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## Bridging the implementation gap

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# CHAPTER 7

General discussion

## 7.1 Introduction

Evidence concerning psychosocial interventions for children and young people with externalizing behavior problems has been amassed at an impressive pace in recent years (Southam-Gerow & Prinstein, 2014). Interventions that have been proven effective are now considered vehicles through which the knowledge of “what works” can be applied in practice. Outcomes for children, young people, and their families, however, have not improved in line with these advances in knowledge.<sup>10</sup> This deficit has become known as the “implementation gap,” that is, the difference between the knowledge of “what works” and the application of this knowledge in real-life practice (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). The implementation gap raises the following questions about the application of interventions:

1. What does it mean to apply interventions – as vehicles of the knowledge of “what works” – and how is this operationalized in outcome studies?
2. Does the application of these interventions make a real difference to the end-users of the services?
3. What types of support for professionals can strengthen implementation processes?

This dissertation answered these three questions and presented knowledge of factors that contribute to bridging the implementation gap. In answering these questions, the focus was on whether professionals are delivering the interventions as intended. To realize this aim, five objectives were formulated, namely:

1. To examine the adequacy of the implementation of treatment integrity procedures in outcome studies of interventions targeting externalizing behavior problems of youth.
2. To examine the moderating effect of level of treatment integrity on the reduction of youth antisocial behavior after an intervention.
3. To examine the essential ingredients of support for youth care professionals to enable them to deliver the intended intervention with sufficient treatment integrity.
4. To examine the experiences and use of treatment integrity instruments within child and youth care organizations.
5. To devise a potential way to integrate support systems for professionals around overlapping factors of interventions.

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<sup>10</sup> A meta-analysis of RCTs that had tested youth evidence-based interventions in more clinically representative contexts, pitting them against usual care, showed a mean effect size of 0.29 for these interventions (Weisz et al., 2013a).

An overview of the research questions, objectives, corresponding chapters, and brief conclusions is presented in Table 7.1 (section 7.1.4).

## **7.2 Summary of the most important results**

### **7.2.1 What does it mean to apply interventions – as vehicles of the knowledge of “what works” – and how is this operationalized in outcome studies?**

In child and youth care, evidence-based interventions are considered vehicles through which the knowledge of “what works” can be applied in practice. These interventions target specific populations with specific problems. The interventions are theoretically based, well-documented,<sup>11</sup> protocolled, structured, and manualized, and have gained empirical support in experimental or quasi-experimental research (Weisz, Jensen-Doss, & Hawley, 2006). Applying the content of interventions as intended is referred to as treatment integrity (Perepletchikova, Treat, & Kazdin, 2007). The first objective of the research underlying this dissertation was to examine the operationalization of treatment integrity procedures in outcome studies of evidence-based interventions for children and young people with externalizing behavior problems. Treatment integrity procedures provide information about the establishment, assessment, evaluation, and reporting of treatment integrity.

The results of the systematic review of outcome studies that were performed prior to May 2012 (Chapter 2), show that treatment integrity was rarely assessed. The systematic search resulted in only 24 articles covering 29 studies that actually assessed treatment integrity. Almost all studies (80%) that were included in the review approached adequacy in implementing treatment integrity procedures. Therapist competence was reported far less often than therapist adherence. Many assessments of treatment integrity relied on self-reports by professionals, which precluded reports on the training of raters and indicators of interrater reliability. The findings were also limited in scope: Almost half (45%) of the studies were about the same intervention (multisystem therapy; MST), mostly examined by the same researchers. The present study shows that although measuring treatment integrity in outcome studies is found to be important, it is often missing or not examined under adequate circumstances. The lack of studies adequately assessing treatment integrity undermines the confidence we can have in statements made about the relationship between treatment integrity and intervention outcomes.

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<sup>11</sup> “Well-documented” includes the documentation of clinical expertise and patient values with regard to the intervention, as evidence-based practice is the integration of best research evidence with clinical expertise and patient values (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000, p 1).

Without adequate integrity measurements, the actual delivery of interventions remains unknown and no statements can be made about the relationship between treatment integrity and outcomes.

### **7.2.2 Does the application of these interventions make a real difference to the end-users of the services?**

When the actual delivery of the intervention is measured adequately, statements can be made about the association between treatment integrity and client outcomes. Previous meta-analyses on the effects of interventions for juveniles exhibiting antisocial behavior, have suggested that delivering an intervention with a high level of integrity is associated with positive client outcomes (Lipsey, 2009; Tennyson, 2009). However, these meta-analyses did not take into account the quality of the treatment integrity procedures of the included studies. The second objective of this research was to meta-analytically examine, in a multilevel model, the moderating effect of level of treatment integrity on the reduction of youth antisocial behavior after an intervention. The operationalization of treatment integrity procedures of the primary studies was taken into account.

Treatment integrity was found to be a significant moderator of the reduction in client's antisocial behavior after an intervention (Chapter 3). A significant difference was found between the effect sizes of studies with a high level of treatment integrity and those with a low level of treatment integrity. Significant medium to large effects of evidence-based interventions were found when the level of treatment integrity was high ( $d = 0.633$ ). Non-significant small/marginal effects were found when the integrity level was low ( $d = 0.143$ ). In the study, a notably small number of studies ( $k = 6, 35.3\%$ ) were found in which the intervention was implemented with high levels of treatment integrity.

Other significant moderators were study design, intervention type, and intervention duration. A multivariate analysis was performed to examine the effect of level of treatment integrity on client outcomes, adjusting for intervention characteristics (intervention type and intervention duration). The results showed that the association between high levels of treatment integrity and positive client outcomes stayed the same when controlled for the other significant moderators. This indicates the specific contribution of high levels of treatment integrity to client outcomes over and above the effect of intervention characteristics. The results of this study indicate that delivering evidence-based interventions with high treatment integrity is critical and should be stimulated.

### **7.2.3 What types of support for professionals can strengthen implementation processes?**

#### **Essential ingredients of support for child and youth care professionals**

Delivering an intervention with a high level of integrity is a difficult task. One of the questions around the implementation gap is therefore: “What types of support for professionals can strengthen implementation processes?” Research suggests that providing professionals with frequent and targeted support is an effective way to establish and maintain treatment integrity (Kerby, 2006; Mikolajczak, Stals, Fleuren, Wilde & Paulussen, 2009; Schoenwald et al., 2009b). Specific knowledge of what the content of a support system should be, or of the standard minimum rules for effective support, was lacking. The third objective of the research underlying this dissertation was to extend the knowledge of how best to support professionals in establishing and maintaining treatment integrity in planned interventions.

The support systems of evidence-based interventions that showed a positive and sufficient effect of the support on levels of treatment integrity were analyzed in a systematic review (Chapter 4). The results indicated that an effective support system minimally consists of a combination of training and ongoing support (supervision, consultation, coaching), preferably extended with booster sessions. The findings are congruent with the suggestions in the literature that merely giving practitioners a short training course is not sufficient to enable adequate delivery of the intervention (Addis, 2002; Connor-Smith & Weisz, 2003; Fixsen et al., 2005; in Steinfeld, Coffman & Keyes, 2009). After initial training, professionals need continued support to ensure treatment integrity. The support should focus on, among other things, providing feedback on levels of treatment integrity, preferably through the use of direct instruments (such as video, audio, and/or live sessions).

#### **Experiences and use of treatment integrity instruments within child and youth care organizations**

Various instruments are used to measure levels of treatment integrity in outcome studies of evidence-based interventions (Schoenwald & Garland, 2013). However, little is known about the feasibility of the use of treatment integrity measurements in child and youth care organizations as part of quality assurance procedures, or as a tool to provide performance feedback to therapists. The fourth objective of this research was to gain knowledge of the use of treatment integrity

measurements within child and youth care organizations, and knowledge of the experiences with the use of these types of measurements. Given that we found that support should focus on, among other things, providing feedback on levels of treatment integrity (see Chapter 4), this objective became even more relevant.

The results of the qualitative study (Chapter 5) show that the 12 selected interventions use treatment integrity instruments for multiple purposes. Instruments are used as part of quality assurance procedures (for certification and/or recertification) and to provide performance feedback to therapists (for supervision purposes). The vast majority of instruments are rated by means of videotapes of sessions with clients, with requirements concerning the type of sessions or topics to be taped. The use of a direct assessment instrument (videotape ratings) in every supervision session was found to be standard in only one intervention (Parent Management Training – Oregon). The therapists of this intervention were positive about the use of the videotape ratings.

The present study showed that one of the most important conditions for professionals to perceive measurements as valuable, is that the instruments are used for multiple purposes. However, only 36.4% of the interventions included in this study used measurements for more than one purpose. The second condition to perceive measurements as valuable is that feedback to professionals is provided. Participants in the study mentioned that the content of feedback that professionals prefer differs between junior and senior professionals: Professionals who have just started to deliver the intervention prefer feedback on adherence, whereas their more experienced colleagues prefer feedback on competence.

The overall conclusion of the qualitative study (Chapter 5) is that instruments for the measurement of treatment integrity can be standardly used in supervision and for multiple purposes, and that both therapists and supervisors prefer using the instruments that way. At the same time, the results show that almost none of the interventions standardly use the instruments in supervision or for multiple purposes. Combined with the results presented in Chapter 4, it is clear that much action needs to be undertaken in the provision of support to these professionals. There is a need for structural direct learning (by using videotapes) in supervision, instruments need to be used for multiple purposes, and there needs to be differentiation in the type of feedback provided to professionals. The implication of this is that the skills needed to provide constructive feedback based on instruments, needs further examination.

## **A potential way to integrate support systems for professionals around overlapping factors of interventions**

The most crucial aspect in the attempt to bridge the implementation gap is to provide knowledge on possible ways to deal with the limitations present in child and youth care organizations. It is insufficient to provide information on what support is needed for professionals without knowing what support is realistic for professionals. The question becomes: “What types of support for professionals can strengthen implementation processes *and* be adopted in real-life child and youth care organizations?” One of the major difficulties with the provision of support systems to professionals is that child and youth care organizations have limited time and capability to provide such systems. Child and youth care organizations are confronted with a multitude of mandatory support systems, and professionals are confronted with an accumulation of support sessions. These organizations are under pressure to provide, and are responsible for providing, high-quality, low-cost services, and thus strive to effectively and efficiently integrate support systems.

The last objective of this research was to devise a potential way to integrate support systems for professionals that take into account these organizations’ capacities and incapacities. As a first step in integrating support for professionals, it is suggested (Chapter 6) that support be organized around common and overlapping (structural and contextual) factors of interventions. Organizing support based on the competences that professionals need to deliver multiple interventions serves two purposes. First, it enables child and youth care organizations to organize support more efficiently, while also reducing the accumulation of support sessions for professionals. This fulfils the desire of both child and youth care organizations and professionals to prevent the stacking of support systems and sessions. Second, it lays a foundation for improved practice. More efficient organization of support for professionals around common and overlapping factors increases the likelihood that the implementation of these factors is stimulated on a broad scale. Integrating support around overlapping therapeutic techniques would be the next logical step. Integrating support systems around overlapping factors is a totally new way of stimulating the quality of services delivery, which leads to new research tasks. The effects of integrating support systems need to be examined for child and youth care organizations, professionals, and clients.

### **7.2.4 Overview of research questions, objectives, corresponding chapters, and brief conclusions**

The research questions, objectives, and corresponding chapters, together with a brief conclusion per chapter, are presented in Table 7.1.

**Table 7.1**  
*Overview of research questions, objectives, corresponding chapters, and brief conclusions*

<b>Research question</b>	<b>Objective</b>	<b>Corresponding chapter</b>	<b>Brief conclusion</b>
1. What does it mean to apply interventions – as vehicles of the knowledge of “what works” – and how is this operationalized in outcome studies?	To examine the adequacy of the implementation of treatment integrity procedures in outcome studies of interventions targeting externalizing behavior problems of youth.	Chapter 2	Applying the content of interventions is referred to as treatment integrity. Although measuring treatment integrity is important, it is often missing or not examined under adequate circumstances. This weakens the confidence in statements made in many studies about the association between treatment integrity and intervention outcomes.
2. Does the application of these interventions make a real difference to the end-users of the services?	To meta-analytically examine the moderating effect of level of treatment integrity on the reduction of youth antisocial behavior after an intervention.	Chapter 3	Treatment integrity was found to be a significant moderator of the reduction of client antisocial behavior after an intervention. Significant medium to large effects of evidence-based interventions were found when the level of treatment integrity was high ( $d = 0.633$ ). Non-significant small/marginal effects were found when the level of integrity was low ( $d = 0.143$ ).

**Table 7.1** (*Continued*)

<b>Research question</b>	<b>Objective</b>	<b>Corresponding chapter</b>	<b>Brief conclusion</b>
<p>3. What types of support for professionals can strengthen implementation processes?</p>	<p>To examine the essential ingredients of support for child and youth care professionals to enable them to deliver the intended intervention with sufficient treatment integrity.</p>	<p>Chapter 4</p>	<p>An effective support system minimally consists of a combination of training and ongoing support (supervision, consultation, coaching), preferably extended with booster sessions. The support should focus on, among other things, providing feedback on levels of treatment integrity, preferably through the use of direct instruments (such as video, audio, and/or live sessions).</p>
<p>To examine the experiences and use of treatment integrity instruments within child and youth care organizations.</p>	<p>Chapter 5</p>	<p>Instruments are used as part of quality assurance procedures (certification and/or recertification) and to provide performance feedback to professionals (supervision purpose). One of the most important conditions for professionals to perceive measurements as valuable, is that feedback is provided and the instruments are used for multiple purposes. The content of feedback that professionals prefer depends on their experience: Professionals who have just started to deliver the intervention prefer feedback on adherence, whereas experienced therapists prefer feedback on competence.</p>	
<p>To discuss a potential way to integrate support systems for professionals around overlapping factors of interventions.</p>	<p>Chapter 6</p>	<p>As a first step in integrating support for professionals, it is suggested to organize support around common and overlapping contextual and structural factors of interventions. More efficient organization of support for professionals around common, organizational, and structural factors increases the likelihood that implementation of these factors is stimulated on a broad scale.</p>	

### 7.3 Limitations

This dissertation answered questions about the implementation gap concerning what we know and what we do for children and young people with externalizing behavior problems and their families. Some limitations of the underlying research need to be mentioned. The first is the generalization of findings in Chapters 2, 3, and 5 to a broader set of interventions (such as practice-based approaches) and different target populations within child and youth care organizations. These three chapters focus on interventions aimed at children and young people with externalizing behavior problems and their families. Child and youth care organizations also provide care, treatment, and interventions to populations confronted with other difficulties, for example, children and young people with internalizing problems. In addition to the evidence-based interventions discussed in Chapters 2 and 3, child and youth care organizations also provide practice-based approaches that are developed through practice and in light of the outcomes of that practice. Whether the findings presented in this dissertation are applicable to practice-based interventions and different target populations needs examination.

The second limitation is the lack of generalizability of the findings in Chapters 2 and 3 to the whole range of interventions that focus on children and young people with externalizing behavior problems. The main focus of the research was on the treatment integrity of interventions for children and young people with externalizing behavior problems and their families. The studies included in the analyses in Chapters 2 and 3 are limited to those that have taken treatment integrity into account. The studies in these chapters show that only a small number of studies focusing on children and young people with externalizing behavior problems actually assess treatment integrity. In addition, studies that do take treatment integrity into account commonly focus on the same intervention.

The third limitation is that this research did not establish under which conditions a high level of treatment integrity is associated with positive client outcomes. In the multilevel meta-analysis study (Chapter 3), no differentiation between efficacy and effectiveness studies was made. It is therefore unknown whether the association between level of treatment integrity and client outcomes is different for these types of studies.

The fourth limitation is that it was not possible to identify the contribution that each aspect of treatment integrity makes to client outcomes. The measurements of treatment integrity have to reflect the delivery as intended. It is generally recognized in the literature that treatment integrity encompasses therapist adherence and therapist competence (Perepletchikova, Treat, & Kazdin, 2007). However, in the first study in this dissertation (Chapter 2), only three of the included outcome studies addressed both aspects. Of the 29 studies that assessed treatment integrity, 24 assessed treatment integrity solely as therapist adherence. Competence,

at least up until the moment of that study, was an absolute outlier in treatment integrity measurements. This is surprising given the importance of competence in implementing an intervention in accordance with a client's needs (see section 7.3 for a further discussion). The lack of measurements of competence in outcome studies also had an effect on the meta-analytic study that is included in this dissertation (Chapter 3). In that study, we could not differentiate between levels of adherence and competence, because most studies included in this meta-analysis did not make this differentiation. Therefore, it remains unknown which indicators of competence compromised treatment progress and had an impact on intervention outcomes. The outcome studies also had not incorporated treatment differentiation in their measurements. Thus, treatment differentiation could not be taken into account either. It remains unknown whether additional treatment methods may have decreased or increased the treatment effects of the interventions included in Chapter 3 (McLeod et al., 2013b). In short, previous studies did not take into account certain aspects of treatment integrity, possibly because the awareness of the distinction of aspects of treatment integrity and the tools to measure these were not (yet) available.

The last limitation is the reliability of the data of primary studies that were used to indicate levels of treatment integrity in this dissertation. An adequate operationalization of treatment integrity procedures was an inclusion criterion for outcome studies in two of the studies presented in this dissertation (Chapters 3 and 4). This criterion, however, does not guarantee that valid and reliable measurement instruments were used, or that the conditions under which measurements were made reflect the actual delivery as intended. The adequacy levels of implementation of treatment integrity procedures were obtained with the Implementation of Treatment Integrity Procedures Scale, adapted version (ITIPS-A) (Goense, 2013). This instrument can only be used for descriptive purposes. It gives a mere overall evaluation of the implementation of procedures on treatment integrity in a study. This limitation implies that the results of Chapters 3 and 4 have to be interpreted with caution.

## **7.4 Implications for clinical practice**

The results of, and the knowledge gained during, this research have implications for the daily practices of child and youth care organizations. First of all, child and youth care organizations in the Netherlands and elsewhere typically provide a wide range of advice, guidance, help, and care, much of which is practice-based. The factors within the practice-based approaches that are to target the problems in many cases have not yet been made explicit. Over the last decade, most Dutch child and youth care organizations have made a great effort to describe their interventions, develop a theoretical underpinning, and collect information on goal

attainment and outcomes for clients (for an overview, see Databank Effectieve Jeugdinterventies, 2016).<sup>12</sup> Still, little is known about the content, delivery, or client outcomes of the vast majority of practice-based approaches and care as usual either in the Netherlands or abroad (Garland, Hawley, Brookman-Frazee, & Hurlburt, 2008). The results of the present research imply that child and youth care organizations have to be explicit, or more explicit, about what they are doing in care as usual, which practice-based approaches they are implementing, and the outcomes they achieve with clients. This demands a proper definition of what is being done, as practice cannot improve what it does not measure accurately, and it cannot measure what it does not define (inspired by Durlak & Dupre, 2008). It is only by being explicit about what is done, that reflection on the outcomes is possible and efforts can be made to sustain this possibly effective care. A proper description of the content of care also creates the possibility to disseminate it on a broader scale.

To be able to be explicit about the actual delivery of services, it is recommended that child and youth care organizations use treatment integrity instruments. These instruments should be developed for care as usual, which in most cases is a practice-based approach. In the development of these instruments, the focus should be on the core factors of each of the services that child and youth care organizations provide. The overlapping factors between these services have to be examined. As discussed in Chapter 6, many interventions tend to overlap on common, contextual, and structural factors, and possibly also on therapeutic techniques. Focusing on overlapping factors will mean that child and youth care organizations will not have to develop treatment integrity instruments for every single type of care they provide, which will decrease the administrative burden on both professionals and supervisors.

This dissertation shows that when treatment integrity data are used as part of quality assurance procedures and for supervision purposes, the data can function in a data loop. To contribute effectively to the continuous improvement of the services that are delivered, treatment integrity data should always be used together with client outcomes. Outcome data enable reflection on what is done and what the results of these actions are for clients. The combination of these data also provides essential information about the effectiveness of interventions that are being delivered under clinical conditions.

To be able to use treatment integrity information within a data feedback loop in clinical practice, an effort has to be made to incorporate support systems in which this is possible. This requires first and foremost that there is support for professionals. Child and youth care organizations should integrate the support sessions for professionals around overlapping common, contextual, and struc-

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<sup>12</sup> [www.nji.nl/interventies](http://www.nji.nl/interventies), see also [www.youthpolicy.nl](http://www.youthpolicy.nl)

tural factors of interventions. As discussed in Chapter 6, integrating support systems based on the competences that professionals need to deliver multiple interventions serves two purposes. First, it enables child and youth care organizations to organize support more efficiently. This meets the desire of both child and youth care organizations and professionals to prevent the stacking of support systems and sessions. Second, it lays a foundation for improved practice. More efficient organization of support for professionals around these factors increases the likelihood that the delivery of these factors are stimulated on a broad scale within a setting. Integrating support around overlapping therapeutic techniques would be the next logical step.

The support for professionals should focus not only on the actual delivery of the core factors of the care (adherence), but also, and maybe even more so, on the skillful, responsive, and flexible delivery of these factors (competence in delivery). As stated by Weisz et al. (2013b), in the actual youth ecosystem, in which so many real-world factors are at play, the client's needs can change mid-treatment, requiring the professional to shift his or her focus. This requires the professional to attend to the client's needs, without drifting from the intended intervention. The knowledge and skills necessary for professionals to flexibly deliver the core factors of interventions in ways that best meet the needs of clients, has to be the content of the support for these professionals. Therefore, it is essential to have supervisors and professionals who are capable of reflecting on treatment integrity and outcomes of clients.

## **7.5 Recommendations for future research**

For over a long period of time primary outcome studies of evidence-based interventions for children and young people with externalizing behavior problems have not been taking treatment integrity measurements into account. With the growing attention to treatment integrity, the demands on the operationalization of treatment integrity procedures will increase and they should therefore receive more attention in outcome studies. Treatment integrity procedures reflect the establishment, assessment, evaluation, and reporting of treatment integrity. With respect to the establishment of treatment integrity, this dissertation has indicated the importance of providing professionals with frequent and targeted support. Thus, outcome studies should always report on treatment integrity in light of the support systems that are in place.

Second, scholars suggest that treatment integrity encompasses two aspects, namely therapist adherence and therapist competence (Perepletchikova, Treat, & Kazdin, 2007). It is recommended that in the assessment of treatment integrity, future research should distinguish between the different aspects of treatment integrity. Only by distinguishing treatment integrity in adherence and competence

can one fully understand how these different aspects interact and have an impact on client outcomes. It is crucial that valid and reliable instruments be developed and used to measure levels of adherence and competence in order to make any statements of value concerning this construct. Proper measurement of treatment integrity will provide crucial information about the content of training and support for professionals who are responsible for the delivery of these interventions.

Third, it is recommended that future studies of evidence-based interventions also measure treatment differentiation. As discussed in this dissertation, professionals may also be experienced in delivering particular treatment methods acquired in previous therapeutic work, that are not part of the specific intervention under study (McLeod et al., 2013b). The degree to which the professionals use these other treatment methods, and consequently deviate from the planned intervention, is referred to as treatment differentiation (Kazdin, 1994). Without measuring treatment differentiation, it is not possible to examine additional treatment methods that may decrease or increase treatment effects (McLeod et al., 2013b).

Finally, and as also stated by Weisz (2015), there should be more emphasis on developing and testing interventions in representative clinical conditions for which the interventions are ultimately intended. The clients in representative conditions often have a comorbidity of problems and are difficult to motivate for treatment. At the same time, resources for training and supporting professionals are minimal in these settings (Broeders, van der Helm, & Stams, 2015). As Weisz (2015, p. 131) stated: “It would be an interesting paradox if research designed to improve clinical care has produced treatments that do not fit – and may not cope so well with – the very clinical care it was intended to improve.” Researching interventions in conditions that are representative of the daily practices of child and youth care organizations, will generate more externally valid evidence on intervention effects, mechanisms of change, and factors that moderate effects. This type of research will generate knowledge that is applicable to the daily practices of child and youth care organizations (Weisz, 2015).

## 7.6 Concluding remarks

The primary studies included in this dissertation illustrate the complexities and challenges faced when conducting implementation research. On the positive side, this dissertation also illustrates the increasing knowledge in the field and the potential to sophisticate implementation research methodology and procedures.

Among the main challenges of implementation science is the disparity between optimal implementation circumstances and the limitations present in the practice field of child and youth care organizations. As also put forward at the 2015 Global Implementation Conference, going to scale and achieving collective and social impact requires 1) shared objectives for creating contexts that are hospitable to evidence-based programs, and 2) capacity building of key stakeholder groups to develop and institutionalize the infrastructure needed for the full and effective use of evidence-based interventions. Key stakeholder groups, funders, policy-makers, program developers, researchers, and service providers need to make both transformative and incremental changes in order to co-produce the visible infrastructure needed to support the effective implementation of evidence-based programs (Global Implementation Conference, 2015).

In this dissertation, I have addressed a few of the important questions around the implementation gap in child and youth care. As social circumstances change, implementation processes will change. This means there will be no end to the effort that needs to be made to effectively implement effective care. Collaboration and sharing of knowledge within and beyond country, scientific domain, and service setting borders is essential to gain a greater understanding of this ever-changing subject. The Global Implementation Initiative (GII) and European Implementation Collaborative (EIC), as well as the national networks around implementation, are great examples of collective efforts to increase the social impact of effective care. To achieve a greater social impact, it is essential to bridge the implementation gap. With this dissertation, I hope to have contributed to the knowledge necessary to bridge the gap, and thus to making “what works” work for children and young people with externalizing behavior problems and their families, both in the Netherlands and abroad.