevel meta-analyses, the total amount of participants remained relatively low for this type of statistical analyses. For both meta-analyses a three-level mixed effects model (Assink & Wibbelink, 2016) was used to maximize statistical power and preserve as much information as possible, accounting for both within and between sources of variance. The two Dutch sample sizes are also considered small, they, however, did contain all juveniles in intensive specialized treatment in the Netherlands over a two year period (2010-2012), and all juveniles in specialized mandated Dutch secure youth

care over a three year total period (2012-2015). Testing of significant changes by means of Reliable Change Index at an individual level, was used as a remedy to deal with lack of statistical power to detect significant change at group level.

Secondly, the inclusion of older studies in the meta-analyses, a prerequisite for systematic reviews, and the inclusion of mostly North American studies, may limit generalizability (Bijleveld, 2015), although studies examining risk factors for juvenile (general) criminal offense recidivism in the United States and Europe showed remarkable similar results (Van der Put et al., 2011, 2012). Interestingly, Leijten, Melendez-Torres, Knerr, and Gardner (2016) showed that parenting interventions for reducing child disruptive behavior that were developed in the United States could be transported to other continents without loss of effectiveness, which proved not true for the effects of multi-systemic treatment on juvenile criminal offense recidivism (Van der Stouwe, Asscher, Stams, Dekovic, & Van der Laan, 2014). Studies are conducted within a certain time frame and context, which especially influences studies on sexual problem behavior; what is considered atypical in some parts of the world may not be considered so in other parts of the world. Also, time alters perceptions on normalcy of sexual behavior (in adolescence). Results, therefore, should be cautiously applied to other (especially non-Western) parts of the world.

Finally, only few participant characteristics could be included in the moderator analyses in the meta-analytic studies, because not many studies comprehensively reported on sample characteristics. The heterogeneity of juveniles with harmful sexual behavior demands the thorough reporting of sample characteristics to enable assessment of external validity of study results, and to conduct moderator analyses to test intervention effects in subgroups of juvenile sex offenders (Bijleveld, 2015). Because this was not the case in many studies, possible moderating effects of participant characteristics might have been missed.

## **DIRECTIONS FOR FUTURE RESEARCH**

Further research into the field of (relapse into) sexual transgressions by juveniles is needed in order to obtain a fuller understanding of its etiology and of which juveniles persist and desist. Aiming mandated intensive treatment at juveniles not in need of intensive treatment is a stigmatizing waste of resources, sooner causing harm than benefit. Research on protective factors, and the attainment of well-being specifically, is still in its infancy, while research on risk factors is ongoing, but still incomplete. Knowledge on how well-being of these juveniles may be enhanced and supported short and long term, and whether well-being indeed prevents (sexual) reoffending, seems imperative to successfully incorporate the concept of well-being into mandated treatment.

Further research on the last R of the RNR model (i.e., how to improve responsivity and its relation to -established- treatment integrity) is also advised. Treatment integrity is an important predictor of treatment success, as is responsivity. The question how to 'stick with a program', but at the same time create sufficient flexibility in treating juveniles with a complex and highly individualized treatment need is a topic worthy of further investigation.

Lastly, the adequate assessment of dynamic treatment needs that are of specific importance to juveniles with harmful sexual behavior, also remains an important topic of interest. Validity of psychodiagnostic measurements and treatment need assessments for this highly heterogeneous and relatively small group of juveniles should remain a focus point of research; what aspects can be influenced through treatment and are therefore to be made measurable? The operationalization of the concept of well-being and protective factors seem of prominent interest, as to be able to assess treatment progress on these topics in the future.

## CONCLUSION

The central question of this dissertation was "how to provide matched care for juveniles with harmful sexual behavior". In sum, juveniles who self-report high levels of treatment needs (specific or generic) should be allocated to intensive forms of treatment tailored to these specific needs. Intensive, mandated treatment should generally focus more explicitly on the improvement of well-being (i.e., the fulfillment of the three basic human needs; competence, relatedness, and autonomy). Through this, the juvenile's goal directed behavior (i.e., the sexual harmful behavior) is able to change into more prosocial behavior. This foremost constitutes adapting a more holistic view on harmful sexual behavior by juveniles by current mandated treatments.

When juveniles do not self-report a high level of treatment need, an assessment of callous-unemotional traits and their transgressive behavior in general may clarify which juveniles are in need of mandated intensive treatment focused on conduct problems in general, and which juveniles indeed are not in need of mandated, intensive individual treatment. The last group may require less intensive and less restrictive guidance, (family) counseling or psycho-education, depending on the (contextual) factors that facilitated the harmful behavior.

In conclusion, self-reported treatment need levels, combined with recidivism risk assessment, may best guide allocation to and contents of treatment. Improving well-being of the individual juvenile, thereby also preventing relapse into harmful behavior, is deemed the most important feature of matched and effective treatment in general.