

## Tilburg University

### Knowing me, knowing you

Zijlmans, L.J.M.

*Publication date:*  
2014

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

*Citation for published version (APA):*  
Zijlmans, L. J. M. (2014). *Knowing me, knowing you: On staff supporting people with intellectual disabilities and challenging behaviour*. Ridderprint.

#### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

#### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



# Knowing me, knowing you

---

On staff supporting people with intellectual disabilities and challenging behaviour

Linda Zijlmans



# **Knowing me, knowing you**

**On staff supporting people with intellectual disabilities  
and challenging behaviour**

**Linda Johanna Maria Zijlmans**

© 2014 Linda Zijlmans

ISBN: 978-90-5335-838-2

Lay-out: Ridderprint BV, Ridderkerk

Drukwerk: Ridderprint BV, Ridderkerk

Dit proefschrift werd mede mogelijk gemaakt door financiële steun van ZonMw, de Borg en de VOBC.

# **Knowing me, knowing you**

## **On staff supporting people with intellectual disabilities and challenging behaviour**

### **Proefschrift**

ter verkrijging van de graad van doctor aan Tilburg University  
op gezag van de rector magnificus, prof. dr. Ph. Eijlander, in  
het openbaar te verdedigen ten overstaan van een door het  
college voor promoties aangewezen commissie in de aula van  
de Universiteit op 6 vrijdag juni 2014 om 14.15 uur

door

**Linda Johanna Maria Zijlmans**

geboren op 14 oktober 1983 te Venlo

***Promotores***

Prof. dr. P.J.C.M. Embregts

Prof. dr. A.M.T. Bosman

Prof. dr. J.J.L. Derksen

***Copromotor***

Dr. L. Gerits

***Beoordelingscommissie***

Prof. dr. B. Orobio de Castro

Prof. dr. B. Maes

Prof. dr. H.F.L. Garretsen

Prof. dr. C. Vlaskamp

Dr. M. van Nieuwenhuijzen

## Regel één

Nu.

Ik wil.

Ik moet.

Dit, dat, snel.

Kom, doe, ga weg.

Jij hier, ik daar en tussen ons het onbegrip.

Mijn leven, mijn zaak

Mijn hoofd, mijn lijf

Van mij, alleen

van mij. Maar

ik kan het

niet.

Ik kan het niet alleen  
En ja - natuurlijk weet ik dat.  
De hulp die ik verwacht  
benauwt me af en toe

Maar geef er geen  
en nergens heb ik vat  
meer op, de levenskracht  
ontloopt me. Ik ben moe.

Dus help me nou  
al lijkt het tegen  
wil en dank.  
Ik wankel  
zonder  
jou.

Kijk;  
het is niet makkelijk  
om hulp te krijgen.  
Het liefste zou ik zwijgen, of weigeren  
en steigeren bij elk warm woord.

Het stoort - die moord op zelfstandigheid.  
Maar dan geldt regel één:  
ik kan het  
niet alleen.





**Voor mijn lieve Joes**



## Contents

Chapter 1	General introduction	11
Chapter 2	Engagement and avoidance in support staff working with people with intellectual disability and challenging behaviour: A multiple-case study	25
Chapter 3	The relationship among attributions, emotions, and interpersonal styles of staff working with clients with intellectual disabilities and challenging behaviour	43
Chapter 4	Emotional intelligence, emotions, and feelings of support staff working with clients with intellectual disabilities and challenging behaviour: An exploratory study	65
Chapter 5	Training emotional intelligence related to treatment skills of staff working with clients with intellectual disabilities and challenging behaviour	83
Chapter 6	The effectiveness of staff training on the interaction between staff and clients with intellectual disabilities and challenging behaviour: An observational study	101
Chapter 7	The effectiveness of staff training focused on emotional intelligence and interaction between support staff and clients	119
Chapter 8	Summary and general discussion	141
	Samenvatting	159
	Dankwoord	167
	CV	171
	Publications	173



# Chapter 1

---

## General introduction





Working within human services can be an emotionally demanding and stressful job. In a recent research report levels of burnout within different types of jobs were presented (CBS, 2011). This report revealed that almost 12% of people working in human services suffer from burnout, compared to, for instance, 6% of people working in agriculture. Another Dutch report focused on job risks of working in human services (TNO, 2008) revealed that staff working in care for people with disabilities suffered more from emotional exhaustion than staff working in other segments of care. When translating this to care for people with intellectual disabilities (ID), this finding could be explained by the fact that people with ID have a greater chance of developing challenging behaviour (CB) than people without ID (Wallander, Dekker, & Koot, 2003). CB constitutes a rather common phenomenon in care for people with ID and, consequently, support staff are often confronted with this behaviour.

Forms of CB are verbal and physical aggression towards people or materials, self-injurious behaviour, and social withdrawn behaviour. According to the guidelines of the British Royal College of Psychiatrists 'Behaviour can be described as challenging when it is of such an intensity, frequency or duration as to threaten the quality of life and/or the physical safety of the individual or others and is likely to lead to responses that are restrictive, aversive or result in exclusion.' (BPS, RCP, & RCSLT, 2007, p. 10).

This definition of CB clarifies why it is not surprising that providing good quality care to and building up meaningful relationships with people with ID and CB can be challenging and difficult. The high levels of burnout and job turnover within staff working with people with ID and CB can thus be explained by the daily demands that are being put on staff. These demands are a serious threat to the wellbeing of staff and clients who benefit from a stable and qualified team of support staff, and consequently threaten the relationship between support staff and clients.

## 1.1 Relationships between support staff and clients

Hastings (2010) describes that research on staff increasingly emphasises that support staff form an important predictor of quality of life and wellbeing of clients. The importance of staff in the provision of care and support for this complex group of people, and in addition, the crucial role they play in their social network and thus the lives of people with ID is more and more acknowledged (Emerson, Remington, Hatton, & Hastings, 1995; Van Asselt-Goverts, Embregts, & Hendriks, 2013; Verdonschot, de Witte, Reichrath, Buntinx, & Curfs, 2009; Rice & Rosen, 1991). A number of studies show the importance of building interpersonal relationships between clients and staff in order to improve quality of life (Embregts, 2011; Van Asselt-Goverts, Embregts, Hendriks, & Frielink, 2014; Schalock, 2004; Schalock & Verdugo, 2002). In addition, the perspective of staff and clients with regard to staff-client relationships is receiving growing attention from scientific research. According to support staff good quality of care is expressed in building a meaningful relationship that is based on trust (Hermsen, Embregts, Hendriks, & Frielink, 2014). When focusing on clients' perspective regarding good quality of care, clients



emphasise that support staff should respect and accept the client, show interest, listen sincerely to the client, be honest towards the client, know the client and his/her characteristics, and show a caring and nurturing attitude towards the client (Clarkson, Murphy, Coldwell, & Dawson, 2009; Roeleveld, Embregts, Hendriks, & Van den Bogaard, 2011). In conclusion, the importance of the interpersonal relationship between staff and clients with respect to quality of care and wellbeing of clients is increasingly recognised within research as well as in clinical practice. However, it is a great challenge for staff to find a balance in providing support based on a meaningful, human relationship with the client, and at the same time help the client becoming more and more autonomous or independent (Embregts, 2011). Finding this balance is even more complex in the presence of CB.

## 1.2 Challenging behaviour and the impact on support staff

A prevalence study from England showed that 10 to 15% of people with ID who were in contact with human services show CB (Emerson, 2001). A recent observational study conducted within five Dutch treatment facilities for people with mild ID and severe CB found higher levels of CB. In the group of observed clients 44% showed aggressive behaviour and 12% self-injurious behaviour (Tenneij & Koot, 2008). Levels of CB in residential facilities are also substantially higher than in community settings (Tyrer et al., 2006). CB can be divided into internalising behavior, for example withdrawn or anxious behavior, and externalising behavior, for example verbal and physical aggression (Achenbach & Rescorla, 2003). Factors influencing the onset or form of CB can range from characteristics of the person with ID, for instance the level of ID or the presence of a syndrome, to factors within the social environment of the client, for instance, stressful live events, or negative staff attitudes (Embregts, Didden, Huitink, & Schreuder, 2009; Emerson, 2003; Hastings & Remington, 1994). CB can have serious consequences for clients such as physical and emotional damage, and exclusion from participation in, for example, jobs or education (Emerson, 2001). In addition, CB may have a negative influence on wellbeing of support staff. Next to physical damage that can be caused by CB, several studies have shown that severe CB can lead to negative emotional reactions in staff members, for instance, fear, anger, and annoyance (Bromley & Emerson, 1995; Hastings, 1995; Hatton, Brown, Caine, & Emerson, 1995). Staff report that the persistent nature of CB, the lack of an effective manner to manage CB, and the inability to understand the occurrence of CB cause negative emotions and feelings of stress (Bromley & Emerson, 1995), which in turn, can lead to higher levels of burnout symptoms (Hastings, 2002; Mitchell & Hastings, 2001).

Burnout is the feeling of severe emotional exhaustion, depersonalisation, and decreased sense of personal accomplishment (Maslach & Jackson, 1981). Burnout is a long-term stress reaction that can eventually lead to absenteeism (Bakker, Demerouti, De Boer, & Schaufeli, 2003). Especially the degree in which an individual experiences emotional exhaustion is related to chances of absenteeism (Schaufeli & Enzmann, 1998). In addition, several studies found strong relationships between burnout

symptoms and turnover (Firth & Britton, 1989; Jackson, Schwab, & Schuler, 1986; Kahill, 1988), an important and prominent problem within the care for people with ID that has a significant impact on clients (Vlaskamp, 1997; Zijlstra, Vlaskamp, & Buntinx, 2000). In sum, CB of clients can have serious negative consequences for clients as well as support staff. Negative emotions of staff caused by CB can reach such high levels, that they eventually lead to burnout, absenteeism, and job turnover.

As said, CB can lead to negative emotions and burnout among support staff. In addition, CB can affect staff behaviour negatively. Hastings (2005) proposed a model regarding the cyclic relationship between CB, staff behaviour, staff emotions, and additional factors. The model describes that CB of clients can lead to negative emotions among support staff which in turn influence staff behaviour. For instance, Rose, Jones, and Fletcher (1998) conducted a study within a residential setting for people with ID and CB. Analyses revealed that staff who reported higher levels of stress showed less engagement and positive interactions with clients. In turn, staff behaviour has shown to be of influence on the development and maintenance of CB (Embregts et al., 2009; Hastings, 1995, 1997; Hastings & Remington, 1994). Staff members dealing with CB tend to implement interventions that are effective in the short term, but reinforce maintenance of CB in the long term (Hastings & Remington, 1994). For instance, clients who show CB often gain attention from support staff (Lambrechts, Van Den Noortgate, Eeman, & Maes, 2010). When the function of CB of a client is gaining social attention, the CB decreases when support staff give attention to the client (short-term), but because the client is rewarded and the CB is reinforced, the chances of occurrence of CB in the future increase (long-term). Thus, staff behaviour appears to be an important factor in the emergence and persistence of CB (Hastings, 1997).

## **1.3 Explanations for support staff behaviour**

### **1.3.1 Emotions and stress**

Negative emotions and stress among staff decrease the chances of adequate staff behaviour (Allen & Tynan, 2000; Hastings, 2005). From a behaviouristic perspective, Oliver (1995) suggests that staff may perceive incidents of CB as aversive events, which lead to increased negative emotions. This phenomenon may lead to staff trying to avoid negative emotions caused by CB of a client and thereby the client (Noone & Hastings, 2010). Avoiding a stressful situation is a coping strategy that people use to handle stress (Lazarus & Folkman, 1984). Although this strategy leads to an immediate reduction of experienced negative emotions, it does not solve the actual cause of these emotions. Moreover, avoidance leads to lower levels of engagement between staff and clients.

### **1.3.2 Beliefs**

The previous paragraphs showed that a functional analysis is important when determining the content of treatment plans in terms of adequate staff behaviour (Didden, Duker, & Korzilius, 1997). For

instance, when CB has a social function and is reinforced by attention that is provided by support staff, a treatment plan could focus on staff not responding to CB and simultaneously offering alternative adequate client behaviour. Although investigating staff emotions and conducting functional analysis may be a good starting point for developing treatment plans, research has shown that this may not be enough to improve staff behaviour (Berryman, Evans, & Kalbag, 1994). Addressing beliefs of staff is also of great importance (Wanless & Jahoda, 2002), because support staff often have incorrect beliefs with regard to the causes of CB (Hastings & Brown, 2002). A cognitive-emotional theory focused on these causal beliefs was developed by Weiner (1985, 1986) and translated for the care for people with ID (Dagnan, Trower, & Smith, 1998; Hill & Dagnan, 2002; Hastings & Brown, 2002). Attribution refers to causal explanations of behaviour. This theory proposes that the more stable the cause of CB according to the beliefs of staff, the less optimism support staff experience. Moreover, the more CB of the client is perceived as controllable (under control of the client), the more anger and less sympathy staff experience. Experiencing less positive and more negative emotions towards a client reduces supporting or helping behaviour of staff. A study of Hastings (1995) shows the importance of targeting these beliefs. He found that staff reported 74% of CB to be intentional. In sum, beliefs of support staff affect experienced emotions and staff behaviour, which emphasises the importance of investigating these beliefs to improve staff behaviour.

### **1.3.3 Client characteristics**

In addition to emotions and beliefs, client characteristics may also affect staff behaviour. Hastings and Remington (1995) found that staff experienced more negative emotions in response to aggressive behaviour than to stereotyped behaviour. Lambrechts, Kuppens, and Maes (2009) revealed that staff members experience more anxious emotions when a client exhibits serious self-injurious behaviour than when a client shows stereotyped behaviour. With regard to staff responses to CB, Lambrechts et al., (2010) found that staff reacted differently to aggressive behaviours and stereotyped behaviours. When clients showed aggressive or destructive behaviour, staff tended to show verbal reactions focused on stopping the behaviour, whereas verbal reactions to self-injurious behaviour mostly consisted of orders and instructions related to the ongoing activity. Results of another study showed that staff rarely respond to stereotyped behaviour (Hastings, 1995). Severity of CB is also a determinant of staff behaviour. Huitink, Embregts, Veerman, and Verhoeven (2011) found a relationship between the severity of CB of clients and behaviour showed by staff. Staff working with clients with more severe CB offered clients more structure and gave directive instructions more frequently than staff who worked with clients showing less severe CB.

### **1.3.4 Personal characteristics**

When investigating staff behaviour, personal characteristics of staff should be taken into account. However, relatively few studies have been conducted in order to identify personal characteristics, individual differences, and their effect on support staff behaviour (Rose, David, & Jones, 2003).

A behavioural concept which is receiving increasing attention within research on support staff is coping. Coping is defined as the “cognitive and behavioural efforts a person makes to manage demands that tax or exceed his or her personal resources” (Lazarus, 1995, p. 6). For instance, Rose et al. (2003) found that the use of an emotion-oriented coping strategy is positively related to general distress. Devereux, Hastings, Noone, Firth, and Totsika (2009) suggested that an emotion-oriented coping strategy mediates the relationship between demands and emotional exhaustion. In addition, some studies have emphasised the importance of personality when investigating staff behaviour (Chung & Harding, 2009; Rose et al., 2003). More specific, an association between personality traits (especially neuroticism) and inadequate coping strategies was found.

An important factor shown to be related to coping and burnout (Gerits, Derksen, & Verbruggen, 2004; Gerits, Derksen, Verbruggen, & Katzko, 2005) is emotional intelligence. Emotional intelligence can be seen as individual style and is defined as “...an array of emotional, personal and social abilities and skills that influence an individual’s ability to cope effectively with environmental demands and pressures” (Bar-On, Brown, Kirkcaidy, & Thomé, 2000, p. 1108). Emotional intelligence is a non-cognitive form of intelligence which contains the following key elements: The image people have of themselves, how they assert their own desires and rights, the ability to understand and manage their own emotions and the emotions of others, relationships people have with others, the extent to which they invest in interpersonal relationships, the ability to recognise and respect feelings of others, stress management skills, general wellbeing, and the capacity to control impulses. When confronted with emotionally demanding situations, such as a client showing severe CB, emotional intelligence influences the use of coping styles (Matthews & Zeidner, 2000). In addition, staff working with clients with ID and CB who had higher levels of emotional intelligence reported fewer burnout symptoms (Gerits et al., 2004). Considering staff behaviour, especially high intrapersonal emotional intelligence is related to lower levels of controlling behaviour (Willems, Embregts, Bosman, & Hendriks, 2013).

## 1.4 Staff training and coaching

Although research is moving from a view on support staff that is characterised as problematic and negative towards a view that focuses on the potential strengths of staff with respect to staff-client relationships (Hastings, 2010), it is undeniable that the relationship between staff and clients is rather complex and challenging, due to CB, negative staff emotions and behaviour, and the additional factors such as personal characteristics affecting these phenomena. Effective training programs for support staff are clearly warranted within clinical practice. Consequently, research reveals an increasing emphasis on the effectiveness of training for support staff, in which the focus is mainly being put on improving skills and knowledge (e.g., Cooper & Browder, 2001; Feldman, Atkinson, Foti-Gervais, & Condillac, 2004; Reid, Parsons, Lattimore, Towery, & Reade, 2005).

However, in order to develop a meaningful relationship between support staff and clients, it takes more than only improving skills and knowledge of staff. Staff training should also focus on attitudes and individual characteristics (Embregts, 2011). Unfortunately, a literature review on elements taken into account in staff training showed that training programs evaluated in the past twenty years rarely include staff attitude or individual characteristics (Van Oorsouw, Embregts, & Bosman, 2013). A meta-analysis conducted by Van Oorsouw, Embregts, Bosman, and Jahoda (2009) showed that a combination of in-service training and coaching on the job appeared to be the most effective strategy when training support staff. Subsequently, providing feedback should always be part of staff training programs (Van Oorsouw et al., 2009). A specific feedback method that has shown to be effective in improving staff behaviour is video feedback (Embregts, 2002; 2003). Finlay, Antaki, and Walton (2008) pleaded that video feedback should always be part of programs improving staff behaviour.

## **1.5 Content of the present thesis**

As showed, more research aimed at factors influencing staff behaviour and interventions on improving staff behaviour is clearly warranted. Therefore, this thesis consists of six studies focusing on the relationship between staff and client variables and on the effectiveness of a specific training program developed for support staff working clients with ID and CB. The main goal of the first study described in Chapter 2 was to investigate to what extent levels of staff engagement and staff avoidance are related to challenging and desirable client behaviours and clients' initiatives for contact. Staff and client behaviours were measured within moments of interaction in natural settings using systematic observational data. In Chapter 3 the relationship among attributions, emotions, and interpersonal styles of staff working with clients with ID and CB was investigated. In addition, the influence of type of CB on attributions, emotions and interpersonal style of staff was taken into account. Chapter 4 describes an exploratory study focusing on the relationship between emotional intelligence, emotions, and feelings of support staff. Chapter 5, 6, and 7 focus on the effectiveness of a training program developed for support staff working with people with ID and CB. The training is aimed at emotional intelligence of staff and staff-client interactions. Support staff reflect on their own emotional intelligence and receive video feedback on their behaviour related to the needs of the client. Chapter 5 is aimed at assessing whether the training improves emotional intelligence of staff. Chapter 6 is an observational study that focuses on the effect of a training program pertaining to the interaction between staff and clients. In this study, video recordings of daily interactions between staff and clients were analysed and evaluated. Chapter 7 describes a study investigating the effectiveness of the training on emotional intelligence, coping styles, and experienced emotions of staff. The final chapter, Chapter 8, summarises the findings of all chapters, reflects on these findings, and finally describes implications for both research and clinical practice.

## References

- Achenbach, T. M., & Rescorla, L. A. (2003). *Manual for the ASEBA adult forms & profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families.
- Allen, D., & Tynan, H. (2000). Responding to aggressive behavior: Impact of training on staff members' knowledge and confidence. *Mental Retardation, 38*, 97-104.
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior, 62*, 341-356.
- Bar-On, R., Brown, J. M., Kirkcaldy, B. D., & Thomé, E. P. (2000). Emotional expression and implications for occupational stress; an application of the Emotional Quotient Inventory (EQ-i). *Personality and Individual Differences, 28*, 1107-1118.
- Berryman, J., Evans, I. M., & Kalbag, A. (1994). The effects of training in nonaversive behavior management on the attitudes and understanding of direct care staff. *Journal of Behavior Therapy and Experimental Psychiatry, 25*, 241-250.
- Bromley, J., & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. *Journal of Intellectual Disability Research, 39*, 341-352.
- BPS/RCP/RCSLT. (2007). *Challenging Behaviour: A Unified Approach*. London: British Psychological Society/Royal College of Psychiatrists.
- Centraal Bureau voor de Statistiek (CBS). (2011). *Burn-out: de rol van werk en zorg*. Den Haag: CBS.
- Chung, M. C., & Harding, C. (2009). Investigating burnout and psychological well-being of staff working with people with intellectual disabilities and challenging behaviour: The role of personality. *Journal of Applied Research in Intellectual Disabilities, 22*, 549-560.
- Clarkson, R., Murphy, G., Coldwell, J., & Dawson, D. (2009). What characteristics do service users with intellectual disability value in direct support staff within residential forensic services? *Journal of Intellectual & Developmental Disability, 34*, 283-98.
- Cooper, K. J., & Browder, D. M. (2001). Preparing staff to enhance active participation of adults with severe disabilities by offering choice and prompting performance during a community purchasing activity. *Research in Developmental Disabilities, 22*, 1-20.
- Dagnan, D., Trower, P., & Smith, R. (1998). Care staff responses to people with learning disabilities and challenging behavior: A cognitive-emotional analysis. *British Journal of Clinical Psychology, 37*, 59-68.
- Devereux, J. M., Hastings, R. P., Noone, S. J., Firth, A., & Totsika, V. (2009). Social support and coping as mediators or moderators of the impact of work stressors on burnout in intellectual disability support staff. *Research in Developmental Disabilities, 30*, 367-377.
- Didden, R., Duker, P. C., & Korzilius, H. (1997). Meta-analytic study on treatment effectiveness for problem behaviors with individuals who have mental retardation. *American Journal on Mental Retardation, 101*, 387-399.
- Embregts, P. J. C. M. (2002). Effect of resident and direct-care staff training on responding during social interactions. *Research in Developmental Disabilities, 23*, 353-366.
- Embregts, P. J. C. M. (2003). Using self-management, video feedback, and graphic feedback to improve social behavior of youth with mild intellectual disabilities. *Education and Training in Developmental Disabilities, 38*, 283-295.
- Embregts, P. J. C. M. (2011). *Zien, bewogen worden, in beweging komen*. Tilburg: Prismaprint.
- Embregts, P. J. C. M., Didden, R., Huitink, C., & Schreuder, N. (2009). Contextual variables affecting aggressive behaviour in individuals with mild to borderline intellectual disabilities who live in a residential facility. *Journal of Intellectual Disability Research, 53*, 255-264.
- Emerson, E. (2001). *Challenging behaviour. Analysis and intervention in people with severe intellectual disabilities* (2nd edn.). University Press: Cambridge.

- Emerson, E. (2003). Prevalence of psychiatric disorders in children and adolescents with and without intellectual disability. *Journal of Intellectual Disability Research, 47*, 51-58.
- Emerson, E., Remington, B., Hatton, C., & Hastings, R. P. (1995). Special issue on staffing. *Mental Handicap Research, 8*, 215-339.
- Feldman, M. A., Atkinson, L., Foti-Gervais, L., & Condillac, R. (2004). Formal versus informal interventions for challenging behaviour with intellectual disabilities. *Journal of Intellectual Disability Research, 48*, 60-68.
- Finlay, W. M. L., Antaki, C., & Walton, C. (2008). A manifesto for the use of video in service improvement and staff development in residential services for people with learning disabilities. *British Journal of Learning Disabilities, 36*, 227-231.
- Firth, H., & Britton, P. (1989). 'Burnout', absence and turnover amongst British nursing staff. *Journal of Occupational Psychology, 62*, 55-59.
- Gerits, L., Derksen, J. J. L., & Verbruggen, A. B. (2004). Emotional intelligence and adaptive success of nurses caring for people with mental retardation and severe behavior problems. *Mental Retardation, 42*, 106-21.
- Gerits, L., Derksen, J. J. L., Verbruggen, A. B., & Katzko, M. (2005). Emotional intelligence profiles of nurses caring for people with severe behaviour problems. *Personality and individual differences, 38*, 33-43.
- Hastings, R. P. (1995). Understanding factors that influence staff responses to challenging behaviours: An exploratory interview study. *Mental Handicap Research, 8*, 296-320.
- Hastings, R. P. (1997). Staff beliefs about the challenging behaviors of children and adults with mental retardation. *Clinical Psychology Review, 17*, 775-790.
- Hastings, R. P. (2002). Do challenging behaviors affect staff psychological well-being? issues of causality and mechanism. *American Journal on Mental Retardation, 107*, 455-467.
- Hastings, R. (2005). Staff in special education settings and behaviour problems: towards a framework for research and practice. *Educational Psychology, 25*, 207-221.
- Hastings, R. P. (2010). Support staff working in intellectual disability services: The importance of relationships and positive experiences. *Journal of Intellectual & Developmental Disability, 35*, 207-210.
- Hastings, R. P., & Brown, T. (2002). Behavioural knowledge, causal beliefs and self-efficacy as predictors of special educators' emotional reactions to challenging behaviours. *Journal of Intellectual Disability Research, 46*, 144-150.
- Hastings, R. P., & Remington, B. (1994). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *British Journal of Clinical Psychology, 33*, 423-438.
- Hastings, R. P., & Remington, B. (1995). The emotional dimension of working with challenging behaviours. *Clinical Psychology Forum, 46*, 144-150.
- Hatton, C., Brown, R., Caine, A., & Emerson, E. (1995). Stressors, coping, strategies, and stress-related outcomes among direct care staff in staffed houses for people with learning disabilities. *Mental Handicap Research, 40*, 148-156.
- Hermesen, M. A., Embregts, P. J. C. M., Hendriks, A. H. C., & Frielink, N. (2014). The human degree of care. Professional loving care for people with a mild intellectual disability: an explorative study. *Journal of Intellectual Disability Research, 58*, 221-232.
- Hill, C., & Dagnan, D. (2002). Helping, attributions, emotions and coping style in response to people with learning disabilities and challenging behaviour. *Journal of Learning Disabilities, 6*, 363-372.
- Huitink, C., Embregts, P. J. C. M., Veerman, J. W., & Verhoeven, L. (2011). Staff behavior toward children and adolescents in a residential facility: A self-report questionnaire. *Research in Developmental Disabilities, 32*, 2790-2796.
- Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). Toward an understanding of the burnout phenomenon. *Journal of applied psychology, 71*, 630.
- Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology/ Psychologie Canadienne, 29*, 284.

- Lambrechts, G., Kuppens, S., & Maes, B. (2009). Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research, 53*, 620-632.
- Lambrechts, G., Van Den Noortgate, W., Eeman, L., & Maes, B. (2010). Staff reactions to challenging behaviour: An observation study. *Research in Developmental Disabilities, 31*, 525-535.
- Lazarus, R. S. (1995). Psychological stress in the workplace. *Occupational stress: A handbook, 1*, 3-14.
- Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. In W. D. Gentry (Ed.), *The handbook of behavioural medicine* (pp. 282-325). New York: Guilford.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior, 2*, 99-113.
- Matthews, G., & Zeidner, M. (2000). Emotional Intelligence, adaptation to stressful encounters, and health outcome. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 459-489). San Fransisco, CA: Jossey-Bass Inc.
- Mitchell, G., & Hastings, R. P. (1998). Learning disability care staffs emotional reactions to aggressive challenging behaviours: Development of a measurement tool. *British Journal of Clinical Psychology, 37*, 441-449.
- Nederlandse Organisatie voor Toegepast Natuur-Wetenschappelijk Onderzoek (TNO). (2008). *Het grote gevaar van de zorg. Overzicht van arbeidsrisico's van en maatregelen voor verpleegkundigen en verzorgenden*. Hoofddorp: TNO, Kwaliteit van Leven, Arbeid.
- Noone, S. J., & Hastings, R. P. (2010). Using acceptance and mindfulness-based workshops with support staff caring for adults with intellectual disabilities. *Mindfulness, 1*, 67-73.
- Oliver, C. (1995). Self-injurious behaviour in children with learning disabilities: Recent advances in assessment and intervention. *Journal of Child Psychology and Psychiatry, 36*, 909-927.
- Reid, D. H., Parsons, M. B. Lattimore, L. P., Towery, D. L., & Reade, K. K. (2005). Improving staff performance through clinician application of outcome management. *Research in Developmental Disabilities, 26*, 101-116.
- Rice, D. M., & Rosen, M. (1991). Direct care staff: a neglected priority. *Mental Retardation 29*, 3-4.
- Roeleveld, E., Embregts, P., Hendriks, L., & Bogaard, K. van den (2011). Zie mij als mens! Noodzakelijke competenties voor begeleiders volgens mensen met een verstandelijke beperking. In P. Embregts, & L. Hendriks (Eds.), *Menslievende professionalisering in de zorg voor mensen met een verstandelijke beperking: Aansluiten bij cliënten en hun ouders* (pp. 41-60). Arnhem: HAN University Press.
- Rose, J., David, G., & Jones, C. (2003). Staff who work with people who have intellectual disabilities: the importance of personality. *Journal of Applied Research in Intellectual Disabilities, 16*, 267-277.
- Rose, J., Jones, F., & Fletcher, B. (1998). The impact of a stress management programme on staff well-being and performance at work. *Work & Stress: An International Journal of Work, Health & Organisations, 12*, 112-124.
- Schalock, R. L. (2004). The concept of quality of life: what we know and do not know. *Journal of Intellectual Disability Research 48*, 203-216.
- Schalock, R. L., & Verdugo, M. A. (2002) *Handbook on Quality of Life for Human Service Practitioners*. American Association on Mental Retardation, Washington, DC.
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. CRC Press.
- Tenneij, N. H., & Koot, H. M. (2008). Incidence, types and characteristics of aggressive behaviour in treatment facilities for adults with mild intellectual disability and severe challenging behaviour. *Journal of Intellectual Disability Research, 52*, 114-124.
- Tyrer, F., McGrother, C. W., Thorp, C. F., Donaldson, M., Bhaumik, S., Watson, J. M., et al. (2006). Physical aggression towards others in adults with learning disabilities: Prevalence and associated factors. *Journal of Intellectual Disability Research, 50*, 295-304.
- Van Asselt-Goverts, A. E., Embregts, P. J. C. M., & Hendriks, A. H. C. (2013). Structural and functional characteristics of the social networks of people with mild intellectual disabilities. *Research in Developmental Disabilities, 34*, 1280-1288.



- Van Asselt-Goverts, A. E., Embregts, P. J. C. M., Hendriks, A. H. C., & Frielink, N. (2014). Experiences of support staff with expanding and strengthening social networks of people with mild intellectual disabilities. *Journal of Community and Applied Social Psychology, 24*, 111-124.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., & Bosman, A. M. T. (2013). Evaluating staff training: Taking account of interactions between staff and clients with intellectual disability and challenging behaviour. *Journal of Intellectual and Developmental Disability, 38*, 356-364.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., Bosman, A. M. T., & Jahoda, A. (2009). Training staff serving clients with intellectual disabilities: A meta-analysis of aspects determining effectiveness. *Research in Developmental Disabilities, 30*, 503-511.
- Verdonschot, M. M. L., de Witte, L. P., Reichrath, E., Buntinx, W. H. E., & Curfs, L. M. G. (2009). Community participation of people with an intellectual disability: A review of empirical findings. *Journal of Intellectual Disability Research, 53*, 303-318.
- Vlaskamp, C. (1997). The implementation of care programme for individuals with profound multiple disabilities. *European Journal on Mental Disability, 4*, 3-12.
- Wallander, J. L., Dekker, M. C., & Koot, H. M. (2003). Psychopathology in children and adolescents with intellectual disability: measurement, prevalence, course, and risk. In: *International Review of Research in Mental Retardation*, Vol. 26 (ed. L. M. Glidden), pp. 93-134. Academic Press, San Diego, CA.
- Wanless, L. K., & Jahoda, A. (2002). Responses of staff towards people with mild to moderate intellectual disability who behave aggressively: A cognitive emotional analysis. *Journal of Intellectual Disability Research, 46*, 507-516.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*, 548-573.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. Berlin: Springer-Verlag.
- Willems, A. P. A. M., Embregts, P. J. C. M., Bosman, A. M. T., & Hendriks, A. H. C. (2013). The analysis of challenging relations: influences on interactive behaviour of staff towards clients with intellectual disabilities. *Journal of Intellectual Disability Research*. doi: 10.1111/jir.12027
- Zijlstra, H. P. R., Vlaskamp, C., & Buntinx, W. H. E. (2000). Direct service professionals turnover: An indicator of the quality of life of individuals with profound multiple disabilities. *European Journal on Mental Disability, 22*, 39-56.





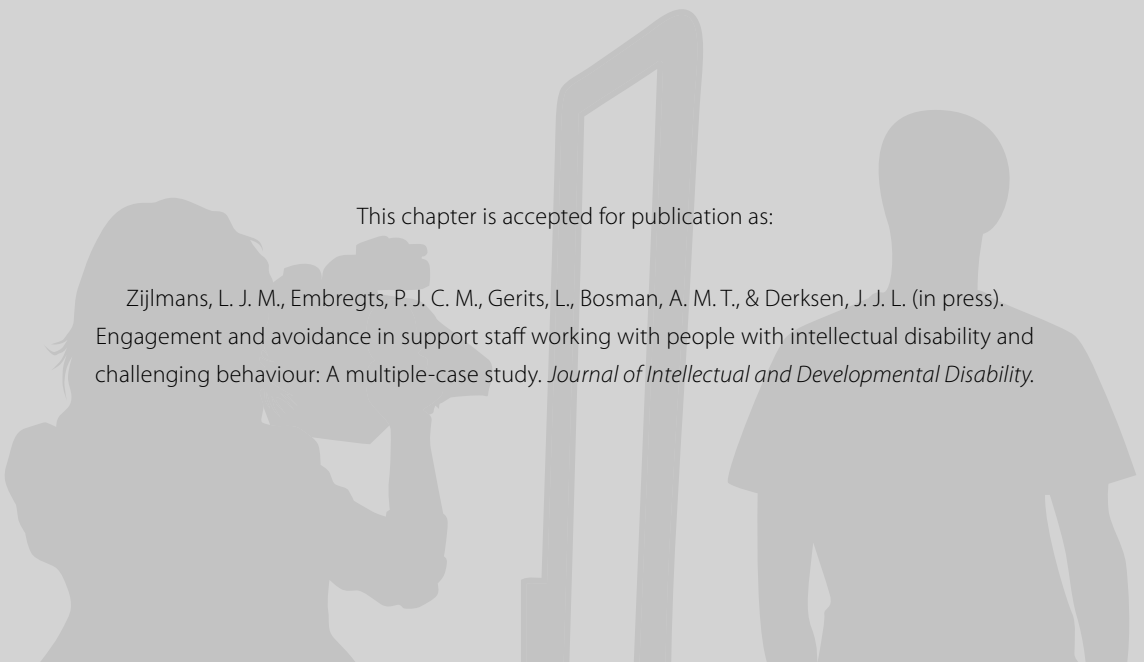
# Chapter 2

---

## **Engagement and avoidance in support staff working with people with intellectual disability and challenging behaviour: A multiple-case study**

This chapter is accepted for publication as:

Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (in press). Engagement and avoidance in support staff working with people with intellectual disability and challenging behaviour: A multiple-case study. *Journal of Intellectual and Developmental Disability*.



## **Abstract**

Challenging behaviour of clients influences emotional wellbeing of staff; this in turn affects levels of staff engagement and avoidance within interactions with clients. The main goal of this study was to investigate to what extent levels of staff engagement and staff avoidance are related to challenging and desirable client behaviours and clients' initiatives for contact. Participants were eight support staff and three clients. Staff and client behaviours were measured within moments of interaction in natural settings using systematic observational data. The results showed that general levels of staff engagement, avoidance, and client behaviours seem to be related. However, individual, sequential analyses do not support these relationships. Future research should take a more individual and intrapersonal view of staff behaviour and staff-client interaction into account, in order to obtain a detailed and realistic image of individual patterns in interactions between support staff and clients.

## 2.1 Introduction

Support staff of individuals with intellectual disability (ID) are often confronted with challenging behaviour (CB), which frequently causes a range of negative emotions. The unpredictability of CB is an important source of stress for staff (Bromley & Emerson, 1995). From a behaviouristic point of view, the function of CB can be varied, including social functions such as seeking attention or avoiding contact with staff (Emerson & Bromley, 1995). Evaluating the function of behaviour is important when determining staff policy and the content of treatment plans (Didden, Duker, & Korzilius, 1997).

When CB is reinforced through attention from staff, a treatment plan could focus on not paying attention to the client's behaviour. However, research has also shown that this functional approach may not be enough to alter staff behaviour (Berryman, Evans, & Kalbag, 1994). Altering beliefs and attitudes of staff also appears to be important, which is in line with a more cognitive-emotional approach, expressed in the causal-attribution theory of Weiner (1985). This theory has been adapted to the support of people with ID and states that staff beliefs about the causes and functions of CB impact staff responses to CB. For instance, staff who believe that CB is the result of uncontrollable factors (such as a medical condition) are more willing to help clients than staff who consider the CB controllable ("he does this on purpose"). Moreover, a study on interpersonal staff behaviour showed that staff, who perceive CB as controllable engage in a more hostile regulated style when interacting with the client (Zijlmans, Embregts, Bosman, & Willems, 2012). Another important factor in the determination of staff behaviour is the nature of the behaviour of a client. For example, staff working with clients who show externalising behaviour, exhibit higher levels of controlling behaviour (Zijlmans et al., 2012). In sum, negative emotions affect staff's emotional wellbeing and behaviour, which in turn affects the relationship between staff and clients (Bromley & Emerson, 1995; Hastings, 2005). This understanding is important when investigating treatment and quality of life outcomes for clients (Hastings, 2010).

When applying a behaviouristic approach to staff behaviour, Oliver (1995) suggests that staff may perceive incidents of CB as aversive stimuli leading to increased stress. High levels of stress induce negative emotions and behaviour in staff, which in turn may trigger the onset and development of CB (Hastings, 1995, 1997; Hastings & Remington, 1994a). Staff have several coping strategies at their disposal to handle stress and CB (Hatton & Emerson, 1995), such as task-oriented coping and avoidance-oriented coping (Lazarus & Folkman, 1984). Task-oriented coping focuses on solving the problem that caused the stressful event.

Avoidance-oriented coping strategies focus on escaping stressful events and negative emotions caused by such events. Although this strategy leads to a reduction of negative emotions, it does not solve the cause of these emotions. Avoidance is identified as a behavioural process within negative emotional experiences of support staff working with clients with ID and CB (Noone & Hastings, 2010). Avoiding contact appears to have a positive effect in the short term, namely a reduction of CB. In the long term, however, avoiding contact often increases the chance of CB. After all, CB of a client may

function as a means to minimise contact with support staff. Not engaging in contact with the client in the long run, however, increases the chance of it occurring again, as a result of reinforcement.

Because avoidance leads to lower levels of engagement between staff and clients, it often affects the quality and supportiveness of staff-client relationships negatively. Thus, studying engagement and avoidance behaviour of support staff may enhance our understanding of their role in establishing positive and negative relationships in staff-client interactions. It is not inconceivable that lower levels of engagement and higher levels of avoidance as a response towards clients' CB eventually lead to less engagement in response to other client behaviours, such as desirable behaviour or contact initiatives on the part of the client. For instance, Jones et al. (1999) showed that support staff gave more attention and assistance to clients who showed less CB and more adaptive behaviour. The focus of this study is, therefore, the relationship between clients' CB, desirable behaviour and contact initiatives, and the levels of engagement and avoidance in support staff.

In the 1970s, 80s, and 90s, a substantial number of studies focused on observation of staff and client behaviours within large samples (Duker et al., 1989; Grant & Moores, 1977; Seys, Duker, Saleminck, & Franken-Wijnhoven, 1998). This line of research mainly focused on individuals with severe to profound ID and described the influence of client characteristics, such as communicative skills on staff behaviour. More recently, Hostyn and colleagues (Hostyn, Neerinckx, & Maes, 2011; Hostyn, Petry, Lambrechts, & Maes, 2011) used observational data to study client and staff behaviours.

The current study aims at answering the following research question: To what extent are levels of staff engagement and staff avoidance related to challenging and desirable client behaviours and clients' initiatives for contact?

## **2.2 Method**

### **2.2.1 Participants**

In this study, eight staff members and three clients from a residential setting for people with an ID and CB participated. This setting consisted of small group homes in which clients had their own apartments with kitchen and bathroom. Managers selected three locations for participation. Subsequently, staff (one man and seven women) were randomly selected during a team meeting. The age of staff ranged from 21 to 49 years (mean age was 28.9 years). Staff members had worked a mean of 3.5 years with people with ID and their mean hours a week of work were 27.

Furthermore, three clients from the three different locations also agreed to participate. The clients were selected by the participating support staff based on difficulties they experienced working with these clients. Reasons for selecting these specific clients were difficulty making contact and heightened levels of CB during interactions. Client A was male, 59 years old, and diagnosed with a severe ID, PDD-NOS and showed obsessive-compulsive behaviour, verbal and physical aggression. Client B was also male, 41 years old, moderately intellectually disabled and diagnosed with PDD-NOS and Fragile-

X-syndrome and also showed obsessive-compulsive behaviour, verbal and physical aggression. Client C was female, 55 years old, with mild ID and was diagnosed with Borderline Personality Disorder. She exhibited self-injurious behaviour and was addicted to alcohol and gambling. The clients and/or their representatives gave permission to participate in this study by giving their written consent. Additionally, the scientific and ethics committee of the facility approved the implementation of the study and its procedure. Each support staff was observed in interactions with one of the three selected clients. Staff member 1, 2, and 3 worked with Client 1, Staff member 4, 5, and 6 worked with Client B, and Staff member 7 and 8 worked with Client C.

### **2.2.2 Measurements**

To obtain a broad impression of staff and client behaviour in task-related settings as well as in leisure-related settings, the interactions between client and the staff members were systematically observed in their natural environment. To measure staff and client behaviour an observation system developed by Jones et al. (1999) was used. They grounded the content of their behavioural categories on engagement and avoidance behaviours. Staff and client behaviours including their definitions are described in Table 2.1. Staff behaviours were divided into two groups: avoidance related behaviours and engagement related behaviours. Client behaviours were divided into three groups: desirable behaviour, CB, and contact.

Because the nature of some behaviour resulted in simultaneous occurrence (e.g., contact and desirable behaviour), all staff and client behaviours were placed into four different categories based on the content of the behaviours. Category 1: assistance, process, no assistance/process. Category 2: other conversation, no other conversation, praise. Category 3: social engagement, no social engagement. Category 4: problem behaviour, off task behaviour, task-oriented behaviour. A 'rest' category was added and was used for coding when a staff member left the room or when they were out of each other's vision. Behaviours within one category could not occur at the same time. All behaviours, except for praise, were state events, that is, their duration was more than a few seconds. Praise was coded as a point event, because it lasts a relatively short time (less than a few seconds).

It is important to note that process and no assistance/process was only counted as avoidance when it occurred at the same time as no other conversation, because when these behaviours did not occur with no other conversation, they occurred at the same time as other conversation, which is an engagement-related behaviour.

The observations were coded using the computer program 'The Observer XT' (Noldus Information Technology BV, Wageningen, the Netherlands). Staff and client behaviours were assessed during 15-minute continuous time sampling observations collected with a hand-held computer. All behaviours that occurred during these 15-minute intervals were registered. For instance, when a staff member assisted the client during the entire interval and gave a compliment to the client, assistance was coded (state event) and within the interval praise was coded once (point event). This way a time line with all behaviours that occurred during the interval emerged. All client and staff behaviour



categories were represented by a key on the computer, for instance, assistance was the A key on the computer keyboard. The behaviours were coded during the observations.

In addition to the observations, we interviewed staff members a year after the observations were conducted. Seven out of eight staff members were still working in the same group home with the same client. Topics that were addressed in the interview were: The function of CB of the client, the adequacy of staff responses to challenging and desirable behaviour (according to treatment plans), the emotions and stress staff members experienced when dealing with CB and the personal goals of clients as formulated in treatment plans.

**Table 2.1** *Description Behavioural Categories Observation System*

Categories	Definition
<b>Staff</b>	
Engagement	
<i>Assistance</i>	An explicit or implicit instruction to perform an activity, presentation of materials in the context of an activity, prompting with gestures or physical, demonstration. Corrective feedback as a form of guidance/instruction. An example of assistance is giving the client the instruction to brush his teeth.
<i>Other conversation</i>	Social talk. Any other form of voice or gestures interactions, which are neither encouraging nor discouraging. An example of other conversation is discussing a football match with the client.
<i>Praise</i>	Verbal praise, gestural praise, physical praise (point event), for instance giving the client a compliment such as "you did very well!".
Avoidance	
<i>Process</i>	Assistance without prompting. Performing an activity with the client, without real involvement of the client, for instance, holding a client's hand while walking without making further contact with him or her.
<i>No assistance/process</i>	
<i>No other conversation</i>	
<b>Client</b>	
Contact	
<i>Social engagement</i>	Speech, attempted speech, signals or gestures in order to receive attention from, or pay attention to the staff member. An example of social engagement is touching a staff member's shoulder.
Desirable behaviour	
<i>Task-oriented behaviour</i>	Preparing for or completing a task, such as brushing teeth or doing the dishes
Challenging behaviour	
<i>Problem behaviour</i>	Behaviour which harms the client or staff member: self-injurious behaviour, verbal and physical aggression directed towards others, destruction of property. An example of problem behaviour is trying to hit a staff member.
<i>Off task</i>	Task avoidance behaviour, internalizing behaviour that causes the client not to perform a task or an activity. An example of off task behaviour is staying in bed after the staff member gave the instruction to get out of bed.

### 2.2.3 Inter-observer reliability

Observations were conducted by the first author and two Masters students. Prior to the study, the first author tested the observation system with a colleague. They conducted real-time observational data with regard to interactions between support staff and clients within a residential living unit

for individuals with ID and CB. The observers practiced three shifts, which means they discussed their coding during observing. After these shifts they sat in the group home separately and coded interactions independently, without discussing, during six shifts. This resulted in 13.5 hours of observations. The observers achieved an inter-observer agreement of 90% and concluded that the used observation system was reliable for the purpose of this study. Based on the experience of these observers, it was decided to use observation intervals of 15 minutes to be able to compare different observations.

After this test-phase the first author gave the co-observers (i.e., the Masters students) three-day training. During the training, video fragments of interactions between staff members and clients with an ID and CB made for another research project were used. On the first day of the training, the observers watched interactions, discussed them and coded them. On the second and third day, staff and client behaviour was coded in 16 intervals of 15 minutes. During this coding process the observers did not discuss the video material. The inter-observer reliability between the first author and the Masters students was 83.8% and 80.8%, respectively.

### **2.2.4 Procedure**

Prior to the study, the experimenter provided staff and clients with information on the research and the observations. Staff did not know the main goals of the study or which behaviours were observed during the study. The observations took place during a period of six weeks. The duration of the contact and interaction moments between support staff and clients were different for the three specific clients, for instance, mean duration of the contact moments for Client A was three minutes, whereas the mean duration of contact moments for Clients B and C was ten minutes. This implies that for Client A the 15 minutes intervals were not just interactions. We introduced a rest category because the staff member sometimes left the room of the client after a few minutes. In order to equalise time that staff and clients were observed when they were in the same room, it was decided that five support staff members (working with Clients B and C) were observed for at least 38 intervals of 15 minutes, and three staff members (working with Client A) were observed for at least 70 intervals. As a result, the total durations of interaction between the clients and staff members were approximately equal. Staff working with Client 1 had an average of 74 measurement of 15 minutes, and reached a mean total duration of 318 minutes of contact. Staff working with Client B had an average of 40 measurements, and a mean total contact duration of 367. Staff working with Client C had an average of 40 measurements and a mean total duration of 374 minutes of contact.

The observations took place in the morning and evening shifts during situations in which interactions between client and staff members occurred most frequently. The morning observations took place during personal care, such as brushing teeth and getting dressed. The evening observations were conducted during moments of leisure, such as playing a game and drinking a soda. The interactions and observations mostly took place in the living quarters of the clients. Some observations were

conducted during walks and group moments on the location the clients lived. When observing, the observer always stood or sat on the other side of the room, and did not interact with staff or clients.

## 2.3 Results

First, the general occurrence of engagement and avoidance related behaviours of staff and contact, challenging and desirable behaviours of clients were determined. Mean percentages and standard deviations of the occurrence of staff and client behaviours are presented in Table 2.2. Percentages of client behaviours do not sum to 100, because behaviours were placed in different, not mutually exclusive, categories. Desirable and challenging behaviours do sum to 100%, as well as avoidance and engagement by staff, because they are mutually exclusive.

The mean percentage of avoidance related behaviours was 27.8 (range = 9.9 to 37.8%). The mean percentage of engagement related behaviours was 72.2 (range = 36.2 to 90.1%). The mean level of contact on the part of the clients was 48.4 (range = 20.1 to 88.7%). The mean level of desirable behaviour was 93.0 (range = 86.7 to 100%), whereas the mean percentage of challenging behaviour was 7.0 (range = 0 to 16.9%).

In order to investigate the relationship of staff levels of engagement and avoidance with client behaviours, Pearson's correlations were calculated. Because percentages of engagement and avoidance add up to 100%, only the correlations between avoidance and client behaviours are reported. This is the same for desirable and challenging behaviour; only the correlation between challenging behaviour and avoidance is reported. A high correlation was found ( $r = -.92, p < .01$ )

**Table 2.2** Mean Percentages and Standard Deviations of Staff and Client Behaviours

Support staff	Avoidance staff		Engagement staff		Contact client		Desirable behaviour		Challenging behaviour		Praise (total amount)
	M	SD	M	SD	M	SD	M	SD	M	SD	Total
1	36.9	23.7	63.1	23.7	20.1	17.0	86.7	16.7	13.3	16.7	117
2	35.7	18.0	64.3	18.0	32.4	20.4	90.2	13.4	9.8	13.4	273
3	37.8	24.7	62.2	24.7	27.2	19.2	88.7	12.7	11.3	12.7	97
4	29.0	19.8	71.0	19.8	46.4	21.5	90.0	16.9	10	16.9	56
5	21.7	14.0	78.3	14.0	45.7	23.0	94.7	9.7	5.3	9.7	155
6	28.4	17.2	71.6	17.2	53.8	19.2	96.3	7.4	3.7	7.4	123
7	22.7	23.9	77.3	23.8	72.9	26.2	97.5	15.8	2.5	15.8	16
8	9.9	12.9	90.1	12.0	88.7	13.7	100.0	.0	.0	.0	50

between staff avoidance and contact initiated by the client. Within dyads in which clients initiated more contact, support staff showed higher levels of engagement and lower levels of avoidance. This finding is supported by the experience of the observers. They noted that Client 3 initiated contact with staff more often than the other clients. She did this by, for example, starting a conversation about the weather or her job. Staff always engaged in these talks.

The correlation between avoidance and challenging behaviour was also large ( $r = .89, p < .01$ ). Staff working with a client who showed more challenging behaviour, showed higher levels of avoidance related behaviours. Additionally, support staff with whom the client showed less challenging behaviour, showed higher levels of engagement and lower levels of avoidance, and vice versa. This is supported by anecdotal information from the observers concerning Client 1, who showed the highest levels of challenging behaviour. His challenging behaviour was mainly of an obsessive and compulsive nature. A recurring interactional pattern was staff giving client an instruction, client shows challenging behaviour (for instance he starts to slide his chair), staff stops engaging with client and waits for the client to stop his challenging behaviour (this often took several minutes), when the client stops his challenging behaviour, staff often compliments him, when the client does not stop, staff gives him another instruction after a few minutes. This indicates that staff members working with this client spent a lot of time avoiding interaction with him.

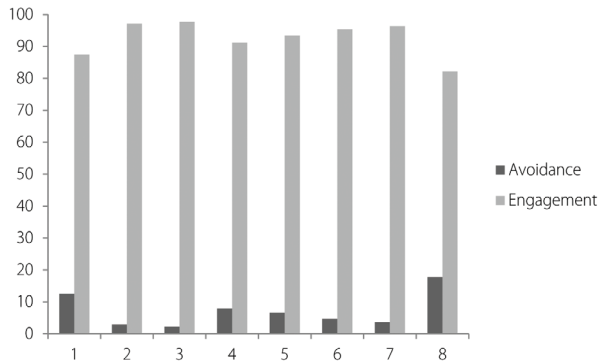
Because praise (part of engagement) was registered as a point event, it was not possible to calculate the percentage of time support staff showed this behaviour. Frequency of praise is presented in Table 2.2. The mean frequency of praise during contact moments is 2.1 within a mean duration of 350 minutes of contact (range = 0.4 to 3.9%). None of the correlations between client behaviour and praise were significant.

Summarised, the percentages of general occurrence of staff and client behaviours hardly differ. It is noticeable that percentages differ more among staff members working with different clients than among staff working with the same client. However, the mean percentages also vary between staff members working with the same client. In addition, contact initiated by the client is the most variable behaviour across clients and staff members. The least variable behaviours were desirable and challenging client behaviour.

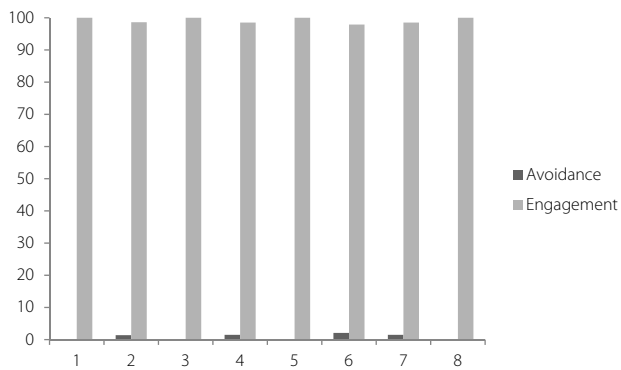
Secondly, the percentages of sequences of contact, desirable and challenging behaviours of clients as well as avoidance and engagement behaviours of staff were calculated. Figure 2.1, 2.2, and 2.3 present the results for each staff member in interaction with each of the three clients, and show the percentage of avoidance and engagement in direct response to client behaviours.

When focusing clients' contact initiatives, staff members mostly reacted with engagement-related behaviours (range = 82.2 to 97.8%). The percentages of engagement and avoidance vary across staff members, but do not seem to be related to contact initiatives of the clients they worked with. However, the figures also show some differences between the individual staff members, for example Staff member 1 showed less engagement and more avoidance in respond to client contact compared to her colleagues. Table 2.2 showed that this is also the dyad in which the client showed most challenging

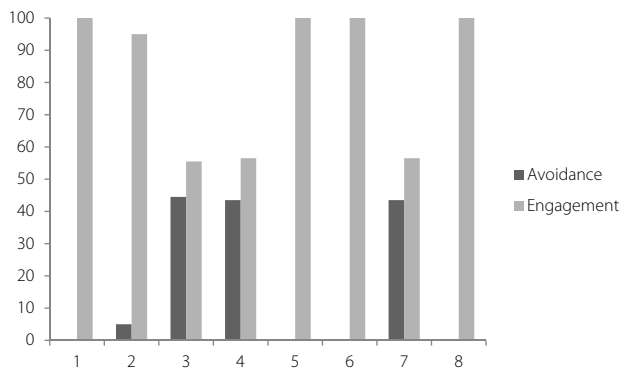
**Figure 2.1** Avoidance and Engagement Levels (in %) of Staff Members following Contact initiated by Clients



**Figure 2.2** Avoidance and Engagement Levels (in %) in Staff Members following Desirable Behaviour of Clients



**Figure 2.3** Avoidance and Engagement Levels (in %) in Staff Members following Challenging Behaviour of Clients



behaviour and the least contact with the staff member (20.1% and 13.3%). Further visual analyses showed that the responses to contact in terms of engagement and avoidance are not necessarily related to the general occurrence of challenging behaviour. For example Staff member 8 showed less engagement and more avoidance in response to client contact, whereas Client C did not show challenging behaviour in this dyad and initiated more contact with Staff member 7 than with Staff member 8.

Further, the figures show that the percentages of sequences with regard to desirable and challenging client behaviours vary greatly across staff members and do not seem to be related to the clients the staff interacted with. For instance, Staff members 1 and 5 did not react in response to challenging behaviours in terms of avoidance at all, whereas Staff member 1 showed a higher percentage of avoidance in response to client's contact initiatives (12.5%). For Staff member 6, the figure shows the same pattern. She responded to desirable behaviour with avoidance related behaviour 2.1% of the time. However, she reacted to CB with only engagement related behaviour. Staff members 3 and 4 showed higher amounts of avoidance-related behaviours in response to challenging behaviour (44.5% and 43.5%). When comparing the results of these staff members to the results presented in Table 2.2, one can see that clients showed somewhat higher levels of challenging behaviour when Staff members 3 and 4 were interacted with them (11.3% and 10%). However, the highest level of challenging behaviour was to be found with Staff member 1 (13.3%), who did not respond in terms of avoidance. Results with regard to the challenging behaviour of Client C are difficult to interpret, because this client hardly showed any challenging behaviour. However, Staff member 7 only showed engagement in response to desirable client behaviour, whereas Staff member 8 showed avoidance related behaviour in response to desirable behaviour in 3.2 % of the time.

In sum, these results show relatively large variations across the different staff members. Most staff members showed high percentages of engagement-related behaviours in response to contact, desirable, and challenging behaviours. When comparing the results of staff working with the same client, the extent to which staff responded in terms of engagement or avoidance to client behaviours does not seem to be related to the general occurrence of client behaviours. For instance, staff who worked with clients who showed the highest levels of challenging behaviour, did not necessarily respond with higher levels of avoidance.

In addition to the observations, support staff were interviewed a year after the research. With regard to adequacy of staff responses to CB, five out of seven staff members pointed out that they had to ignore it. In addition, four out of seven staff noted that the function of CB of their client was social, for instance gaining attention from the staff or disrupting contact. Six out of seven staff said they felt stress and negative emotions, such as helplessness, irritation, or fear, when dealing with CB. For none of the clients that participated in this study, was increasing mastering of independent skills a personal goal. Staff pointed out that the focus of treatment was mainly supportive and not stimulating or teaching.

## 2.4 Discussion

The current study focused on the extent to which levels of staff engagement and staff avoidance are related to challenging and desirable client behaviours and clients' initiatives for contact. Support staff showed high levels of engagement related behaviours, such as assistance. These engagement levels with a mean of 72 %, were higher compared to other studies. For instance, a study of Hewson and Walker (1992) measured staff engagement for an average of only 21% of the time. A study conducted in Hong Kong (Chan & Yau, 2002) found a total percentage of 37% of engagement between staff and clients. Differences with those studies could be explained by when observations were conducted. For instance, in the study of Chan and Yau support staff were observed all day, and consequently time spent with other clients or organisational tasks were also taken into account, whereas support staff in this study was only observed during contact moments with specific clients. Subsequently, the interviews with staff showed that stimulating independence was not an important goal for the clients who participated in our study, which explains the high levels of assistance. Treatment was mainly focused on assisting and supporting clients with their daily tasks and activities, rather than stimulating independent behaviour.

Clients in this study showed varying levels of contact. It is noticeable that the client with severe ID experienced the lowest levels of contact, and the client with mild ID experienced the highest levels of contact. According to the observers, the client with mild ID was more able to have a verbal conversation with support staff and had a broader communicative repertoire, compared to the clients with more severe ID. This might explain the higher levels of contact initiatives of the client with mild ID. In addition, the diagnoses of the participating clients could also play a role in the varying levels of contact that were found. For instance, clients with Fragile-X syndrome experience social anxiety (Cohen, 1995), and clients with Autism Spectrum Disorder often show a lack of social interest in others (Jordan, 2007). Such clients are possibly less inclined to engage in social interactions and may even try to avoid interaction with other individuals. When looking at challenging and desirable behaviours of clients, it is interesting to note that the clients in this study showed relatively low levels of CB although managers and support staff selected these clients based on their complexity and high occurrence of CB.

The fact that the clients did not show high levels of CB could be caused by the presence of the observer. This change in clients' daily routine could have led to social desirable behaviour or at least reactivity (Johnson, Douglas, Bigby, & Iacono, 2011). The varying levels of ID of the participating clients could also explain the different levels of challenging and desirable behaviours. A meta-analysis by McClintock, Hall, and Oliver (2003) identified severe ID as a risk marker for the development of CB, such as self-injurious and stereotyped behaviour. In addition, another risk marker identified in this meta-analysis was gender; males are at greater risk of developing CB, especially aggressive behaviour. This finding is in line with the current study, in which the only participating female client did not show any aggressive behaviour at all.

When focusing on the extent to which levels of staff engagement and staff avoidance are related to client behaviours, the results indicate relationships between certain behaviours. For instance, dyads in which the clients show high levels of contact also show high levels of staff engagement. This matches findings of staff members showing fewer interaction initiatives in contact and support when clients have less-developed communicative skills or higher levels of internalising behaviour (Embregts, 2003; Seys et al., 1998). Interventions focusing on improving clients' communicative abilities or reducing internalising behaviour might lead to a more equally distributed pattern of staff assistance and attention across different clients, and could reduce CB (Harvey, Boer, Meyer, & Evans, 2009).

Staff working with clients with higher levels of CB, showed higher levels of avoidance. This relationship between levels of staff engagement and avoidance and client behaviours matches the literature that describes how CB can lead to negative emotions in staff which can increase avoidance behaviour of staff and consequently to lower levels of engagement of staff (Hastings & Remington 1994a,b; Oliver, 1995; Noone & Hastings, 2010). The interviews with staff also confirmed that, although clients did not show CB very frequently, staff did experience negative emotions working with these clients. This finding explains the strong correlation between CB and avoidance. Nevertheless, some staff also stated that avoiding CB is a response described in treatment plans, which could indicate that avoidance is used as a management technique. This reasoning should be analysed in future research addressing the relationship between CB and avoidance.

The expounded relationship between client and staff contact was not found in client and staff behaviours. Responses of support staff in terms of engagement and avoidance were not related to the initial levels of challenging and desirable behaviours and contact initiated by clients. Differences across engagement and avoidance related responses were arbitrarily divided among the different staff members. This suggests that engagement and avoidance related behaviours depend on individual staff characteristics rather than on client characteristics. These findings are supported by anecdotal information of the observers, who experienced different patterns of interactions between staff working with the same client. For instance, according to the observers, staff working with Client B showed very different personal styles in terms of affection and empathy, which resulted in different levels of praise and positive interactions. This could mean that responses in terms of engagement and avoidance depend more on individual staff characteristics than on client characteristics. Staff characteristics and their influences on interaction with clients has been the subject of many studies. For instance, Rose et al. (1998) found that the level of stress experienced by support staff is negatively related to the amount of assistance staff provides to clients. Other related factors are organisational factors, job satisfaction, coping styles, and personality of support staff (Hatton et al., 1999; Rose, David, & Jones, 2003). Social climate is also thought to be an influence on staff and client behaviour, and consequently on treatment outcomes (Langdon, Swift, & Budd, 2006). Additionally, characteristics of the daily job of staff, such as the need for haste, the ability to rely on colleagues, and the number of organisational tasks may also affect staff-client interactions. Future research should investigate to



what extent these factors influence the nature of staff-client interactions and levels of engagement and avoidance.

The sample size in our study was small, which makes it impossible to generalise the results to a larger population of support staff and clients. However, the multiple-case design of the study does enable a detailed analysis of interactional patterns for each selected dyad of support staff and client. In addition, the amount of systematic and daily observations gave a realistic and broad picture of moments of interaction between support staff and clients with an ID and CB. To be able to generalise the results of the current study, future research should replicate it using a larger sample size.

To answer our research question and to conduct daily observations during a long period, it was necessary to use an observation system that contained a small amount of behaviours that are broadly defined. Consequently, this system makes obtaining a more detailed picture of subtle behaviours impossible. For instance, assistance was defined as: "An explicit or implicit instruction to perform an activity, presentation of materials in the context of an activity, prompting with gestures or physical, demonstration. Corrective feedback as a form of guidance/instruction". This means that a broad range of staff behaviours, such as giving an instruction to the client to get out of bed, but also providing the client with physical assistance to put on his shoes, were identified as assistance. A disadvantage of the observation system is that it does not allow a more detailed distinction between behaviours, such as different forms of assistance.

The goal of this study was to investigate the relationship between staff levels of engagement and avoidance and client behaviours. With regard to the research question, the results showed a mixed picture. General levels of staff engagement, avoidance, and client behaviours seem to be related, whereas individual (sequential) analyses do not support these relationships. These results appear to be contradictory, but recent work by Molenaar (2004) reveals that this situation is the rule rather than the exception. Molenaar showed that intra-individual differences do not manifest themselves in inter-individual differences (Molenaar & Campbell, 2009). Standard statistical methods for the analysis of inter-individual variation are insensitive to the large heterogeneity in the population. Simply stated, mean behaviour cannot be generalised to the behaviour of individuals. This explains why the mean results based on our group of eight dyads do not reflect the intra-individual findings. The consequences of this finding for research in the field of ID lies in developing and conducting studies that aim at investigating individual patterns between support staff and clients, rather than studies that aim at group level outcomes.

## References

- Berryman, J., Evans, I. M., & Kalbag, A. (1994). The effects of training in nonaversive behavior management on the attitudes and understanding of direct care staff. *Journal of Behavior Therapy and Experimental Psychiatry, 25*, 241-250.
- Bromley, J., & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. *Journal of Intellectual Disability Research, 39*, 341-352.
- Chan, J. S., & Yau, M. K. (2002). A study on the nature of interactions between direct-care staff and persons with developmental disabilities institutional care. *The British Journal of Developmental Disabilities, 48*, 39-51.
- Cohen, I. L. (1995). A theoretical analysis of the role of hyperarousal in the learning and behavior of fragile X males. *Mental Retardation and Developmental Disabilities Research Reviews, 1*, 286-291.
- Didden, R., Duker, P. C., & Korzilius, H. (1997). Meta-analytic study on treatment effectiveness for problem behaviors with individuals who have mental retardation. *American Journal on Mental Retardation, 101*, 387-399.
- Duker, P., Boonekamp, J., Ten Brummelhuis, Y., Hendrix, Y., Hermans, M., Van Leeuwe, J., & Seys, D. (1989). Analysis of ward initiatives toward mentally retarded clients: clues for intervention. *Journal of Mental Deficiency Research, 33*, 55-67.
- Embregts, P. J. C. M. (2003). Using self-management, video feedback and graphic feedback to improve social behavior of youth with mild mental retardation. *Education and Training in Developmental Disabilities, 38*, 282-294.
- Emerson, E., & Bromley, J. (1995). The form and function of challenging behaviours. *Journal of Intellectual Disability Research, 39*, 388-398.
- Grant, G. W., & Moores, B. (1977). Resident characteristics and staff behavior in two hospitals for mentally retarded adults. *American Journal of Mental Deficiency, 82*, 259-265.
- Harvey, S. T., Boer, D., Meyer, L. H., & Evans, I. M. (2009). Updating a meta-analysis of intervention research with challenging behaviour: Treatment validity and standards of practice. *Journal of Intellectual and Developmental Disability, 34*, 67-80.
- Hastings, R. P. (1995). Understanding factors that influence staff responses to challenging behaviours: An exploratory interview study. *Mental Handicap Research, 8*, 296-320.
- Hastings, R. P. (1997). Staff beliefs about the challenging behaviors of children and adults with mental retardation. *Clinical Psychology Review, 17*, 775-790.
- Hastings, R. (2005). Staff in special education settings and behaviour problems: towards a framework for research and practice. *Educational Psychology, 25*, 207-221.
- Hastings, R. P. (2010). Support staff working in intellectual disability services: The importance of relationships and positive experiences. *Journal of Intellectual and Developmental Disability, 35*, 207-210.
- Hastings, R. P., & Remington, B. (1994a). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *British Journal of Clinical Psychology, 33*, 423-438.
- Hastings, R., & Remington, B. (1994b). Rules of engagement: Toward an analysis of staff responses to challenging behavior. *Research in Developmental Disabilities, 15*, 279-298.
- Hatton, C., & Emerson, E. (1995). Staff in services for people with learning disabilities: an overview of current issues. *Mental Handicap Research, 8*, 215-219.
- Hatton, C., Emerson, E., Rivers, M., Mason, H., Mason, L., Swarbrick, R., Kiernan, C., Reeves, A., & Alborz, A. (1999). Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *Journal of Intellectual Disability Research, 43*, 253-267.
- Hewson, S., & Walker, J. (1992). The use of evaluation in the development of a staffed residential service for adults with mental handicap. *Mental Handicap Research, 5*, 188-203.

- Holden, B., & Gitlesen, J. P. (2003). Prevalence of psychiatric symptoms in adults with mental retardation and challenging behaviour. *Research in Developmental Disabilities, 24*, 323-332.
- Hostyn, I., Neerinx, H., & Maes, B. (2011). Attentional processes in interactions between people with profound intellectual and multiple disabilities and direct support staff. *Research in Developmental Disabilities, 32*, 491-503.
- Hostyn, I., Petry, K., Lambrechts, G., & Maes, B. (2011). Evaluating the quality of the interaction between persons with profound intellectual and multiple disabilities and direct support staff: a preliminary application of three observation scales from parent-infant research. *Journal of Applied Research in Intellectual Disabilities, 24*, 407-420.
- Jones, E., Perry, J., Lowe, K., Felce, D., Toogood, S., Dunstan, F., Allen, D., & Pagler, J. (1999). Opportunity and the promotion of activity among adults with severe intellectual disability living in community residences: the impact of training staff in active support. *Journal of Intellectual Disability Research, 43*, 164-178.
- Johnson, H., Douglas, J., Bigby, C., & Iacono, T. (2011). The challenges and benefits of using participant observation to understand the social interaction of adults with intellectual disabilities. *Augmentative and Alternative Communication, 27*, 267-278.
- Jordan, R. (2007). Autistic Spectrum Disorders. In Carr, A. (Ed.), *The handbook of Intellectual Disability and Clinical Psychology Practice*. (pp. 529-555) London, Routledge.
- Langdon, P. E., Swift, A., & Budd, R. (2006). Social climate within secure inpatient services for people with intellectual disabilities. *Journal of Intellectual Disability Research, 50*, 828-836.
- Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. In W. D. Gentry (Ed.), *The handbook of behavioural medicine* (pp. 282-325). New York: Guilford.
- McClintock, K., Hall, S., & Oliver, C. (2003). Risk markers associated with challenging behaviours in people with intellectual disabilities: a meta-analytic study. *Journal of Intellectual Disability Research, 47*, 405-416.
- Molenaar, P. C. M. (2004). A manifesto on psychology as idiographic science: Bringing the person back into scientific psychology, this time forever. *Measurement, 2*, 201-218.
- Molenaar, P. C. M., & Campbell, C. G. (2009). The new person-specific paradigm in psychology. *Current Directions in Psychological Science, 18*, 112-117.
- Noldus (2009). The Observer XT. Noldus Information Technology, Wageningen.
- Noone, S. J., & Hastings, R. P. (2010). Using acceptance and mindfulness-based workshops with support staff caring for adults with intellectual disabilities. *Mindfulness, 1*, 67-73.
- Oliver, C. (1995). Self-injurious behaviour in children with learning disabilities: Recent advances in assessment and intervention. *Journal of Child Psychology and Psychiatry, 36*, 909-927.
- Rose, J., David, G., & Jones, C. (2003). Staff who work with people who have intellectual disabilities: The importance of personality. *Journal of Applied Research in Intellectual Disabilities, 16*, 267-277.
- Rose, J., Jones, F., & Fletcher, B. (1998). The impact of a stress management programme on staff well-being and performance at work. *Work & Stress: An International Journal of Work, Health & Organisations, 12*, 112-124.
- Seys, D., Duker, P., Saleminck, W., & Franken-Wijnhoven, J. (1998). Resident behaviors and characteristics as determinants of quality of residential care: An observational study. *Research in Developmental Disabilities, 19*, 261-273.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*, 548-73.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Bosman, A. M. T., & Willems, A. P. A. M. (2012). The relationship among attributions, emotions, and interpersonal styles of staff working with clients with intellectual disabilities and challenging behavior. *Research in Developmental Disabilities, 33*, 1484-1494.





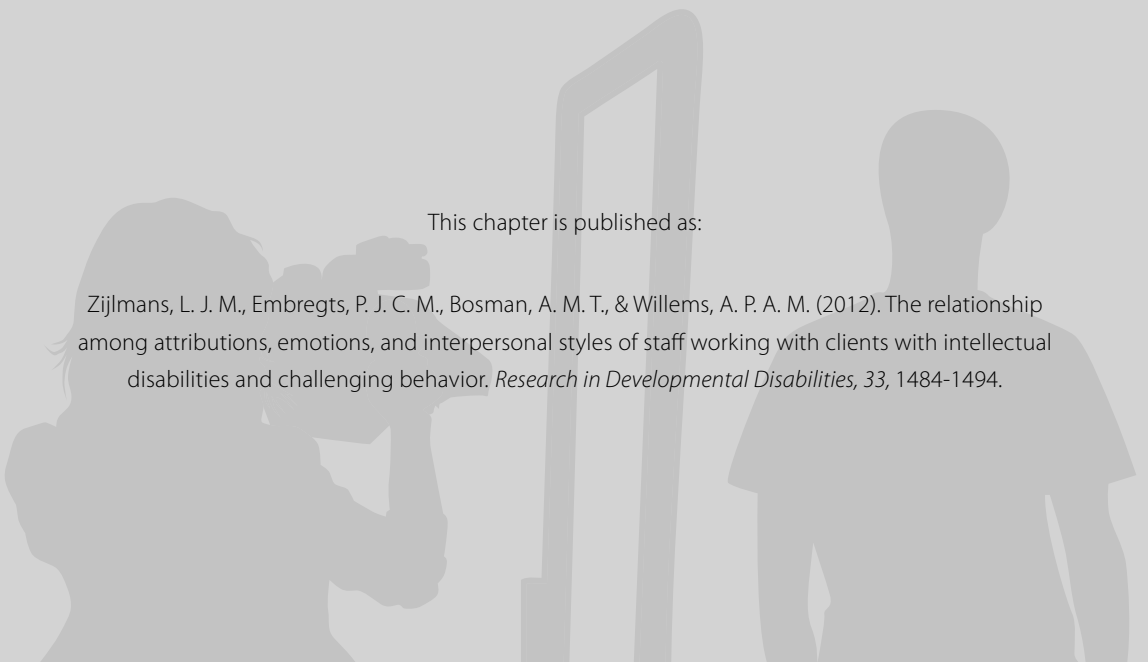
# Chapter 3

---

## **The relationship among attributions, emotions, and interpersonal styles of staff working with clients with intellectual disabilities and challenging behaviour**

This chapter is published as:

Zijlmans, L. J. M., Embregts, P. J. C. M., Bosman, A. M. T., & Willems, A. P. A. M. (2012). The relationship among attributions, emotions, and interpersonal styles of staff working with clients with intellectual disabilities and challenging behavior. *Research in Developmental Disabilities, 33*, 1484-1494.



## **Abstract**

Several studies have tested Weiner's model, which suggests a relationship among causal attributions regarding challenging behaviour, emotions, and helping behaviour of staff. No studies have focused on interpersonal styles. The goals of this study were to investigate the influence of type of challenging behaviour on attributions, emotions and interpersonal style of staff, the relationships among staff attributions, emotions, and interpersonal style, and the mediating function of emotions in the relation between attributions and interpersonal style. Participants were 99 staff members. Results show that challenging behaviour aimed at the environment was related to higher levels of negative emotions, attributions and certain interpersonal styles such as controlling behaviour. In addition, a relationship between emotions, attributions, and interpersonal style was found. However, there was no mediating function of emotions in the relationships between attributions and interpersonal style. Concluding, future research should take a more dynamic view of staff behaviour and staff-client interaction into account.

### 3.1 Introduction

People with intellectual disabilities (ID) have a greater chance of developing challenging behaviour (CB) and psychopathology (Wallander, Dekker, & Koot, 2003). Emerson (2001, p. 3) defined CB as 'behaviour of such intensity, frequency or duration that the physical safety of the person is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit or deny access to and use of ordinary community facilities'. Furthermore, CB can be divided into behaviour aimed at the client him or herself (inward, for example withdrawal and self-injurious behaviour) and behaviour focused on the environment of the client (outward, for example aggression and delinquent behaviour). Clients who show CB often gain attention from their support staff (Lambrechts, Van Den Noortgate, Eeman, & Maes, 2010). A number of studies show that staff reactions to CB often reinforce clients' maladaptive behaviour (Embregts, Didden, Huitink, & Schreuder, 2009; Hastings, 1996, 2002). In sum, staff behaviour appears to be a key factor in the emergence and persistence of CB (Hastings, 1997a). Hastings and Remington (1994) concluded that staff behaviour can be influenced by factors related to the CB itself. For instance, CB of clients can lead to negative emotions of support staff, such as anxious feelings, irritation, which in turn can lead to feelings of depersonalisation, and emotional exhaustion (Mitchell & Hastings, 2001). These emotional reactions influence the chance of staff responses that serve to maintain CB of clients (Hastings & Remington, 1994). Rose, Jones, and Fletcher (1998) found that within residential facilities where support staff reported low levels of stress, larger amounts of assistance provided by staff and more positive interactions between staff and clients were observed. In addition, Allen and Tynan (2000) found that when staff feels threatened by CB, the chances they will respond adequately decrease significantly.

Staff behaviour is also shaped by internal and interpersonal factors indirectly associated with CB, such as beliefs about the causes of CB of clients (for instance medical causes like migraine or environmental causes such as school demands). Wanless and Jahoda (2002) emphasised the need for more research with a focus on these interpersonal perceptions and beliefs of support staff and the influence of these beliefs on staff behaviour. Staff beliefs, emotions, and their influence on staff behaviour are key elements in the attribution theory of Weiner (1985, 1986). Attribution refers to causal explanations of behaviour (Hastings & Brown, 2002). Weiner's model distinguishes two important types of attributions: stable/unstable cause (is the cause of CB stable or temporary) and controllable/uncontrollable cause (does the client have control over his/her behaviour). Weiner proposed that the more stable the cause of CB according to the beliefs of staff, the less optimism support staff experience. In addition, the more CB of the client is perceived as controllable (under control of the client), the more anger and less sympathy staff experience (Dagnan, Trower, & Smith, 1998; Hill & Dagnan, 2002; Weiner, 1985). These emotional reactions affect the way staff members help the client, in other words, optimism and sympathy will induce helping behaviour, whereas anger will reduce it. A critical literature review of Willner and Smith (2008), however, reveals inconsistencies regarding the results of studies investigating associations between attributions, emotions, and behaviour of



staff members. A number of studies reported no association between attribution style and helping behaviour and provided limited support for Weiner's model implemented in the care for people with ID and CB (Bailey, Hare, Hatton, & Limb, 2006; Hastings & Brown, 2002; Rose & Rose, 2005).

Most studies aimed at applying Weiner's attribution theory to the care for individuals with ID focused on the relation between causal attributions and staff helping behaviour (Bailey et al., 2006; Dagnan et al., 1998) and provided assistance (Felce, Bowley, Baxter, Jones, Lowe, & Emerson, 2000). These studies, however, primarily focused on the presence or absence of certain staff behaviours (e.g., whether or not staff shows helping behaviour) and not so much on the way these behaviours are expressed. This is important, because in research on communication and interaction processes it is well known that people mostly react to the way in which things are said or done rather than what is actually being said or done. Previous studies have not investigated interpersonal behaviour styles, for example, whether helping behaviour is controlling or emancipating in nature, or whether it is friendly, neutral, or even hostile. Therefore, it is not only important to investigate what staff members do when working with their clients, but it is also of great importance to focus on the interpersonal behaviour style of the staff members, which may affect the process of interaction between support staff and clients. Jahoda and Wanless (2005) concluded that staff members can act in a professional way, thus do as they were told, but their interpersonal beliefs and emotions can differ greatly from the way they say they would respond to CB of their client. Besides investigating what staff members do, it is also of great importance to focus on how they act: the interpersonal behaviour style of the staff members could give us an indication of the nature of the relationship between staff and clients.

To our knowledge, relatively little research has focused on whether interaction style is associated with staff variables like emotions and attributions. Therefore, the present study focuses on testing an adapted version of Weiner's model by investigating the relationship between staff's experienced emotions, causal attributions, and, instead of helping behaviour of staff, staff's interpersonal style. In this study, we did not use vignettes to describe CB of fictional clients but we explored staff's attributions with respect to real CB of clients the support staff worked with. Wanless and Jahoda (2002) tested the differences between hypothetical CB scenarios and real CB scenarios with respect to staff emotions and found that support staff experienced more negative emotions in response to the real incidents of aggression.

In addition to the use of real incidents of CB, the type of CB displayed by a client is also found to affect staff emotions (Noone, Jones, & Hastings, 2006). Hastings and Remington (1995) showed that staff reported stronger negative emotions in response to aggressive behaviour than to stereotyped behaviour. Research by Lambrechts, Kuppens, and Maes (2009) revealed that staff members experience anxious emotions when a client exhibits serious self-injurious behaviour. Again, no association between negative emotions and stereotyped behaviour was found. Type of CB is also related to staff attributions, for instance,

Stanley and Standen (2000) found that staff members confronted with CB aimed at the environment (for instance aggressive behaviour) perceived the behaviour as more controllable than

staff confronted with CB aimed at the client him or herself (for instance self-injurious behaviour). A recent study of Dilworth, Philips, and Rose (2011) revealed that staff perceived physical aggression more under control of the client than self-injurious behaviour. In this study we will therefore also focus on the influence of type of CB on attributions, emotions, and interpersonal styles. The following research questions will be answered in the present study:

1. Does type of CB influence staff attributions, emotions, and interpersonal style?
2. Do attributions and staff emotions predict interpersonal style?
3. Do emotions have a mediating function in the relationship between attributions and interpersonal style?

## 3.2 Method

### 3.2.1 Participants

#### 3.2.1.1 Staff

Participants were 99 staff members (64 women, 35 men) working in four Dutch residential facilities for clients with ID. Staff members had a mean age of 33.7 years ( $SD = 10.1$ ) and their mean age of experience working with clients with ID was 10.0 years ( $SD = 9.5$ ). Table 3.1 shows descriptive statistics of participants for each residential facility. After the organisations gave permission to conduct the research project, managers selected teams working with clients with severe CB to participate. CB was defined as behaviour of such intensity, frequency, or duration that the physical safety of the person or others is placed in serious jeopardy or behaviour which is likely to seriously limit or deny access to the use of ordinary community facilities (Emerson, 2001). The experimenter provided all participating staff members with information on what was expected from them.

#### 3.2.1.2 Clients

The experimenter linked each staff member at random to a client he or she was working with; that way 99 unique couples emerged. Severity of clients' ID ranged from borderline (41.4%), mild (35.4%), moderate (14.1%), and severe (7.1%) to profound (2%). Participating staff members had worked with the specific client for at least one month. All clients showed severe CB: aggression (60.6%), fear/depression symptoms (54.5%), self-injury (16.2%), extreme withdrawal (23.2%), delinquent behaviour (8.1%), and psychosomatic complaints (3%). Note that a single client may show several types of CB. Table 3.2 shows descriptive statistics of clients for each residential facility.

**Table 3.1** Descriptive Statistics of Participating Staff

		Facility 1	Facility 2	Facility 3	Facility 4
Gender	Women	22	17	15	10
	Men	9	12	11	3
Age	<i>M</i>	35	36	30	32
	<i>SD</i>	10	11	7	11
Work experience with client (months)	<i>M</i>	24	57	8	8
	<i>SD</i>	29	47	6	6
Contract (hours a week)	<i>M</i>	29	28	28	31
	<i>SD</i>	7.7	6.7	6.7	5.0
	<i>n</i>	31	29	26	13

**Table 3.2** Descriptive Statistics of Participating Clients

		Facility 1	Facility 2	Facility 3	Facility 4
Gender	Women	7	14	8	6
	Men	24	15	18	7
Age	<i>M</i>	36	45	15	14
	<i>SD</i>	14	10	3	4
Level of ID	Borderline	14	3	16	8
	Mild	15	5	10	5
	Moderate	2	12	0	0
	Severe	0	7	0	0
	Profound	0	2	0	0
	<i>n</i>	31	29	26	13

### 3.2.2 Measures

#### 3.2.2.1 Demographic information

Participants obtained a general questionnaire on demographic characteristics. Demographic characteristics of clients were gathered by a questionnaire completed by psychologists of the participating facilities.

### 3.2.2.2 Causal attributions

To measure causal explanations of staff regarding the CB of their clients, the Challenging Behaviour Attribution Scale (CHABA; Hastings, 1997b) was used. The questionnaire was translated into Dutch and checked by a native speaker. The CHABA contains 33 items on a 5-point Likert scale ranging from -2 (very unlikely) to 2 (very likely) and is designed to measure staff application of causal models regarding CB in particular situations. Examples of causes of CB are "Because she/ he cannot cope with high levels of stress" and "Because she/he is physically disabled". The CHABA consists of five factors concerning causal attributions: learned behaviour (divided into positively reinforced behaviour and negatively reinforced behaviour), biomedical (the CB is caused by a biomedical deviation), emotional (the CB is due to emotional causes), physical environment (the CB is caused by environmental factors) and stimulation (the CB is caused by a lack of stimulation). Based on Cronbach's alpha coefficients ranging from .65 to .87, the internal consistency of the subscales is moderate to good (Hastings, 1997b). Since the present study focuses on staff attributions regarding the CB of one specific client, we asked staff members to indicate causes with respect to CB of the client he or she was linked with. Because this study was partially aimed at investigating the relationship between attributions and emotions based on Weiner's model, we wanted to measure stability and controllability attributions. Therefore, the items of the CHABA were converted into two new subscales to measure both controllability and stability attributions based on the computations used in the studies of Bailey et al. (2006) and Lambrechts et al. (2009). The internal consistency of the converted subscales in this study was good, with an alpha value of .79 for stability attributions and .78 for controllability attributions. In order to obtain subscale scores, all items belonging to the subscales stability and controllability were averaged.

### 3.2.2.3 Emotional reactions

To measure staff's emotional reactions to CB of a client, we used the Emotional Reactions to Challenging Behaviour Scale (Mitchell & Hastings, 1998). The questionnaire was first translated into Dutch and checked by a native speaker. The scale consists of 15 4-point Likert items with response categories from 0 (never) to 3 (yes, very frequently). The questionnaire contains two distinct subscales, namely: fear/anxiety and depression/anger. The subscales have a high internal consistency and a good test-retest reliability (Mitchell & Hastings, 1998). The original questionnaire focused on emotions staff members experience when dealing with CB of clients in general. Because this study only focuses on emotions that staff experience when dealing with CB of a specific client, the general question of the questionnaire was reformulated as follows: "To what extent do you experience the following emotions when you have to deal with the CB of client X?" Internal consistency for the different emotions in this study was sufficient, alpha values were .66 (fear/anxiety) to .67 (depression/anger). In order to obtain subscale scores, all items belonging to the different subscales were averaged.

#### 3.2.2.4 Interpersonal styles

To measure interpersonal styles of staff, the Staff-Client Interactive Behaviour Inventory (SCIBI; Willems, Embregts, Stams, & Moonen, 2010) was used. This instrument was originally developed in Dutch. The questionnaire provides insight on staff's inter- and intrapersonal styles when working with a specific client and consists of 30 items using a 5-point Likert scale ranging from 1 (completely inapplicable) to 5 (completely applicable). The interpersonal factors of the SCIBI are mainly based on Leary's model of interpersonal behaviour (1957), which focuses on a control dimension (dominance vs. support-seeking) and an affiliation dimension (love vs. hate). The development of the intrapersonal factors is based on research on intrapersonal staff characteristics like emotions (Hastings, 2005), coping strategies (Mitchell & Hastings, 2001), and expressed emotions (Moore, Ball, & Kuipers, 1992). The SCIBI contains seven factors divided into intra- and interpersonal behaviour namely control, hostility, friendliness, support-seeking, proactive thinking, self-reflection, and expressed emotions. This study is aimed at staff's interactive and interpersonal behaviour style, not on intrapersonal constructs such as coping strategies. Therefore it was decided to only include the interpersonal subscales of the SCIBI: control, hostility, friendliness, and support-seeking. The questionnaire has a good construct validity and the subscales have a good internal consistency (alpha values ranging from .68 to .89). An example of an item is "I take the lead when I am with this client". In a recent replication study conducting confirmatory factor analysis, the underlying seven factor structure of the SCIBI was replicated and sufficient to good internal consistency was found, resulting in even higher reliability coefficients than in the earlier study (Willems, Embregts, Hendriks, & Bosman, 2012). The internal consistency of the subscales in this study was found to be sufficient to good, with alpha values ranging from .61 (hostility) to .84 (friendliness). Scores on the items belonging to the subscales were averaged in order to obtain subscale scores.

#### 3.2.3 Procedure

As said, each staff member was at random linked to a client that he or she worked with. The staff members then completed questionnaires with respect to this client. The questionnaires were presented during two measurements with two weeks in between to prevent a transfer effects. The questionnaires were completed during team meetings. During the first measurement the staff completed the general questionnaire and the SCIBI. The CHABA and the Emotional Reactions to Challenging Behaviour Scale were presented during the second measurement. We made this distinction based on the aims of the questionnaires: the general questionnaire and the SCIBI both focused on the client in general, the CHABA and the Emotional Reactions to Challenging Behaviour Scale both focused on the CB of the client. We presented the questionnaires on two different occasions two weeks apart from each other, we tried to control for transfer between the questionnaires. Apart from questionnaires for staff, data on clients were also collected using a questionnaire that was completed by psychologists working with the participating teams. In this questionnaire we asked psychologists which types of CB were shown by their clients: behaviour aimed at the client him or herself (extreme withdrawal, fear/

depression, psychosomatic complaints, and self-injurious behaviour) and behaviour focused on the environment of the client (delinquent behaviour and aggressive behaviour). Clients could also show both types of CB. 37.4% of the participating clients showed CB aimed at themselves (inward), 30.3% showed CB aimed at the environment (outward), and 32.3% of the clients showed both types of CB.

### 3.2.4 Design and analyses

In this study a within-groups correlational design was adopted. In order to investigate the relation between type of CB and the staff variables, an analysis of variance was conducted. To obtain insight into the influence of attributions and emotions on interpersonal styles, hierarchical regression analyses were conducted. In addition, mediation analyses based on the method of Preacher and Hayes (2004, 2008) were conducted to determine whether emotions play a mediating role in the relationship between attributions and interpersonal style of staff members.

# 3

## 3.3 Results

The results section consists of three parts, describing the analyses used to answer all three research questions. First, we focus on the relationship of type of CB displayed by the client and emotions, attributions, and interpersonal styles of staff members. Then the research question with respect to the influence of staff attributions and emotions on interpersonal style is investigated. The final part of the results section is aimed at investigating the mediating function of staff emotions in the relationship between attributions and interpersonal style.

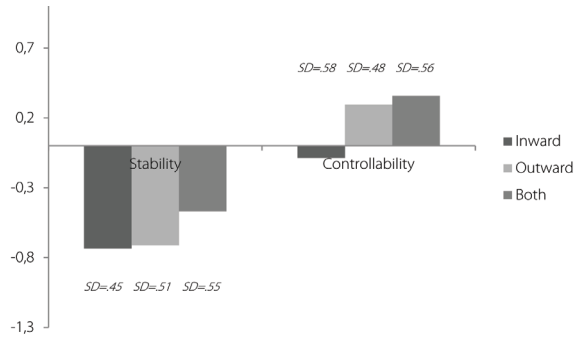
### 3.3.1 The relation between type of CB and staff variables

To determine the effect of type of CB on each of the three staff variables with their respective levels of emotions (fear/anxiety vs. depression/anger), attributions (stability vs. controllability), and interaction styles (control vs. hostility vs. friendliness vs. support-seeking) a multivariate analysis of variance was conducted on the mean scores of the staff variables. CB was treated as a between-subjects variable with three levels (CB aimed at environment, CB aimed at the client him or herself, CB aimed at the environment and the client him or herself) and staff variables as a within-subjects variable with eight levels. For each within-subjects variable Bonferroni-corrected post-hoc tests were conducted.

The mean scores and standard deviations of the staff variables are presented for each type of CB in Figures 3.1a, 3.1b, and 3.1c. The results showed an effect of type of CB on 5 of the 8 staff variables. First, we discuss the attributions. The effect of CB on 'controllability' was significant,  $F(2, 88) = 6.09$ ,  $p < .01$ , partial  $\eta^2 = .12$ . The mean score was significantly higher for staff members working with clients that showed CB aimed at his/her environment ( $p < .05$ ) or both types of CB ( $p < .005$ ) than for staff working with clients who showed only CB aimed at their selves. The main effect of CB on stability was not significant,  $F(2, 88) = 2.63$ ,  $p < .10$ , partial  $\eta^2 = .06$ .

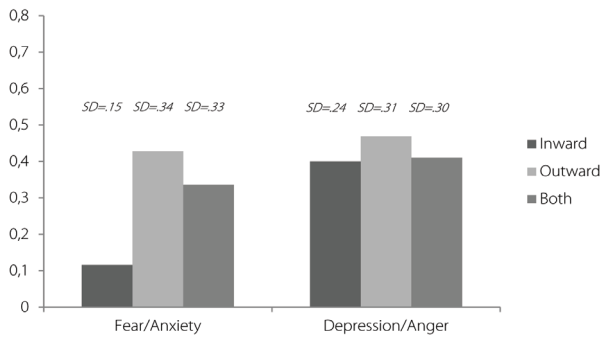
**Figure 3.1a** Means and Standard Deviations on Attributions

Note. Range of scores on stability and controllability attributions is -2 to 2.



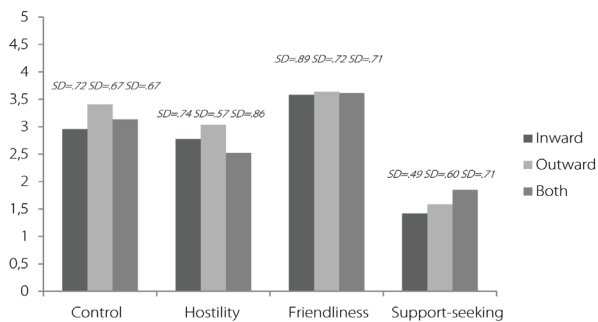
**Figure 3.1b** Means and Standard Deviations on Emotions

Note. Range of scores on fear/anxiety and depression/anger is 0 to 3.



**Figure 3.1c** Means and Standard Deviations on Interpersonal Styles

Note. Range of scores on interpersonal styles is 1 to 5.



The effect of CB on the emotion 'fear/anxiety' was,  $F(2, 88) = 9.49, p < .01$ , partial  $\eta^2 = .18$ . Staff members working with clients who showed CB aimed at the environment ( $p < .001$ ) or who showed both types of CB ( $p < .01$ ) perceived the CB as more controllable and experienced more fearful and anxious emotions when dealing with the CB than staff members working with clients who showed only CB aimed at themselves. The main effect of CB on 'depression/anger' was not significant,  $F < 1$ .

The effects of CB on the interpersonal styles were all significant, apart from 'friendliness',  $F < 1$ . The effect of CB on 'control' was  $F(2, 88) = 3.22, p < .05$ , partial  $\eta^2 = .07$ . The mean score of staff members working with clients who showed CB aimed at his/her environment was higher than the mean score of staff working with clients who showed CB aimed at him or herself ( $p < .05$ ); the remaining comparisons were not significant. The effect of CB on the interpersonal style 'hostility' was  $F(2, 88) = 3.63, p < .05$ , partial  $\eta^2 = .08$ . Staff members working with clients who showed CB aimed at his/her environment scored higher than staff members working with clients who showed both types of CB ( $p < .05$ ). The main effect of CB on 'friendliness' was not significant,  $F < 1$ . Finally, the effect of CB, on the interpersonal style 'support-seeking' was  $F(2, 88) = 4.00, p = .02$ , partial  $\eta^2 = .08$ . The mean scores showed that staff members working with clients with both types of CB were higher than for staff members working with clients who only showed CB aimed at him or herself ( $p < .05$ ).

### 3.3.2 The influence of attributions and emotions on interpersonal style

In order to investigate the association of attributions and emotions with interpersonal styles, four hierarchical ordinary least squares regression analyses were conducted, one for each interpersonal style (dependent variables). Because we found type of CB to be related to the staff variables measured in this study, we wanted to control for type of CB in our analysis. The categorical variable type of CB was transformed into three dummy variables, one for each category. By doing this, type of CB can be inserted as a variable to control for in the regression analysis. As the results of the analyses of variance showed that the largest differences with regard to the staff variables appeared between type of CB aimed at the client him or herself and CB aimed at the environment, the dummy variables of outward CB and both types of CB were included in all four regression analyses. To explore the independent contribution of each independent variable (type of CB, staff attributions, and emotions), the variables were entered in separate groups: because type of CB is the only client variable and we wanted to control for it when we explore the influence of the staff variables on interpersonal style, Model 1 includes the dummy variables which define the controlling variable type of CB. Model 2 includes the independent variables "stability" attributions and "controllability" attributions. Model 3 consists of the emotions "fear/anxiety" and "depression/anger", which are considered mediation variables in the relation between attributions and interpersonal style. All variables were entered simultaneously into the model in order to explore the independent contribution of each variable to the prediction of interpersonal style of staff. Table 3.3 shows the results of the four regression analyses.

The results of the first hierarchical regression analysis only yielded an effect of CB aimed at the environment of the client on the interpersonal style 'control'  $\beta = .29, t(91) = 2.44, p = .02$ . The model



**Table 3.3** Summary of Hierarchical Regression Analyses

Interpersonal styles	Control		Hostility		Friendliness		Support-seeking	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	.06		.08*		.00		.08*	
Outward		.29*		.14		.03		.12
Both		.11		-.18		.02		.32**
Step 2	.07*		.12**		.03		.15**	
Stability		.08		.17		.03		.43**
Controllability		.22		.24		-.19		-.06
Step 3	.01		.03		.02		.10**	
Fear/anxiety		.04		-.02		-.12		.23
Depression/anger		.06		.18		-.04		.18
Total R <sup>2</sup>	.14		.23		.05		.33	

\* $p < .05$ , \*\* $p < .001$ .

which only includes the independent variables of type of CB explained a marginal significant proportion of variance in scores on 'control',  $R^2 = .06$ ,  $F(2, 89) = 3.02$ ,  $p = .05$ . The second model including type of CB and the attribution measures explained a significant amount of variance in the scores on the dependent variable 'control',  $R^2 = .13$ ,  $F(4, 87) = 3.24$ ,  $p = .02$ . In addition, the third model, which includes emotions upon the other independent variables, also explained a significant amount of variance,  $R^2 = .14$ ,  $F(6, 85) = 2.24$ ,  $p = .05$ , however, this model did not explain significantly more variance upon the other two models. Summarised, type of CB and attributions together explained 13% of the variance in scores on 'control'. This means that attributions are an important predictor of the interpersonal style of 'control'. Staff members who consider the CB of their client to be caused by more stable factors and to be more under control of the client, show a higher level of 'control' in the interaction with the client.

When examining the regression analyses in which 'hostility' is the dependent measures, results showed that the first model including type of CB explained a significant amount of variance in the scores on 'hostility',  $R^2 = .08$ ,  $F(2, 89) = 3.59$ ,  $p = .03$ . This is also the case for the second model, including measures of attributions,  $R^2 = .19$ ,  $F(4, 87) = 5.19$ ,  $p < .01$ . This also accounted for the third model,  $R^2 = .22$ ,  $F(6, 85) = 3.99$ ,  $p < .01$ . Thus, the last model did not explain a significant amount of variance upon the other two models. In addition, it should be noted that none of the independent variables had a significant contribution to the prediction of 'hostility'. However, type of CB and attributions together explained 19% of variance in the scores on 'hostility'. Again attributions regarding the stability of the cause of the CB and the controllability of the CB play a significant role in predicting the level of 'hostility' in the interaction between staff and client.

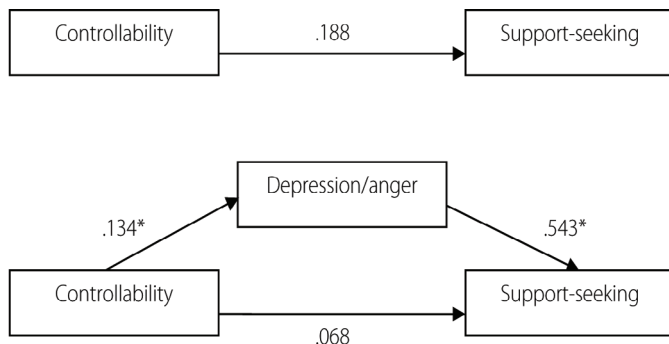
The regression analysis for the interpersonal style 'friendliness' did not show any significant results. None of the independent variables were found to predict the 'friendliness' and none of the models

explained a significant amount of variance in the scores on 'friendliness'. This indicates that the interpersonal style 'friendliness' is not related to emotions, attributions, and type of CB.

When examining the regression analyses in which 'support-seeking' is the dependent measure, results showed that the first model including type of CB as independent variable predicted a significant amount of variance in the scores on the interpersonal style of 'support-seeking',  $R^2 = .08$ ,  $F(2, 89) = 3.92$ ,  $p = .02$ . This also accounts for the second model including type of CB and attributions,  $R^2 = .23$ ,  $F(4, 87) = 6.60$ ,  $p = .00$ . The third model including type of CB, attributions and emotions added a significant extra amount of variance in the scores on 'support-seeking',  $R^2 = .34$ ,  $F(6, 85) = 7.15$ ,  $p < .01$ . In addition, the variable type of CB aimed on the client him/herself and the environment is a significant predictor of 'support-seeking',  $\beta = .32$ ,  $t(91) = 2.78$ ,  $p = .01$ . 'Stability' attribution was also found to predict 'support-seeking',  $\beta = .43$ ,  $t(91) = 3.74$ ,  $p < .01$ . In addition, 'fear/anxiety' predicted the dependent variable on a marginally significant level,  $\beta = .23$ ,  $t(91) = 1.94$ ,  $p = .06$ . This means that staff members who experience more fearful and anxious emotions, show higher levels of a support-seeking interpersonal style. Summarised, all variables together (type of CB, attributions, and emotions) explained 34 % of the variance in the scores on 'support-seeking'. This means that type of CB, attributions, and emotions together are important predictors of the interpersonal style 'support-seeking'.

### 3.3.3 Mediation analyses

In order to explore whether the relationship between attributions and interpersonal style is mediated by emotions, mediation analyses according to the method of Preacher and Hayes (2004, 2008) were conducted. Unlike other methods, for instance the method of Baron and Kenny (1986), this method implies that a significant total effect of the independent on the dependent variable is not necessary for testing mediation effects. In other words, even when no total effect of the independent variable on the dependent variable is found, a third variable can have a mediating function in the relationship between the independent and dependent variables. In addition, bootstrapping is a nonparametric re-sampling procedure to test mediation in a sample that might not be distributed normally. The method is also beneficial to investigate relationships with more than one mediating variable. Preacher and Hayes (2008) developed a macro for SPSS, which was used in this study to calculate mediation effects. The data of our sample was re-sampled 1000 times. The dummy variables that define type of CB were inserted as covariates. Because the independent variable consisted of two levels (controllability and stability attributions) and the dependent variable of four levels (control, hostility, friendliness and support-seeking), eight mediation analyses were conducted. To determine whether a variable functions as a mediator, the criterion is that zero is not within the 95% confidence interval. The mediation analyses yielded no mediating effects of emotions in the relationship between attributions and interpersonal style, except for the relationship between the attribution 'control' and the interpersonal style 'support-seeking'. This relation is mediated by the emotion 'depression/anger' (indirect effect = .073; 95% CI = .0023, .1868). This means that staff members who score higher on

**Figure 3.2.** Results of Mediation Analysis for the Relationship between 'Controllability' Attributions and 'Support-seeking' Interpersonal style

\* $p < .05$ .

'controllability', experience more feelings of depression and anger which is associated with a higher level of the support-seeking interpersonal style. Figure 3.2 shows the betas of this particular mediation analysis.

### 3.4 Discussion

The aim of the present study was to investigate the relation between type of CB, staff's causal attributions, experienced emotions, and interpersonal styles. Type of CB was related significantly to the staff variables measured in this study. Staff members working with clients who showed CB aimed at the environment perceived CB as more controllable, experienced more fearful and anxious emotions when dealing with CB and scored higher on the interpersonal styles 'control' and 'hostility'. These findings are consistent with a recent study in youth care of Van Dam et al. (2011). They found that staff members showed more controlling behaviour towards the adolescents who showed CB aimed at their environment than towards adolescents who showed CB aimed at themselves. The type of CB aimed at the environment and at the client him or herself was significantly related to the interpersonal style 'support-seeking'. These findings are partly consistent with the results of the study of Hastings and Remington (1995), who found staff reporting more negative emotions in response to aggressive behaviour (aimed at the environment) compared to stereotyped behaviour (aimed at client him or herself). Because CB aimed at the environment can be aimed at the staff member, it may explain the relationships we found between CB aimed at the environment on the one hand and negative emotions of the staff member and controlling and hostile interpersonal styles on the other

hand. These findings are consistent with the results of Jahoda and Wanless (2005), who found that support staff can react hostile to aggressive behaviour of their clients.

The results of the present study also provide evidence for a relationship among attributions of staff with respect to CB, experienced emotions in working with clients with ID and CB, and the interpersonal style of staff members. Regression analysis showed that only the variable 'stability' was a predictor of the interpersonal style 'support-seeking', when controlling for the other variables. However, the results showed that all variables together explained a substantial amount of variance in the interpersonal styles 'hostility' and 'support-seeking'. This is in line with the fact that support-seeking behaviour is considered to be a coping strategy when confronted with learned helplessness (Mikulincer, 1994), that is, having beliefs that one cannot change things regarding certain situations (e.g., stability and controllability attributions) and experiencing anxiety and depression in these situations. For instance, when a staff member perceives the aggressive behaviour of his client as controllable, he can experience feelings of helplessness and fear, which can lead to a more support-seeking way of interacting with the client, in other words, the staff member has the feeling he needs support and approval of his client.

In contrast to Weiner's model, the results of the mediation analysis did not show a mediating function of emotions in the relationships between attributions with respect to CB and interpersonal styles of staff. The only mediating function was found for depressed and angry emotions in the relation between the attribution 'controllability' and the interaction style 'support-seeking'. Staff members who perceived CB of their clients as more controllable, experienced stronger depressed and angry feelings when confronted with CB and showed higher levels of a support-seeking interpersonal style.

As said, a systematic literature research conducted by Willner and Smith (2008) revealed that the results of the studies focused on Weiner's model are highly inconsistent. Our study confirms the conclusion that there is no mediating function of emotions in the relationship between attributions and staff behaviour, in this case interpersonal style. The inconsistency of findings in studies focusing on Weiner's model could be due to different definitions of staff helping behaviour used in these studies. Sharrock, Day, Qazi, and Brewin (1990) investigated helping behaviour by asking staff to report the likelihood of helping a client they worked with. Jones and Hastings (2003) defined staff helping behaviour in a more behaviouristic way. Staff members looked at a video that showed a client with self-injurious behaviour and asked staff how they would respond to this behaviour, for example giving the client a hug, ignoring the behaviour, or distracting the client. The present study took a questionnaire on staff behaviour into account, focusing on interpersonal styles by using the Staff-Client Interactive Behaviour Inventory (Willems et al., 2010). The SCIBI is constructed to encompass the entire spectrum of interpersonal staff behaviour styles and not just the presence or absence of one type of staff behaviour like helping behaviour, as in the studies earlier described. This difference in conceptualisation of the variable staff behaviour in the studies regarding the relationship between attributions, emotions, and behaviour, could be an explanation for the inconsistency of the findings in these studies.

A limitation of this study is that functional analysis was not conducted to assess the actual cause of CB of clients. In addition, past training and coaching experiences of participating staff with regard to this theme were not investigated. It is not inconceivable that staff-knowledge training on emotions or causes of CB affected the outcome of the measurements on emotions, attributions, and interpersonal styles. For future research it is recommended to take the actual causes of CB and the past training experiences of staff members into account.

Another methodological limitation arises when interpreting the results of the present study. Although this study takes an important first step in investigating the associations among emotions, attributions, and interpersonal styles of staff, the data were gathered using questionnaires, that is, by means of retrospective self-report. One of the issues of self-report studies is the vulnerability to social desirable responses (Lambrechts et al., 2009). Wanless and Jahoda (2002) specifically showed that staff members tend to report more positive than negative emotions when responding on questions regarding CB. In addition, it remains questionable to what extent staff members are able to assess their own beliefs, emotions, and behaviour. Taking these findings into account, it is recommended to focus future research on the actual and immediate behaviour of staff members in response to CB of their clients rather than using questionnaires to measure staff emotions and behaviour.

In addition, it is also a challenge to take into account the variability of emotions, attributional beliefs, and interpersonal behavioural style in future research. This issue is two-fold. Firstly, interpersonal behaviour has shown to be dependent of client variables, such as age and severity of CB (Willems et al., 2010). In addition, in daily practice, it often becomes clear that especially emotions and interpersonal behaviour of staff can change as a function of several factors, for example, interpersonal client behaviour, expected risks, organisational climate, the content of protocols and treatment plans, and/or social support.

Secondly, emotions, beliefs and staff behaviour may change over time. Support staff who participated in this study completed questionnaires during two moments. Each questionnaire was completed once by each staff member regarding one specific client. Recent research in the field of personality, individual differences, and interpersonal behaviour has focused on the variability of feelings and emotions people experience and the dynamic effect of this variability on interpersonal behaviour (Timmermans, Van Mechelen, & Kuppens, 2010). Kuppens, Oravecz, and Tuerlinckx (2010) suggest that emotions and feelings of human beings move around an affective home base, a baseline, which is different for each individual. Back et al. (2011) present a framework for analysing the complex dynamics of personality and social relationships and suggest that emotions and thoughts influence social behaviour and vice versa. These studies on variability in emotions and interpersonal behaviour emphasise that the dynamics of feelings and behaviour should be taken into account. Moreover, to capture a realistic and reliable image of feelings and behaviour of individuals, more longitudinal or multiple measurements of thoughts, emotions, and interpersonal behaviour instead of snapshot measures (for example, a questionnaire) are required. These implications should be considered in future research.

Although it is complicated to take the variability of staff variables into account when using questionnaires, it is still of importance to consider staff's assessments and self-reports with regard to their own emotions, beliefs, and behaviour (Hastings, 2010) because this information could be rather valuable as a starting point for staff training and coaching. With regard to staff training, the results of this study highlight the need for more research aimed at staff and client characteristics and variables that influence staff behaviour and staff-client interactions and relations. In addition, Rose (2011) emphasised the importance of research aimed at the influence of staff psychological factors on client outcomes. Broadening the research areas and taking the perceptions of clients into account could be of additional value. In sum, it is more and more recognised that staff behaviour exists in a complex dynamic system of client behaviour, organisational aspects and rules, colleagues, interactions, staff's own thoughts, emotions, and personality. To fully understand staff behaviour and its determinants, it would be helpful to integrate existing studies and findings and perform more longitudinal research that includes variables like personality and organisational aspects. This way a dynamic model can be developed including all variables related to staff behaviour with a focus on daily variability.

## References

- Allen, D., & Tynan, H. (2000). Responding to aggressive behavior: Impact of training on staff members' knowledge and confidence. *Mental Retardation, 38*, 97-104.
- Back, M. D., Baumert, A., Denissen, J. J., Hartung, F.-M., Penke, L., Schmukle, S. C., et al. (2011). PERSOC: A unified framework for understanding the dynamic interplay of personality and social relationships. *European Journal of Personality, 25*, 97-107.
- Bailey, B. A., Hare, D. J., Hatton, C., & Limb, K. (2006). The response to challenging behaviour by care staff: Emotional responses, attributions of cause and observations of practice. *Journal of Intellectual Disability Research, 50*, 199-211.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality & Social Psychology, 51*, 1173-1182.
- Dagnan, D., Trower, P., & Smith, R. (1998). Care staff responses to people with learning disabilities and challenging behaviour: A cognitive-emotional analysis. *British Journal of Clinical Psychology, 37*, 59-68.
- Dilworth, J., Philips, N., & Rose, J. (2011). Factors relating to staff attributions of control over challenging behaviour. *Journal of Applied Research in Intellectual Disabilities, 24*, 29-38.
- Embregts, P. J. C. M., Didden, R., Huitink, C., & Schreuder, N. (2009). Contextual variables affecting aggressive behaviour in individuals with mild to borderline intellectual disabilities who live in a residential facility. *Journal of Intellectual Disability Research, 53*, 255-264.
- Emerson, E. (2001). *Challenging behavior. Analysis and intervention in people with severe intellectual disabilities* (2nd edn.). University Press: Cambridge.
- Felce, D., Bowley, C., Baxter, H., Jones, E., Lowe, K., & Emerson, E. (2000). The effectiveness of staff support: Evaluating active support training using a conditional probability approach. *Research in Developmental Disabilities, 21*, 243-255.
- Hastings, R. P. (1996). Staff strategies and explanations for intervening with challenging behaviours. *Journal of Intellectual Disability Research, 40*, 166-175.
- Hastings, R. P. (1997a). Staff beliefs about the challenging behaviors of children and adults with mental retardation. *Clinical Psychology Review, 17*, 775-790.
- Hastings, R. P. (1997b). Measuring staff perceptions of challenging behaviour: The challenging behaviour attributions scale (CHABA). *Journal of Intellectual Disability Research, 41*, 495-501.
- Hastings, R. P. (2002). Do challenging behaviors affect staff psychological well-being? Issues of causality and mechanism. *American Journal on Mental Retardation, 107*, 455-467.
- Hastings, R. P. (2005). Staff in special education settings and behaviour problems: Towards a framework for research and practice. *Educational Psychology, 25*, 207-221.
- Hastings, R. P. (2010). Support staff working in intellectual disability services: The importance of relationships and positive experiences. *Journal of Intellectual & Developmental Disability, 35*, 207-210.
- Hastings, R. P., & Brown, T. (2002). Behavioural knowledge, causal beliefs and self-efficacy as predictors of special educators' emotional reactions to challenging behaviours. *Journal of Intellectual Disability Research, 46*, 144-150.
- Hastings, R. P., & Remington, B. (1994). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *The British Journal of Clinical Psychology, 33*, 423-438.
- Hastings, R. P., & Remington, B. (1995). The emotional dimension of working with challenging behaviours. *Clinical Psychology Forum, 46*, 144-150.
- Hill, C., & Dagnan, D. (2002). Helping, attributions, emotions and coping style in response to people with learning disabilities and challenging behaviour. *Journal of Learning Disabilities, 6*, 363-372.

- Jahoda, A., & Wanless, L. K. (2005). Knowing you: The interpersonal perceptions of staff towards aggressive individuals with mild to moderate intellectual disabilities in situations of conflict. *Journal of Intellectual Disability Research, 49*, 544-551.
- Jones, C., & Hastings, R. P. (2003). Staff reactions to self-injurious behaviours in learning disability services: Attributions, emotional responses and helping. *British Journal of Clinical Psychology, 42*, 189-203.
- Kuppens, P., Oravecz, Z., & Tuerlinckx, F. (2010). Feelings change: Accounting for individual differences in the temporal dynamics of affect. *Journal of Personality and Social Psychology, 99*, 1042-1060.
- Lambrechts, G., Kuppens, S., & Maes, B. (2009). Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research, 53*, 620-632.
- Lambrechts, G., Van Den Noortgate, W., Eeman, L., & Maes, B. (2010). Staff reactions to challenging behaviour: An observation study. *Research in Developmental Disabilities, 31*, 525-535.
- Leary, T. (1957). *Interpersonal diagnosis of personality: A functional theory and methodology for personality evaluation*. New York: Ronald Press.
- Mitchell, G., & Hastings, R. P. (1998). Learning disability care staff's emotional reactions to aggressive challenging behaviours: Development of a measurement tool. *British Journal of Clinical Psychology, 37*, 441-449.
- Mitchell, G., & Hastings, R. P. (2001). Coping, burnout, and emotion in staff working in community services for people with challenging behaviors. *American Journal on Mental Retardation, 5*, 448-459.
- Moore, E., Ball, R. A., & Kuipers, L. (1992). Expressed emotion in staff working with the long-term mentally ill. *The British Journal of Psychiatry, 161*, 802-808.
- Mikulincer, M. (1994). *Human learned helplessness: A coping perspective*. Plenum Press: New York.
- Noone, S. J., Jones, R. S. P., & Hastings, R. P. (2006). Care staff attributions about challenging behaviors in adults with intellectual disabilities. *Research in Developmental Disabilities, 27*, 109-120.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*, 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891.
- Rose, J. (2011). How do staff psychological factors influence outcomes for people with developmental and intellectual disability in residential services? *Current Opinion in Psychiatry, 24*, 403-407.
- Rose, J., Jones, F., & Fletcher, B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research, 42*, 163-172.
- Rose, D., & Rose, J. (2005). Staff in services for people with intellectual disabilities: The impact of stress on attributions of challenging behaviour. *Journal of Intellectual Disability Research, 49*, 827-838.
- Sharrock, R., Day, A., Qazi, F., & Brewin, C. R. (1990). Explanations by professional care staff, optimism and helping behaviour: An application of attribution theory. *Psychological Medicine, 20*, 849-855.
- Stanley, B., & Standen, P. J. (2000). Carers attributions for challenging behaviour. *British Journal of Clinical Psychology, 39*, 157-168.
- Timmermans, T., Van Mechelen, I., & Kuppens, P. (2010). The relationship between individual differences in intraindividual variability in core affect and interpersonal behavior. *European Journal of Personality, 24*, 623-638.
- Van Dam, C., Nijhof, K. S., Veerman, J. W., Engels, R. C. M. E., Scholte, R. H. J., & Delsing, M. J. M. H. (2011). Group care worker behavior and adolescents' internalizing and externalizing problems in compulsory residential care. *Residential Treatment for Children & Youth, 28*, 232-250.
- Wallander, J. L., Dekker, M. C., & Koot, H. M. (2003). Psychopathology in children and adolescents with intellectual disability: Measurement, prevalence, course, and risk. In L. M. Glidden (Ed.), *International Review of Research in Mental Retardation*, vol. 26 (pp. 93-134). San Diego, CA: Academic Press.
- Wanless, L. K., & Jahoda, A. (2002). Responses of staff towards people with mild to moderate intellectual disability who behave aggressively: A cognitive emotional analysis. *Journal of Intellectual Disability Research, 46*, 507-516.



- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. Berlin: Springer-Verlag.
- Willems, A. P. A. M., Embregts, P. J. C. M., Hendriks, L. H. C., & Bosman A. M. T. (2012). Measuring staff behavior towards clients with ID and challenging behavior: Further psychometric evaluation of the Staff-Client Interactive Behavior Inventory (SCIBI). *Research in Developmental Disabilities*, 33, 1523-1532.
- Willems, A. P. A. M., Embregts, P. J. C. M., Stams, G. J. J. M., & Moonen, X. M. H. (2010). The relation between intrapersonal and interpersonal staff behaviour towards clients with ID and challenging behaviour: A validation study of the Staff-Client Interactive Behaviour Inventory. *Journal of Intellectual Disability Research*, 54, 40-51.
- Willner, P., & Smith, M. (2008). Attribution theory applied to helping behaviour towards people with intellectual disabilities who challenge. *Journal of Applied Research in Intellectual Disabilities*, 21, 150-155.





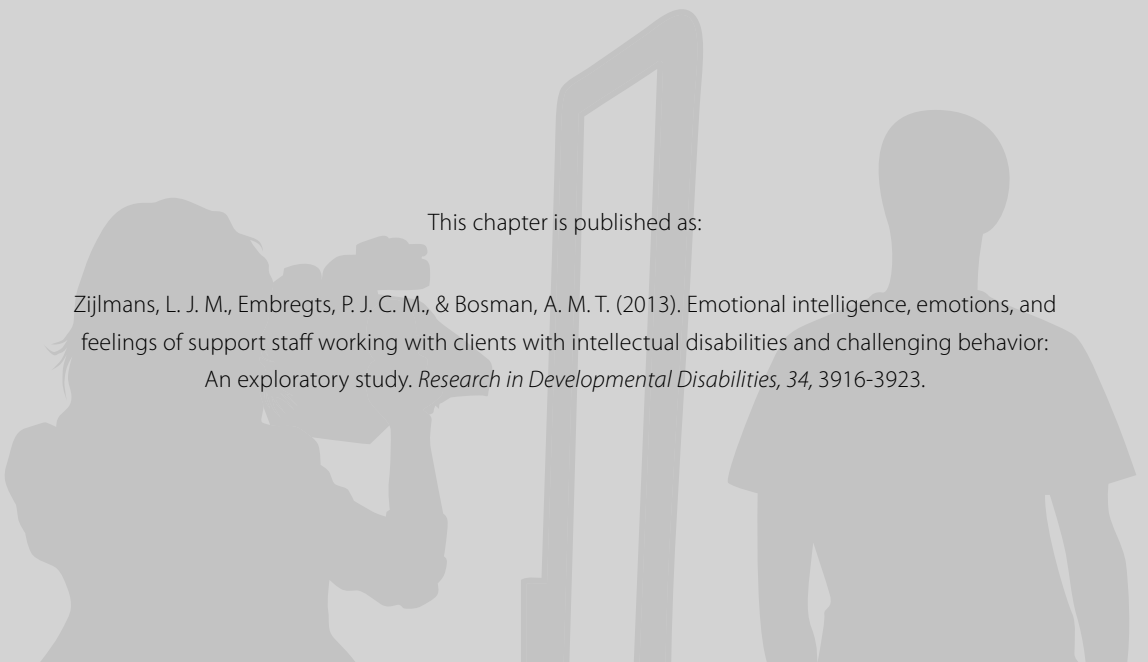
# Chapter 4

---

## **Emotional intelligence, emotions, and feelings of support staff working with clients with intellectual disabilities and challenging behaviour: An exploratory study**

This chapter is published as:

Zijlmans, L. J. M., Embregts, P. J. C. M., & Bosman, A. M. T. (2013). Emotional intelligence, emotions, and feelings of support staff working with clients with intellectual disabilities and challenging behavior: An exploratory study. *Research in Developmental Disabilities, 34*, 3916-3923.



## **Abstract**

Working with clients who show challenging behaviour can be emotionally demanding and stressful for support staff, because this behaviour may cause a range of negative emotional reactions and feelings. These reactions are of negative influence on staff wellbeing and behaviour. Research has focused on negative emotions of staff. However, a distinction between emotions and feelings has never been made in the research field of intellectual disabilities. Negative emotions and feelings may be regulated by emotional intelligence, a psychological construct that takes into account personal style and individual differences. The purpose of this study was to explore the relationship between emotional intelligence on the one hand and emotions and feelings on the other. Participants were 207 support staff serving clients with moderate to borderline intellectual disabilities and challenging behaviour. Emotional intelligence, emotions, and feelings were measured with questionnaires. The results show that emotional intelligence, emotions, and feelings are related. However, found relationships were weak. Most significant relations were found between feelings and stress management and adaptation elements of emotional intelligence. Because the explored variables can change over time they call for a longitudinal research approach.

## 4.1 Introduction

Challenging behaviours (CB) such as aggression and self-injurious behaviour are a common phenomenon in care for people with intellectual disabilities (ID) (Wallander, Dekker, & Koot, 2003). Consequently, support staff are often confronted with CB. Therefore, working with clients who show CB can be emotionally demanding and stressful for staff, because it may cause a range of negative emotional reactions, such as fear, anger, and disgust (Bromley & Emerson, 1995; Hastings, 1995; Hatton, Brown, Caine, & Emerson, 1995). These emotions may ultimately lead to burnout and they may be reinforced by the persistent nature of CB of clients with ID, the lack of an effective manner to handle such behaviour, and difficulties understanding this behaviour (Bromley & Emerson, 1995).

Additionally, negative emotions may also affect staff behaviour, which in turn may lead to less assistance and less positive interactions (Rose, Jones, & Fletcher, 1998). Oliver (1995) described how negative emotions can actually cause patterns of avoidance within interactions with clients who show CB. A model developed by Weiner (1985, 1986), translated for the care for people with ID, states that inadequate beliefs with regard to CB can lead to negative emotions. These emotions decrease the chance of supporting staff behaviour towards the client (Dagnan, Trower, & Smith, 1998; Hill & Dagnan, 2002; Weiner, 1985). In terms of interpersonal style, research has shown that experiencing negative emotions is an important predictor of a hostile and controlling style (Zijlmans, Embregts, Bosman, & Willems, 2012). In sum, negative emotions may negatively impact wellbeing and behaviour of support staff.

Although the effects of CB of clients on staff emotions appear to be well established, the role of feelings, a closely related aspect of affect development has not received the attention that emotions have (Hastings, 2002; Rose & Rose, 2005). In general, emotions and feelings are treated the same (Mitchell & Hastings, 1998). Since the seminal works by Damasio (1994), Damasio, Everitt, and Bishop (1996), and Damasio et al. (2000), it has become clear that emotions and feelings albeit related have different meanings. The subtle details between emotions and feelings as described by Damasio et al. (1996) will not be outlined here, but the most important distinction will be. Emotions, also called primary or basis emotions, are present in very young children (Ekman, 1992). Limited cognitive processes are involved in experiencing the six primary emotions of anger, disgust, fear, joy, sadness, and surprise (Ekman, Friesen, & Ellsworth, 1972). Feelings or secondary emotions, always involve aspects of cognitive and conscious processes (Damasio, 2001; Hansen, 2005). Feelings develop when a child grows up, interacting with his/her responsive parents. A responsive and sensitive parent provides security for the child and helps the child to regulate primary emotions, such that an adequate transition from emotions to more cognitive based, unique and personal feelings is established (Derksen, 2007). In addition, Damasio (2001) describes that feelings are a subjective matter whereas emotions are not. Emotions are objectively observable processes within the human brain and body. When dealing with CB, staff members can experience primary emotions such as fear, but also feelings such as helplessness (Bromley & Emerson, 1995; Mitchell & Hastings, 1998).

This distinction between emotions and feelings allows exploration of the effect of CB on basic emotions and more cognitive and reflective feelings, which may shed more light on the way staff's primary emotions are transposed to personal feelings. Emotions can be viewed as temporary, unchangeable and affected or even caused by the situations in which the person finds his or her self. When reflecting on those emotions, one could say that the individual translates experienced emotions into feelings. For example, support staff who was reflecting on an aggressive incident with a client said: "He slapped me in my face, I got really frightened. The unpredictability of his behaviour made me feel helpless." In this quote fear is the emotion, helplessness the feeling. The emotion vanishes after the incident, whereas the feeling does not. It is quite conceivable that every time the staff member reflects on this incident or other incidents with this client, he feels helpless.

Apart from the effect of negative emotions and feelings on the behaviour of support staff, staff behaviour is also affected by the way they regulate their emotions. An important predictor of emotion regulation is emotional intelligence. The general definition of this non-cognitive form of intelligence include elements of emotion regulation like "understanding one's emotions" and "managing one's own emotions and emotions of others". Bar-On (1997) defined emotional intelligence as ". . . an array of emotional, personal and social abilities and skills that influence an individual's ability to cope effectively with environmental demands and pressures" (Bar-On, Brown, Kirkcaldy, & Thomé, 2000, p. 1108). Emotional intelligence addresses the following key factors: The perception people have of themselves and their emotions, how they assert their own desires and rights, the ability to understand and manage their own emotions and the emotions of others, relationships people have with others, the extent to which they invest in other people and in themselves, the ability to recognise and respect feelings of others, the strategies people use to handle problems, general wellbeing, and the capacity to control impulses.

Emotional intelligence is a predictor of general functioning and wellbeing (Mayer, Caruso, Salovey, & Sitarenios, 2001). Van der Zee, Thijs, and Schakel (2002) showed that emotional intelligence predicted a significant amount of variance in academic and social success, above indicators of academic intelligence and personality. Birks and Watt (2007) proposed that emotional intelligence could affect patient-centred care, in which the ability to manage, read, and understand emotions and feelings of one self and one's client is crucial. In addition, emotional intelligence can change over time (Goleman, 1995) and appears to be trainable (Freedman, 2003; Wasseveld, Overbeeke, & Derksen, 2007). Research has even shown that a training program focused on emotional intelligence related to treatment skills of support staff of clients with ID and CB is effective in improving emotional intelligence (Zijlmans, Embregts, Gerits, Bosman, & Derksen, 2011).

Summarised, negative emotions and feelings of staff may be of negative influence on staff behaviour and thus on the relationship between support staff and clients. Because feelings are more cognitive and reflective than emotions, regulating or changing feelings might be more effective than trying to regulate immediate emotions. In addition, coaching staff to regulate feelings with regard to CB of clients may lead to more adequate staff behaviour and higher staff wellbeing, as they can reflect

more neutrally on incidents with clients. Individual differences of emotion regulation are important when investigating staff emotions and feelings and finding pointers for staff training and coaching in order to improve staff behaviour. Emotional intelligence addresses these individual differences and serves a broad and useful construct that could provide a significant contribution to the research field aimed at support staff working with individuals with ID and CB. In addition, past research on staff did not distinguish between emotions and feelings. Therefore, the main goal of this study is to explore the relationships among staff emotions, emotional intelligence, and feelings. The research question this study is aimed at is: is there a relationship between emotions, feelings, and emotional intelligence? Also, the relationship between gender, age, and work experience on the one hand, and emotions, feelings, and emotional intelligence on the other hand is considered.

## 4.2 Method

### 4.2.1 Participants

The participants in this study were 207 staff members (151 women, 73%, 56 men, 27%) who were employed at four different residential treatment facilities in the Netherlands for children, adolescents, and adults with moderate to borderline ID and CB. The age of the participants ranged from 19 to 61 (mean = 32.87 years,  $SD = 9.27$ , median = 31) and their work experience with clients with ID and CB ranged from two months to 37.5 years (mean = 7.77 years,  $SD = 6.93$ , median = 6 years). The hours staff members worked a week ranged from 16 to 40 h (mean = 30.42,  $SD = 4.42$ , median = 32). Table 4.1 shows descriptive statistics of participants for each residential treatment facility.

**Table 4.1** Descriptive Statistics of Participating Staff

		Facility 1	Facility 2	Facility 3	Facility 4
Gender	Women	39 (70%)	40 (78%)	36 (68%)	36 (71%)
	Men	16 (30%)	9 (22%)	16 (32%)	15 (29%)
Age	<i>M</i>	35.38	31.55	30.92	33.43
	<i>SD</i>	10.16	8.93	6.40	10.55
	Median	33	39	30	29
Work experience with people with ID and CB (months)	<i>M</i>	10.04	6.75	7.25	6.85
	<i>SD</i>	9.58	5.07	4.97	6.40
	Median	6	5.5	7	4.58
Contract (hours a week)	<i>M</i>	30.60	30.88	30.15	30.06
	<i>SD</i>	5.53	4.38	3.49	4.01
	Median	32	22	32	32
	<i>n</i>	55 (26%)	51 (24%)	53 (25%)	51 (26%)



### **4.2.2 Procedure**

In order to recruit participants, the experimenter first obtained permission from the management of the organisations to implement and conduct the research. Subsequently, the study was approved by the scientific and ethics committee of one of the four participating organisations, Dichterbij, in the Netherlands. Managers were provided with information about the main aims of the research project and together with the experimenter participants were randomly selected. All participants were working with children, adolescents, or adults with ID and CB. The experimenter contacted the staff to provide them with practical information about the research and after this each staff member received the questionnaires. The experimenter guaranteed confidentiality and anonymity to reduce the chance of social desirable responding.

### **4.2.3 Measures**

#### *4.2.3.1 Demographic information*

Participants obtained a general questionnaire on demographic characteristics like gender, age and work experience (see Table 4.1).

#### *4.2.3.2 Emotional intelligence*

To measure emotional intelligence of staff members, the Dutch version of the Bar-On Emotional Quotient-inventory (EQ-i, Bar-On, 1997; Derksen, Jeuken, & Klein Herenbrink, 1998) was used. This instrument is widely used to measure emotional intelligence and it consists of 133 items using a five-point Likert scale with response categories ranging from 1 (very seldom true or not true of me), 2 (seldom true of me), 3 (sometimes true of me), 4 (often true of me), to 5 (very often true of me or true of me). The items constitute five scales concerning intrapersonal abilities, interpersonal skills, adaptability, stress-management capacity, and general mood. Examples of items are "I prefer others to make decisions for me", "I know how to deal with upsetting problems", and "I'm unable to understand the way other people feel".

Considerable support for the reliability and validity of the EQ-i is provided by several studies (Bar-On et al., 2000; Dawda & Hart, 2000; Reiff, Hatzes, Bramel, & Gibbon, 2001). The construct validity has been examined in 16 countries and the EQ-i has been found to map a broad range of related emotional constructs (Bar-On, 1997; Derksen, Kramer, & Katzko, 2002). The mean Cronbach's alpha coefficients for the different subscales range from .69 to .86. The average test-retest reliability coefficients after one and four months were .85 and .75, respectively. Empirical findings presented in the manual of the instrument show that the EQ-i is a reliable and valid instrument. The structural properties of the instrument have shown to be good (Dawda & Hart, 2000). The internal consistency of the EQ-i scores (total EQ-i) in this study was excellent ( $\alpha = .82$ ).

#### 4.2.3.3 Experienced emotions and feelings

To measure staff negative emotions and feelings when confronted with CB of their clients, the Emotional Reactions to Challenging Behaviour Scale was used (Mitchell & Hastings, 1998). The questionnaire was translated into Dutch and checked by a native speaker. The scale comprises 15 4-point Likert items with response categories from 0 (no, never), 1 (yes, sometimes), 2 (yes, frequently) to 3 (yes, very frequently). Participants may rate to what extent they experience certain emotions and feelings when confronted with or dealing with CB. The questionnaire is originally composed of two distinct subscales, namely: fear/anxiety and depression/anger. The subscales with regard to negative emotions have a high internal consistency and a good test-retest reliability (Mitchell & Hastings, 1998). To get insight into emotions and feelings of staff members, the experimenter converted two new subscales from the items of the questionnaire, namely "emotions" and "feelings". Table 4.2 shows which items belong to which subscales. The alpha values for these subscales were .65 (emotions) and .66 (feelings). To obtain a mean score for the two subscales all scores on items belonging to a subscale were averaged.

It should be noted that the data used in this study originally belong to a large intervention study, in which 214 support staff completed questionnaires before and after a training program (manuscript in preparation). In this study data of the pre-test phase of 207 staff members were used. Three staff members did not complete the EQ-i, so they were discarded from the study. With respect to missing items in the Emotional Reactions to Challenging Behaviour Scale, there were very few, that is, 8 out of 3105 (less than .3%). Apart from the fact that means were used, these few missings cannot have affected the outcomes in any way.

**Table 4.2** *Converted Subscales Staff Emotions and Feelings*

Emotions	Feelings
Angry	Betrayed
Sad	Humiliated
Disgusted	Hopeless
Frightened	Resigned
Afraid	Helpless
	Frustrated
	Guilty
	Nervous
	Incompetent
	Shocked

#### 4.2.4 Design and analyses

A within-groups correlational design was adopted in this study. First, means and standard deviations for all variables were calculated to describe our sample. Next, a correlational analysis was conducted to investigate the relationship between emotional intelligence on the one hand, and emotions, and feelings on the other.

### 4.3 Results

In Table 4.3 the means and standard deviations of the staff with regard to the subscale scores of the questionnaires are presented. A Kolmogorov-Smirnov test was performed on the five main scales of the EQ-i, emotions, and feelings. Only interpersonal EQ, stress management, and adaptation were normally distributed. Because not all variables were normally distributed ( $p < .05$ ), Spearman correlations were calculated.

**Table 4.3** Mean Scores and Standard Deviations for Measures

	Mean	SD
<b>Emotional intelligence</b>		
<i>Intrapersonal EQ</i>	104.45	12.66
Self-regard	101.15	11.84
Emotional self-awareness	105.13	12.84
Assertiveness	105.81	13.98
Independence	102.87	13.73
Self-actualisation	101.86	11.91
<i>Interpersonal EQ</i>	104.54	11.79
Empathy	101.09	12.55
Social responsibility	101.73	12.84
Interpersonal relationships	106.16	11.03
<i>Stress management</i>	108.07	10.49
Stress tolerance	106.24	10.84
Impulse control	106.88	11.83
<i>Adaptation</i>	103.33	13.37
Reality testing	106.04	12.93
Flexibility	101.62	14.56
Problem solving	98.84	14.45
<i>General mood</i>	104.49	10.95
Optimism	103.41	12.42
Happiness	104.68	10.22
<b>Emotions</b>	.42	.34
<b>Feelings</b>	.54	.29

In Table 4.4 the Spearman correlations between the different scales are presented. To interpret the magnitude of the correlation coefficients, Cohen's criteria (1988) were used, with correlations between 0.1 and 0.3 judged as small or weak, correlations between 0.3 and 0.5 as medium or

moderate and correlations between 0.5 and 1.0 as large or strong. Only significant correlations are discussed here. It should be noted that the correlation between emotions and feelings was .59 ( $p < .001$ ). The magnitude of this correlation indicates that the subscales of emotions and feelings are related, but do not measure the same construct.

**Table 4.4** Spearman Correlations between the Scales of Emotional Intelligence, Emotions, and Feelings

	Emotions	Feelings
Scales emotional intelligence		
Intrapersonal EQ	-.07	-.23**
Interpersonal EQ	-.11	-.08
Stress management	-.22**	-.18*
Adaptation	-.15*	-.20**
General mood	.02	-.07

\* $p < .05$ , \*\* $p < .001$

$n = 207$

The results revealed that half of the correlations reached significance, but their magnitude is weak. Emotions as well as feelings correlated significantly with stress management and adaptation. Feelings are also significantly related to intrapersonal EQ. Adaptation and stress management seemed most important when relating emotional intelligence to emotions and feelings. In other words, support staff who score higher on adaptation and stress management experience fewer negative emotions and feelings when confronted with CB. To obtain a more detailed picture, correlations among emotional intelligence, emotions, and feelings were also calculated for each subscale of the Bar-On EQ-i. These results are presented in Table 4.5.

Again, it should be noted that although the following relationships were significant, they were all of weak magnitude. For the intrapersonal EQ subscales the following correlations were significant: the correlation between emotional self-awareness and feelings, the correlation between assertiveness and feelings, and the correlation between independence and feelings. Support staff with better insight into their own emotions, are more assertive, can express their emotions and cognitions more adequately, are more emotionally independent of others in life, report less negative emotions and feelings when dealing with CB of clients. Again, subscales of the stress management scale and the adaptation scale appeared to play the largest role with regard to experienced emotions and feelings when dealing with CB. Individuals who scored higher on impulse control, reality testing, and problem solving experienced fewer negative emotions when confronted with client's CB. Additionally, staff who scored higher on stress tolerance, and reality testing, reported fewer negative feelings when working with a client who exhibits CB.

In sum, support staff who are better in regulating stress, are more able to delay gratification and control their emotions more adequately, are more flexible, solve problems in a more adequate way,

**Table 4.5** Spearman Correlations between the Subscales of Emotional Intelligence, Emotions, and Feelings

		Emotions	Feelings
Subscales emotional intelligence			
Intrapersonal EQ	Self-regard	-.06	-.13
	Emotional self-awareness	-.09	-.16*
	Assertiveness	-.07	-.22*
	Independence	-.06	-.22**
	Self-actualisation	-.06	-.11
Interpersonal EQ	Empathy	-.07	.03
	Social responsibility	-.10	-.03
	Interpersonal relationships	-.05	-.14*
Stress management	Stress tolerance	-.07	-.17*
	Impulse control	-.26**	-.11
Adaptation	Reality testing	-.14*	-.20**
	Flexibility	-.01	-.12
	Problem solving	-.16*	-.07
General mood	Optimism	.03	-.09
	Happiness	.01	-.08

\* $p < .05$ , \*\* $p < .001$

$n = 207$

and are more able to perceive themselves and their present environment (reality testing), experience less negative emotions and feelings when working with clients who show CB. Thus, support staff who are better stress managers and are more able to adapt to their environment and situations they are confronted with, are more able to regulate the negative emotions and feelings which are caused by CB of their clients.

In addition to the relationships between emotional intelligence, emotions, and feelings, the relationship between these variables on the one hand, and age, working experience and contract (hours a week) on the other were investigated. It should be noted that a Kolmogorov-Smirnov test showed that age, working experience, contract (hours a week) were not normally distributed ( $p < .01$ ). Spearman correlations were calculated and the results showed significant relationships between age and intrapersonal EQ ( $r = .21, p < .01$ ), between working experience and intrapersonal EQ ( $r = .16, p = .03$ ), the correlation between working experience and general mood marginally significant ( $r = .14, p < .05$ ). The found significant correlations were of weak magnitude. There were no significant correlations between staff variables, emotions, and feelings.

## 4.4 Discussion

The aim of the present study was to explore the relationships among staff emotions, feelings, and emotional intelligence of support staff. Although the correlations between emotions and feelings on the one hand and emotional intelligence on the other hand were not large, significant relationships were found between certain subscales of emotional intelligence and emotions and feelings. Stress management and adaptation skills of staff members appear to play the largest role in the relationship with emotions and feelings. Support staff who are more adequate problem solvers, seem to experience fewer negative emotions when confronted with CB of their clients. Also, staff who manage stress more adequately, handle stress in a more constructive way and adapt more easily to certain situations in daily life, report less negative feelings. Staff who have a higher impulse control and control emotions in a more effective way experience less negative emotions as well as feelings when dealing with CB. This also applies to staff, who are more able to validate their feelings and cognitions with external reality. This study also revealed significant relationships between age and intrapersonal emotional intelligence. Older staff scored higher on the intrapersonal subscale of the EQ-i. In addition, staff with more working experience also scored higher on intrapersonal EQ, which makes sense because age and working experience are strongly related. Future research should clarify whether age or working experience are determinants of emotional intelligence.

As said, the correlations were of weak magnitude. Note that, only correlational analyses were performed. The results should not be interpreted in terms of causality. The correlations were not corrected for multiple statistical tests, but the observed effect sizes were reported ( $r$ ) and thereby the focus was put on the strength of the relationships between variables rather than their significance (Nakagawa, 2004; Perneger, 1998). This revealed that relationships were not very strong, but it did show a certain pattern, revealing that emotional intelligence appears to be more strongly related to feelings than to emotions.

More specific definitions of the subscales of the EQ-i clarifies the relationships with emotions and feelings. For instance, Bar-On (1997) defines impulse control as the ability to effectively and constructively control and manage one's own emotions. In addition, reality testing is defined as the ability to objectively validate one's own feelings and cognitions with external reality. This includes being able to assess the agreement between what is experienced and what objectively exists. As said, staff scoring high on the subscales impulse control and reality testing reported less negative emotions and feelings. These and the other relationships among emotional intelligence, emotions, and feelings underline the view of emotional intelligence as a form of emotion regulation, which is in line work conducted by Montes-Berges and Augusto (2007). They showed emotional intelligence to be related to aspects of emotional regulation and coping, such as an avoidance-based coping strategy (Oliver, 1995).

Looking at the difference between correlations of emotional intelligence with emotions on the one hand and feelings on the other, it is notable that more aspects of emotional intelligence are

significantly related to feelings than to emotions. For instance, three out of five subscales regarding intrapersonal EQ are related to feelings, none are related to emotions. Staff members who have better abilities to express themselves and are emotionally and practically more independent of others, experience fewer negative feelings when confronted with CB. The fact that feelings seem to be more related to emotional intelligence compared to emotions, may be explained by the cognitive and conscious nature of both feelings and emotional intelligence and the relatively stronger unconscious nature of emotions (Damasio, 2001). When support staff completed the EQ-i and the Emotional Reactions to Challenging Behavior Scale they had to reflect on their own emotions, feelings, and their own personal style. The latter two can be considered conscious processes that include processes of reflecting and thinking, whereas emotions refer to a direct physical reaction (Damasio, 2001; Hansen, 2005).

An explanation for the low correlations and the rather low scores on the Emotional Reactions to Challenging Behaviour Scale, might be a sign of socially desirable responding that may come with the use of self-report measurement (Lambrechts, Kuppens, & Maes, 2009). Wanless and Jahoda (2002) showed that staff members reported more positive than negative emotions in response to questions with regard to CB. Support staff may find it difficult to admit they experience negative emotions and feelings such as fear or anger when dealing with CB. This is illustrated by anecdotal information. A direct quote from a staff member was "I find it hard to answer that I experience fear when working with X (client) because my organisation gives me the feeling that CB should be considered as normal and 'part of the job.'" This quote also stresses the importance of taking into account the organisational environment and the support staff gain from their supervisors when investigating emotions and feelings of staff (Blumenthal, Lavender, & Hewson, 1998; Hatton et al., 1999). In addition, research has shown that emotions are observable reactions in the human brain and body that can be investigated with, for instance, physical measurements (Damasio, 2001). These kind of measurements should be taken into account in future research on the relationship between emotional intelligence and emotions.

The low values of the significant correlations may be the result of staff members completing one questionnaire with regard to their personal style in daily life (EQ-i) and another with respect to the emotions and feelings they experience when working with one specific client who exhibits CB (Emotional Reactions to Challenging Behaviour Scale). Completion of the EQ-i with regard to a specific situation with a specific client might have led to higher correlations with emotions and feelings. Future research should focus on the distinction between general measures and measures regarding specific situations and clients.

The current study takes an important initial step in exploring and investigating the relationship among emotional intelligence, emotions, and feelings of support staff working with clients who show CB. Some limitations arise when analysing the results. As said, the use of retrospective self-report can be seen as a limitation. Therefore future research should also focus on other ways to measure staff emotions, for instance observational or even physiological methods. Van Oorsouw, Embregts,

and Sohler (2011) made a first attempt in developing an observational instrument to measure staff emotions, which could form a fundament for prospective research. Another line of research has shown that emotions, feelings, and emotional intelligence are not stable factors and can change over time (Goleman, 1995; Kuppens, Oravecz, & Tuerlinckx, 2010; Timmermans, Van Mechelen, & Kuppens, 2010). These findings call for a more longitudinal approach when investigating emotions, feelings, and emotional intelligence.



## References

- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: Technical Manual*. Toronto, Canada: Multi Health Systems.
- Bar-On, R., Brown, J. M., Kirkcaldy, B. D., & Thomé, E. P. (2000). Emotional expression and implications for occupational stress; an application of the Emotional Quotient Inventory (EQ-i). *Personality and Individual Differences*, 28, 1107-1118.
- Birks, Y. F., & Watt, I. S. (2007). Emotional intelligence and patient-centred care. *Journal of the Royal Society of Medicine*, 100, 368-374.
- Blumenthal, S., Lavender, T., & Hewson, S. (1998). Role clarity, perception of the organization and burnout amongst support workers in residential homes for people with intellectual disability: a comparison between a National Health Service trust and a charitable company. *Journal of Intellectual Disability Research*, 42, 409-417.
- Bromley, J., & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. *Journal of Intellectual Disability Research*, 39, 341-352.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences (2nd ed.)*. New Jersey: Lawrence Erlbaum.
- Dagnan, D., Trower, P., & Smith, R. (1998). Care staff responses to people with learning disabilities and challenging behaviour: a cognitive-emotional analysis. *British Journal of Clinical Psychology*, 37, 59-68.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason and the human brain*, NY: Grosset/Putnam.
- Damasio, A. (2001). Fundamental feelings. *Nature*, 413, 781.
- Damasio, A. R., Everitt, B. J., & Bishop, D. (1996). The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Proceedings of The Royal Society*, 351, 1413-1420.
- Damasio, A. R., Grabowski T. J., Bechara A., Damasio H., Ponto, L. L. B., Parvizi J., & Hichwa R. D. (2000). Subcortical and cortical brain activity during the feeling of self-generated emotions. *Nature Neuroscience*, 3, 1049-1056.
- Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences*, 28, 797-812.
- Derksen, J. (2007). *Zijn wij wel narcistische genoeg? Over het ontstaan van onze lentecultuur als gevolg van gewijzigde vroegkinderlijke condities*. [Are we narcissistic enough?] Nijmegen: PEN Tests Publisher.
- Derksen, J. J. L., Jeuken, J., & Klein Herenbrink, A. J. (1998). *Bar-On Emotioneel Quotiënt Vragenlijst, Nederlandse vertaling en bewerking* [Bar-On Emotional Quotient Inventory Dutch translation and adaptation]. Nijmegen, the Netherlands: PEN Tests Publisher.
- Derksen, J., Kramer, I., & Katzko, M. (2002). Does a self-report measure for emotional intelligence assess something different than general intelligence? *Personality and Individual Differences*, 32, 37-48.
- Ekman, R. (1992). An argument for basic emotions. *Cognition and Emotion*, 6, 169-200.
- Ekman, P., Friesen, W. V., & Ellsworth, P. (1972). *Emotion in the human face: Guidelines for research and an integration of findings*. New York: Pergamon Press.
- Freedman, J. (2003). Key lessons from 35 years of social-emotional education: How self-science builds self-awareness, positive relationships, and healthy decision-making. *Perspectives in Education*, 21, 69-80.
- Goleman, D. (1995). *Emotional Intelligence*. New York, NY: Bantam Books.
- Hansen, F. (2005). Distinguishing between feelings and emotions in understanding communication effects. *Journal of Business Research*, 58, 1426-1436
- Hastings, R. P. (1995). Understanding factors that influence staff responses to challenging behaviours: An exploratory interview study. *Mental Handicap Research*, 8, 296-320.
- Hastings, R. P. (2002). Do challenging behaviors affect staff psychological well-being? issues of causality and mechanism. *American Journal on Mental Retardation*, 107, 455-467.

- Hatton, C., Brown, R., Caine, A., & Emerson, E. (1995). Stressors, coping, strategies, and stress-related outcomes among direct care staff in staffed houses for people with learning disabilities. *Mental Handicap Research, 40*, 148-156.
- Hatton, C., Emerson, E., Rivers, M., Mason, H., Mason, L., Swarbrick, R., Kiernan, C., Reeves, D. & Alborz, A. (1999), Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *Journal of Intellectual Disability Research, 43*, 253-267.
- Hill, C. & Dagnan, D. (2002). Helping, attributions, emotions and coping style in response to people with learning disabilities and challenging behaviour. *Journal of Learning Disabilities, 6*, 363-72.
- Kuppens, P., Oravecz, Z., & Tuerlinckx, F. (2010). Feelings change: Accounting for individual differences in the temporal dynamics of affect. *Journal of Personality and Social Psychology, 99*, 1042-1060.
- Lambrechts, G., Kuppens, S., & Maes, B. (2009). Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research, 53*, 620-632.
- Mayer, J. D., Caruso, D. R., Salovey, P., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion, 1*, 232-242.
- Mitchell, G., & Hastings, R. P. (1998). Learning disability care staffs emotional reactions to aggressive challenging behaviours: Development of a measurement tool. *British Journal of Clinical Psychology, 37*, 441-449.
- Montes-Berges, B. & Augusto, J.-M. (2007). Exploring the relationship between perceived emotional intelligence, coping, social support and mental health in nursing students. *Journal of Psychiatric and Mental Health Nursing, 14*, 163-171.
- Nakagawa, S. (2004). A farewell to Bonferroni: the problems of low statistical power and publication bias. *Behavioural Ecology, 15*, 1044-1045.
- Oliver, C. (1995). Self-injurious behaviour in children with learning disabilities: Recent advances in assessment and intervention. *Journal of Child Psychology and Psychiatry, 36*, 909-927.
- Perneger, T. V. (1998). What's wrong with Bonferroni adjustments. *British Medical Journal, 316*, 1236.
- Reiff, H. B., Hatzes, N. M., Bramel, M. H., & Gibbon, T. (2001). The relation of LD and gender with emotional intelligence in college students. *Journal of Learning Disabilities, 34*, 66-78.
- Rose, J., Jones, F., & Fletcher, B. (1998). The impact of a stress management programme on staff well-being and performance at work. *Work & Stress: An International Journal of Work, Health & Organisations, 12*, 112-124.
- Rose, D., & Rose, J. (2005). Staff in services for people with intellectual disabilities: the impact of stress on attributions of challenging behaviour. *Journal of Intellectual Disability Research, 49*, 827-38.
- Timmermans, T., Van Mechelen, I., & Kuppens, P. (2010). The relationship between individual differences in intraindividual variability in core affect and interpersonal behaviour. *European Journal of Personality, 24*, 623-638.
- Van der Zee, K., Thijs, M., & Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the Big Five. *European Journal of Personality, 16*, 103-125.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., & Sohler, J. (2011). Verbal and nonverbal behaviour of staff: a first attempt in the development of an observation instrument. *Research in Developmental Disabilities, 32*, 2408-2414.
- Wallerand, J. L., Dekker, M. C. & Koot, H. M. (2003). Psychopathology in children and adolescents with intellectual disability: Measurement, prevalence, course, and risk. In L. M. Glidden (Ed.), *International Review of Research in Mental Retardation*, Vol. 26 (pp. 93-134). San Diego, CA: Academic Press.
- Wanless, L. K., & Jahoda, A. (2002). Responses of staff towards people with mild to moderate intellectual disability who behave aggressively: a cognitive emotional analysis. *Journal of Intellectual Disability Research, 46*, 507-516.
- Wasseveld, R., Overbeeke, S., & Derksen, J. (2007). Kan emotionele intelligentie worden getraind? [Is emotional intelligence trainable?] *Psychologie & Gezondheid, 35*, 182-188.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*, 548-73.

Weiner, B. (1986). *An Attributional Theory of Motivation and Emotion*. Springer-Verlag, Berlin.

Zijlmans, L. J. M., Embregts, P.J.C.M., Bosman, A. M. T., & Willems, A. P. A. M. (2012). The relationship among attributions, emotions, and interpersonal styles of staff working with clients with intellectual disabilities and challenging behavior. *Research in Developmental Disabilities, 33*, 1484-1494.

Zijlmans, L. J. M., Embregts, P.J.C.M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2011). Training emotional intelligence related to treatment skills of staff working with clients with intellectual disabilities and challenging behaviour. *Journal of Intellectual Disability Research, 55*, 219-230.





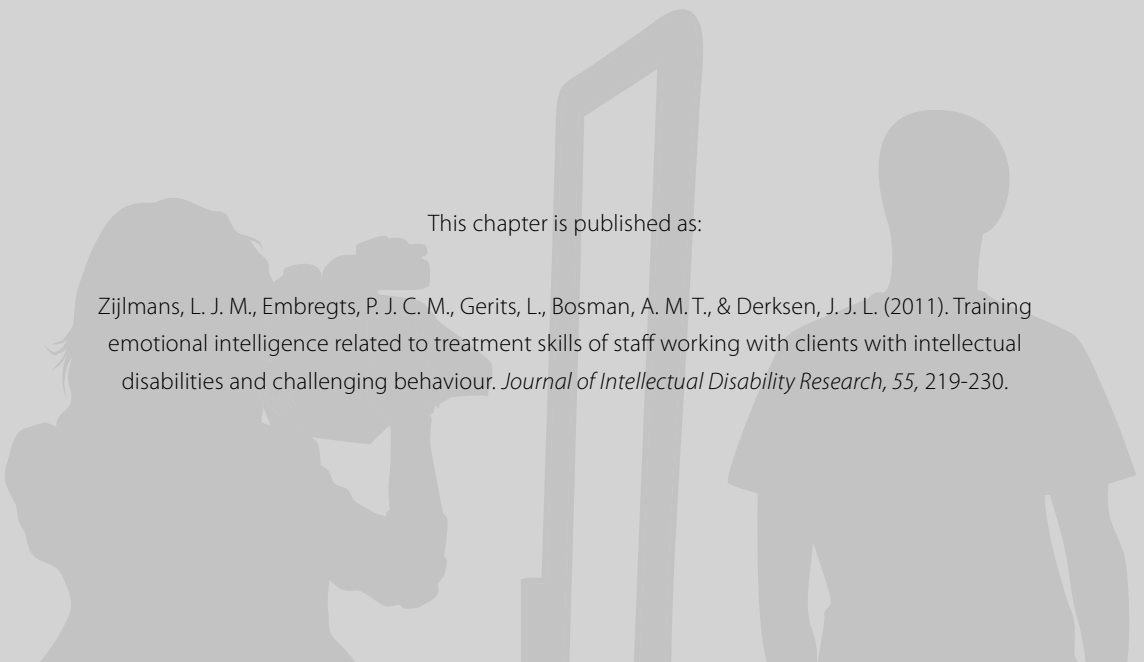
# Chapter 5

---

## **Training emotional intelligence related to treatment skills of staff working with clients with intellectual disabilities and challenging behaviour**

This chapter is published as:

Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2011). Training emotional intelligence related to treatment skills of staff working with clients with intellectual disabilities and challenging behaviour. *Journal of Intellectual Disability Research*, 55, 219-230.



## **Abstract**

Staff working with clients with intellectual disabilities who display challenging behaviour may contribute to the continuation of this behaviour, because it causes emotional reactions such as anxiety, anger, and annoyance, which may prohibit adequate response behaviour. To enhance staff behaviour and treatment skills a training that aimed at improving emotional intelligence was developed. The goal of this study was to assess whether a training aimed at emotional intelligence in combination with a video feedback training program improves emotional intelligence of staff working with clients with intellectual disabilities and challenging behaviour. Participants were 60 staff members working with individuals with intellectual disabilities and challenging behaviour. Thirty-four staff members participated in a four month training program and 26 constituted the control group. A pre-test-post-test control group design was used. Effectiveness was assessed by using the Dutch version of the Bar-On EQ-i and the judgments of experts on emotional intelligence. Emotional intelligence of the experimental group changed significantly more than that of the control group. Judgments of experts on emotional intelligence indicated that the change of emotional intelligence of the experimental group improved positively. The positive effect of the training program on emotional intelligence is consistent with previous research on emotional intelligence and suggests that emotional intelligence of staff working with clients with intellectual disabilities and challenging behaviour can be influenced by training.

## 5.1 Introduction

People with intellectual disabilities (ID) are at a higher risk of challenging behaviour (CB) than people without ID (Wallander, Dekker, & Koot, 2003). The prevalence of severe CB among individuals with ID ranges from 7.8% to 12.1% (Emerson & Bromley, 1995). Factors that can lead to the development and maintenance of CB in people with ID lie in characteristics of the individual with ID like gender (e.g. male individuals are more often identified as having a conduct disorder than female individuals) and age (e.g. older individuals are more often diagnosed with depression) on the one hand and psychosocial environment of the individual with ID such as stressful life events, problem-solving skills, task difficulty and negative staff attitudes on the other hand (Embregts, Didden, Huitink, & Schreuder, 2008; Emerson, 2003; Hastings & Remington, 1994). Staff members dealing with CB often implement interventions that are effective in the short term, but reinforce maintenance of CB in the long term (Hastings & Remington, 1994). Clients who show CB often gain attention from their caregivers (Lambrechts, Van Den Noortgate, Eeman, & Maes, 2010). Thus, staff behaviour appears to be an important factor in the emergence and persistence of CB (Hastings, 1997).

Furthermore, CB produces a range of emotional reactions on part of the staff, such as fear, anger, anxiety and annoyance (Bromley & Emerson, 1995; Hastings, 1995; Hatton, Brown, Caine, & Emerson, 1995). When staff feels threatened by CB, the chances that they will respond appropriately significantly decrease (Allen & Tynan, 2000). The persistent nature of CB of clients with ID, the lack of an effective manner to handle such behaviour and difficulties understanding such behaviour may cause feelings of stress (Bromley & Emerson, 1995). Within residential facilities where staff reported low levels of stress, larger amounts of assistance and positive interaction were found (Rose, Jones, & Fletcher, 1998).

Thus, research reveals an increasing emphasis on the quality of training for direct-care staff working with people with ID, with a focus on the optimisation of skills and knowledge (e.g., Cooper & Browder, 2001; Feldman, Atkinson, Foti-Gervais, & Condillac, 2004; Reid, Parsons, Lattimore, Towery, & Reade, 2005). A meta-analysis conducted by Van Oorsouw, Embregts, Bosman, and Jahoda (2009) showed the importance of a careful selection of training goals, such as the training format and the techniques being used to improve treatment skills of staff. A combination of in-service training and coaching on the job appeared to be the most effective strategy.

A particularly effective strategy to improve staff performance is the provision of feedback to staff members, which may include oral and/or written feedback. Embregts (2002, 2003), who conducted a series of intervention studies using video and graphic feedback, showed that video feedback enhanced staff's behaviour to both appropriate and inappropriate behaviours on the part of clients. Staff was also satisfied with the training, which is critical, because attempts to improve staff performance are largely ineffective when not accepted by the staff (Suda & Miltenberger, 1993). Note, however, that there are marked individual differences in the performance of service staff following a feedback intervention training (Embregts, 2002).



An important factor that has not been included in previous research aiming at the improvement of response behaviour of staff dealing with clients with ID and CB is emotional intelligence. Emotional intelligence is a concept described by Bar-On (1997). He defined this non-cognitive intelligence construct as '... an array of emotional, personal and social abilities and skills that influence an individual's ability to cope effectively with environmental demands and pressures' (Bar-on, Brown, Kirkcaidy, & Thomé, 2000, p. 1108). It consists of the following key factors: the image people have of themselves, how they assert their own desires and rights, the ability to understand and manage their own emotions, relationships people have with others, the extent to which they invest in others, the ability to recognise and respect feelings of others, the strategies people use to cope with problems and stress, general wellbeing and the capacity to control impulses.

An instrument that is widely used to measure emotional intelligence is the Bar-On EQ-i, developed by Bar-On (1997). This questionnaire contains five domains concerning intrapersonal abilities, interpersonal skills, adaptability, stress management capacity and general mood. The EQ-i is a questionnaire that consists of five main scales comprising 15 subscales containing 133 items using a 5-point Likert scale with response categories ranging from 1 (very seldom true or not true of me) to 5 (very often true of me or true of me). Examples of items are 'I know how to deal with upsetting problems', 'I prefer others to make decisions for me' and 'I'm unable to understand the way other people feel'.

A large number of studies have provided considerable support for the reliability and validity of the EQ-i (Bar-On et al., 2000; Dawda & Hart, 2000; Reiff, Hatzes, Bramel, & Gibbon, 2001). The construct validity has been examined in 16 countries and the EQ-i has been found to tap a broad range of related emotional constructs (Bar-On, 1997; Derksen, Kramer, & Katzko, 2002). The average Cronbach's alpha coefficients for the different subscales have been found to range from 0.69 to 0.86. The average test-retest reliability coefficients after 1 and 4 months have been found to be 0.85 and 0.75, respectively. Empirical findings presented in the manual show convincingly that the EQ-i is a reliable and valid instrument. Dawda and Hart (2000) found that the structural properties of the instrument are good. Emotional intelligence predicts general functioning and wellbeing (Mayer, Caruso, Salovey, & Sitarenios, 2001), may change over time (Goleman, 1995) and appears to be trainable (Freedman, 2003).

In demanding and challenging environments, emotional intelligence influences the selection and control of coping strategies for use within the immediate situation (Matthews & Zeidner, 2000). Staff working with clients with ID and CB who had higher levels of emotional intelligence reported fewer burnout symptoms (Gerits, Derksen, & Verbruggen, 2004). This finding led to our project of trying to optimise the effectiveness of video feedback by connecting it with the concept of emotional intelligence of care staff.

Very few studies have studied the effectiveness of a training program that aimed at increasing emotional intelligence. Sjölund and Gustafsson (2001) conducted a study that investigated the effect of a workshop designed to increase managerial skills. The results showed an increase in emotional

intelligence scores of the participants. A four-session intervention study by Nelis, Quoidbach, Mikolajczak, and Hansenne (2009) yielded not only a significant increase of emotional intelligence in young adults, it also revealed that the benefits of the intervention did not depend on the initial level of emotional intelligence.

In sum, emotional intelligence appears to be a crucial factor in staff coping with CB of clients with ID. Higher levels of emotional intelligence affect appropriate behaviour in staff positively. Because emotional intelligence appears to be trainable, the main goal of this study was to test whether a training program improves emotional intelligence of direct-care staff. The training consisted of feedback sessions on individual EQ-i profiles and video feedback on staff members interacting with clients with ID. Pre- and post-test EQ-i scores of staff members participating in experimental and control groups will be compared to assess the effect of the training. The following research questions will be answered in the present study:

1. Are the differences between pre- and post-test scores on the five main scales of the EQ-i of the experimental group higher than those of the control group?
2. Are there differential effects of the training on subscales of the EQ-i?
3. Did emotional intelligence of staff participating in the experimental group improve?

## 5.2 Method

### 5.2.1 Participants

Participants were 60 staff members (73% women, 27% men) working in two residential settings in the Netherlands for people with mild to moderate ID and accompanying CB and psychiatric problems.

**Table 5.1.** Descriptive Statistics of Participant Groups

	Experimental group		Control group		
	Facility 1	Facility 2	Facility 1	Facility 2	
Gender					
	Women	14	13	8	9
	Men	4	3	7	2
Age					
	<i>M</i>	37.11	33.63	32.47	33.55
	<i>SD</i>	9.71	12.20	8.27	10.00
Work experience (months)					
	<i>M</i>	115.00	88.13	97.30	88.00
	<i>SD</i>	102.37	65.90	91.96	75.10
Contract (hours a week)					
	<i>M</i>	31.50	32.88	32.80	28.00
	<i>SD</i>	4.88	3.79	3.00	4.27
	<i>n</i>	18	16	15	11

Table 5.1 shows descriptive statistics of participants for each residential setting. For the selection of participants, the experimenter first obtained permission from both organisations to conduct the research. Managers were provided with information about the training program and together with the experimenter teams were randomly selected. In each organisation six teams were randomly selected. From these teams, three staff members were selected to participate in the experimental group and three staff members were assigned to the control group. This selection was mostly random, in 29 cases random selection was impossible as a result of practical and organisational reasons. Staff participating in the experimental group were divided into four training groups. The experimenter contacted each staff member (control and experimental group) to explain the main goals of the training program and the research.

All participants were working with youngsters or adults with ID and CB; 31 clients were selected to participate in the study. Severity of clients' ID ranged from mild (68%), and moderate (16%) to severe (16%). Most prevalent psychiatric diagnoses were Autism Spectrum Disorder (42%), Attention Deficit Hyperactivity Disorder (10%) and Personality Disorder (10%).

### **5.2.2 Intervention**

Training sessions were conducted in committee rooms at the residential facilities. The main goal of the program was to improve emotional intelligence by using two coaching methods: oral feedback on individual EQ-i profiles and video feedback. Before the start of the training each participating staff member selected one client with whom they experienced difficulties in the interaction and often did not know how to handle his/her CB. For example, one staff member selected a client who frequently behaved aggressively towards her. Another participant selected a client who showed no initiative in the interaction and preferred to be alone. Professional EQ-i trainers provided training regarding the EQ-i. During the first day, staff was trained on the concept of emotional intelligence and its significance for both profession and teamwork. This didactic training session included extensive information on the five domains of emotional intelligence (Bar-On, 1997), the role of emotional intelligence in daily life, an explanation of the Bar-On EQ-i and the meaning of the scores. A group assignment, in which the staff members had to solve a fictitious problem, was performed to clarify the role of emotional intelligence in interaction of teams. Staff also received feedback on their own EQ-i profile. EQ-i profiles that have previously been found to relate to higher rates of burnout were compared with the EQ-i profiles of the individual staff members (Gerits et al., 2004). On the second day, each staff member formulated two specific goals in relation to his/her EQ-i profile, one regarding personal development and the other regarding the needs of a client they had selected. The staff helped each other to formulate individual development plans for the following 4 months in subgroups. The goals staff members formulated were implemented and specified in their individual development plans. The plans were discussed and supervised during group sessions. The staff members worked on their plans individually, with two subgroup feedback sessions organised 1.5 and 3 months after the start of the training program. In addition to this, the video-feedback procedures were initiated during group sessions.

Professional trainers provided video feedback. All trainers were certified clinical psychologists working at the residential settings and they were coached and supervised by a professional and experienced video-feedback trainer. The video-feedback trainers were also present during the first two training sessions, so they could adjust their feedback more adequately to the EQ-i profiles of staff. As said before, each staff member chose a client to focus on during the training. Before the beginning of the video-feedback training, the experimenter studied treatment plans of clients to select CB and most relevant responses on behalf of the staff. For example, staff members are made aware to not be too demanding on a client with a high level of arousal. Staff members were asked to make video recordings of themselves interacting with clients. Desirable responses of staff towards clients were reviewed in connection with the EQ-i scores of staff in a training session of 90 min. The importance of demonstrating certain types of responses was also emphasised. The training groups met three times, each lasting 90 minutes. The staff and trainer viewed the videotape, and the staff member being observed was first asked to comment. Then the trainer and the participant related the staff behaviour to the desirable staff response and the EQ-i profile of the staff member. The trainer followed a pre-established protocol for verbal description of correct and incorrect responses, contingent praise and corrective comments to guarantee consistency of feedback across sessions. In the last training session staff members received feedback on their new profiles and made plans for further development in a group session.

### 5.2.3 Measures

The Dutch version of the Bar-On EQ-i (Bar-On, 1997) adapted by Derksen, Jeuken, and Klein Herenbrink (1998) was used to measure emotional intelligence. As said, the EQ-i is designed to measure the domains of intrapersonal abilities, interpersonal skills, adaptability, stress management capacity and general mood (i.e. five main scales). Two validity scales are included to identify overly positive or overly negative self-representations, and a response-consistency score indicates the validity of the results. As said before, the EQ-i consists of five main scales and 15 subscales (see Tables 5.2 and 5.3) containing 133 items using a 5-point Likert scale. It takes 20-30 minutes to complete the EQ-i. Similar to IQ-scores, EQ-i raw scores are converted to standard scores ( $M = 100$ ,  $SD = 15$ ).

An increase in EQ-i scores does not necessarily indicate improvement. Individuals can also aim for decreasing scores. Sometimes high scores can be detrimental to an individual. For example, individuals with high scores on impulse control will probably show lower levels of flexible behavioural patterns in response to unpredictable situations. To determine whether emotional intelligence of staff had improved (increased or decreased) after completion of the training program, the experimenter developed an expert review system with instruction for experts specialised in EQ-i on how to judge pre- and post-test scores. This system was based on opinions of experts on EQ-i and its literature. As said, each participating staff member in the experimental group formulated an individual development plan. This plan was implemented in the expert review system. The system consisted of three categories, defined as: scores changed desirably (scores that changed three points or more in the direction expected based on the individual development plan of a staff member), scores changed

unfavourably (scores that changed three points or more in the direction opposite to the expected direction based on the individual development plan of a staff member) and unchanged scores (scores that did not differ more than two points). For example, a staff member formulated the following goal in his individual development plan: 'My goal is to improve my empathy in working with this client, I want to know what his needs are so I can understand where his difficult behaviour comes from.' Each difference between pre- and post-test scores of this participant was evaluated with respect to the change in the EQ-i profile. The pre-test score on the subscale empathy of this staff member was 94, his post-test score was 101. This score changed more than three points in the direction expected with respect to the goal formulated in his individual development plan, so it was judged as 'score changed desirably'. The difference between pre- and post-test scores of the 15 subscales of the EQ-i of 34 staff members who participated in the experimental group were judged by the trainer. To reduce bias in the judgment of the trainer and to ensure the reliability of the assessment, a blind reviewer judged the scores independently of the trainer. The trainer and the blind reviewer were certified specialists in analysing EQ-i profiles. Both experts (trainer and reviewer) made their judgments based on the pre- and post-test scores for each subscale and the individual development plans staff members had made regarding their emotional intelligence. The experts agreed in 98% of the cases. On 10 pre- and post-test scores experts did not agree. They discussed these scores until consensus was reached. The high inter-rater reliability can be explained by the fact that both reviewers were specialised in working with the EQ-i and that the categories of the review system were very clear and tight and left little room for interpretation.

#### **5.2.4 Design**

The effect of the training program was evaluated in a pre-test post-test control group design. Before the start of the training program and shortly before the last training session staff was asked to complete the Bar-On EQ-i.

The initial sample of this study consisted of 73 participants. During the training program four participants dropped out because of burnout, two because of somatic illness and seven because of job changes. To guarantee that systematic factors did not influence the results, we compared mean scores of participants that completed the training program versus participants that dropped out with an independent sample *t*-test. Mean scores did not differ significantly.

### **5.3 Results**

The result section contains three parts. The goal of the first analysis was to test whether the training affected EQ-i scores of the experimental groups more so than those of the control group. The second analysis aimed at investigating whether there are large differences in pre- and post-test scores of

the 15 subscales of the EQ-i. The third set of analysis tested whether EQ-i scores of individual staff members improved in a desirable direction according to experts.

### 5.3.1 The effect of training on general EQ-i scores

To determine whether there is a difference between the development of emotional intelligence in the experimental and control group, we first calculated the difference between scores from pre-test and post-test for each participant. A 2 (condition: experimental vs. control) X 5 (scales: intrapersonal, interpersonal, stress management, adaptability, and general mood) analysis of variance was performed on the difference scores of each scale. Scales were treated as within-subjects factors (repeated measure) and condition as between-subjects factor. Table 5.2 shows the mean difference scores for each scale in both conditions, and reveals that the mean EQ-i scores increased from pre-test to post-test.

The main effect of condition was significant,  $F(1,58) = 6.49, p = 0.01$ . The experimental group showed higher difference scores than the control group. The main effect of scale was also significant,  $F(4,232) = 3.43, p = 0.01$ . Because of the significant interaction between condition and scale the main effects needed further qualification  $F(4,232) = 3.53, p = 0.01$ .

**Table 5.2.** Mean Difference Scores of the EQ-i (post-test scores - pre-test scores)

Subscale	Experimental group (n = 34)		Control group (n = 26)	
	M	SD	M	SD
Total EQ	11.03	7.99	5.88	6.02
Intrapersonal	10.15	7.12	5.88	5.55
Self-regard	8.41	6.31	6.42	5.06
Emotional self-awareness	10.38	7.86	7.88	5.97
Assertiveness	11.00	6.97	6.54	7.07
Independence	8.62	6.89	6.69	6.11
Self-actualisation	8.38	6.81	6.85	6.33
Interpersonal	9.71	7.76	8.38	6.65
Empathy	9.41	9.20	8.12	6.74
Social responsibility	9.97	7.11	9.96	10.01
Interpersonal relationship	9.82	6.46	8.12	5.84
Stress management	8.82	6.48	6.27	5.43
Stress tolerance	10.26	7.20	6.19	6.29
Impulse control	6.24	5.51	6.92	4.78
Adaptability	12.71	8.05	6.00	5.49
Reality testing	10.38	7.44	8.12	6.11
Flexibility	10.82	8.55	8.81	6.52
Problem solving	11.88	9.17	7.85	6.34
General mood	7.09	5.12	5.96	4.70
Optimism	8.15	6.47	7.42	4.99
Happiness	6.53	6.05	5.19	3.56

To compare the scales with regard to the difference scores, an analysis of variance was performed for the experimental and the control group separately. In the control condition none of the difference scores on the scales differed significantly from one another. In the experimental group, only three comparisons (Bonferroni corrected post-hoc tests) reached a significant level. The mean difference score of the intrapersonal scale was higher than that of the general mood scale ( $p = 0.05$ ); the mean difference score of the adaptability scale was higher than that of the stress management scale ( $p = 0.01$ ) and of the general mood scale ( $p = 0.001$ ).

Post hoc  $t$ -tests were also conducted on the difference scores of the experimental and control groups to determine on which scales the two groups differed. Difference scores of the experimental groups were significantly higher than those of the control groups on two scales, that is, the intrapersonal scale,  $t(58) = 2.52, p = 0.01$ , and the adaptability scale,  $t(58) = 3.65, p = 0.001$ . The increase of the interpersonal, stress management and general mood scale did not differ significantly between experimental and control groups. Thus, the group who participated in the training had larger increases than the control group in two of the five scales of the EQ-i after training.

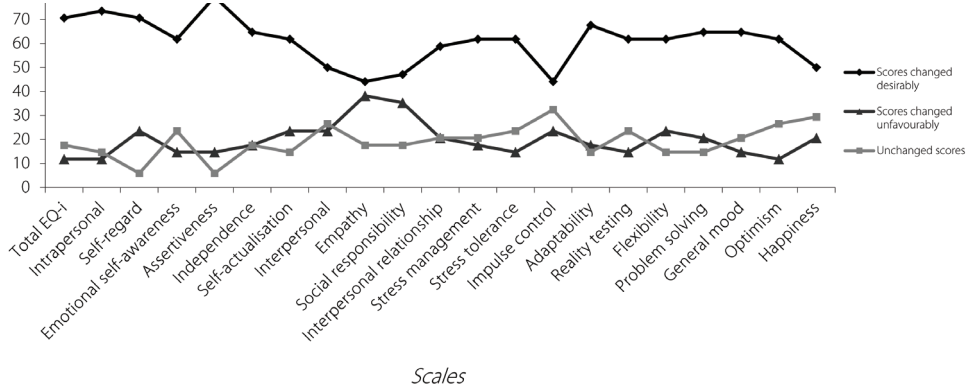
### **5.3.2 Differential effects of the training on the EQ-i subscales**

To investigate whether there were differences at the subscale level, we compared the increase of the subscales per scale from pre-test to post-test of staff members participating in the experimental group. An analysis of variance on the difference scores of the intrapersonal scale (self-regard, emotional self-awareness, assertiveness, independence, self-actualisation) of the experimental group (a within-subjects variable) revealed a non-significant difference between the subscales of the intrapersonal scale,  $F(4,132) = 1.38, p = 0.24$ . The same analysis on the interpersonal scale (empathy, social responsibility, interpersonal relationship) did not reveal a difference between subscales either,  $F(2,66) = 0.08, p = 0.93$ . The analysis on the stress management scale (stress tolerance, impulse control), however, yielded a significant difference  $F(1,33) = 10.85, p = 0.002$ . The score on stress tolerance subscale (10.3) had increased significantly more than the one on the impulse control subscale (6.3). The analyses on the two remaining scales, adaptability (reality testing, flexibility, problem solving) and general mood (optimism, happiness) did not reach significant levels,  $F(2,66) = 0.34, p = 0.71$ , and  $F(1,33) = 1.22, p = 0.28$ , respectively. Thus, differences at the subscale level are limited to the stress management scale.

### **5.3.3 Desirability of EQ-i score changes**

Experts evaluated the changes in EQ-i scores according to the following three categories: scores changed desirably, scores changed unfavourably and unchanged scores. Figure 5.1 presents the distributions of the experts' judgments on emotional intelligence for each subscale and it reveals that the percentages of scores that changed desirably are considerably higher than the percentages of scores that changed unfavourably and scores that did not change at all. Thus, experts believe that the emotional intelligence of the staff members in the experimental group changed in the desired direction.

Figure 5.1. Desirability of Changes in EQ-i Scores according to Experts



Finally, a chi-squared test was conducted to determine whether the frequency distribution of experts' judgments (scores changed desirably, scores changed unfavourably, and unchanged scores) differs from the normal distribution. As can be seen in Table 5.3, the frequency distribution of most of the subscales deviated significantly from the normal distribution, except for the interpersonal scale, empathy, social responsibility, impulse control, and happiness. This suggests a systematic change in



Table 5.3. Chi-square and Significance Level testing the Normal Distribution for each Scale and Subscale

Subscale	$\chi^2 (2)$	<i>p</i>
Total EQ	21.14	.001
Intrapersonal	24.77	.001
Self-regard	22.82	.001
Emotional self-awareness	12.76	.001
Assertiveness	32.88	.001
Independence	15.10	.001
Self-actualisation	12.77	.001
Interpersonal	4.29	.12
Empathy	3.94	.14
Social responsibility	4.47	.11
Interpersonal relationship	9.94	.01
Stress management	12.41	.001
Stress tolerance	12.77	.001
Impulse control	2.18	.34
Adaptability	18.06	.001
Reality testing	12.77	.001
Flexibility	12.77	.001
Problem solving	15.24	.001
General mood	15.24	.001
Optimism	13.47	.001
Happiness	4.65	.10



staff's emotional intelligence as a result of the training according to the experts for the majority of scales.

## 5.4 Discussion

The aim of the present study was to assess the effectiveness of a staff intervention program focusing on emotional intelligence, treatment skills related to emotional intelligence, and video feedback. The key element of the training was relating staff behaviour to emotional intelligence. In this study we focused on the improvement of emotional intelligence of staff members. The results showed that a training focusing on emotional intelligence of staff is indeed effective. Changes of emotional intelligence of the experimental group were significantly larger compared with the control group. More specifically, emotional intelligence of staff members improved significantly when we took into account the judgments of experts on emotional intelligence regarding the scores of participants. In other words, experts on emotional intelligence concluded that most of the changes in emotional intelligence scores are actually improvements.

The results of this study are consistent with the findings of several studies assessing the effectiveness of interventions focusing on emotional intelligence or elements of emotional intelligence (Aber, Brown, & Henrich, 1999; Nelis et al., 2009). Like in the present study, Wasseveld, Overbeeke, and Derksen (2007) used the Bar-On EQ-i to assess the effectiveness of a training for managers focusing on emotional intelligence. In addition to feedback on the emotional intelligence of staff members, the provision of video feedback on staff behaviour was another important strategy in the present training program. Embregts (2002) showed the effectiveness of video feedback on staff behaviour. The present study is to our knowledge the first one addressing the effectiveness of a staff intervention focusing on emotional intelligence, treatment skills related to emotional intelligence and video feedback.

In this study we did not focus on underlying mechanisms of the training that may cause the change in emotional intelligence. We believe, however, based on experiences of the trainers, that the most effective element of the intervention concerns awareness. Staff members seem to become aware of their own emotional intelligence and learn how it affects their behaviour. Mindfulness training is another intervention in which awareness plays an important role (Singh et al., 2006, 2009). Recently, effectiveness of a mindfulness training with respect to the use of physical restraints was found in a study similar to our research (Singh et al., 2009). Twenty-three staff members working in residential group homes for individuals with ID participated in a 12-week training program focusing on mindfulness. Mindfulness training is a method that teaches people to be aware of the present moment, of themselves and their environment, without judging it. The use of physical restraints by the participating staff members decreased significantly after the completion of the training program. In another study of Singh et al. (2006) the effectiveness of a mindfulness training was found. In the 5-day training program methods like didactic instruction on mindfulness, meditation exercises and

techniques, and exercises to enhance mindfulness were presented and applied. After staff completed the mindfulness training upon a behavioural training, the use of interventions for physical aggression decreased and the number of learning objectives mastered by staff members increased. The results of these studies suggest that a mindfulness training for staff improves staff-client interactions.

More research is required to draw conclusions about the underlying mechanisms of the current training program, the similarities between both training methods, and whether they are both effective in enhancing staff behaviour who work with clients with ID and CB. However, mindfulness training changes and improves the nature of staff-client interactions because staff member can observe client behaviour without judging it (Sameroff, 1995). We believe that a training focusing on emotional intelligence of staff may have similar consequences. Because staff members become aware of their emotional intelligence and how it affects their own behaviour and that of the client, staff might be able to observe client behaviour from a distance and become less controlling regarding client behaviour. More research is necessary to draw conclusions about the effect of emotional intelligence training on staff-client interaction.

Despite the positive outcome of our study, we would like to mention four caveats. First, we randomly selected the participating teams, but participants within these teams could not all be selected randomly for practical and organisational reasons. Second, although the training program focuses on emotional intelligence and related treatment skills, we did not focus on data collection and data analysis with respect to treatment skills of staff in this study. An interesting question for future research should therefore address the effect of the training program on staff behaviour and the relationship between emotional intelligence and treatment skills. Third, we did not assess client behaviour in the present study. Although 73% of the studies addressing the effectiveness of a staff intervention do not report inferential client statistics (Van Oorsouw et al., 2009), future research should take into account client behaviour and wellbeing. Fourth, although there is a gender imbalance in our study, we did not take gender into account in our analyses, because of the small number of participants. Gerits et al. (2004) showed that EQ-i scores of men and women differed on some subscale. For example, female staff scored significantly higher than male staff on the subscales empathy, interpersonal relationship and social responsibility. We did perform a *t*-test on the pre-test scores of men and women, but we found no significant differences. An explanation for this lack of differences between male and female staff could be the fact that the staff members participating in the study of Gerits et al. worked with clients with all levels of ID, whereas our participants mostly worked with client with mild ID. Next, a much larger number of staff members ( $n = 380$ ) participated in the study of Gerits et al. than in our study. In addition, we performed a *t*-test on the difference scores (difference between pre- and post-test scores) of men and women to investigate whether gender affects the effectiveness of the training program. Again, we found no significant differences between men and women.

In sum, emotional intelligence is associated to several measures of wellbeing, such as coping with stress and burnout (Gerits et al., 2004). More specifically, in demanding and challenging environments,

emotional intelligence influences the selection and control of coping strategies for use within the immediate situation (Matthews & Zeidner, 2000). Staff taking care of clients with severe CB often have to deal with stressful situations and are at greater risk of burnout (Mitchell & Hastings, 2001; Jenkins, Rose, & Lovell, 1997). Burnout can eventually lead to absenteeism, which may have a negative impact on the wellbeing of clients. This indicates that the findings of the present study are relevant for the daily practice in the care for people with ID and CB. Although the effect of our training program on client behaviour and staff-client interactions was not assessed, previous research on emotional intelligence (Matthews & Zeidner, 2000; Gerits et al., 2004) revealed that it is an important characteristic that influences staff behaviour and thus staff-client interactions. The results of the present study add to this knowledge and showed that emotional intelligence can be enhanced by a training. Based on this conclusion, future research needs to focus on the effect of staff's emotional intelligence on staff and client behaviour and staff-client interaction. The need for training of emotional intelligence and treatment skills of staff members is clearly emphasised in the present study.

## References

- Aber, J. L., Brown, J. L., & Henrich, C. C. (1999). *Teaching conflict resolution: An effective school-based approach to violence prevention*. New York, NY: National Center for Children in Poverty, Joseph L. Mailman School of Public Health, Columbia University.
- Allen, D., & Tynan, H. (2000). Responding to aggressive behaviour: Impact of training on staff members' knowledge and confidence. *Mental Retardation, 38*, 97-104.
- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: Technical Manual*. Toronto, Canada: Multi Health Systems.
- Bar-On, R., Brown, J. M., Kirkcaldy, B. D., & Thomé, E. P. (2000). Emotional expression and implications for occupational stress; an application of the Emotional Quotient Inventory (EQ-i). *Personality and Individual Differences, 28*, 1107-1118.
- Bromley, J., & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. *Journal of Intellectual Disability Research, 39*, 341-352.
- Cooper, K. J., & Browder, D. M. (2001). Preparing staff to enhance active participation of adults with severe disabilities by offering choice and prompting performance during a community purchasing activity. *Research in Developmental Disabilities, 22*, 1-20.
- Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences, 28*, 797-812.
- Derksen, J. J. L., Jeuken, J., & Klein Herenbrink, A. J. (1998). *Bar-On Emotioneel Quotiënt Vragenlijst, Nederlandse vertaling en bewerking* [Bar-On Emotional Quotient Inventory Dutch translation and adaptation]. Nijmegen, the Netherlands: PEN Tests Publisher.
- Derksen, J., Kramer, I., & Katzko, M. (2002). Does a self-report measure for emotional intelligence assess something different than general intelligence? *Personality and Individual Differences, 32*, 37-48.
- Embregts, P. J. C. M. (2002). Effect of resident and direct-care staff training on responding during social interactions. *Research in Developmental Disabilities, 23*, 353-366.
- Embregts, P. J. C. M. (2003). Using self-management, video feedback, and graphic feedback to improve social behavior of youth with mild intellectual disabilities. *Education and Training in Developmental Disabilities, 38*, 283-295.
- Embregts, P. J. C. M., Didden, R., Huitink, C., & Schreuder, N. (2009). Contextual variables affecting aggressive behaviour in individuals with mild to borderline intellectual disabilities who live in a residential facility. *Journal of Intellectual Disability Research, 53*, 255-264.
- Emerson, E. (2003). Prevalence of psychiatric disorders in children and adolescents with and without intellectual disability. *Journal of Intellectual Disability Research, 47*, 51-58.
- Emerson, E., & Bromley, J. (1995). The form and function of challenging behaviours. *Journal of Intellectual Disability Research, 39*, 388-398.
- Feldman, M. A., Atkinson, L., Foti-Gervais, L., & Condillac, R. (2004). Formal versus informal interventions for challenging behaviour with intellectual disabilities. *Journal of Intellectual Disability Research, 48*, 60-68.
- Freedman, J. (2003). Key lessons from 35 years of social-emotional education: How self-science builds self-awareness, positive relationships, and healthy decision-making. *Perspectives in Education, 21*, 69-80.
- Gerits, L., Derksen, J. J. L., & Verbruggen, A. B. (2004). Emotional intelligence and adaptive success of nurses caring for people with mental retardation and severe behavior problems. *Mental Retardation, 42*, 106-21.
- Goleman, D. (1995). *Emotional Intelligence*. New York, NY: Bantam Books.
- Hastings, R. P. (1995). Understanding factors that influence staff responses to challenging behaviours: An exploratory interview study. *Mental Handicap Research, 8*, 296-320.
- Hastings, R. P. (1997). Measuring staff perceptions of challenging behaviour: the challenging behaviour attributions scale (CHABA). *Journal of Intellectual Disability Research, 41*, 495-501.

- Hastings, R. P., & Remington, B. (1994). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *The British Journal of Clinical Psychology, 33*, 423-438.
- Hatton, C., Brown, R., Caine, A., & Emerson, E. (1995). Stressors, coping, strategies, and stress-related outcomes among direct care staff in staffed houses for people with learning disabilities. *Mental Handicap Research, 40*, 148-156.
- Jenkins, R., Rose, J., & Lovell, C. (1997). Psychological well-being of staff working with people who have challenging behaviour. *Journal of Intellectual Disability Research, 41*, 502-511.
- Lambrechts, G., Kuppens, S., & Maes, B. (2009). Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research, 53*, 620-632.
- Matthews, G., & Zeidner, M. (2000). Emotional Intelligence, adaptation to stressful encounters, and health outcome. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 459-489). San Francisco, CA: Jossey-Bass Inc.
- Mayer, J. D., Caruso, D. R., Salovey, P., & Sitarenios, G. (2001) Emotional intelligence as a standard intelligence. *Emotion, 1*, 232-242.
- Mitchell, G., & Hastings, R. P. (2001). Coping, burnout, and emotion in staff working in community services for people with challenging behaviors. *American Journal on Mental Retardation, 5*, 448-459.
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences, 47*, 36-41.
- Reid, D. H., Parsons, M. B. Lattimore, L. P., Towery, D. L., & Reade, K. K. (2005). Improving staff performance through clinician application of outcome management. *Research in Developmental Disabilities, 26*, 101-116.
- Reiff, H. B., Hatzes, N. M., Bramel, M. H., & Gibbon, T. (2001). The relation of LD and gender with emotional intelligence in college students. *Journal of Learning Disabilities, 34*, 66-78.
- Rose, J., Jones, F., & Fletcher, B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research, 42*, 163-172.
- Sameroff, A. J. (1995). General systems theories and developmental psychopathology. In D. Cicchetti, & D. J. Cohen (Eds.), *Developmental psychopathology. Vol. 1: Theory and methods* (pp. 659-695). New York: John Wiley.
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Singh, A. N., Adkins, A. D., & Singh, J. (2009). Mindful staff can reduce the use of physical restraints when providing care to individuals with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities, 22*, 194-202.
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Curtis, W. J., Wahler, R. G., Sabaawi, M. et al. (2006). Mindful staff increase learning and reduce aggression in adults with developmental disabilities. *Research in Developmental Disabilities, 27*, 545-558.
- Sjölund, M., & Gustafsson, H. (2001). *Outcome study of a leadership development assessment and training program based on emotional intelligence*. An internal report prepared for the Skanska Management Institute in Stockholm, Sweden.
- Suda, K. T., & Miltenberger, R. G. (1993). Evaluation of staff management strategies to increase positive interactions in a vocational setting. *Behavioral Residential Treatment, 8*, 69-88.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., Bosman, A. M. T., & Jahoda, A. (2009). A meta-analysis of staff-training: elements determining effectiveness. *Research in Developmental Disabilities, 30*, 503-511.
- Wallander, J. L., Dekker, M. C., & Koot, H. M., (2003). Psychopathology in children and adolescents with intellectual disability: Measurement, prevalence, course, and risk. In L. M. Glidden (Ed.), *International Review of Research in Mental Retardation*, Vol. 26 (pp. 93-134). San Diego, CA: Academic Press.
- Wasseveld, R., Overbeeke, S., & Derksen, J. (2007). Kan emotionele intelligentie worden getraind? [Is emotional intelligence trainable?] *Psychologie & Gezondheid, 35*, 182- 188.





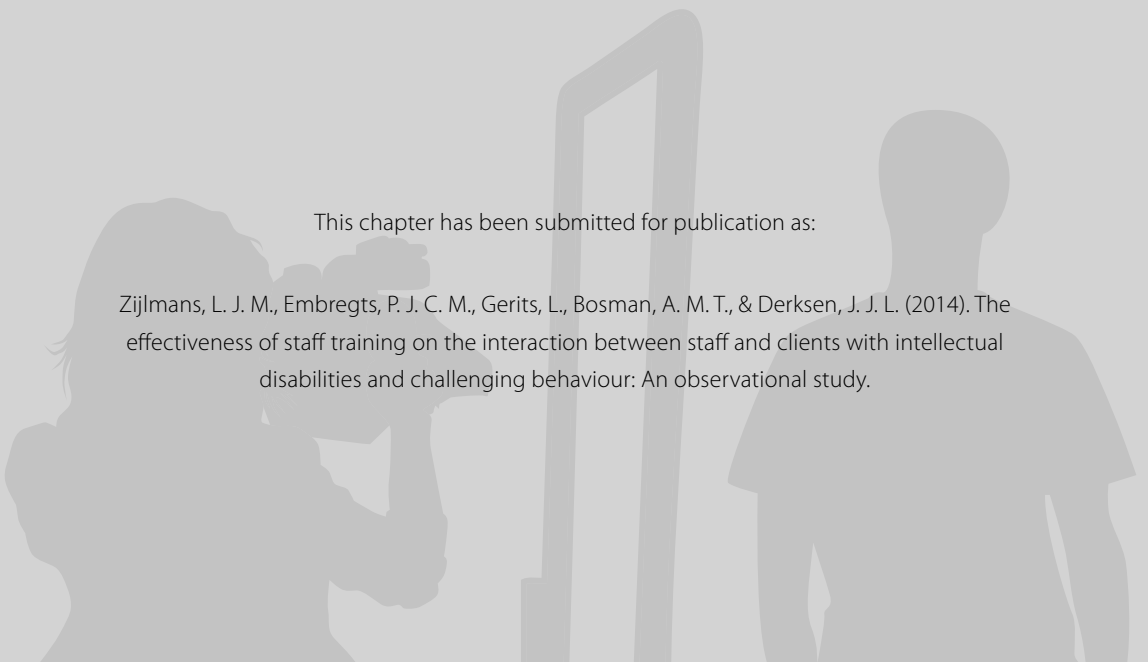
# Chapter 6

---

## **The effectiveness of staff training on the interaction between staff and clients with intellectual disabilities and challenging behaviour: An observational study**

This chapter has been submitted for publication as:

Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2014). The effectiveness of staff training on the interaction between staff and clients with intellectual disabilities and challenging behaviour: An observational study.





## **Abstract**

Interpersonal relationships between support staff and clients have impact on wellbeing of clients. Self-determination theory describes three universal human needs that determine levels of wellbeing: relatedness, autonomy, and competence. The support of fulfillment of clients' needs is expressed in daily interactions between staff and clients with intellectual disabilities. The aim of this study was to investigate the effectiveness of a staff training on staff-client interaction. Participants were 37 staff members and 37 clients. A pre-test-post-test control group design was used. Video recordings of interactions between staff and clients were analysed with an observational system based on self-determination theory. The experimental group showed a significant increase of support of fulfillment of clients' needs, whereas the control group did not. Staff training lead to an improvement of interaction between clients and staff, defined in terms of supporting fulfillment of clients' needs. These conclusions are in line with a professional loving approach in which an involved staff attitude is key to good quality of care.

## 6.1 Introduction

Over the past decades, the role of support staff in the care for people with intellectual disabilities (ID) received increased attention and their importance in the provision of care and support for clients has been acknowledged (Emerson, Remington, Hatton, & Hastings, 1995; Hastings, 2010; Rice & Rosen, 1991). Individuals with ID are at risk for developing challenging behaviour (CB) (Wallander, Dekker, & Koot, 2003). Consequently, support staff working with these individuals are often confronted with behaviour like aggression or self-injury, which can lead to a range of negative emotional reactions in these staff members such as: fear, anger, irritation, and disgust (Bromley & Emerson, 1995; Hastings, 1995; Hatton, Brown, Caine, & Emerson, 1995). Research has shown that negative emotions affect staff behaviour and in turn the interaction between clients and staff (Allen & Tynan, 2000; Rose, Jones, & Fletcher, 1998). As the interpersonal relationships between staff and clients are crucial predictors of the wellbeing of clients (Schalock, 2004), negative staff emotions and staff-client interactions are important issues to study and target in interventions.

The construct of wellbeing has been subject of a theoretical debate (Cacioppo & Berntson, 1999; Diener, 2000; Seligman & Csikszentmihalyi, 2000) resulting in an innovative theoretical framework on wellbeing developed by Ryan and Deci (1985, 2000, 2001), called self-determination theory. In their work, Ryan and Deci distinguish three basic and universal needs of human beings: Relatedness, autonomy, and competence. Relatedness refers to a sense of belonging or relating to a group or to another individual. Autonomy refers to the feeling that one can make his or her own decisions and choices related to personal goals. Competence refers to the feeling one can exhibit and regulate his or her behaviour that results in a certain outcome. The extent to which these needs are fulfilled, determines the level of self-motivation and wellbeing the individual experiences (Ryan & Deci, 2000). Fulfilment strongly depends on the social environment of the individual shown by the specific definitions of the basic needs. For instance, the feeling of being an autonomous individual can be increased when the direct social environment of a person stimulates him to make his own choices and express his own opinions and ideas. In an environment in which own opinions and wishes are being rejected or disapproved, the individual will experience less autonomy. In addition, according to self-determination theory, individuals can only experience optimal wellbeing when all three needs are being satisfied (Ryan & Deci, 2000). For instance, social environments that fulfil the need of competence but fail to nurture relatedness do not have a positive impact on wellbeing and can even result in a decreased level of wellbeing.

Although research has not focused on the applicability of the theory to the population of individuals with ID, Deci (2004) argues that self-determination theory provides a useful model for guidance of intervention development focused on improving life circumstances of individuals with ID. The support of fulfilment of clients' needs in terms of relatedness, autonomy, and competence is expressed in daily interactions between staff and clients with ID. Individuals with ID are more prone to develop CB which causes negative staff emotions and is of negative influence of staff behaviour

and thus on the relationship between staff and clients. This indicates that fulfilment of the needs of relatedness, competence, and autonomy by support staff is frequently jeopardised when CB is present. Interventions focused on knowledge, skills, and attitude of support staff play a crucial role in improving staff behaviour (Allen & Tynan, 2000; Embregts, 2009, 2011). Staff training and coaching can be aimed at several issues, such as physical interventions (Allen & Tynan, 2000), positive behaviour support (Car et al., 2002), stress management (Van Oorsouw, Embregts, Bosman, & Jahoda, 2013), and supporting self-determination of clients (Wong & Wong, 2008). In addition, a meta-analysis of Van Oorsouw and colleagues (Van Oorsouw, Embregts, Bosman, & Jahoda, 2009) showed that a combination of an in-service training and coaching-on-the-job is most effective. Subsequently, feedback such as verbal or video feedback should always be part of staff training programs (Van Oorsouw et al, 2009).

The aim of this study was to determine the effectiveness of a training program described in Zijlmans, Embregts, Gerits, Bosman, and Derksen (2011) on staff-client interaction. Interaction is operationalised as staff support of clients' need for fulfilment. The program is focused on the emotional intelligence of staff members and interaction between staff and clients. Support staff received feedback on their own emotional intelligence and the influence of it on their interaction with clients. Emotional intelligence is defined as "...an array of emotional, personal and social abilities and skills that influence an individual's ability to cope effectively with environmental demands and pressures" (Bar-on, Brown, Kirkcaidy, & Thomé, 2000, p. 1108). The reason for implementing emotional intelligence of support staff in the training program is that research has shown that emotional intelligence is related to general functioning and wellbeing (Gerits, Derksen, & Verbruggen, 2004, Mayer, Caruso, Salovey, & Sitarenios, 2001), may change over time (Goleman, 1995), and appears to be trainable (Freedman, 2003). Moreover, Birks and Watt (2007) proposed that emotional intelligence affects patient-centred care, in which the ability to manage, read, understand, and accept emotions and feelings of one self and one's client is crucial. These are also important aspects of the needs described in self-determination theory.

The main goal of the training program is to improve wellbeing of clients, by improving interaction between support staff and clients. More specific, we focus on daily interactions between staff and clients with ID and CB in terms of the fulfilment of relatedness, autonomy and competence. To analyse the impact of the training program on staff-client interactions, videotapes of staff members interacting with their clients were made. The following research question is answered in the present study: Does the training program improve daily interactions between staff and clients in terms of support of fulfilment of relatedness, autonomy, and competence? Because interaction is obviously a process that takes place between two (or more) individuals, in this case a staff member and a client, an additional step was made by focusing not only on staff behaviour but also on client behaviour and the effect of the training program on it.

## 6.2 Method

### 6.2.1 Participants

This study was conducted within four residential settings for children, adolescents and adults with ID and CB. The study was approved by the scientific and ethics committee from one of the participating organisations. The study was mainly aimed at support staff, but client behaviour was also taken into account. Clients and/or their representatives gave permission for making video recordings by filling in a written consent form. After the residential settings signed up for participation, the experimenter presented the research plan to the managing board of the facilities. Subsequently, all teams working with clients with CB were selected by the managers. Within the teams, staff members were randomly selected to participate in either the training (experimental) group or the control group.

Prior to the start of the research each participating staff member selected a client with whom they experienced difficulties in the interaction. It should be noted that staff members participated in subgroups of three, and each subgroup selected one client. Staff members participating in the experimental group had the first choice. After they made their choice, staff of the control group selected a different client. Initially, 214 support staff participated in this research. Each staff member made video recordings of themselves interacting with their clients. We decided to use a selection of the video recordings based on the following criteria:

- Staff and client must both be clearly captured by the video camera;
- In case of verbal communication, the observer had to be able to hear and understand the staff member and client;
- In case of dominant sound of radio, television or other individuals in the room that causes arousal, the video recording was not taken into account;
- The taped interaction had to be a one-on-one situation;
- A recording had to have a minimum duration of five minutes.

After this strict selection a number of 55 support staff remained. However, only 37 clients participated because several staff members worked with the same client. Because we wanted to focus on unique dyads of clients and staff, a random selection of staff working with the same client was made. In this way 37 unique dyads emerged. Table 6.1 presents relevant descriptive statistics of participating staff. Staff members were given the instruction to record 10 minutes of the pre- and post-test. It appeared that the duration of the video recordings ranged from five to 45 minutes (some participants forgot to turn off the camera, while others only taped for five minutes).

Ages of clients ranged from 11 to 61 (mean = 25.3,  $SD = 15.5$ ). Severity of clients' ID ranged from mild (89%), and moderate (6%) to severe (5%). Most prevalent psychiatric diagnoses were Autism Spectrum Disorder (50%), Attention Deficit Hyperactivity Disorder (13%), and Attachment Disorder (22%).

**Table 6.1** Descriptive Statistics of Participant Groups

		Experimental group	Control group
Gender	Women	10	11
	Men	9	7
Age	<i>M</i>	35.89	35.05
	<i>SD</i>	10.82	9.28
Work experience ID (months)	<i>M</i>	79.16	127.81
	<i>SD</i>	52.04	108.99
Work experience with specific client (months)	<i>M</i>	43.26	50.92
	<i>SD</i>	33.95	56.47
Contract (hours a week)	<i>M</i>	31.08	30.50
	<i>SD</i>	4.05	5.13

### 6.2.2 Intervention

Training sessions were provided in committee rooms at the residential facilities. The main aim of the training was to improve emotional intelligence of support staff and staff-client interaction by using two coaching methods: Oral feedback on individual emotional intelligence profiles combined with video feedback on daily interactions.

Professional trainers specialised in emotional intelligence, staff-client interactions, and providing feedback ran the training program described more in detail in Zijlmans et al. (2011). During the first and second day, staff was trained on the concept of emotional intelligence and its significance for both professional and team work. Staff received feedback on their own emotional intelligence and formulated individual goals that were translated into developmental plans. Examples of individual goals are: "I would like to work in a more structured and methodical way with this client", or "I would like to improve my ability to read and understand emotional signals of this client". The staff members worked on their plans individually, with two subgroup feedback sessions organised 1.5 and 3 months after the start of the training program.

In addition, the video-feedback sessions were initiated during six group sessions of 90 minutes. Before the start of the video-feedback training, the first author and the trainers who provided the training studied treatment plans of clients to select most relevant adequate staff behaviour during interaction with the client. For example, staff members are made aware to be not too demanding on a client with a high level of arousal. Staff members were asked to make video recordings of themselves interacting with clients. These interactions were reviewed in connection with the emotional intelligence of the staff member. The importance of demonstrating certain behaviour was also emphasised. Staff and trainer viewed the videotape, and the staff member being observed was first

asked to comment. Then the trainer and the participant related the staff behaviour to the desirable staff behaviour and the emotional intelligence of the staff member. For instance, if the desirable staff behaviour was recognising and naming client's emotions, this was related to what the staff member actually did in the video fragment and to, for example, scores on the interpersonal subscales like empathy.

The trainer followed a pre-established protocol for verbal description of correct and incorrect responses, contingent praise, and corrective comments to guarantee consistency of feedback across sessions. In the final training session staff received feedback on their new emotional intelligence profiles and made plans for further development. In addition, after finishing the training program support staff were again asked to make video recordings of themselves interacting with their client.

### **6.2.3 Measure**

The video recordings of staff-client interactions were scored with an observation system developed by Custers, Kuin, Riksen-Walraven, and Westerhof (2011). These researchers developed a system based on self-determination theory of Ryan and Deci (2000) in order to determine the quality of interaction between elderly people and their caregivers. Because there was no known observation system based on this theory, they adapted a child-caregiver observation system (Erickson, Sroufe, & Egeland, 1985) showing high agreement with self-determination theory. The scales described in the observation system are derived from the components fulfilment of relatedness, autonomy, and competence.

To be able to use the scales to judge interaction between support staff and individuals with ID and CB, the experimenter consulted six staff members and discussed the applicability of the scales of Custers et al. (2011) to their interactions with residents. Most frequently staff members mentioned the fact that the observation system as developed by Custers et al. (2011) was focused on physical care of elderly people, whereas working with clients with ID and CB more often entails supportive forms of care, such as helping clients with making choices or stimulating clients to fulfil daily skills more independently. Based on the outcomes of those deliberations the observation system was adapted to the care for clients with ID by adding more examples and by shifting the emphasis from forms of physical care to supportive care. In addition, the first and third author discussed the content of the scales. Based on their clinical experience, they specified some parts by adding more examples or changing original examples.

Furthermore, the method of scoring used in the original scale of Custers et al. (2011) was also adapted. Rather than scoring the video recordings as a whole, thus independent of their duration, we choose to divide all recordings into fragments of two minutes to take into account the variability of staff and client behaviour, and to prevent a pre-selection of the video recordings. For instance, recordings of six minutes consisted of three fragments and recordings of 30 minutes were divided into 15 fragments. Each fragment was judged, independent of the total duration of the recording.

The adapted version of the observation system contained three seven-point rating scales for staff behaviour ranging from (1) very low to (2) low, (3) moderately low, (4) moderate, (5) moderately

high, (6) high, and (7) very high. These scales give an indication of the degree to which support staff contributes to the fulfilment of clients' three basic needs, that is, relatedness, autonomy, and competence, during interactions:

- Support of relatedness: the extent to which staff shows empathy, warm interest in the client, makes conversation, and provides emotional support;
- Support of autonomy: the extent to which staff respects the client as an individual with his or her own perspectives and choices;
- Support of competence: the extent to which staff supports the client in his/her daily routines by structuring the situation and by showing supportive and helping behaviours.

Examples of descriptions belonging to a high score on support of relatedness are: "The staff member provides adequate emotional support to the client. He/she seems calm and shows empathy. He/she shows a warm interest in the client, takes his/her time to make the client feel safe and accepted. He/she responds adequately to the emotional signals of the client and reassures the client verbally as well as non-verbally. The staff member seems to enjoy the interaction with the client and provides a comfortable atmosphere. He/she seems to sense the needs of the client flawlessly". Examples of descriptions belonging to a high score on support of autonomy are: "The staff member clearly respects and appreciates the ideas and opinions of the client. He/she treats the client like an autonomous individual with his/her wishes and beliefs. The staff member has a conversation with the client, he/she does not talk to the client. He/she gives the client space to express his/her own ideas and wishes". Examples of descriptions belonging to a high score on support of competence are: "The staff member provides adequate structure and explanation and stimulates the client to perform tasks and activities. He/she compliments the client on adequately performed activities and adapts his/her pace to that of the client. The staff member does not dominate the interaction and does not patronise the client".

Because the client is obviously also involved in staff-client interaction, Custers et al. (2011) developed three seven-point scales to measure clients' positive and negative affect and behaviour in addition to the staff behaviour scales:

- Negativity (irritation, anger, aggression)
- Depressed affect (fear, tension, sadness)
- Positive affect (enthusiasm, cheerfulness, enjoyment)

A high score on negativity was defined as: "The client repeatedly exhibits negative emotions and behaviours such as physical or verbal aggression. He/she looks very dissatisfied." A high score on depressed affect was defined as: "The client shows fearful and depressed emotions very frequently. He/she shows withdrawn behaviour". A high score on positive affect was defined as: "The client shows signs of positive affect such as laughing, making jokes, being enthusiastic, showing interest in the support staff, or being proud very frequently". The definitions were operationalised into more concrete, observable, and detailed behaviours.

### 6.2.4 Inter-observer reliability

To determine the inter-observer reliability of the scoring system, the first and third author observed video recordings of staff and clients interacting. The total duration of the observations was six hours. They discussed their independent scores until they reached an 80% agreement level. Next, the experimenter randomly selected 20% of all gathered video fragments. In line with Custers et al. (2011), it was decided that scores that differed one point were considered to be an agreement. An agreement of 93% was reached.

### 6.2.5 Design

The effect of the training program on interaction was evaluated in a pre-test-post-test control group design. Prior to the start of the training program and shortly after the last training session staff members were videotaped during interactions with the clients they selected. Mean scores of age, work experience with individuals with ID, work experience with the specific client, and contract (hours a week) of participants that completed the training program versus participants of the control group were compared with an independent sample *t*-test. Mean scores did not differ significantly; the control group and experimental group did not differ from each other on these variables.

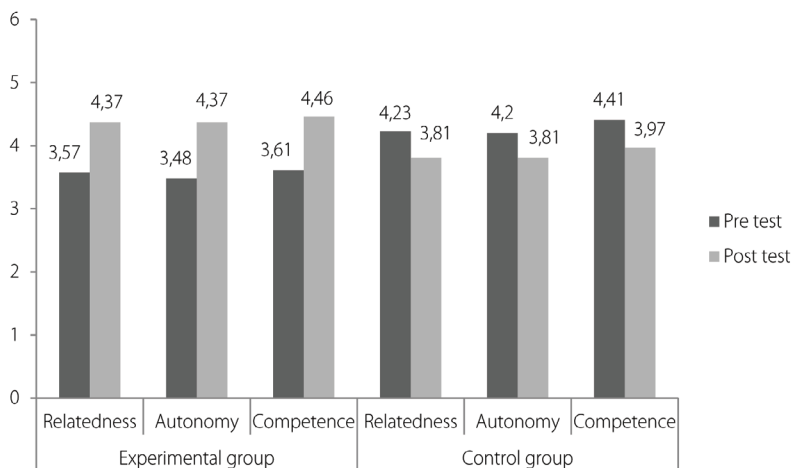
## 6.3 Results

### 6.3.1 The effectiveness of the training on need fulfilment provided by staff

First, to determine the effect of the training on staff and client behaviour, all scores were computed into mean scores for each scale. This resulted in six mean scores for each participant on each measurement (pre-test and post-test). To answer the first research question, only the staff scales (support of relatedness, autonomy, and competence) regarding staff behaviour were taken into account. To determine whether the training improved staff support of need fulfilment, 2 (condition: experimental vs. control) X 3 (scales: support of relatedness, support of autonomy, and support of competence) X 2 (measurement: pre-test, post-test) analysis of variance was performed on the mean scores of the participants. Scales and measurements were treated as within-subjects factors and condition as between-subjects factor. Figure 6.1 shows the mean scores for each staff behaviour scale in both conditions on pre-test and post-test.

Neither the third-order interaction between condition, scales, and measurement ( $F < 1$ ) nor the second-order interactions between scales and condition ( $F < 1$ ) and scales and measurement ( $F(2, 34) = 1.56, p = .22$ ) reached significance. Because of the significant interaction between condition and measurement ( $F(1, 35) = 25.70, p = .001$ ) separate analyses for the experimental and control groups were justified. Subsequently, a 3 (scale) by 2 (measurement) repeated measures analysis of variance was performed on the mean scores of the staff scales.



**Figure 6.1** Pre- and Post-Test Scores Staff Scales

For the experimental group, scores on all three scales, that is, support of relatedness, support of autonomy, and support of competence significantly increased significantly after the intervention. The interaction between scale and measurement was not significant ( $F(2, 17) = 2.51, p = .11$ ). The main effect of scales was not significant, whereas the main effect of measurement was,  $F(1, 18) = 23.64, p = .001$ . Scores on the post-test were higher than on the pre-test. There was no significant interaction effect between measurement and scales.

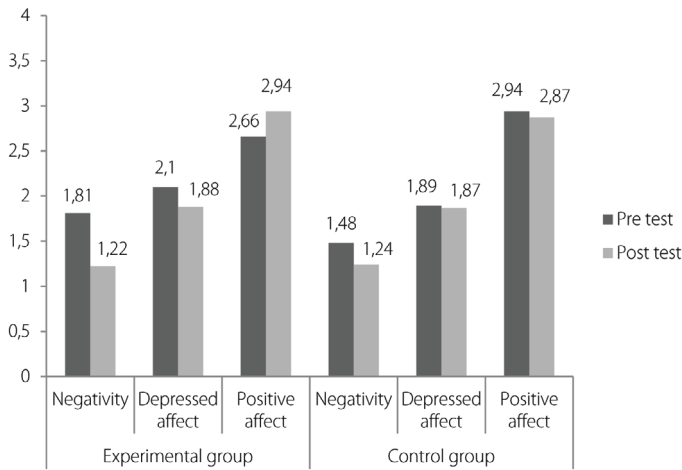
In the control condition there were main effects of measurement ( $F(1, 17) = 5.22, p = .04$ ) and of scale ( $F(2, 17) = 4.23, p = .03$ ), but no significant interaction effect. The main effect of measurement revealed lower scores on the post-test than on the pre-test. This means that participants in the control group, contrary to the experimental group, showed decreased scores at the post-test. Post-hoc Bonferroni corrected pairwise comparisons revealed that scores on support of competence were significantly higher than scores on support of relatedness ( $p = .04$ ). No other significant differences between scales occurred. This finding means that staff showed higher levels of support of competence of clients (for example praising clients, stimulating clients to perform an activity) than support of relatedness (for example responding adequately to emotional cues of clients, showing interest and affection towards clients).

Summarised, the experimental group had higher scores on the post-test than on the pre-test, whereas the control group had lower scores on the post-test than on the pre-test. These findings indicate that the training positively affected the support of staff members with regard to clients' needs of relatedness, autonomy, and competence.

### 6.3.2 The effect of the training on client behaviour

To determine the effect of the training on client affect and behaviour, only the final three scales with respect to clients were taken into account. A 2 (condition: experimental vs. control) X 3 (scales: negativity, depressed affect, positive affect) X 2 (measurement: pre-test, post-test) repeated measures analysis of variance was performed on the mean scores of the participants. Again, scales and measurements were treated as within-subjects factors and condition as between-subjects factor. Figure 6.2 shows the mean scores for each client behaviour scale in both conditions on pre-test and post-test.

Figure 6.2 Pre- and Post-Test Scores Client Scales



None of the interaction effects among condition, measurement, and scale were significant. The main effect of condition was not significant, whereas the main effect of scale was,  $F(2, 34) = 23.42, p = .001$ . Post-hoc  $t$  tests revealed that scores on negativity were significantly lower than scores on depressed affect ( $p = .001$ ) and scores on positive affect ( $p = .001$ ). In addition, scores on positive affect were significantly higher than scores on depressed affect ( $p = .01$ ). The main effect of measurement was significant,  $F(1, 35) = 4.11, p = .05$ ; pre-test scores were higher than post-test scores. These findings indicate that the staff training did not have any impact on the positive and negative behaviour of clients.

## 6.4 Discussion

This study showed that a staff training program focused on emotional intelligence and interaction between staff and clients, leads to an improvement of the staff support of need fulfilment of clients. Individual wellbeing is embedded in a social context, and is determined by the extent to which we experience relatedness, autonomy, and competence (Ryan & Deci, 2001). This obviously applies to individuals with ID (Deci, 2004). As interpersonal relationships between staff and clients are important predictors of the wellbeing of clients (Schalock, 2004), we assessed the effectiveness of a staff training on the support of fulfilment of human needs of people with ID outlined in self-determination theory (Ryan & Deci, 2001). To our knowledge, this theory has not been used or adapted before to the field of research focusing on individuals with ID. However, Deci (2004) states that self-determination theory could play a large role when it comes to increasing wellbeing of clients by focusing on staff. In line with this, interaction between staff and clients was operationalised in terms of support of fulfilment of three human needs outlined in self-determination theory (Custers et al., 2011; Ryan & Deci, 2001). In addition, six support staff were consulted to discuss the applicability of the scales to their interactions with clients with ID and CB. The adapted scales were used to determine the effectiveness of a staff training on interaction between staff and clients. The evaluated training program, focused on emotional intelligence of support staff and interaction between staff and clients, resulted in significant improvements on support of relatedness, autonomy, and competence in the experimental group. The control group did not show any improvements. More specific, support staff that participated in a training focused on emotional intelligence and treatment skills showed increased levels of recognition of adequate responses to emotional signals of their client. Additionally, these staff treated their clients more like self-dependent individuals and more often respected their opinions and wishes. Finally, after the training program support staff showed higher levels of support of competence, they praised their clients more often and stimulated clients more to perform activities and tasks on their own.

A description of pre- and post-test measures of a staff member who showed a clear increase in support of autonomy can clarify the effect of the training. In the pre-test video recording, we see the staff member (S) and client (C) talking about the fact that the client's room is a mess. S emphasises that the client should clean up her room, but C clearly does not agree with the staff member. C points out that she does not think her room is a mess and that she has other things to do that are more important to her. S says that she demands C to clean up her room and invigorates this by threatening to take away the reinforcer that is related to cleaning up her room. In this specific interaction, S scores low on autonomy. In the post-test recording, we see the same situation. S and C are having a conversation on several tasks C should perform. S asks C: "Which task do you think is most important, and how would you like to perform it?" The conversation is continuous and S asks C what kind of reinforcer she would like to have. In this video recording S shows much more respect for C's wishes and ideas than in the first recording. In the post-test recording S scores high on autonomy.

Increased self-determination leads to higher levels of experiencing relatedness to other individuals and groups and to increased choice and more control over decisions and life, which enhances quality of life for individuals with ID (Gagne, 1994). It seems very likely that clients interacting with support staff who show high levels of support, feel accepted and respected, which could stimulate individual development (Roeleveld, Embregts, Hendriks, & Van den Bogaard, 2011). Having knowledge on and being equipped with skills related to support of need fulfilment, is simply not enough to provide clients with a safe, warm, and motivating environment and giving clients the feeling they are related, autonomous, and competent (Embregts, 2009). Sincerely engaging with clients, really listening to them, respecting them, and accurately tuning in to the emotional signals of clients are important interpersonal capacities that define staff-client relationships and appeal to staff attitude. It is this interpersonal attitude that forms the foundation of the training program we studied. Emotional intelligence can be described as a personal style or attitude with which individuals deal with situations they are confronted with in daily life. The training program gives staff members insight into that attitude and by providing them with video feedback, they are confronted with their attitude towards clients. In addition, when focusing on the specific definitions of aspects of emotional intelligence and the three components of self-determination theory, there appear to be many similarities. For instance, part of the definition of relatedness is “a staff member scoring high on this scale expresses positive regard and emotional support to the client. He/she is empathic in his/her reactions, makes eye contact, touches the client at appropriate moments, smiles a lot, and talks calmly. He/she listens to the client and responds promptly and appropriately to signals of the client”. This description is in line with specific definition of the interpersonal subscale of the EQ-i: “To be aware of and understand how others feel, to identify with one’s social group and cooperate with others, and to establish mutually satisfying relationships and relate well with others.” (Bar-On, 2006, p. 21).

A meta-analysis of Van Oorsouw et al. (2009) showed that studies evaluating the effectiveness of staff training rarely focus on client outcome variables, such as client behaviour. In this study, client behaviour during interactions was measured. Client behaviour did not show a significant improvement after the training program, which implies that the training program only affected staff behaviour and not client behaviour. This finding is in line with the results of Damen, Kef, Worm, Janssen, and Schuengel (2011) who conducted a study to determine the effectiveness of a video-feedback intervention for staff. This intervention was aimed at interaction between staff and clients, more specifically, it focused on staff’s adequate detecting of and responding to clients’ behavioural signals. Damen et al. (2011) showed that staff behaviour did improve but client behaviour did not, similarly to the findings of the current study. It is possible that changes in staff behaviour were not large enough to alter client behaviour or that certain client behaviour that was not measured in fact did change. The fact that client behaviour did not change in our study does not mean that a client’s wellbeing did not increase. Custers et al. (2011) measured wellbeing of residents in nursing homes with questionnaires addressing aspects of wellbeing. She did not find an effect of level of need fulfilment support by nurses on general wellbeing of residents. It is, however, questionable whether

questionnaires provide an adequate representation of an individual's wellbeing. A study conducted with interviews, showed that clients with moderate and mild ID are able to express their feelings and opinions on staff behaviour (Roeleveld et al., 2011). Emerson and Hatton (2008) also interviewed clients on individual wellbeing by using a semi-structured interview with additional pictures and pictograms to support clients in answering the questions. Future research should focus on measuring wellbeing of individual clients in an objective and in a subjective way, for instance by observing and interviewing clients.

Although the current study takes a first step in assessing the effectiveness of a staff training on need fulfilment of clients with ID and CB, some limitations should be noted. First, the sample size used in this study was small and there are only a few measurement moments, which could mean that possible variability of or changes in staff and client behaviour was missed. Subsequently, a random selection of staff members was made to guarantee unique dyads of staff and clients. However, in the original sample several staff members worked with the same client, causing dependency of the observations. This study did not focus on this dependency and the moderating or mediating influence on the effectiveness of the training program. In addition, it is not inconceivable that the effect of a staff training is larger for staff working within teams in which more staff members participated in the training. In sum, future research should focus on larger sample sizes, should adopt a more longitudinal approach to include variation within need fulfilment, and should take into account staff and client variables and dependency of staff working with the same client or in a team in which more staff members are trained. Additionally, this study took a first step in adapting an instrument based on self-determination theory to the care for individuals with ID. Future research should continue this process in order to refine and test the theory and the suitability of it for this specific group.

Hastings (2010) emphasised that when it comes to training staff, a focus should be put on improving the relationship between staff and clients. Subsequently, Van Oorsouw et al. (in press) concluded that in order to improve quality of interaction and relationships, it is not enough to increase only knowledge and skills of staff. The training program investigated here contains elements of knowledge and treatment skills, but also important aspects of attitude and self-awareness. By training and coaching these elements, the relationship between staff and clients may be improved. The conclusions drawn here fit with a client-centred and professional loving approach (Birks & Watt, 2007; Hermsen, Embregts, Hendriks, & Frielink, 2014) in which a caring and involved staff attitude is key to good quality of care.

## References

- Allen, D., & Tynan, H. (2000). Responding to aggressive behavior: impact of training on staff members' knowledge and confidence. *Mental retardation*, 38, 97-104.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI) 1. *Psicothema*, 18, 13-25.
- Bar-On, R., Brown, J. M., Kirkcaldy, B. D., & Thomé, E. P. (2000). Emotional expression and implications for occupational stress; an application of the Emotional Quotient Inventory (EQ-i). *Personality and Individual Differences*, 28, 1107-1118.
- Birks, Y. F., & Watt, I. S. (2007). Emotional intelligence and patient-centred care. *Journal of the Royal Society of Medicine*, 100, 368-374.
- Bromley, J., & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. *Journal of Intellectual Disability Research*, 39, 341-352.
- Cacioppo, J. T., & Berntson, G. G. (1999). The affect system architecture and operating characteristics. *Current Directions in Psychological Science*, 8, 133-137.
- Carr, E. G., Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A. P., Sailor, W., ... & Fox, L. (2002). Positive Behavior Support Evolution of an Applied Science. *Journal of positive behavior interventions*, 4, 4-16.
- Custers, A. F., Westerhof, G. J., Kuin, Y., & Riksen-Walraven, M. (2011). Need fulfillment in caring relationships: Its relation with well-being of residents in somatic nursing homes. *Aging & mental health*, 14, 731-739.
- Damen, S., Kef, S., Worm, M., Janssen, M. J., & Schuengel, C. (2011). Effects of video-feedback interaction training for professional caregivers of children and adults with visual and intellectual disabilities. *Journal of Intellectual Disability Research*, 55, 581-595.
- Deci, E. L. (2004). Promoting intrinsic motivation and self-determination in people with mental retardation. *International Review of Research in Mental Retardation*, 28, 1-29.
- Deci, E. L., & Ryan, R. M. *Self-Determination*. John Wiley & Sons, Inc., 1985.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, 55, 34.
- Embregts P. (2009). *Zorg voor mensen met een verstandelijke beperking. Menslievende professionalisering in de zorg voor mensen met een verstandelijke beperking*. HAN University Press, Arnhem.
- Embregts, P. J. C. M. (2011). *Zien, bewogen worden, in beweging komen*. Tilburg: Prismaprint.
- Emerson, E., & Hatton, C. (2008). Self-reported well-being of women and men with intellectual disabilities in England. *American Journal on Mental Retardation*, 113, 143-155.
- Emerson, E., Remington, B., Hatton, C., & Hastings, R. P. (1995). Special issue on staffing. *Mental Handicap Research*, 8, 215-339.
- Erickson, M. F., Sroufe, L. A., & Egeland, B. (1985). The relationship between quality of attachment and behavior problems in preschool in a high-risk sample. *Monographs of the society for research in child development*, 147-166.
- Freedman, J. (2003). Key lessons from 35 years of social-emotional education: How self-science builds self-awareness, positive relationships, and healthy decision-making. *Perspectives in Education*, 21, 69-80.
- Gagne, R. (1994). A self-made man. In V. J. Bradley, J. W. Ashbaugh, & B. C. Blaney (Eds.), *Creating individual supports for people with developmental disabilities* (pp. 327-334). Baltimore: Paul H. Brookes.
- Gerits, L., Derksen, J. J. L., & Verbruggen, A. B. (2004). Emotional intelligence and adaptive success of nurses caring for people with mental retardation and severe behavior problems. *Mental Retardation*, 42, 106-21.
- Goleman, D. (1995). *Emotional Intelligence*. New York, NY: Bantam Books.
- Hastings, R. P. (1995). Understanding factors that influence staff responses to challenging behaviours: An exploratory interview study. *Mental Handicap Research*, 8, 296-320.

- Hastings, R. P. (2010). Support staff working in intellectual disability services: The importance of relationships and positive experiences. *Journal of Intellectual & Developmental Disability, 35*, 207-210.
- Hatton, C., Brown, R., Caine, A., & Emerson, E. (1995). Stressors, coping strategies and stress-related outcomes among direct care staff in staffed houses for people with learning disabilities. *Mental Handicap Research, 8*, 252-271.
- Hermesen, M. A., Embregts, P. J. C. M., Hendriks, A. H. C., & Frielink, N. (2014). The human degree of care. Professional loving care for people with a mild intellectual disability: an explorative study. *Journal of Intellectual Disability Research, 58*, 221-232.
- Mayer, J. D., Caruso, D. R., Salovey, P., & Sitarenios, G. (2001) Emotional intelligence as a standard intelligence. *Emotion, 1*, 232-242.
- Rice, D. M., & Rosen, M. (1991). Direct-care staff: A neglected priority. *Mental Retardation, 29*, 3-4.
- Roeleveld, E., Embregts, P., Hendriks, L., & Van den Bogaard, K. (2011). Zie mij als mens! Noodzakelijke competenties voor begeleiders volgens mensen met een verstandelijke beperking. In P. Embregts, & L. Hendriks (Red.), *Menslievende professionalisering in de zorg voor mensen met een verstandelijke beperking: Aansluiten bij cliënten en hun ouders* (pp. 41-60). Arnhem: HAN University Press.
- Rose, J., Jones, F., & Fletcher, B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research, 42*, 163-172.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist, 55*, 68.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology, 52*, 141-166.
- Schalock, R. L. (2004). The concept of quality of life: what we know and do not know. *Journal of Intellectual Disability Research, 48*, 203-216.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American psychologist, 55*, 5.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., Bosman, A. M. T., & Jahoda, A. (2009). A meta-analysis of staff-training: elements determining effectiveness. *Research in Developmental Disabilities, 30*, 503-511.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., Bosman, A. M. T., & Jahoda, A. (2013). Writing About Stress: The Impact of a Stress-Management Programme on Staff Accounts of Dealing with Stress. *Journal of Applied Research in Intellectual Disabilities*. doi: 10.1111/jar.12066
- Wallander, J. L., Dekker, M. C., & Koot H. M. (2003). Psychopathology in children and adolescents with intellectual disability: measurement, prevalence, course, and risk. In: *International Review of Research in Mental Retardation*, Vol. 26 (ed. L. M. Glidden), pp. 93-134. Academic Press, San Diego, CA.
- Wong, P. K. S., & Wong, D. F. K. (2008). Enhancing staff attitudes, knowledge and skills in supporting the self-determination of adults with intellectual disability in residential settings in Hong Kong: a pretest-posttest comparison group design. *Journal of Intellectual Disability Research, 52*, 230-243.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2011). Training emotional intelligence related to treatment skills of staff working with clients with intellectual disabilities and challenging behaviour. *Journal of Intellectual Disability Research, 55*, 219-230.







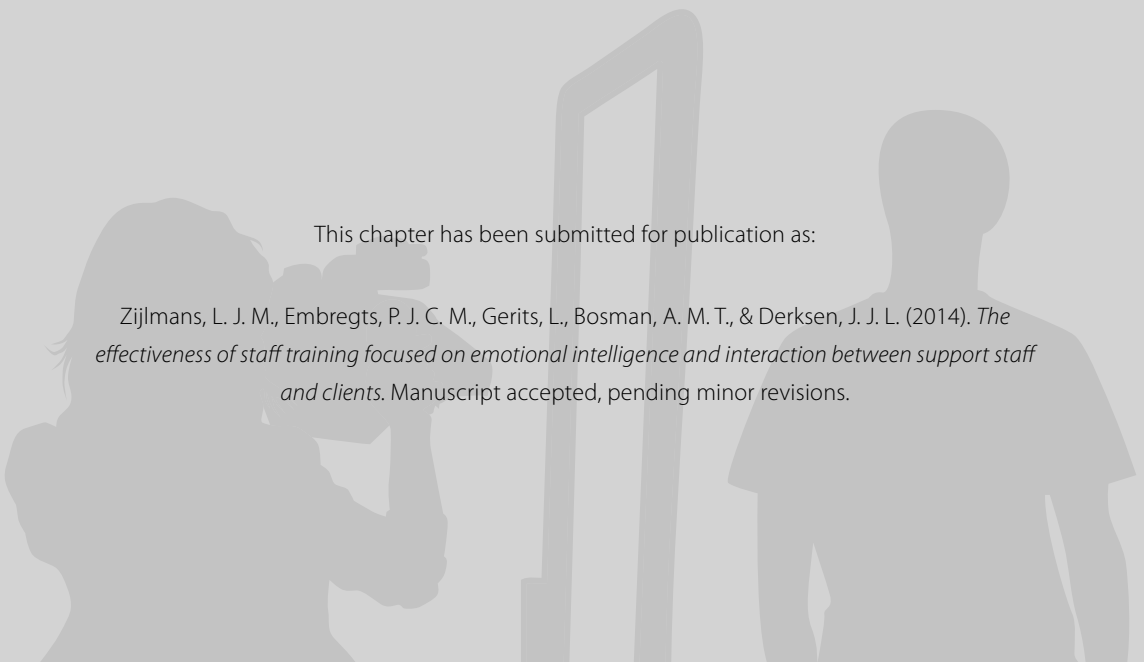
# Chapter 7

---

## **The effectiveness of staff training focused on emotional intelligence and interaction between support staff and clients**

This chapter has been submitted for publication as:

Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2014). *The effectiveness of staff training focused on emotional intelligence and interaction between support staff and clients*. Manuscript accepted, pending minor revisions.



## **Abstract**

Recent research addressed the relationship between staff behaviour and challenging behaviour of individuals with an intellectual disability. Consequently research on interventions aimed at staff is warranted. The present study focused on the effectiveness of a staff training aimed at emotional intelligence and interactions between staff and clients. The effects of the training on emotional intelligence, coping style, and emotions of support staff were investigated. Participants were 214 support staff working within residential settings for individuals with intellectual disabilities and challenging behaviour. The experimental group consisted of 76 staff members, 138 staff members participated in two different control groups. A pre-test, post-test, follow-up control group design was used. Effectiveness was assessed using questionnaires addressing emotional intelligence, coping, and emotions. Emotional intelligence of the experimental group changed significantly more than that of the two control groups. The experimental group showed an increase in task-oriented coping, whereas one control group did not. The results with regard to emotions were mixed. Follow-up data revealed that effects within the experimental group were still present four months after the training ended. These results show that staff training aimed at emotional intelligence and staff-client interactions is effective in improving emotional intelligence and coping styles of support staff. However, the need for more research aiming at the relationship between staff characteristics, organisational factors, and their mediating role in the effectiveness of staff training is emphasised.

## 7.1 Introduction

Research regarding individuals with intellectual disabilities (ID) conducted the last decades has shown the importance of aiming at interpersonal relationships of clients in order to investigate or improve quality of life (Van Asselt-Goverts, Embregts, Hendriks, & Frielink, 2014; Hastings, 2010; Schalock & Verdugo, 2002). Additionally, the role of support staff in the social network of people with ID is more and more recognised (Van Asselt-Goverts, Embregts, & Hendriks, 2013; Verdonschot, de Witte, Reichrath, Buntinx, & Curfs, 2009). Individuals with ID often heavily depend on support of their support staff. Because people with ID are more prone to develop forms of challenging behaviour (CB) than people without ID (Wallander, Dekker, & Koot, 2003), support staff are often confronted with CB, such as aggressive behaviour. Staff members dealing with CB often implement interventions that appear to reinforce maintenance of CB (Hastings, 1995; Hastings & Remington, 1994). For instance, clients who show CB often gain attention from their staff, which serves as a reinforcer (Lambrechts, Van Den Noortgate, Eeman, & Maes, 2010).

Challenging behaviour of clients often causes emotional reactions in support staff, such as fear, anger, and annoyance (Bromley & Emerson, 1995; Hastings, 1995; Hatton, Brown, Caine, & Emerson, 1995). These negative emotional reactions may, in turn, lead to higher levels of stress and burnout (Jenkins, Rose, & Lovell, 1997; Rose, Horne, Rose, & Hastings, 2004). Emotional reactions may also negatively affect staff behaviour. Staff who feels threatened by a client's CB will most likely react inadequately to the behaviour (Allen & Tynan, 2000). More specifically, within residential facilities where staff reported low levels of stress, higher levels of support and more positive staff-client interactions were found (Rose, Jones, & Fletcher, 1998).

Research on interpersonal style has shown that support staff who are confronted with CB are less friendly and more controlling than staff working with clients who do not exhibit CB (Willems, Embregts, Bosman, & Hendriks, 2013). Also, staff who experience more negative emotions when working with clients show more hostile and controlling styles (Zijlmans, Embregts, Bosman, & Willems, 2012). These phenomena expressed themselves over the past few years in dreadful events that occurred within health services for people with ID and CB. For instance, in 2011 national media in the United Kingdom revealed that clients staying in a residential facility suffered from physical and psychological abuse by support staff. In the same year, a Dutch television program showed shocking images of a young man with mild ID living in a residential facility in the Netherlands, being tied up to the wall of his bedroom. These are just two examples among many others revealing the powerlessness that staff experiences in working with people who show severe forms of CB. Thus, support staff working with clients with ID and severe forms of CB are in dire need of more adequate interaction and coping styles to deal with these behaviours.

Although research increasingly aims at staff emotions and wellbeing related to client characteristics, staff psychological factors, and organisational factors, little research has been conducted with respect to staff characteristics and individual differences related to CB, emotions, and stress. An important factor

that has been subject of a number of psychological studies and that addresses staff characteristics is coping. Lazarus and Folkman (1984) defined coping as the “cognitive and behavioural efforts a person makes to manage demands that tax or exceed his or her personal resources” (Lazarus, 1995, p.6). Two main coping strategies can be distinguished: problem- or task-oriented coping (aimed at resolving or changing the problematic situations) and emotion-oriented coping (focused on managing the emotions one experiences as a result of a stressful situation). Coping can be seen as a mediator in the relationship between a stressful situation and the emotional outcome within an individual. Devereux, Hastings, Noone, Firth, and Totsika (2009), for instance, suggested that wishful thinking mediates the relationship between demands and emotional exhaustion.

Rose, David, and Jones (2003) emphasised the importance of personality when developing a model incorporating staff variables, such as coping strategies and general wellbeing. An association between personality traits and coping strategies was found. Gerits, Derksen, and Verbruggen (2004) found that individuals using a task-oriented coping style, showed lower levels of burnout. In addition, Chung and Hardy (2009) showed a clear relationship between personality traits as extraversion and levels of burnout and wellbeing of staff. Glidden, Billings, and Jobe (2006) investigated the associations between coping styles, personality, and wellbeing of parents with children with ID. Again, neuroticism was found to be positively related to emotion-oriented coping strategies.

An important factor that addresses personal style and individual differences is emotional intelligence. Emotional intelligence can be defined as “...an array of emotional, personal and social abilities and skills that influence an individual’s ability to cope effectively with environmental demands and pressures” (Bar-on, Brown, Kirkcaidy, & Thomé, 2000, p. 1108). The Bar-On model of emotional intelligence consists of the following factors: intrapersonal abilities, interpersonal capacities, stress management, adaptation skills, and general mood (Bar-On, 1997). Emotional intelligence is of influence on general functioning and wellbeing of individuals (Gerits et al., 2004; Gerits, Derksen, Verbruggen, & Katzko, 2005; Mayer, Caruso, Salovey, & Sitarenios, 2001). Van der Zee, Thijs, and Schakel (2002) found that emotional intelligence predicted a significant amount of variance in academic and social success. Research conducted by Matthews and Zeidner (2000) revealed that emotional intelligence affects the selection of coping strategies in demanding and challenging situations, for instance situations in which staff have to deal with CB of clients. In addition, another study found a significant relationship between higher levels of emotional intelligence and the use of an adequate coping style (Gerits et al., 2004). Translating the emotional intelligence model to care, Birks and Watt (2007) proposed that emotional intelligence could affect patient-centred care, in which the ability to understand emotions of one self and one’s client is crucial. Finally, research on emotional intelligence has shown that this construct is trainable (Freedman, 2003; Zijlmans, Embregts, Gerits, Bosman, & Derksen, 2011). For instance, Wasseveld, Overbeeke, and Derksen (2007) showed that an emotional intelligence-training lead to increased emotional intelligence among participants. Slaski and Cartwright (2003) found that a training for managers focusing on emotional intelligence, resulted in increased wellbeing and reduced subjective stress experiences of managers. These findings imply that emotional intelligence-

training for staff working with clients with ID and CB could lead to decreased levels of stress and negative emotions. Unfortunately, the effects of training emotional intelligence on the long term are not available. Summarised, emotional intelligence is a broad and useful construct related to training of support staff working with individuals with ID and CB, especially seen in the light of recent negative incidents in the United Kingdom and the Netherlands that address the need for more compassion focused care for these clients.

Considering the described examples of staff not being able to handle CB in an adequate manner, research on interventions aimed at staff is warranted. A meta-analysis on the effectiveness of staff training showed the importance of a careful selection of training goals, such as the training format and the techniques being used to improve knowledge and skills of staff (Van Oorsouw, Embregts, Bosman, & Jahoda, 2009). Additionally, the most effective training method is a combination of in-service training and coaching-on-the-job. An example of coaching on the job is providing video feedback on staff-client interactions, which has shown to improve behaviour of support staff and clients (Embregts, 2002, 2003).

The current study focuses on the effectiveness of a staff training aimed at emotional intelligence and interactions between staff and clients with ID and CB. The training consists of elements of in-service and coaching-on-the-job methods. Based on previous research, we hypothesise that the training has a positive effect on emotional intelligence, coping, and emotions of support staff. The following research questions will be answered in the present study:

1. Does the training improve emotional intelligence of support staff?
2. What is the effect of the training on coping styles of support staff?
3. What is the effect of the training on levels of emotions experienced by support staff?

## 7.2 Method

### 7.2.1 Participants

Participants were 214 support staff (153 women, 61 men) affiliated with four Dutch residential treatment facilities for children, adolescents, and adults with moderate to borderline ID and CB. The age of the participants ranged from 19 to 61 years (mean = 32.6 years,  $SD = 9.2$ ). The average number of years of working experience with clients with ID and CB ranged from two months to 37 years (mean = 7.7 years,  $SD = 7$ ). Descriptive statistics of participants for each residential facility are presented in Table 7.1.

### 7.2.2 Procedure

The experimenter first obtained permission from the management of the organisations to conduct the research. In addition, the scientific and ethic board of one of the participating facilities authorised the experimenter to collect the data and implement the training program. Managers were provided

**Table 7.1** Descriptive Statistics of Participant Groups

Facility	Experimental group (N=76)				Control group 1 (N=71)				Control group 2 (N=67)			
	1	2	3	4	1	2	3	4	1	2	3	4
Gender												
Women	20	13	14	9	7	4	7	4	3	2	6	8
Men	4	4	3	9	10	15	11	13	9	16	18	24
Age												
<i>M</i>	34.83	33.65	28.24	34.22	33.71	32.00	33.17	31.53	43.56	27.63	30.89	33.75
<i>SD</i>	10.48	11.81	5.30	10.70	9.14	8.31	6.07	6.81	10.08	4.41	7.02	16.40
Work experience (months)												
<i>M</i>	109.417	86.82	73.06	56.65	122.21	87.37	105.67	71.94	186.00	55.56	80.56	86.57
<i>SD</i>	111.53	64.03	54.05	13.35	111.68	62.51	60.95	54.26	140.71	52.99	60.14	111.80

with information about the main goals of the research project and they selected teams in which support staff served clients with severe CB. This selection was not based on motivation of teams, but on team stability to ensure that most of the staff members would complete the whole study. Within these teams staff members were selected randomly to participate in the experimental group. The remaining staff members of these teams participated in control group 1. To investigate the effects of the training program on the staff members more thoroughly, a second control group was formed by selecting other teams in which none of the staff members participated in the training. These teams were also selected by managers of the participating organisations.

Participating support staff completed questionnaires before the start of the training and directly after the training ended. In addition, about 65% of staff in the experimental group completed the questionnaires again four months after the training ended.

### 7.2.3 Intervention

The training is described in detail by Zijlmans et al. (2011). In this study the training is described briefly. The main aim of the program was to improve emotional intelligence and staff-client interactions by using two methods: Verbal feedback on individual EQ-i profiles and video-feedback on staff interacting with clients.

Prior to the start of the training support staff selected one client with whom they experienced difficulties in the interaction. The training was provided by professional trainers specialised in emotional intelligence, staff-client interactions, and providing staff with feedback. The first one and a half day consisted of in-service, didactic training sessions focused on the concept of emotional intelligence and its significance for both profession and teamwork. It included extensive information on the five domains of emotional intelligence (Bar-On, 1997), the role of emotional intelligence in daily life, an explanation of the Bar-On EQ-i, and the meaning of scores. Most important, staff received feedback on their own EQ-i profile. Each staff member formulated two developmental goals related to the needs of the client they selected.

Video feedback was provided during group sessions. Prior to the start of the training, staff made video recordings of themselves interacting with the selected client. Interaction between staff and clients was reviewed and related to the EQ-i scores and developmental goals of staff during six training sessions of 90 minutes. The staff and trainer viewed the video recording, and the staff member being observed was first asked to comment. Then the trainer and the participant related the staff behaviour to the EQ-i profile of the staff member. Four months after the first training session staff members received feedback on their new EQ-i profiles in a group session.

## **7.2.4 Measures**

### *7.2.4.1 Emotional intelligence*

The Dutch version of the widely used Bar-On Emotional Quotient-inventory (EQ-i, Bar-On, 1997) was used to measure emotional intelligence of staff. This questionnaire contains five scales concerning intrapersonal abilities, interpersonal skills, adaptability, stress-management capacities, and general mood. These domains are divided in subscales containing 133 items using a five-point Likert scale with response categories ranging from 1 (very seldom true or not true of me), 2 (seldom true of me), 3 (sometimes true of me), 4 (often true of me), to 5 (very often true of me or true of me). Several studies found support for a good reliability and validity of the EQ-i (Bar-On, Brown, Kirkcaldy, & Thomé, 1999; Dawda & Hart, 2000; Reiff, Hatzes, Bramel, & Gibbon, 2001). The EQ-i measures a broad range of related emotional constructs (Bar-On, 1997; Derksen, Kramer, & Katzko, 2002). The mean Cronbach's alpha coefficients for the subscales ranged from .69 to .86. The internal consistency of the pre-test EQ-i scores (total EQ-i) in this study was excellent ( $\alpha = .87$ ). In addition, it should be noted that the EQ-i consists of three validity scales: inconsistency index, positive impression scale, and negative impression scale. We choose to delete EQ-i's with a score higher than 12 on the inconsistency index and scores higher than 130 on the positive or negative impression scale from the data-analyses, because these EQ-i's can be viewed as invalid.

### *7.2.4.2 Emotional Reactions*

The Emotional Reactions to Challenging Behaviour Scale (ERCBS, Mitchell & Hastings, 1998; Jones & Hastings, 2003) was used to measure experienced emotions of support staff. This questionnaire focuses on emotions staff members experience when dealing with CB of their clients. The questionnaire was translated into Dutch and checked by a native speaker. The scale comprises 23 4-point Likert items with response categories from 0 (no, never), 1 (yes, sometimes), 2 (yes, frequently) to 3 (yes, very frequently). Staff have to rate to what extent they experience certain emotions when confronted or dealing with CB. The questionnaire is composed of four subscales, namely: confident/relaxed, cheerful/excited, fear/anxiety, and depression/anger. Examples of emotions named in the instrument are "helpless" and "disgust". The subscales with regard to negative emotions have a high internal consistency and a good test-retest reliability (Mitchell & Hastings, 1998). The internal consistency of



the subscales referring to positive emotions has also shown to be good (Jones & Hastings, 2003). The Cronbach's alpha values found in this study indicated a sufficient to good internal consistency, with alphas ranging from .69 to .79. Scores on items belonging to one subscale were averaged to obtain subscale scores.

#### 7.2.4.3 Coping styles

To measure coping styles used by staff members, a Dutch version of the Coping Inventory for Stressful Situations (CISS, Endler & Parker, 1999) was used. This instrument is based on the coping theory of Lazarus and Folkman (1984, 1987), who have defined coping as a conscious response to stressful or negative situations and proposed a model which distinguishes between two coping functions, namely problem-focused responses and emotion-focused responses. Other studies have shown a third function of coping which concerns a more avoidance-based coping strategy, for example, seeking social support or focusing on an alternative task. The questionnaire contains 48 items which address three coping strategies (task-, emotion-, and avoidance-oriented coping) and describe to what extent individuals use certain behaviours to deal with stressful or negative situations. An example of an item is "Come up with several different solutions to the problem". Endler and Parker (1994) found strong support for the multidimensionality and a good construct and concurrent validity of the CISS. Psychometric properties were identified as very good in several samples, the internal consistency of the three subscales ranged from  $\alpha = .76$  to  $\alpha = .92$ . In this study, the internal consistency for the subscales was found to be good to excellent with alpha values ranging from .83 to .9. In order to obtain subscale scores all scores on items belonging to a subscale were averaged.

#### 7.2.5 Design and analyses

A pre-test, post-test, follow-up control group design was used to determine the effectiveness of the training program. Prior to the start of the training program and shortly before the last training session staff was asked to complete the Bar-On EQ-i. Measures with regard to coping styles and experienced emotions were completed before the start of the training and after the training. For all subscales of each of the completed questionnaires, difference scores between the post-test and pre-test scores were calculated and used for the analyses. Overall summary statistics for each group are presented in Table 7.2.

## 7.3 Results

In this section the effectiveness of the training program on emotional intelligence, coping, and emotions is described. Mauchly's test was used to investigate sphericity of the data. When the results of Mauchly's test were significant, Greenhouse-Geisser was used to determine effects. Post-hoc tests were always Bonferroni corrected. Furthermore, analyses for each questionnaire were conducted on

Table 7.2 Summary Statistics of Participant Groups

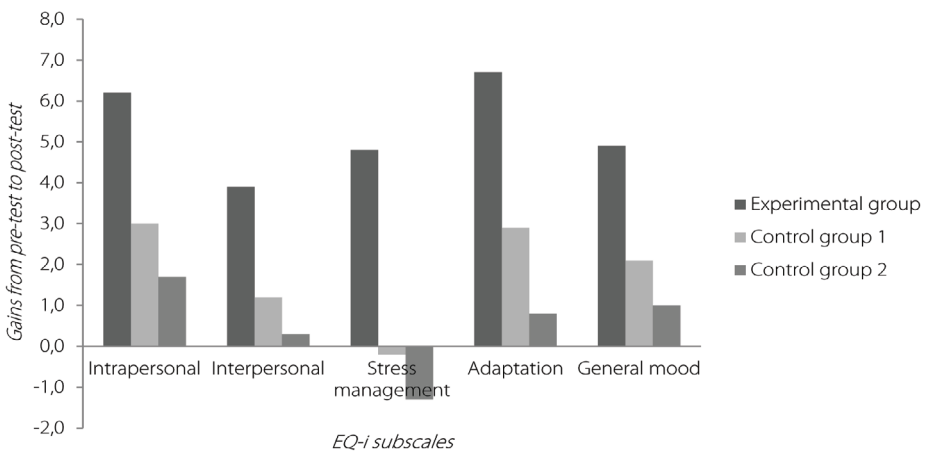
		Experimental group			Control group 1		Control group 2	
		Pre-test	Post-test	Follow-up	Pre-test	Post-test	Pre-test	Post-test
Intrapersonal EQ	<i>M</i>	103.7	110.5	111.3	103.6	106.0	106.4	107.3
	<i>SD</i>	14.1	13.5	13.0	10.5	10.6	12.1	10.2
	<i>n</i>	68	65	54	66	51	58	41
Interpersonal EQ	<i>M</i>	104.3	108.6	110.2	103.6	103.9	104.5	104.4
	<i>SD</i>	13.8	13.5	12.8	10.5	12.6	9.6	11.2
	<i>n</i>	68	65	54	66	51	58	41
Stress management	<i>M</i>	107.5	112.4	112.9	108.6	108.4	108.7	107.3
	<i>SD</i>	10.3	11.6	11.5	10.2	12.6	9.7	10.6
	<i>n</i>	68	65	54	66	51	58	41
Adaptation	<i>M</i>	101.8	110.6	113.2	101.8	105.2	106.4	106.2
	<i>SD</i>	14.2	14.5	15.3	10.9	12.1	11.1	11.7
	<i>n</i>	68	65	54	66	51	58	41
General mood	<i>M</i>	104.5	109.7	110.5	103.9	106.0	105.2	106.7
	<i>SD</i>	12.5	11.3	11.0	10.3	11.4	10.1	8.641
	<i>n</i>	68	65	54	66	51	58	41
Task-oriented coping	<i>M</i>	3.7	4.0	4.1	3.7	3.8	3.7	3.7
	<i>SD</i>	.5	.4	.4	.4	.5	.4	.4
	<i>n</i>	76	69	51	70	58	66	43
Emotion-oriented coping	<i>M</i>	2.3	2.1	2.0	2.1	2.0	2.0	2.0
	<i>SD</i>	.7	.6	.6	.5	.5	.6	.6
	<i>n</i>	76	69	51	70	58	66	43
Avoidance-oriented coping	<i>M</i>	2.8	3.0	2.8	2.8	2.8	2.6	2.6
	<i>SD</i>	.7	.7	.6	.6	.7	.6	.7
	<i>n</i>	76	69	51	70	58	66	43
Confident/relaxed	<i>M</i>	1.6	1.9	1.8	1.8	1.7	1.7	1.8
	<i>SD</i>	.6	.8	.7	.7	.7	.7	.7
	<i>n</i>	76	66	46	70	54	66	41
Cheerful/excited	<i>M</i>	.9	1.1	1.0	.9	1.0	1.1	1.1
	<i>SD</i>	.7	.9	.9	.8	.7	.7	.8
	<i>n</i>	76	66	46	70	54	66	41
Fear-anxiety	<i>M</i>	.5	.6	.5	.5	.5	.6	.5
	<i>SD</i>	.3	.5	.5	.4	.4	.5	.4
	<i>n</i>	76	66	46	70	54	66	41
Depression/anger	<i>M</i>	.5	.4	.4	.5	.4	.5	.5
	<i>SD</i>	.3	.3	.3	.3	.3	.3	.3
	<i>n</i>	76	66	46	70	54	66	41

participants who completed both pre- and post-test: 146 support staff completed pre- and post-tests of the emotional intelligence; 168 completed the CISS, and 159 the ERCBS. Stability of the effects in the experimental group were investigated by comparing follow-up scores with pre- and post-test scores, with a total of 45 support staff completing the EQ-i, 46 the CISS, and 51 the ERCBS. Mean scores are presented in Table 7.2.

### 7.3.1 The effect of the training on EI

To determine the effect of the training on emotional intelligence, a 3 (condition: experimental group vs. control 1 vs. control group 2) X 4 (organisation) X 5 (EQ-i scale: intrapersonal EQ vs. interpersonal EQ vs. stress management vs. adaptation vs. general mood) MANOVA was performed on the mean difference scores of the support staff on the five EQ-i subscales. Condition and organisation were both treated as between-subjects factor. Mean scores are presented in Figure 7.1.

**Figure 7.1** Mean Difference Scores Subscales EQ-i



None of the interaction effects reached significant levels. The main effect of organisation was not significant either ( $F < 1$ ). The main effect of condition was significant ( $F(2, 134) = 4.92, p < .01$ ) as well as the main effect of scale ( $F(3.4, 455.2) = 3.61, p < .05$ ). Post-hoc tests revealed that the mean change of the experimental group was significantly higher than that of control group 1 ( $p < .05$ ) and of control group 2 ( $p < .01$ ), whereas the difference between control group 1 and control group 2 was not significant. Mean scores on intrapersonal EQ were significantly higher than those on interpersonal EQ ( $p < .05$ ) and on stress management ( $p < .01$ ). Scores on the adaptation scale were significantly

higher than on stress management ( $p < .01$ ). Finally, scores of general mood were significantly higher than those of stress management ( $p < .05$ ).

To investigate the stability of the effects in the experimental group, a repeated measure analysis was conducted on the pre-test, post-test, and follow-up scores. The main effect of intrapersonal EQ was significant,  $F(2, 44) = 11.5, p < .001$ . Post-hoc tests revealed that significantly higher post-test were than pre-test scores ( $p < .01$ ) and follow-up scores ( $p < .01$ ). The main effect of interpersonal EQ was also significant,  $F(2, 44) = 6.0, p < .01$ . Scores on the follow-up were significantly higher than on the pre-test ( $p < .01$ ). The main effect of stress management was also significant,  $F(2, 44) = 8.07, p < .01$ . Post-hoc tests revealed significantly higher scores on the post-test than on the pre-test ( $p < .01$ ) and the follow-up test ( $p < .05$ ). The main effect of adaptation subscale was significant as well,  $F(2, 44) = 16.21, p < .00$ . Scores on the post-test score were significantly higher than on the pre-test ( $p < .01$ ), and scores on the follow-up were significantly higher than on the pre-test ( $p < .00$ ). In addition, the mean difference between follow-up and post-test was marginally significant ( $p < .08$ ). Finally, the main effect of general mood was also significant,  $F(2, 44) = 6.14, p < .01$ . Post-hoc revealed significantly higher scores on the post-test than on the pre-test ( $p < .05$ ), and significantly higher scores on the follow-up than on the pre-test ( $p < .05$ ).

In sum, these results indicate that the training program established a stronger increase of all five subscales of emotional intelligence in the experimental group than in the control groups. Participants had larger gains on the intrapersonal scale than on the interpersonal and stress management scales and larger gains on adaptation than on stress management. Follow-up effects in the experimental group indicated that emotional intelligence-training effects were still present after four months.

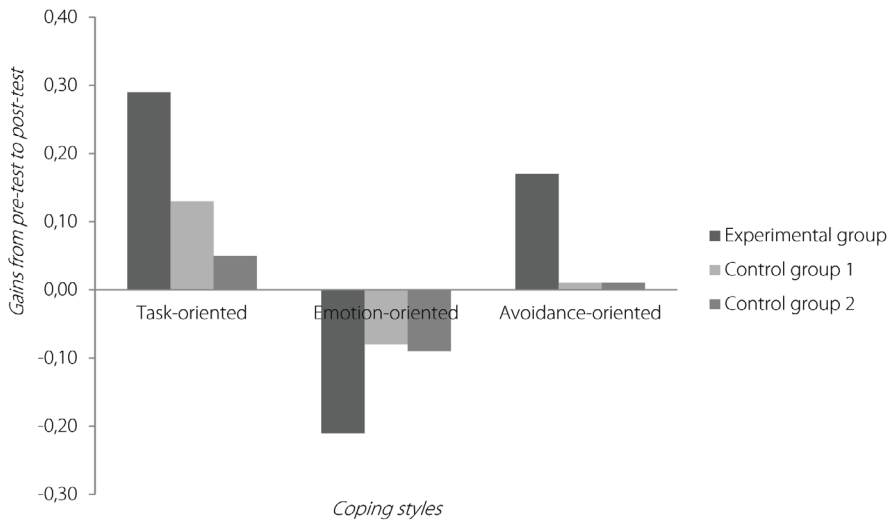
### **7.3.2 The effect of the training on coping styles of staff**

To investigate the impact of the training on coping styles, a 3 (condition: experimental group vs. control 1 vs. control group 2) X 4 (organisation) X 3 (coping style: task-oriented vs. emotion oriented vs. avoidance-oriented) MANOVA was performed on the mean difference scores of support staff on the three subscales of the CISS. Mean difference scores presented in Figure 7.2.

Only the interaction between condition and coping style reached a significant level,  $F(4, 312) = 3.53, p < .01$ . Neither the main effect of organisation ( $F < 1$ ) nor the main effect of condition ( $F(2, 156) = 1.40, p = .25$ ) were significant. The main effect of coping style was significant ( $F(2, 312) = 18.34, p < .0001$ ), but because of the significant interaction with condition, we analysed each of the conditions separately by means of one-way ANOVA.

Difference scores of task-oriented coping revealed a main effect of condition,  $F(2, 165) = 6.19, p < .01$ . Post-hoc comparisons showed that scores of the experimental group were significantly larger than those of control group 2 ( $p < .01$ ), and similar to that of control group 1. No significant difference occurred between the two control groups. Neither the main effect of emotion-oriented coping ( $F(2, 165) = 1.32, p = .27$ ) nor the one of avoidance-oriented coping ( $F(2, 165) = 1.53, p = .22$ ) reached significance.

Figure 7.2 Mean Difference Scores Subscales CISS



To investigate the stability of the effects in the experimental group, a repeated measure analysis was conducted on the mean scores of the experimental group. The main effect of task-oriented was significant,  $F(2, 50) = 16.94, p < .001$ . Post-hoc tests revealed higher post-test scores than pre-test ( $p < .001$ ) and follow-up scores ( $p < .001$ ). The main effect of emotion-oriented coping was also significant,  $F(2, 50) = 16.94, p < .001$ . Now post-test scores were significantly lower than pre-test scores ( $p < .01$ ) and follow-up scores were also significantly lower than pre-test scores ( $p < .01$ ). Finally, the main effect of avoidance-oriented coping was also significant,  $F(2, 50) = 5.94, p < .01$ . Follow-up scores were significantly lower than post-test scores.

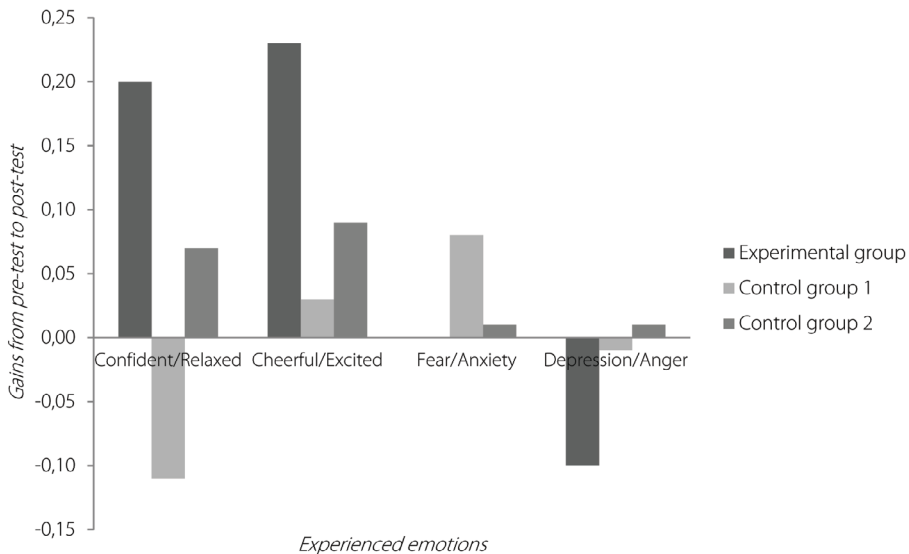
In sum, these results indicate that the training program improved the task-oriented coping styles of staff in the training group more so than that of the members in control group 2. The training did not have differential effects on emotion-oriented and avoidance-oriented coping styles. With regard to follow-up, positive effects of the training on task- and emotion-oriented coping were still present after four months. For avoidance-oriented coping, a positive effect was only revealed at follow-up.

### 7.3.3 The effect of the training on experienced emotions of staff

Finally, to investigate the influence of the training on staff emotions, a 3 (condition: experimental group vs. control 1 vs. control group 2) X 4 (organisation) X 4 (emotional reactions: confident/relaxed vs. cheerful/excited vs. fear/anxiety vs. depression/anger) analysis of variance was performed on the mean difference scores of the support staff on the four subscales of the ERCBS. Mean difference are presented in Figure 7.3.

Two interaction effects reached significant levels: Organisation by emotional reactions ( $F(9, 441) = 7.68, p < .001$ ) and condition by emotional reactions ( $F(6, 441) = 4.05, p < .001$ ). None of the main effects were significant. The significant interactions warranted further analyses. One-way ANOVA's were conducted on each of the emotional-reactions difference scores with organisation as between factor. The effect of organisation only reached significance on the fear/anxiety scale,  $F(3, 155) = 22.00, p < .001$ . Scores on fear/anxiety of Organisations 1 and 2 were significantly larger than those of Organisations 3 and 4 (all  $p$ 's  $< .01$ ). The fear/anxiety scores of Organisation 1 was similar to that of Organisation 2, and the one of Organisation 3 was similar to that of Organisation 4.

Figure 7.3. Mean Difference Scores Subscales Emotional Reactions to Challenging Behaviour Scale



The more important interaction, the one between condition and emotional reactions was also further analysed by means of one-way ANOVA's on each of the emotional reactions difference scores. The effect of condition only reached significance on the confidence/relaxed scale,  $F(2, 156) = 4.71, p < .01$ . Post-hoc tests revealed that the scores of the experimental group were significantly larger than those of the control group 1 ( $p < .01$ ), but similar to that of control group 2. The difference between control group 1 and 2 was not significant.

To investigate difference between mean scores on pre-test, post-test, and follow-up, repeated measure analysis was conducted on the mean scores of all subscales. The main effect of confident/relaxed was significant,  $F(2, 45) = 9.61, p < .001$ . The post-hoc tests revealed that scores on the post-test were significantly higher than on the pre-test ( $p < .01$ ) and follow-up scores ( $p < .01$ ). The main

effect of cheerful/excited was also significant,  $F(2, 45) = 6.20, p < .01$ . Scores on the post-test were significantly higher than on the pre-test ( $p < .01$ ), the scores on follow-up were marginally significantly lower than on the pre-test ( $p = .06$ ). The main effect of fear/anxiety was not significant, but the main effect of depression/anger was,  $F(2, 45) = 6.55, p < .01$ . Post-hoc tests revealed that the follow-up score was significantly lower than on the pre-test ( $p < .05$ ).

In sum, these results indicate that the training only increased the confidence/relaxed reactions of the training group more so than that of control group 1. None of the other emotional reactions were affected by the training. Moreover, with respect to fear/anxiety two organisations had larger mean difference scores between pre-test and post-test than the other ones. In the experimental group, positive emotions were still present after four months. For depression/anger, a positive effect was found only at follow-up.

## 7.4 Discussion

The present study aimed at determining the effectiveness of a staff training focusing on emotional intelligence of staff and staff-client interactions. Three variables play a crucial role in the relationship between staff and client behaviour: emotional intelligence, coping styles, and experienced emotions. Unlike the control groups, the experimental group showed increased levels of emotional intelligence. Trained staff members showed increased scores on intrapersonal capacities, such as self-regard, self-reliance, and emotional self-awareness; a finding in line with work by Aber, Brown, and Henrich (1999) and Nelis, Quoidbach, Mikolajczak, and Hansenne (2009). Another aspect of emotional intelligence that increased after training was adaptation. Adaptation is the extent to which one can validate one's feelings and thinking with external reality, the extent to which one can adapt and adjust one's feelings and thinking to new situations and can effectively solve problems of intrapersonal or interpersonal nature. The fact that the training mainly focused on self-awareness may explain that highest changes were found within the intrapersonal scale. After all, staff did reflect thoroughly on personal characteristics for four months.

With respect to coping styles, the training led to positive effects on task-oriented coping. This indicates that staff were more able to handle stressful situations adequately by focusing more on how to solve the problem (see for similar findings, Gerits et al., 2004). Particularly, levels of adaptation and intrapersonal EQ appeared to be related to active coping. These subscales also showed the largest increase within the experimental group in this study. However, it should be noted that the findings did not reveal a difference between coping styles of staff who participated in the training and their colleagues participating in control group 1. The reason for this may be that staff members within these groups worked daily with one another and perhaps discussed things that had happened during the training sessions. If true, this indicates that the effects of the training not only affected staff participating in the training, but also their team colleagues. However, changes in other factors within

staff teams, such as job satisfaction, work load, or other organisational factors could also have played a role too (Blumenthal, Lavender, & Hewson, 1998; Hatton et al., 1999). No differential effects emerged between the three conditions with respect to emotion-oriented and avoidance-oriented coping.

The effects of the training on staff emotions yielded an increase of the confidence/relaxed emotional reactions of the training group more so than that of control group 1. Trained staff experienced more positive emotions when working with their client. As said, certain coping styles, such as wishful thinking proved to mediate the relationship between stressful situations and emotional exhaustion (Devereux et al., 2009). When adapting this reasoning to this study, trained staff might experience more positive emotions after the training, because they showed an increased use of task-oriented coping. Within this process the effect of the training may have been indirect. It should, however, be noted that there was no difference between the training group and control group 2. In addition, the groups did not differ in terms of experienced negative emotions, which suggests that the training only affected positive emotions, but this effect did not transfer to untrained staff members working with trained staff members.

To determine the stability of the training effects, the experimental group completed a follow-up measure four months after completion of the post-test measure. Although not all support staff completed this measure and the control groups were not included, the analyses on the data provide relevant information. With respect to emotional intelligence, coping styles, and experienced emotions effects found at the post-test were still present after four months. This indicates that the effects of the training are quite stable. Of course, to draw conclusions on the long-term effects of the training, data should be gathered for experimental and control groups, for instance, a year after the training ended.

The organisations did not differ in their gains of emotional intelligence and coping styles, but they did with respect to experienced emotions. These differences may be explained by differences in characteristics of the organisations. For instance, Gray-Stanley and Muramatsu (2011) found a relationship between work overload of staff, levels of work social support, and levels of distress within staff. Note that these organisational influences could also have been found with respect to other staff variables, but they were not. In a previous study of Zijlmans, Embregts, and Bosman (2013), only weak relationships were found between emotional intelligence and emotions, suggesting that a training focused on emotional intelligence does not heavily affect experienced emotions of staff. Future research should clarify the relationship between experienced emotions, organisational factors, and training effectiveness.

Although this study has some notable strengths such as including a relatively large sample size and using three groups to determine generalisation of the training effects within teams, there are some limitations that should also be discussed. First, only questionnaires were used in this study, which could have led to socially desirable answering (Lambrechts, Kuppens, & Maes, 2009; Wanless & Jahoda, 2002) and more importantly, questionnaires do not provide information on actual staff behaviour. However, in another study (Zijlmans, Embregts, Gerits, Bosman, & Derksen, submitted) video recordings of staff-client interactions were judged to determine quality of interaction. Preliminary



findings showed a positive training effect on staff-client interaction. Second, only staff reports were taken into account in this study. We did not focus on client behaviour and client perspective. In their review, Van Oorsouw, Embregts, and Bosman (2013) showed that client behaviour and perspective is rarely taken into account when evaluating staff training, despite the fact that people with ID are indeed able to express their meaning and feeling about staff members (Roeleveld, Embregts, Hendriks, & Van den Bogaard, 2011). Future research assessing the effects of staff training should take client perspective into account.

In the training program studied in this research, personal self-reflection and awareness are the most important ingredients. Based on experiences of the trainers and support staff, these methods seem to form the most effective elements of the intervention. Staff members become aware of their own emotional intelligence and reflect on it. More importantly, they see how it affects their behaviour and their interactions with clients. Another intervention in which awareness plays an important role and which has shown to be rather effective in improving staff behaviour is mindfulness training (Singh et al., 2006; Singh et al., 2009). However, to our knowledge and as concluded by Van Oorsouw et al. (2013), the training studied in this research is the first and only one focusing on self-reflection of staff, related to emotional intelligence and staff-client interactions. More research is warranted to identify the effectiveness of self-reflection in training programs for support staff.

Summarised, this study revealed that staff training aiming at emotional intelligence and staff-client interaction is indeed effective in improving emotional intelligence and the use of task-oriented coping. In addition trained staff experienced fewer negative emotions after the training. With regard to future research a focus should be put on maintaining these effects and considering the role of the training within other settings for individuals with ID and CB, for instance outpatient care. On a final note, commitment of the organisation in which a training is imbedded, is very important for successful and effective implementation (Totsika, Toogood, Hastings, & Nash, 2008), because it increases the maintenance of long-term training effects, of which the relationship between clients and staff benefits directly.

## References

- Aber, J. L., Brown, J. L., & Henrich, C. C. (1999). *Teaching conflict resolution: An effective school-based approach to violence prevention*. New York, NY: National Center for Children in Poverty, Joseph L. Mailman School of Public Health, Columbia University.
- Allen, D., & Tynan, H. (2000). Responding to aggressive behavior: Impact of training on staff members' knowledge and confidence. *Mental Retardation, 38*, 97–104.
- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: Technical Manual*. Toronto, Canada: Multi Health Systems.
- Bar-On, R., Brown, J. M., Kirkcaldy, B. D., & Thomé, E. P. (2000). Emotional expression and implications for occupational stress: an application of the Emotional Quotient Inventory (EQ-i). *Personality and Individual Differences, 28*, 1107-1118.
- Birks, Y. F., & Watt, I. S. (2007). Emotional intelligence and patient-centred care. *Journal of the Royal Society of Medicine, 100*, 368-374.
- Blumenthal, S., Lavender, T., & Hewson, S. (1998). Role clarity, perception of the organization and burnout amongst support workers in residential homes for people with intellectual disability: A comparison between a National Health Service trust and a charitable company. *Journal of Intellectual Disability Research, 42*, 409-417.
- Bromley, J., & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. *Journal of Intellectual Disability Research, 39*, 341-352.
- Chung, M. C., & Harding, C. (2009). Investigating Burnout and Psychological Well-Being of Staff Working with People with Intellectual Disabilities and Challenging Behaviour: The Role of Personality. *Journal of Applied Research in Intellectual Disabilities, 22*, 549-560.
- Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences, 28*, 797-812.
- Derksen, J., Kramer, I., & Katzko, M. (2002). Does a self-report measure for emotional intelligence assess something different than general intelligence? *Personality and Individual Differences, 32*, 37-48.
- Devereux, J. M., Hastings, R. P., Noone, S. J., Firth, A., & Totsika, V. (2009). Social support and coping as mediators or moderators of the impact of work stressors on burnout in intellectual disability support staff. *Research in Developmental Disabilities, 30*, 367-377.
- Embregts, P. J. C. M. (2002). Effect of resident and direct-care staff training on responding during social interactions. *Research in Developmental Disabilities, 23*, 353-366.
- Embregts, P. J. C. M. (2003). Using self-management, video feedback, and graphic feedback to improve social behavior of youth with mild intellectual disabilities. *Education and Training in Developmental Disabilities, 38*, 283-295.
- Endler, N. S., & Parker, J. D. (1994). Assessment of multidimensional coping: Task, emotion, and avoidance strategies. *Psychological Assessment, 6*, 50.
- Endler, N. S., & Parker, J. D. (1999). *CISS: Coping inventory for stressful situations*. MHS.
- Freedman, J. (2003). Key lessons from 35 years of social-emotional education: How self-science builds self-awareness, positive relationships, and healthy decision-making. *Perspectives in Education, 21*, 69-80.
- Gerits, L., Derksen, J. J. L., & Verbruggen, A. B. (2004). Emotional intelligence and adaptive success of nurses caring for people with mental retardation and severe behavior problems. *Mental Retardation, 42*, 106-21.
- Gerits, L., Derksen, J. J. L., Verbruggen, A. B., & Katzko, M. (2005). Emotional intelligence profiles of nurses caring for people with severe behaviour problems. *Personality and Individual Differences, 38*, 33-43.
- Glidden, L. M., Billings, F. J., & Jobe, B. M. (2006). Personality, coping style and well-being of parents rearing children with developmental disabilities. *Journal of Intellectual Disability Research, 50*, 949-962.
- Gray-Stanley, J. A., & Muramatsu, N. (2011). Work stress, burnout, and social and personal resources among direct care workers. *Research in Developmental Disabilities, 32*, 1065-1074.

- Hastings, R. P. (1995). Understanding factors that influence staff responses to challenging behaviours: An exploratory interview study. *Mental Handicap Research, 8*, 296-320.
- Hastings, R. P. (2010). Support staff working in intellectual disability services: The importance of relationships and positive experiences. *Journal of Intellectual & Developmental Disability, 35*, 207-210.
- Hastings, R. P., & Remington, B. (1994). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *The British Journal of Clinical Psychology, 33*, 423-438.
- Hatton, C., Brown, R., Caine, A., & Emerson, E. (1995). Stressors, coping, strategies, and stress-related outcomes among direct care staff in staffed houses for people with learning disabilities. *Mental Handicap Research, 40*, 148-156.
- Hatton, C., Rivers, M., Mason, H., Mason, L., Emerson, E., Kiernan, C., Reeves, & Alborz, A. (1999). Organizational culture and staff outcomes in services for people with intellectual disabilities. *Journal of Intellectual Disability Research, 43*, 206-218.
- Jenkins, R., Rose, J., & Lovell, C. (1997). Psychological well-being of staff working with people who have challenging behaviour. *Journal of Intellectual Disability Research, 41*, 502-511.
- Jones, C., & Hastings, R. P. (2003). Staff reactions to self-injurious behaviours in learning disability services: Attributions, emotional responses and helping. *British Journal of Clinical Psychology, 42*, 189-203.
- Lambrechts, G., Kuppens, S. & Maes, B. (2009). Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research, 53*, 620-632.
- Lambrechts, G., Van Den Noortgate, W., Eeman, L. & Maes, B. (2010). Staff reactions to challenging behavior: An observation study. *Research in Developmental Disabilities, 31*, 525-535.
- Lazarus, R. S. (1995). Psychological stress in the workplace. *Occupational stress: A handbook, 1*, 3-14.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of personality, 1*, 141-169.
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology, 54*, 466.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology, 52*, 397-422.
- Matthews, G., & Zeidner, M. (2000). Emotional Intelligence, adaptation to stressful encounters, and health outcome. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 459-489). San Francisco, CA: Jossey-Bass Inc.
- Mayer, J. D., Caruso, D. R., Salovey, P., & Sitarenios, G. (2001) Emotional intelligence as a standard intelligence. *Emotion, 1*, 232-242.
- Mitchell, G., & Hastings, R. P. (1998). Learning disability care staffs emotional reactions to aggressive challenging behaviours: Development of a measurement tool. *British Journal of Clinical Psychology, 37*, 441-449.
- Gray-Stanley, J. A., & Muramatsu, N. (2011). Work stress, burnout, and social and personal resources among direct care workers. *Research in Developmental Disabilities, 32*, 1065-1074.
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences, 47*, 36-41.
- Reiff, H. B., Hatzes, N. M., Bramel, M. H., & Gibbon, T. (2001). The relation of LD and gender with emotional intelligence in college students. *Journal of Learning Disabilities, 34*, 66-78.
- Roeleveld, E., Embregts, P., Hendriks, L., & Van den Bogaard, K. (2011). Zie mij als mens! Noodzakelijke competenties voor begeleiders volgens mensen met een verstandelijke beperking. In P. Embregts, & L. Hendriks (Red.), *Menslievende professionalisering in de zorg voor mensen met een verstandelijke beperking: Aansluiten bij cliënten en hun ouders* (pp. 41-60). Arnhem: HAN University Press.
- Rose, D., Horne, S., Rose, J. L. & Hastings, R. P. (2004). Negative Emotional Reactions to Challenging Behaviour and Staff Burnout: Two Replication Studies. *Journal of Applied Research in Intellectual Disabilities, 17*, 219-223.

- Rose, J., David, G., & Jones, C. (2003). Staff who work with people who have intellectual disabilities: the importance of personality. *Journal of Applied Research in Intellectual Disabilities, 16*, 267-277.
- Rose, J., Jones, F., & Fletcher, B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research, 42*, 163-172.
- Schallock R. L. & Verdugo M. A. (2002) *Handbook on Quality of Life for Human Service Practitioners*. American Association on Mental Retardation, Washington, DC.
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Singh, A. N., Adkins, A. D., & Singh, J. (2009). Mindful staff can reduce the use of physical restraints when providing care to individuals with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities, 22*, 194–202.
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Curtis, W. J., Wahler, R. G., Sabaawi, M. et al. (2006). Mindful staff increase learning and reduce aggression in adults with developmental disabilities. *Research in Developmental Disabilities, 27*, 545-558.
- Slaski, M., & Cartwright, S. (2003). Emotional intelligence training and its implications for stress, health and performance. *Stress and Health, 19*, 233-239.
- Totsika, V., Toogood, S., Hastings, R. P., & Nash, S. (2008). Interactive training for active support: Perspectives from staff. *Journal of Intellectual and Developmental Disability, 33*, 225-238.
- Van Asselt-Goverts, A. E., Embregts, P. J. C. M., & Hendriks, A. H. C. (2013). Structural and functional characteristics of the social networks of people with mild intellectual disabilities. *Research in Developmental Disabilities, 34*, 1280–1288.
- Van-Asselt-Goverts, A. E., Embregts, P. J. C. M., Hendriks, A. H. C. and Frielink, N. (2014), experiences of support staff with expanding and strengthening social networks of people with mild intellectual disabilities. *Journal of Community and Applied Social Psychology, 24*, 111-124.
- Van der Zee, K., Thijs, M., & Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the Big Five. *European journal of personality, 16*, 103-125.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., & Bosman, A. M. T. (2013). Evaluating staff training: Taking account of interactions between staff and clients with intellectual disability and challenging behaviour. *Journal of Intellectual and Developmental Disability, 38*, 356-364.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., Bosman, A. M. T., & Jahoda, A. (2009). Training staff serving clients with intellectual disabilities: A meta-analysis of aspects determining effectiveness. *Research in Developmental Disabilities, 30*, 503–511.
- Verdonschot, M. M. L., de Witte, L. P., Reichrath, E., Buntinx, W. H. E., & Curfs, L. M. G. (2009). Community participation of people with an intellectual disability: A review of empirical findings. *Journal of Intellectual Disability Research, 53*, 303 – 318.
- Wallander J. L., Koot H. M. & Dekker M. C. (2003). Psychopathology in children and adolescents with intellectual disability: measurement, prevalence, course, and risk. In: *International Review of Research in Mental Retardation*, Vol. 26 (ed. L. M. Glidden), pp. 93-134. Academic Press, San Diego, CA.
- Wanless, L. K., & Jahoda, A. (2002). Responses of staff towards people with mild to moderate intellectual disability who behave aggressively: a cognitive emotional analysis. *Journal of Intellectual Disability Research, 46*, 507-516.
- Wasseveld, R., Overbeeke, S., & Derksen, J. (2007). Kan emotionele intelligentie worden getraind? [Is emotional intelligence trainable?] *Psychologie & Gezondheid, 35*, 182-188.
- Willems, A. P. A. M., Embregts, P. J. C. M., Bosman, A. M. T., & Hendriks, A. H. C. (2013). The analysis of challenging relations: influences on interactive behaviour of staff towards clients with intellectual disabilities. *Journal of Intellectual Disability Research*. doi: 10.1111/jir.12027
- Zijlmans, L. J. M., Embregts, P. J. C. M., & Bosman, A. M. T. (2013). Emotional intelligence, emotions, and feelings of support staff working with clients with intellectual disabilities and challenging behavior: An exploratory study. *Research in Developmental Disabilities, 34*, 3916-3923.

- Zijlmans, L. J. M., Embregts, P. J. C. M. , Bosman, A. M. T., & Willems, A. P. A. M. (2012). The relationship among attributions, emotions, and interpersonal styles of staff working with clients with intellectual disabilities and challenging behavior. *Research in Developmental Disabilities, 33*, 1484-1494.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T. & Derksen, J. J. L. (2011). Training emotional intelligence related to treatment skills of staff working with clients with intellectual disabilities and challenging behaviour. *Journal of Intellectual Disability Research, 55*, 219-230.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2014). The effectiveness of staff training on the interaction between staff and clients with intellectual disabilities and challenging behaviour: An observational study. Manuscript submitted for publication.





# Chapter 8

---

## Summary and general discussion







The important role support staff play in the lives of people with intellectual disabilities (ID) and challenging behaviour (CB) is increasingly acknowledged in recent research and clinical practice. It is also recognised that staff can experience negative emotions and stress during their daily job, caused by CB of clients. When these emotions negatively affect the behaviour and wellbeing of staff, the interpersonal relationship between support staff and client is jeopardised and the client's wellbeing is likely to decrease. Subsequently, intense feelings of stress can eventually lead to burnout and thus absenteeism or job turnover. As support staff form an important part of clients' social networks, these phenomena are undesirable for these complex and vulnerable individuals, who are in need of a stable team of involved and reliable staff members. For these reasons, research focusing on staff emotions and the relationship between support staff and clients is needed. Because the quality of the relationship between staff and clients is of great influence on client wellbeing, clinical practice calls for effective staff interventions to improve the quality of life and wellbeing of clients.

## 8.1 Present thesis

The present thesis was aimed at support staff working with clients with ID and CB. All support staff who participated in the studies described in this thesis were working in residential treatment facilities for children, adolescents, and adults with ID and CB in the Netherlands. The level of ID of participating clients ranged from borderline to severe and the CB exhibited by clients ranged from physical aggression towards staff to compulsive behaviour. This thesis addressed two major themes. First, three studies focused on factors related to emotions and behaviour of support staff working with people with ID and CB. Second, a staff training was developed and the effectiveness of the training was investigated in three studies. The measures used within the different studies ranged from questionnaires to direct observations and the findings of this thesis provide important directions for clinical practice and future research.

## 8.2 Overview of results

The first three studies were aimed at investigating the relationships between staff emotions, behaviour, and other staff- and client-related factors. **Study 1** has been described in Chapter 2, and focused on exploring interactions between staff and clients to gain insight into what actually happens within daily staff-client interactions. More specifically, we investigated the extent to which levels of staff engagement and staff avoidance are related to challenging and desirable client behaviours and clients' initiatives for contact. Participants were eight staff members, one client with mild ID, one client with moderate ID, and one with severe ID. Direct observations were conducted for six weeks during daily, natural contact moments between clients and staff. Findings revealed that staff showed high levels of

engagement related behaviours, such as assistance. When looking at client behaviour, clients in this study showed varying levels of contact, which seemed to be related to the level of ID of clients. The client with mild ID showed the highest level of contact with staff. The study indicated a relationship between contact initiatives from the client and staff engagement. In addition, when clients showed more CB, staff members showed higher levels of avoidance, which is in line with research describing how CB can lead to negative emotions in staff which can increase avoidance behaviour of staff (Hastings & Remington 1994a, 1994b; Oliver, 1995; Noone & Hastings, 2010). Analyses of each staff-client dyads separately, however, revealed no relationships between staff engagement, avoidance, and client behaviours. Thus, the overall picture suggested a relationship between staff and client behaviour, but this was not found in the behaviour of individuals.

Several studies have tested Weiner's model (1985, 1986), in which staff causal attributions regarding CB, emotions of staff, and their influence on staff behaviour are key elements. However, a literature review of Willner and Smith (2008), revealed inconsistencies regarding the results of studies investigating this model with respect to the care for people with ID and CB. Additionally, the conducted studies mainly focused on staff supporting behaviour, not on the interpersonal styles of staff. Therefore, the aim of the **Study 2** (Chapter 3) was to investigate the relationship between staff's causal attributions, experienced emotions, and interpersonal styles. In addition, the relationship between these factors and type of CB shown by clients was taken into account. The findings revealed that support staff working with clients who showed CB aimed at the environment perceived CB as more controllable, experienced more fearful and anxious emotions, and showed higher levels of controlling and hostile behaviour. With regard to the relationship between investigated variables, analyses showed that emotions and attributions together explained a substantial amount of variance of the hostile and support-seeking interpersonal style. In contrast to Weiner's model, the results of the study did not show a mediating function of emotions in the relationship between attributions with respect to CB and interpersonal styles of staff. The findings of this study show that it is of great importance to take the variability of staff variables into account in order to develop a model with respect to CB, staff emotions, and staff behaviour.

Working towards a model of staff variables influencing staff behaviour, **Study 3** (in Chapter 4) made a distinction between emotions and feelings of support staff. In addition, the relationship between emotions, feelings, and emotional intelligence of support was explored. The correlations we found were not large, but some significant correlations were found. Stress management and adaptation skills of staff members appeared to have the strongest relationship with emotions and feelings. Support staff with better problem-solving skills reported fewer negative emotions when confronted with CB of their clients. Support staff who managed stress more adequately, reported fewer negative feelings. Staff with higher impulse and better reality-testing capacities control reported fewer negative emotions as well as feelings. In addition, older support staff with more work experience showed higher levels of intrapersonal emotional intelligence. Feelings seemed to be more strongly related to emotional intelligence than emotions. This finding may be explained by the cognitive and conscious

nature of both feelings and emotional intelligence and the relatively stronger unconscious nature of emotions (Damasio, 2001). As the results of this study were based on retrospective self-report, the findings call for other research methods, such as observations to measure staff emotions and feelings.

The second part of this thesis consists of three studies aimed at evaluating the effectiveness of a specific staff training aimed at emotional intelligence of staff and interactions between staff and clients. Support staff working with people with ID and CB were trained during four months. During seven to ten sessions, staff received verbal feedback on their emotional intelligence, and video feedback with a focus on interaction between staff and client. More specific, in video-feedback sessions a link was made between emotional intelligence of the participants and behaviour shown in the video recordings. The training was provided by certified trainers who followed a pre-established protocol for feedback. The aim of **Study 4** (in Chapter 5) was to assess the effectiveness of the training on emotional intelligence. Stated differently, did the training lead to an improvement of emotional intelligence of the staff members? The results showed that this was the case. Not only changes of emotional intelligence of the experimental group were significantly larger compared to the control group, emotional intelligence of staff members also improved significantly when taking into account the judgments of experts on emotional intelligence regarding the scores of participants. These results are consistent with findings of several studies evaluating the effectiveness of interventions focusing on emotional intelligence or elements of emotional intelligence (Aber, Brown, & Henrich, 1999; Nelis, Quoidbach, Mikolajczak, & Hansenne, 2009) and studies aimed at the effects of video feedback (Embregts, 2002, 2003). A review of Van Oorsouw, Embregts, and Bosman (2013) focused on literature on staff intervention published the past 20 years, showed that this study is the first and only study describing a staff intervention focused on staff self-reflection and awareness. However, this study only described the effects of the training on emotional intelligence, whereas the main goal of the training is improving the interaction between staff and clients.

Therefore, **Study 5** (in Chapter 6) was aimed at determining the effectiveness of the staff training with regard to staff-client interactions. Video recordings of these interactions were analysed and evaluated using an observation system developed by Custers, Kuin, Riksen-Walraven, and Westerhof (2010). This system is based on self-determination theory of Ryan and Deci (2000). Their theory states that the extent to which individuals experience that they are related to others and that they are competent and autonomous individuals, determines their level of wellbeing. The observation system was initially developed to determine the quality of interaction between elderly people and their caregivers. The scales described in the observation system were fulfilment of relatedness, autonomy, and competence. In other words: The extent to which the staff member relates to the client and gives the client the feelings that he/she is an autonomous and competent individual. This study showed that the staff training led to an improvement of the staff support of need fulfilment of clients. More specifically, trained support showed increased levels of recognition of and adequate responses to emotional signals of their client. Additionally, trained staff treated their clients more like self-dependent individuals and more often respected their opinions and wishes. Finally, after the

training program support staff showed higher levels of support of competence and stimulated clients more to perform activities on their own. The support staff participating in a control group did not show these improvements of behaviour. Client behaviour was also taken into account in this study, but it did not show improvement, which implies that the training only affected staff behaviour and not client behaviour. This finding is consistent with the results of Damen, Kef, Worm, Janssen, and Schuengel (2011). Thus, our study underlines the need of training programs that not only contain elements of knowledge and treatment skills, but also include aspects of attitude, self-reflection, and self-awareness.

In the final study, **Study 6** (in Chapter 7) a large sample size was used to be able to determine the effects of the training on several staff variables and generalise the findings to a larger group of support staff. Participants were 214 support staff working within residential treatment facilities for children, adolescents, and adults with ID and CB. They were divided in an experimental group, and two separate control groups. The final study was aimed at determining the effectiveness of a staff training on staff's emotional intelligence, coping styles, and experienced emotions. Trained support staff showed a significant increase of levels of emotional intelligence, whereas both control groups did not. With respect to coping styles, the findings revealed positive effects on task-oriented coping. Staff reported being more able to handle stressful situations adequately by focusing more on how to solve the problem, which is consistent with findings of Gerits, Derksen, and Verbruggen (2004), who showed that higher levels of emotional intelligence are related to more adequate coping with stressful situations. The results with regard to staff emotions were mixed. The training only affected the experience of positive emotions. In addition, organisational differences with respect to the effect of the training on experienced emotions were found. These findings show that we need more research aiming at the relationship between staff characteristics, organisational factors, and their mediating role in the effectiveness of staff training.

### 8.3 Some limitations

Although the studies presented in this thesis take important steps in exploring relationships between staff variables and in addition, showing the effectiveness of a staff training, some general limitations should be mentioned. First, regarding the descriptive and exploring studies on staff variables only snapshot measures were used, whereas research has shown that the investigated staff variables are not stable factors and can change over time (Goleman, 1995; Kuppens, Oravecz, & Tuerlinckx, 2010; Timmermans, Van Mechelen, & Kuppens, 2010). When focusing on the studies aimed at the effectiveness of a training, a similar limitation is found, namely the lack of longitudinal data, which makes it impossible to draw conclusions on the maintenance of the established effects over longer periods of time or the long-term effects of the staff training. However, we did gather follow-up data four months after the training ended. These data revealed that most of the found effects were still

present after four months. More data should be gathered over a longer period of time to investigate the maintenance of training effects. In addition, we did not investigate underlying mechanisms of the training and their independent effectiveness. Finally, it should be noted that the researcher was present during most of the training sessions to check whether trainers addressed all training topics. If this was not the case, the researcher discussed this with the trainer. Because this was not done in a systematic and structural way, solid conclusions about procedural reliability were unfeasible.

Second, the majority of the studies only use retrospective self-report in the form of questionnaires to measure staff variables. Research has shown that the use of self-report can lead to higher levels of social desirable answers by respondents (Lambrechts, Kuppens, & Maes, 2009; Wanless & Jahoda, 2002). Even more important, questionnaires do not provide information on actual staff behaviour or interaction between staff and clients. Therefore two studies used observations in order to measure actual staff behaviour during daily staff-client interactions. Two different methods and observation systems were applied. The first observation system focused on concrete staff and client behaviour and was based on a relevant study of Jones et al. (1999). Data were collected by directly observing daily situations in which staff-client interactions occurred. The second observation system was used to judge the quality of staff-client interactions by relating staff behaviour to components of self-determination theory (Custers et al. 2011). The behaviours addressed in the observation methods were both relatively broadly defined, which made it difficult to obtain a more detailed picture of what happened within staff-client interaction. However, measuring staff behaviour with two different observation systems constitutes a valuable base for further exploration of staff behaviour and ways to measure it. Several colleagues of our research group investigated behaviour of support staff that resulted in new methods (Reuzel, Embregts, Bosman, Cox, Van Nieuwenhuijzen, & Jahoda, 2013; Reuzel, Embregts, Bosman, Van Nieuwenhuijzen, & Jahoda, 2013; Van Oorsouw, Embregts, & Sohler, 2011).

As said in the introduction of this thesis, several variables affect staff behaviour and thus client wellbeing. In this thesis, staffs' emotional intelligence, emotions, feelings, coping styles, and interpersonal styles were studied. However, we did not control for or investigated other significant variables such as social climate, which is also thought to be an influence on staff and client behaviour (Langdon, Swift, & Budd, 2006). In addition, influences of organisational factors, which have shown to affect staff wellbeing and behaviour Hatton et al. (1999), were not taken into account in this thesis. When focusing on the training studies, client characteristics were described, but the influence of client characteristics, such as level of ID or form of CB, on training outcome were not investigated. A final important variable not measured in this thesis is client's wellbeing. Client's wellbeing and perspective was not taken into account, although research has shown that people with ID are quite able to express their thoughts and feeling about support staff (Clarkson, Murphy, Coldwell, & Dawson, 2009; Roeleveld, Embregts, Hendriks, & Van den Bogaard, 2011). However, in order to gain insight into how clients view their staff members, we conducted three focus groups that consisted of children and adolescents with borderline to mild ID and CB. These informal interviews revealed findings similar to

the previously mentioned studies: Clients need to be able to rely on support staff, they want staff to show that they are involved, and they want staff to sincerely listen to them. In addition, a number of clients were interviewed about specific support staff before and after the training. Because the quality of these interviews was insufficient the effectiveness of the training program could not be assessed. Thus, client perspective had been included in this research project, however, the nature of the data was exploring and the quality of especially the interviews did not meet the academic standard for research.

Finally, it should be noted that most of the clients who participated in the studies described in this thesis, had borderline to mild ID. In addition, for the studies with large sample sizes we did not control for severity of ID. Whether the found relationships between staff and client variables also exist within groups of individuals with more severe ID, should be subject of future research. The same accounts for the effectiveness of the specific staff training described in this thesis.

Although the mentioned limitations imply cautious interpretation of the results, the value of this thesis and its studies lies within some notable strengths. First, for the majority of the studies, the sample size was sufficiently large to be able to generalise the findings to all staff working with people with ID and CB. Second, the measures used in the studies were all validated and thoroughly investigated with regard to reliability. Third, staff and clients were observed during daily interactions in order to create a realistic image. The limitations described above were mostly consequences of choices we were forced to make, in order to conduct our research successfully within the boundaries of time and dynamic characteristics of clinical practice.

## **8.4 Implications for research and clinical practice**

Support staff working with people with ID and CB have highly-demanding jobs, in which negative emotions and feelings can be experienced and can even lead to burnout. They are expected to provide high quality of care and to build up meaningful relationships with their clients, as the levels of quality of life and wellbeing of clients heavily depend on support staff (Petry, Maes, & Vlaskamp, 2005). However, developing a meaningful relationship with clients can be difficult within the presence of CB and negative emotions. Clearly, research on how to support staff members in such a way that quality of care is maintained or increased is definitely needed. Therefore, this thesis was aimed at exploring variables related to staff behaviour and, subsequently, investigating the effectiveness of a staff training that was developed for these specific professionals.

The first three studies of this thesis have some important implications for research. Several researchers have proposed theoretical models in order to clarify what actually happens in daily practice and which factors play a role when it comes to CB, staff behaviour, and emotions (e.g., Hastings, 2002, 2005; Rose, David, & Jones, 2003). The findings of this thesis add up to these models and provide new information and perspectives on the relationship between staff and client variables and their

relationships with staff behaviour. For instance, the study that tested Weiner's model (1984), found that staff emotions and causal attributions about CB are related to interpersonal styles. The importance of this finding lies in the fact that we did not focus on certain staff behaviour, as earlier research did, but on staff interpersonal styles, in other words, the manner in which behaviour was expressed, for instance, whether it is friendly or hostile. Thus, the focus on behaviour expression, not on what behaviour was expressed. This is a new way of looking at staff behaviour, which in the past mainly consisted of checking what a staff member did, whether he/she helped or not. Within our research team, this shift of focus is gaining increased attention and is intensively explored in studies conducted by Willems and colleagues, looking at relations between staff and client in using interpersonal models (Willems, Embregts, Bosman, & Hendriks, 2013; Willems, Embregts, Hendriks, & Bosman, 2012; Willems, Embregts, Stams, & Moonen, 2010).

The study on emotions, feelings, and emotional intelligence showed that it could be valuable to make a distinction between emotions and feelings in clinical practice. Negative feelings of cognitive nature are more apt to change than basic emotions with a physical nature, and could thus form a useful target within staff interventions. Again, this study revealed that a new perspective on the emotions experienced by support staff is valuable. The findings of the multiple baseline observational study revealed the importance of looking at the individual relationship between support staff and clients. Although general behavioural patterns were found, it was striking to see that these patterns disappeared when focusing on unique dyads. In developing a staff training to improve staff-client relationships, it is important to be aware of the unique relationship between staff member and client. In sum, this thesis demonstrates that it is valuable and useful to view staff behaviour and staff-client relationships in a different way than was previously done, for instance, by distinguishing between emotions and feelings, and by focusing on how staff behave and not only on what they do. These different perspectives could lead to new outcomes and innovate the development of staff training programs.

In focusing on the staff training program and the outcomes of the studies with regard to the training, some important implications emerge. The need for training of emotional intelligence is clearly emphasised in the present thesis. Emotional intelligence is an important predictor of how individuals deal with stressful situations and how they function in general (Gerits et al., 2004; Matthews & Zeidner, 2000). As shown, support staff working with clients with CB are often confronted with stressful situations and are at greater risk of burnout (Jenkins, Rose, & Lovell, 1997; Mitchell & Hastings, 2001). When improving emotional intelligence, this risk decreases and trained staff have shown to cope with stress more adequately compared to non-trained staff members. Moreover, the training positively affected staff behaviour in interactions with clients. More specifically, trained staff members responded more adequately to emotional signals of their client and showed increased levels of empathy and affection compared to non-trained staff members. Additionally, trained staff showed more respect for the autonomy of the client and showed higher levels of support of competence, they praised their clients more often and stimulated clients more to perform tasks



independently. Concluding, these findings imply that emotional intelligence is indeed a useful and trainable construct to insert in staff training programs. This thesis also showed that it is important to link emotional intelligence to what happens in daily practice, in other words, training on emotional intelligence should also target the effect it has on actual staff behaviour. We believe that it is this self-reflection and awareness that constitute the most effective elements of the intervention. Staff members seem to become aware of their own emotional intelligence and learn how it affects their behaviour by reflecting repeatedly on this.

In line with the findings of the meta-analysis conducted by Van Oorsouw, Embregts, Bosman, and Jahoda (2009), the described training program consisted of both in-service training and coaching-on-the-job elements. The latter was provided by using video feedback. In the studies described in the present thesis the use of video feedback in staff training has proved to be effective, as was shown in earlier research (Damen et al., 2011; Embregts, 2002, 2003). These findings contribute to the plea to always take into account coaching-on-the-job, for instance video feedback, when training support staff (Finlay, Antaki, & Walton, 2008, Van Oorsouw et al., 2009).

When focusing on staff training effectiveness, research has shown that targeting knowledge and skills of support staff is rather valuable, but not enough to improve the attitudes of staff and the relationship between staff and clients (Embregts, 2009, 2011). Studies on client perspective with regard to staff revealed that clients want support staff to sincerely listen to them and they want to feel accepted and respected by staff (Roeleveld et al., 2011). These findings again show the importance of the individual relationship between clients and staff and we believe that having knowledge on and being equipped with skills related to the client and his/her behaviour, is simply not enough to create a safe, warm, and motivating environment for clients and building up a meaningful relationship with them. Providing staff with a self-reflective training focused at emotional intelligence related to staff-client interaction could form an effective method to improve the relationship between clients and staff with regard to the mentioned elements.

## 8.5 Future research

As described in the presented chapters, findings of this thesis form important implications and directions for future research. Relevant relationships among CB, staff emotions, emotional intelligence, and staff behaviour were found. However, these findings do not provide any information on the causality of these relationships, for instance, whether emotional intelligence affects staff emotions, or the other way around, or one another reciprocally. The causality of the relationships between staff and client variables should be subject of future research in order to build (reciprocal) causal research models and formulate useful targets for staff training (Hastings, 2002). Furthermore, it is a challenge for future research to focus on the variability of staff emotions, staff behaviour, and the relationship between support staff and clients (Timmermans et al., 2010). As said, the studies presented in this

thesis did not take into account multiple measures to create a realistic image of how the relationship between staff and client and the variables influencing this relationship might change over time. In sum, longitudinal research should be conducted to take into account causality, but also the variability and dynamics of staff and client behaviour.

The measurements used in this thesis ranged from self-report questionnaires to observations of daily staff-client interactions. Staff emotions were only measured with questionnaires, which, as said, increase the risk of social desirable answering. In addition, anecdotal information revealed that staff members find it difficult to admit that they experience negative emotions and stress when working with their clients. Research has shown that emotions and stress are observable reactions in the human brain and body (Damasio, 2001). This fact forms an interesting starting point for further research on staff emotions, stress, and the influence of them on staff behaviour. The use of physiological measures, should be explored in order measure staff emotions and stress. In addition, a study of Van Oorsouw et al. (2011) on the development of an observation system to measure emotional expressions of staff, showed the importance and added value of measuring verbal and non-verbal behaviour of support staff. In sum, future research should aim at exploring new and innovative methods to measure staff behaviour.

Future research should definitely take into account more variables that are thought to be of influence on staff and client behaviour. Increasingly investigated factors that appear to be essential when studying staff emotions, stress, and behaviour are organisational factors such as work-load, social support, and role clarity (Rose, 1995). Hatton et al. (1999) found that a mismatch between person and organisation or a lack of fit between staff ideas of an ideal organisation and the real organisation they work for, can lead to negative staff outcomes like a greater job strain and reduced work satisfaction. In addition, Blumenthal, Lavender, and Hewson (1998) found a modest relationship between role clarity and emotional exhaustion. They concluded that perceptions of staff with respect to organisations having unrealistic expectations and organisations not listening to views of their staff members are most important in predicting emotional exhaustion. Hastings (2002) proposed that organisational factors appear to be more strongly associated with staff stress, and thus staff behaviour, than client characteristics. In sum, these findings emphasise the importance of taking into account the influence of organisational factors in future research on staff emotions, stress, and behaviour.

With regard to the content of the training program, the different elements and underlying mechanisms of the training should be subject of future research on evaluation of the effects. In other words, we should try to determine the separate effects for training aimed at emotional intelligence and training on staff behaviour linked to emotional intelligence by providing video feedback. In addition, it is not unthinkable that these elements influence each other. Knowledge on the effects of these elements and their reciprocal influences could provide more insight into the underlying mechanisms of the training, and more information, which could form a starting point for adapting and optimising the training program. In line with this, further research should explore the influence of individual differences on the effectiveness of the training. Research conducted by Embregts (2002) showed that

support staff differed in the extent to which video-feedback training improved their treatment skills. A possible explanation of the found differences could lie in the emotional intelligence of support staff. For instance, it is imaginable that a higher score on self-actualisation (the extent to which an individual sets certain goals in life and wants to develop him or herself) leads to a larger effectiveness of the training. These assumptions should be tested in future research in order to determine whether emotional intelligence influence training effectiveness, and if so, to develop staff training in a way that is effective for and fits the needs of each individual staff member.

Finally, future research should undoubtedly pay more attention to the perspective of clients. As research has shown, clients are capable of sharing their opinions on and feelings towards support staff (Clarkson et al., 2009; Roeleveld et al., 2011). The review of Van Oorsouw et al. (2013) showed that client perspective was never taken into account in studies on staff training published the last 20 years. Unfortunately, client perspective was not taken into account in the studies described in this thesis either, albeit we experienced that asking clients about their opinions and feelings could provide rich information on relevant competencies of support staff and could lead to new directions for staff interventions. Concluding, client perspective should be implemented as a measure to determine the effectiveness of staff training. After all, the final goal of training staff is to increase clients' wellbeing.

## 8.6 Conclusion

Support staff working with people with ID and CB have a demanding job in which they can experience intense emotions and feelings of stress, which in turn affect staff wellbeing and behaviour. The main aim of this thesis was two-fold. First, it is aimed at exploring variables influencing staff emotions and behaviour and therefore the relationship between staff and clients. Second, the thesis focused on the effectiveness of a training that was specifically developed for support staff working with people with ID and CB. The studies regarding exploring relationships between certain variables, staff emotions, and behaviour yielded some significant factors, for instance, type and severity of CB, level of negative emotions and feelings experienced by staff, causal attributions of staff with regard to CB, and emotional intelligence of support staff. However, the relationships do not appear to be simply causal and these relationships are sometimes weak, which implies that further research investigating the influences of these factors on staff emotions and behaviour is definitely needed. The studies with respect to the training revealed that a training focused on emotional intelligence and staff-client interactions is indeed effective in improving emotional intelligence of staff. Moreover, the training lead to an increase of adequate coping strategies. Most importantly, findings showed that the training has led to an improvement of staff behaviour. Future research should determine if this improvement leads to an increase of clients' wellbeing.

In conclusion, this thesis has provided relevant new information for clinical practice and human services, identifies important factors related to daily practice, which can be translated to targets

addressed in staff training programs, and showed that reflecting on emotional intelligence can form a rather effective ingredient of staff training. We, of course, hope that these outcomes eventually lead to an improvement of quality of life and wellbeing of clients.

## References

- Aber, J. L., Brown, J. L., & Henrich, C. C. (1999). *Teaching conflict resolution: An effective school-based approach to violence prevention*. New York, NY: National Center for Children in Poverty, Joseph L. Mailman School of Public Health, Columbia University.
- Blumenthal, S., Lavender, T. & Hewson, S. (1998). Role clarity, perception of the organization and burnout amongst support workers in residential homes for people with intellectual disability: a comparison between a National Health Service trust and a charitable company. *Journal of Intellectual Disability Research*, 42, 409-417.
- Clarkson R., Murphy G., Coldwell J., & Dawson D. (2009). What characteristics do service users with intellectual disability value in direct support staff within residential forensic services? *Journal of Intellectual & Developmental Disability*, 34, 283-98.
- Custers, A. F., Westerhof, G. J., Kuin, Y., & Riksen-Walraven, M. (2010). Need fulfillment in caring relationships: Its relation with well-being of residents in somatic nursing homes. *Aging & mental health*, 14, 731-739.
- Damasio, A. (2001). Fundamental feelings. *Nature*, 413, 781.
- Damen, S., Kef, S., Worm, M., Janssen, M. J., & Schuengel, C. (2011). Effects of video-feedback interaction training for professional caregivers of children and adults with visual and intellectual disabilities. *Journal of Intellectual Disability Research*, 55, 581-595.
- Embregts, P. J. C. M. (2002). Effect of resident and direct-care staff training on responding during social interactions. *Research in Developmental Disabilities*, 23, 353-366.
- Embregts, P. J. C. M. (2003). Using self-management, video feedback, and graphic feedback to improve social behavior of youth with mild intellectual disabilities. *Education and Training in Developmental Disabilities*, 38, 283-295.
- Embregts P. (2009). *Zorg voor mensen met een verstandelijke beperking. Menslievende professionalisering in de zorg voor mensen met een verstandelijke beperking*. HAN University Press, Arnhem.
- Embregts, P. J. C. M. (2011). *Zien, bewogen worden, in beweging komen*. Tilburg: Prismaprint.
- Finlay, W. M. L., Antaki, C., & Walton, C. (2008). A manifesto for the use of video in service improvement and staff development in residential services for people with learning disabilities. *British Journal of Learning Disabilities*, 36, 227-231.
- Gerits, L., Derksen, J. J. L., & Verbruggen, A. B. (2004). Emotional intelligence and adaptive success of nurses caring for people with mental retardation and severe behavior problems. *Mental Retardation*, 42, 106-21
- Goleman, D. (1995). *Emotional Intelligence*. New York, NY: Bantam Books.
- Hastings, R. P. (2002). Do challenging behaviors affect staff psychological well-being? issues of causality and mechanism. *American Journal on Mental Retardation*, 107, 455-467.
- Hastings, R. P. (2005). Staff in special education settings and behaviour problems: Towards a framework for research and practice. *Educational Psychology*, 25, 207-221.
- Hastings, R. P., & Brown, T. (2002). Behavioural knowledge, causal beliefs and self-efficacy as predictors of special educators' emotional reactions to challenging behaviours. *Journal of Intellectual Disability Research*, 46, 144-150.
- Hastings, R. P., & Remington, B. (1994a). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. *British Journal of Clinical Psychology*, 33, 423-438.
- Hastings, R., & Remington, B. (1994b). Rules of engagement: Toward an analysis of staff responses to challenging behavior. *Research in Developmental Disabilities*, 15, 279-298.
- Hatton, C., Emerson, E., Rivers, M., Mason, H., Mason, L., Swarbrick, R., Kiernan, C., Reeves, D., & Alborz, A. (1999). Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *Journal of Intellectual Disability Research*, 43, 253-267.
- Jenkins, R., Rose, J., & Lovell, C. (1997). Psychological well-being of staff working with people who have challenging behaviour. *Journal of Intellectual Disability Research*, 41, 502-511.

- Jones, E., Perry, J., Lowe, K., Felce, D., Toogood, S., Dunstan, F., Allen, D., & Pagler, J. (1999). Opportunity and the promotion of activity among adults with severe intellectual disability living in community residences: the impact of training staff in active support. *Journal of Intellectual Disability Research, 43*, 164-178.
- Kuppens, P., Oravecz, Z., & Tuerlinckx, F. (2010). Feelings change: Accounting for individual differences in the temporal dynamics of affect. *Journal of Personality and Social Psychology, 99*, 1042-1060.
- Lambrechts, G., Kuppens, S. & Maes, B. (2009). Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research, 53*, 620-632.
- Langdon, P. E., Swift, A., & Budd, R. (2006). Social climate within secure inpatient services for people with intellectual disabilities. *Journal of Intellectual Disability Research, 50*, 828-836.
- Matthews, G., & Zeidner, M. (2000). Emotional Intelligence, adaptation to stressful encounters, and health outcome. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 459-489). San Fransisco, CA: Jossey-Bass Inc.
- Mitchell, G., & Hastings, R. P. (2001). Coping, burnout, and emotion in staff working in community services for people with challenging behaviors. *Journal of Intellectual Disability Research, 106*.
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences, 47*, 36-41.
- Noone, S. J., & Hastings, R. P. (2010). Using acceptance and mindfulness-based workshops with support staff caring for adults with intellectual disabilities. *Mindfulness, 1*, 67-73.
- Oliver, C. (1995). Self-injurious behaviour in children with learning disabilities: Recent advances in assessment and intervention. *Journal of Child Psychology and Psychiatry, 36*, 909-927.
- Petry, K., Maes, B., & Vlaskamp, C. (2005). Domains of quality of life of people with profound multiple disabilities: The perspective of parents and direct support staff. *Journal of Applied Research in Intellectual Disabilities, 18*, 35-46.
- Reuzel, E., Embregts, P. J. C. M., Bosman, A. M. T., Cox, R., Van Nieuwenhuijzen, M., & Jahoda, A. (2013). Conversational Synchronization in Naturally Occurring Settings: A Recurrence-Based Analysis of Gaze Directions and Speech Rhythms of Staff and Clients with Intellectual Disability. *Journal of Nonverbal Behavior, 37*, 281-305.
- Reuzel, E., Embregts, P. J. C. M., Bosman, A. M. T., Van Nieuwenhuijzen, M., & Jahoda, A. (2013). Interactional patterns between staff and clients with borderline to mild intellectual disabilities. *Journal of Intellectual Disability Research, 57*, 53-66.
- Roeleveld, E., Embregts, P., Hendriks, L., & Van den Bogaard, K. (2011). Zie mij als mens! Noodzakelijke competenties voor begeleiders volgens mensen met een verstandelijke beperking. In P. Embregts, & L. Hendriks (Red.), *Menslievende professionalisering in de zorg voor mensen met een verstandelijke beperking: Aansluiten bij cliënten en hun ouders* (pp. 41-60). Arnhem: HAN University Press.
- Rose, J. L. (1995). Stress and residential staff: Towards an integration of existing research. *Mental Handicap Research, 8*, 220-236
- Rose, J., David, G., & Jones, C. (2003). Staff who work with people who have intellectual disabilities: the importance of personality. *Journal of Applied Research in Intellectual Disabilities, 16*, 267-277.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of Intrinsic motivation, social development, and well-being. *American psychologist, 55*, 68.
- Timmermans, T., Van Mechelen, I. & Kuppens, P. (2010). The relationship between individual differences in intraindividual variability in core affect and interpersonal behaviour. *European Journal of Personality, 24*, 623-638.
- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., & Bosman, A. M. T. (2013). Evaluating staff training: Taking account of interactions between staff and clients with intellectual disability and challenging behaviour. *Journal of Intellectual and Developmental Disability, 38*, 356-364.

- Van Oorsouw, W. M. W. J., Embregts, P. J. C. M., Bosman, A. M. T., & Jahoda, A. (2009). Training staff serving clients with intellectual disabilities: A meta-analysis of aspects determining effectiveness. *Research in Developmental Disabilities, 30*, 503-511.
- Van Oorsouw, W. M. W. J., & Embregts, P. J. C. M., & Sohler, J. (2011). Verbal and nonverbal behaviour of staff: a first attempt in the development of an observation instrument. *Research in Developmental Disabilities, 32*, 2408-2414.
- Wanless, L. K. and Jahoda, A. (2002). Responses of staff towards people with mild to moderate intellectual disability who behave aggressively: a cognitive emotional analysis. *Journal of Intellectual Disability Research, 46*, 507-516.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*, 548-573.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. Berlin: Springer-Verlag.
- Willems, A. P. A. M., Embregts, P. J. C. M., Bosman, A. M. T., & Hendriks, A. H. C. (2013). The analysis of challenging relations: influences on interactive behaviour of staff towards clients with intellectual disabilities. *Journal of Intellectual Disability Research*. doi: 10.1111/jir.12027
- Willems, A. P. A. M., Embregts, P. J. C. M., Hendriks, L. H. C., & Bosman A. M. T. (2012). Measuring staff behavior towards clients with ID and challenging behavior: Further psychometric evaluation of the Staff-Client Interactive Behavior Inventory (SCIBI). *Research in Developmental Disabilities, 33*, 1484-1494.
- Willems, A. P. A. M., Embregts, P. J. C. M., Stams, G. J. J. M., & Moonen, X. M. H. (2010). The relation between intrapersonal and interpersonal staff behaviour towards clients with ID and challenging behaviour: A validation study of the Staff-Client Interactive Behaviour Inventory. *Journal of Intellectual Disability Research, 54*, 40-51.
- Willner, P., & Smith, M. (2008). Attribution theory applied to helping behaviour towards people with intellectual disabilities who challenge. *Journal of Applied Research in Intellectual Disabilities, 21*, 150-155.







## Samenvatting

Het onderzoek beschreven in dit proefschrift was gericht op begeleiders van mensen met een verstandelijke beperking en gedragsproblemen. Alle begeleiders die hebben deelgenomen aan het onderzoek waren werkzaam in residentiele zorgorganisaties voor kinderen, adolescenten en volwassenen met een verstandelijke beperking en gedragsproblemen. De ernst van de verstandelijke beperking van de deelnemende cliënten varieerde van licht tot ernstig. Gedragsproblemen die cliënten lieten zien liepen uiteen van fysieke agressie gericht op begeleiding tot dwangmatig gedrag. Deze gedragsproblemen kunnen leiden tot negatieve emoties en stress bij begeleiders. Deze emoties kunnen vervolgens van invloed zijn op het gedrag van begeleiders en zo een goede interpersoonlijke relatie tussen begeleider en cliënt in weg staan. Daarnaast kunnen gevoelens van stress tot burn-out en ziekteverzuim leiden. Deze verschijnselen verklaren de groeiende behoefte aan onderzoek gericht op emoties van begeleiders en op de relatie tussen het gedrag van begeleiders en cliënten. Ook bestaat er een toenemende behoefte aan bewezen effectieve interventies om de kwaliteit van leven en het welzijn van cliënten te vergroten.

## Hoofdstuk 1

In hoofdstuk 1 wordt beschreven dat het werken met mensen met een verstandelijke beperking en gedragsproblemen emotioneel belastend kan zijn. Stress en burn-out zijn dan ook veelvoorkomend in de zorg voor deze complexe doelgroep. Deze verschijnselen kunnen de betekenisvolle relatie tussen begeleider en cliënt in gevaar brengen. De rol van begeleiders in het leven van mensen met een verstandelijke beperking en gedragsproblemen is steeds vaker onderwerp van onderzoek naar kwaliteit van leven en welzijn van cliënten. Een aantal onderzoekers suggereert zelfs dat het verbeteren van de relatie tussen begeleiders en cliënten leidt tot een verbetering van kwaliteit van leven van de cliënt. Het is en blijft echter een grote uitdaging voor begeleiders om de balans te vinden tussen begeleiding bieden waarin een betekenisvolle, menselijke relatie met de cliënt centraal staat, en tegelijkertijd begeleiding te bieden die de cliënt doet ontwikkelen tot een meer autonoom en zelfstandig individu.

Mensen met een verstandelijke beperking lopen meer risico op het ontwikkelen van gedragsproblemen, zoals agressief gedrag of zelfverwondend gedrag, dan mensen zonder verstandelijke beperking. Het gedrag van begeleiders kan een rol spelen bij het ontstaan van gedragsproblemen, bijvoorbeeld door onbewuste sociale bekrachtiging van het gedrag. Andersom kunnen gedragsproblemen van cliënten voor negatieve emoties en stress zorgen bij begeleiders. Deze emoties kunnen het gedrag van begeleiders negatief beïnvloeden en kunnen zelfs leiden tot patronen van vermijding van de cliënt.

Er bestaan diverse factoren waarvan wordt gedacht dat ze een rol spelen in de relatie tussen gedragsproblemen van cliënten, emoties en gedrag van begeleiders. In hoofdstuk 1 wordt een aantal van deze factoren beschreven. Zo zijn er verschillende onderzoeken waarin is gekeken naar de relatie tussen causale attributies van begeleiders met betrekking tot gedragsproblemen enerzijds, en emoties en gedrag van begeleiders anderzijds. Daarnaast blijken cliëntkenmerken ook een rol te spelen als het gaat om emoties en gedrag van begeleiders. Zo ervaren begeleiders meer negatieve emoties in het omgaan met agressie dan in het omgaan met stereotiep gedrag. Persoonlijke eigenschappen van begeleiders, zoals copingstijl, kunnen ook van invloed zijn op gedrag. Een belangrijke persoonlijke eigenschap die samenhangt met coping en burn-out is emotionele intelligentie. Dit is een non-cognitieve vorm van intelligentie die ook wel beschreven wordt als een persoonlijke stijl. Emotionele intelligentie bestaat uit een aantal elementen: intrapersoonlijk EQ, interpersoonlijk EQ, stressmanagement, adaptatie en algemene stemming. Emotionele intelligentie hangt samen met welzijn en algemeen functioneren.

Hoofdstuk 1 wordt afgesloten met de conclusie dat de relatie tussen begeleider en cliënt complex kan zijn en beïnvloed wordt door een aantal factoren. Vanuit de klinische praktijk bestaat dan ook een grote behoefte aan effectieve scholing en coaching van begeleiders. Onderzoek met betrekking tot scholing van begeleiders heeft zich tot nu toe met name gericht op het verbeteren van kennis en vaardigheden van begeleiders. Een goede relatie op kunnen bouwen met een cliënt vraagt echter meer van een begeleider dan alleen kennis en vaardigheden. Trainingen voor begeleiders zouden zich ook moeten richten op attitude en persoonlijke kenmerken van begeleiders. Daarnaast is een combinatie van een klassikale training en een coaching on the job traject het effectiefst. Een voorbeeld van een effectief gebleken coaching on the job methodiek is videofeedback.

Dit proefschrift behelst twee belangrijke thema's. Allereerst hebben drie studies zich gericht op factoren die gerelateerd zijn aan emoties en gedrag van begeleiders. De eerste drie studies hebben betrekking op factoren die samen lijken te hangen met emoties en gedrag van begeleiders. De overige drie studies richten zich op de effecten van een specifiek voor begeleiders ontwikkelde training: Begeleiders in Beeld. De meetinstrumenten die gebruikt zijn in de verschillende studies varieerden van vragenlijsten tot observatieschalen. De bevindingen van dit proefschrift brengen belangrijke implicaties voort voor zowel de klinische praktijk als toekomstig onderzoek.

## Hoofdstuk 2

De studie die wordt beschreven in dit hoofdstuk was gericht op het exploreren van dagelijkse interacties tussen begeleiders en cliënten. Daarbij is voornamelijk gekeken naar de verhouding tussen betrokkenheid (engagement) en vermijding (avoidance) vanuit de begeleider en de samenhang

tussen deze variabelen en het gedrag van cliënten. Deelnemers waren acht begeleiders, een cliënt met een lichte verstandelijke beperking, een cliënt met een matige verstandelijke beperking en een cliënt met een ernstige verstandelijke beperking. Gedurende zes weken werden begeleiders en cliënten tijdens dagelijkse contactmomenten geobserveerd. De resultaten van deze studie lieten zien dat begeleiders in grote mate betrokkenheid in het contact met de cliënt toonden, bijvoorbeeld door de cliënt te assisteren bij het uitvoeren van een taak of een praatje te maken met de cliënt. Met betrekking tot contact lieten de drie cliënten verschillend gedrag zien dat samen leek te hangen met de ernst van hun beperking. De cliënt met een lichte verstandelijke beperking zocht het vaakst contact met begeleiders. De mate waarin cliënten contact zochten met hun begeleiders leek ook samen te hangen met de mate van betrokkenheid vanuit begeleiders. Daarnaast lieten begeleiders tijdens interacties waarin cliënten meer gedragsproblemen vertoonden, meer vermijdingsgericht gedrag zien. De beschreven bevindingen zijn gebaseerd op de gemiddelde percentages van gedragingen van de hele groep begeleiders en cliënten. Op basis van de individuele begeleider-client dyades zagen we echter geen relatie tussen het gedrag van begeleiders en dat van cliënten. Dit impliceert dat iedere begeleider-client relatie unieke kenmerken heeft die meegewogen zouden moeten worden in onderzoek naar interactiepatronen.

### Hoofdstuk 3

De doelstelling van de tweede studie in dit proefschrift was het toetsen van de theorie van Weiner, waarin beschreven staat dat causale attributies (opvattingen over de oorzaak van gedragsproblemen) en emoties van begeleiders van invloed zijn op de mate van ondersteunend en helpend gedrag richting de cliënt. Eerdere onderzoeken met betrekking tot deze theorie lieten uiteenlopende en tegenstrijdige resultaten zien. Daarnaast richtten deze onderzoeken zich met name op helpend gedrag en niet op de interpersoonlijke stijl van begeleiders. In dit hoofdstuk werd dan ook de relatie tussen attributies, emoties en interpersoonlijke stijlen van begeleiders beschreven. Ook werd de samenhang tussen deze variabelen en het type gedragsprobleem van de cliënt onderzocht. De resultaten lieten zien dat begeleiders die werken met cliënten die met name gedragsproblemen gericht op hun omgeving vertonen, meer negatieve emoties ervaren, een meer beheersmatige en vijandige stijl rapporteren en vaker denken dat de cliënt zijn of haar gedragsproblemen onder controle heeft. Ook kon aangetoond worden dat emoties en attributies gezamenlijk een substantieel deel van de variantie in vijandige en steun-zoekende stijl verklaarden. In tegenstelling tot het model van Weiner werd in deze studie de mediërende rol van emoties in de relatie tussen attributies en gedrag van begeleiders niet aangetoond. De bevindingen beschreven in dit hoofdstuk benadrukken dat het van groot belang is om de variabiliteit van emoties, attributies en gedrag van begeleiders verder te onderzoeken.

## Hoofdstuk 4

In dit hoofdstuk werd het onderscheid tussen emoties en gevoelens van begeleiders onderzocht. Emoties zijn primair van aard, aangeboren en hebben een sterke fysiologische component. Gevoelens hebben daarentegen een cognitieve component en worden gevormd tijdens de opvoeding. In hoofdstuk 4 werd de relatie tussen emoties, gevoelens en emotionele intelligentie onderzocht. De correlaties die werden gevonden waren niet groot, maar enkelen waren wel significant. Zo bleken stressmanagement aan adaptieve vaardigheden het sterkst samen te hangen met emoties en gevoelens. Begeleiders die over betere probleem-oplossingsvaardigheden beschikten, rapporteerden minder negatieve emoties in het omgaan met gedragsproblemen van cliënten. Begeleiders die op een meer adequate manier met stress omgingen, rapporteerden eveneens minder negatieve emoties. Begeleiders met hogere impulscontrole en betere realiteitstoetsingscapaciteiten (oog hebben voor feiten), rapporteerden zowel minder negatieve gevoelens als minder negatieve emoties. Over het algemeen hadden oudere begeleiders met meer werkervaring een hogere intrapersonlijke emotionele intelligentie. Gevoelens leken daarnaast sterker samen te hangen met emotionele intelligentie dan emoties. Deze bevinding zou verklaard kunnen worden door de cognitieve en bewuste aard van gevoelens en emotionele intelligentie. Emoties hebben daarentegen een meer fysieke en minder cognitieve en bewuste basis. De bevindingen in deze studie zijn gebaseerd op retrospectieve vragenlijsten. De gevonden relaties zouden in toekomstig onderzoek met andere onderzoeksmethoden zoals observaties of fysiologische metingen nader onderzocht moeten worden.

## Hoofdstuk 5

Het tweede gedeelte van dit proefschrift beschrijft drie studies die gericht waren op het evalueren van de effectiviteit van een specifieke training genaamd Begeleiders in Beeld. Begeleiders in Beeld concentreert zich op emotionele intelligentie van begeleiders gekoppeld aan interactie tussen begeleiders en cliënten. Begeleiders namen gedurende vier maanden deel aan deze training. Tijdens zeven tot tien bijeenkomsten, kregen begeleiders feedback op hun eigen emotionele intelligentie profiel en daarnaast kregen ze videofeedback gericht op interactie met de cliënt. Tijdens videofeedbackbijeenkomsten werd steeds de koppeling gemaakt tussen het handelen van de begeleider en het emotionele intelligentie-profiel. De training werd verzorgd door gecertificeerde en ervaren trainers die een vooraf ontwikkeld protocol voor feedback hanteerden. Om de effecten van Begeleiders in Beeld te onderzoeken werd gebruik gemaakt van een experimentele groep en een controlegroep. De doelstelling van de vierde studie was het bepalen van het effect van de training op de emotionele intelligentie van deelnemers. Met andere woorden, leidde Begeleiders in Beeld tot een verbetering in emotionele intelligentie van begeleiders? De resultaten toonden aan dat dit inderdaad het geval was. De veranderingen in emotionele intelligentie binnen de experimentele

groep bleken significant groter dan in de controlegroep. Daarnaast verbeterde de emotionele intelligentie van getrainde begeleiders volgens experts op het gebied van emotionele intelligentie. Deze resultaten komen overeen met eerder gevonden resultaten met betrekking tot interventies gericht op emotionele intelligentie en videofeedback. Omdat deze studie zich enkel richtte op het effect van Begeleiders in Beeld op emotionele intelligentie van begeleiders en niet is gekeken naar effecten op het handelen van begeleiders en het welzijn van cliënten, dienen de resultaten met enige voorzichtigheid geïnterpreteerd te worden. Desalniettemin vormen de bevindingen de eerste, belangrijke stap in het bepalen van de effectiviteit van een interventie waarin zelfreflectie en bewustwording centraal staan.

## Hoofdstuk 6

De vijfde studie, beschreven in hoofdstuk 6 van dit proefschrift, was gericht op het bepalen van de effectiviteit van Begeleiders in Beeld met betrekking tot interacties tussen begeleiders en cliënten. Om dit te kunnen onderzoeken werden videobeelden geanalyseerd met een specifiek observatiesysteem dat gebaseerd was op de zelf-determinatie theorie. Deze theorie beschrijft dat ervaren welzijn afhangt van de bevrediging van drie universele behoeften: de behoefte om verbonden te zijn met anderen, de behoefte om als een autonoom individu te kunnen functioneren in het leven en de behoefte om competent te zijn in wat men doet. Het observatiesysteem is oorspronkelijk ontwikkeld in de zorg voor ouderen en werd aangepast aan de zorg voor mensen met een verstandelijke beperking en gedragsproblemen. De schalen in het observatiesysteem werden gescoord op een zeven-puntschaal en beschreven de mate waarin een begeleider de drie behoeften van de cliënt tracht te bevredigen. Met andere woorden, er werd gekeken naar de mate waarin een begeleider probeert verbondenheid te zoeken met de cliënt, de cliënt het gevoel probeert te geven dat hij een autonoom individu is en de cliënt het gevoel probeert te geven dat hij competent is in zijn handelen. De resultaten van deze studie lieten zien dat Begeleiders in Beeld tot een verbetering van deze behoeftebevrediging leidde. Begeleiders die getraind waren stemden beter af op de emotionele signalen van hun cliënten, lieten meer empathie zien, toonden meer respect voor de individuele wensen en ideeën van de cliënt, behandelden de cliënt meer als een competente en onafhankelijke persoon en lieten de cliënt meer activiteiten zelfstandig ondernemen. De begeleiders die in de controlegroep zaten, lieten deze verbeteringen niet zien. Positief en negatief gedrag van cliënten werd ook meegenomen in deze studie, maar de resultaten lieten zien dat dit gedrag niet veranderde door de training. Deze studie benadrukt de behoefte aan trainingen die zich niet louter richten op elementen van kennis en vaardigheden, maar zich ook concentreren op attitude, persoonlijke kenmerken, zelfreflectie en bewustzijn van begeleiders.

## Hoofdstuk 7

In de laatste studie beschreven in dit proefschrift, werden de effecten van Begeleiders in Beeld op verschillende variabelen getoetst, namelijk emotionele intelligentie, coping stijl en ervaren emoties van begeleiders. Deelnemers waren 214 begeleiders die allen werkzaam waren in de residentiele zorg voor mensen met een verstandelijke beperking en gedragsproblemen. Ze werden onderverdeeld in een experimentele groep, een controlegroep van begeleiders die in dezelfde teams werkzaam waren als begeleiders die getraind werden en een onafhankelijke controlegroep. De laatste groep bestond uit teams waarin geen begeleiders deelnamen aan de training. De experimentele groep liet een significante stijging zien in emotionele intelligentie, de gemiddelde emotionele intelligentie van de controlegroepen bleef gelijk. Met betrekking tot copingstijl van begeleiders, toonden de resultaten een positief effect van de training op probleem- of taakgerichte coping. Getrainde begeleiders rapporteerden dat ze beter om konden gaan met stressvolle situaties doordat ze zich meer bleken te richten op het oplossen van de problematische situatie. Deze bevinding komt overeen met de resultaten van eerder onderzoek waarin een hogere emotionele intelligentie samen bleek te hangen met een meer adequate copingstijl. De resultaten met betrekking tot emoties van begeleiders waren verschillend per organisatie. Toekomstig onderzoek zou zich onder andere kunnen richten op de mediërende rol van organisatiefactoren als het gaat om effectiviteit van een interventie voor begeleiders.

## Hoofdstuk 8

Tot slot werden in het laatste hoofdstuk de belangrijkste bevindingen uit dit proefschrift samengevat en in perspectief geplaatst en werden de beperkingen van de studies geschetst. De conclusies van dit proefschrift hebben relevante implicaties voor zowel het onderzoek als de klinische praktijk. Zo richtten de eerste drie studies zich op de relatie tussen verschillende variabelen zoals gedrag van begeleiders, emotionele intelligentie en gedrag van cliënten. De resultaten van deze studies kunnen worden toegevoegd aan onderzoeken waarin theoretische modellen met betrekking tot de relatie tussen begeleider- en cliëntvariabelen worden beschreven. Daarnaast laat het onderzoek beschreven in dit proefschrift zien dat de individuele relaties tussen begeleiders en cliënten uniek zijn en eigen kenmerken hebben. In het ontwikkelen van interventies gericht op het verbeteren van begeleider-clieënt relaties, is het noodzakelijk om deze kenmerken mee te nemen. Tot slot laten de eerste drie studies in dit proefschrift zien dat het waardevol kan zijn om bestaande constructen als emoties of gedrag van begeleiders vanuit een ander perspectief te bekijken door bijvoorbeeld te differentiëren tussen emoties en gevoelens of door naar interpersoonlijke stijl in plaats van helpend gedrag te kijken.

De laatste drie studies waren gericht op de effecten van een specifieke training gericht op emotionele intelligentie en handelen van begeleiders. Begeleiders die deelnamen aan de training lieten op meerdere fronten verbetering zien, zowel op het gebied van emotionele intelligentie als in het handelen op de werkvloer. Daarnaast gingen ze op een adequatere manier om met stressvolle situaties na de training. De meerwaarde van het trainen van emotionele intelligentie wordt dus duidelijk aangetoond en benadrukt door dit proefschrift. Tot slot is het zeer wenselijk om het trainen van emotionele intelligentie te koppelen aan wat er daadwerkelijk gebeurt tijdens interacties tussen begeleiders en cliënten. Videofeedback is een effectief middel om dit te bewerkstelligen. Wij zijn ervan overtuigd dat de werkzame bestanddelen van de training zijn gestoeld op zelfreflectie en bewustwording. Begeleiders reflecteren op hun eigen emotionele intelligentie en worden zich bewust van het effect hiervan op hun handelen en dus op de cliënt. In overeenstemming met de bevindingen van een meta-analyse gericht op effectieve elementen in trainingen voor begeleiders, bevat de training die in dit proefschrift beschreven en onderzocht wordt, zowel klassikale elementen als een coaching on the job traject. Ook laat dit proefschrift zien dat het waardevol is om scholing voor begeleiders gericht op kennis en vaardigheden in te zetten, maar dat dit wellicht niet toereikend is om de attitude van begeleiders en de relatie tussen begeleiders en cliënten te verbeteren. Cliënten geven in diverse onderzoeken aan dat hun ideale begeleider sterke interpersoonlijke kwaliteiten heeft, zoals oprecht kunnen luisteren en respect tonen voor de cliënt. Begeleiders een reflectieve training aanbieden gericht op emotionele intelligentie gekoppeld aan handelen in de praktijk, kan een effectieve manier zijn om hun interpersoonlijke kwaliteiten te verbeteren en zo de relatie tussen begeleider en cliënt te optimaliseren.

Toekomstig onderzoek zou zich onder andere moeten richten op de ontwikkeling van theoretische modellen met betrekking tot de relaties tussen bovenbeschreven variabelen. Ook zou de causaliteit van deze relaties nader getoetst moeten worden. Daarnaast zou longitudinaal onderzoek meer inzicht kunnen geven in de relaties en de variabiliteit ervan. Andere meetinstrumenten zoals fysiologische metingen zouden van toegevoegde waarde kunnen zijn bij het onderzoeken van bijvoorbeeld emoties en zouden een mooie aanvulling kunnen vormen op onderzoek gebaseerd op vragenlijsten en observatie. Ook zou gekeken kunnen worden naar de invloed van organisatiefactoren als werkbelasting en sociale steun op ervaren stress en gedrag van begeleiders. Met betrekking tot de inhoud van de onderzochte training Begeleiders in Beeld zou de werkzaamheid van de verschillende elementen nader bepaald moeten worden. Zo kan meer inzicht worden verkregen in de onderliggende mechanismen van de training en de samenhang hier tussen. Deze informatie kan een waardevol startpunt vormen voor het aanpassen en optimaliseren van de training. Tot slot is het van groot belang om in toekomstig onderzoek het perspectief van cliënten mee te nemen. Zoals eerder onderzoek liet zien zijn veel cliënten goed in staat om hun mening over begeleiders te delen. Toch zijn er relatief weinig studies waarin dit perspectief wordt meegenomen. Zeker als het



gaat om de effecten van een training voor begeleiders, is het bevragen van cliënten hierover een bruikbare en cruciale toevoeging. Ten slotte hopen we dat Begeleiders in Beeld uiteindelijk leidt tot een verbetering van het welzijn van de cliënt.

## Dankwoord

Het schrijven van dit dankwoord heb ik heel lang uitgesteld. Waarom? Omdat het schrijven ervan voor mij voelt als de kers op de taart. Wat heerlijk om eindelijk de mensen te mogen bedanken die samen met mij voor de totstandkoming van dit proefschrift hebben gezorgd. Ik kan dan ook niet anders dan te beginnen met het bedanken van alle begeleiders en cliënten die hebben deelgenomen aan het onderzoek. Drie cliënten wil ik in het bijzonder noemen: lieve Elly, Mike en Jo, jullie gunden mij een kijkje in jullie waardevolle leven, wat mij voor altijd geraakt heeft. Bedankt, het ga jullie goed! Er zijn ook een aantal begeleiders die ik graag wil bedanken. Loes Verheggen, Micheline Derks en Loes van den Munckhof, jullie zaten ooit in onze eerste training en jullie zijn altijd betrokken gebleven bij het onderzoek. Door jullie enthousiasme en interesse weet ik dat we mooi werk hebben geleverd en dat we door moeten gaan. Bedankt! Ook Thijs, Monique, Marloes, Annelies, Monique, Nancy, Eva en Mieke wil ik graag bedanken voor al die diensten die ik met hen heb mogen meelopen. Het moet niet altijd gemakkelijk zijn geweest om jullie werk te doen terwijl ik urenlang met camera of laptop over jullie schouders meekeek. Toch heb ik me altijd welkom gevoeld. Jullie zijn kanjers!

Ook alle organisaties die hebben deelgenomen verdienen natuurlijk een plekje in dit dankwoord: STEVIG Dichterbij, De La Salle, Vitree, Ipse de Bruggen, Dichterbij en Gastenhof. Zonder de inzet van directies, managers, gedragsdeskundigen, begeleiders en cliënten, zou dit proefschrift hier niet liggen. Dank!

Een proefschrift schrijf je nooit alleen, het is een gezamenlijk proces van onderzoek doen, lijnen bepalen, bijstellen, vallen en opstaan. Dit proces heb ik samen met jullie, mijn promotoren, mogen doormaken. En wat heb ik er veel van geleerd! Petri, ik durf in alle eerlijkheid te zeggen dat ik dit onderzoek zonder jou niet had kunnen afronden. Ik heb ontzettend veel aan jou te danken. Jij hebt me steeds weer geïnspireerd, vertrouwen gegeven en op nieuwe ideeën gebracht, ook op de momenten dat ik het even niet meer zag zitten. Wij hebben beiden een grote passie voor de zorg voor mensen met een verstandelijke beperking en delen dezelfde visie als het gaat om onze kwetsbare medemens. Die passie en visie waren en blijven mijn drijfveren in het doen van onderzoek en uitzetten van de training in de praktijk. Je bent een fantastische onderzoeker, een goede coach, maar bovenal een geweldig mens! Ik had me geen betere promotor en dagelijks begeleider kunnen wensen. Bedankt voor alles! Linda, ik zal onze pilot-training, waaraan ik zelf deelnam, nooit vergeten. De respectvolle manier waarop jij met mensen in gesprek kunt gaan en ze vervolgens naar zichzelf kunt laten kijken heeft een onuitwisbare indruk op mij gemaakt. Bedankt voor de vele uren samen kijken naar videobeelden en de inspirerende gesprekken daarover! Anna, als ik aan jou denk, denk ik meteen aan jouw heerlijke lach die de ruimte vult. Je bent een mooi mens met een enorm hart en groot gevoel voor humor. Als jij me niet had gebeld zes jaar geleden, dan was dit onderzoeksproject waarschijnlijk nooit op mijn pad gekomen. Maar door jouw vertrouwen in mijn kunnen, ben ik het

avontuur aangegaan. Ik kan enorm genieten van onze gesprekken, over de wetenschap, de praktijk, maar ook over jouw bijzondere kijk op het leven en de wereld. Ik wil je nog eens extra bedanken voor alle statistische analyses die je met mij samen hebt gedraaid. Jan, ook al spraken wij elkaar alleen tijdens projectgroepoverleggen, jouw inbreng en verfrissende kijk op het onderzoek waren waardevol voor me. Je hebt me geleerd dat je zaken die tijdens het onderzoek niet helemaal goed zijn verlopen, best in een artikel mag zetten, het is namelijk de werkelijkheid. Dank!

Leden van de manuscriptcommissie, prof. dr. H.F.L. Garretsen, prof. dr. B. Orobio de Castro, prof. dr. B. Maes, prof. dr. C. Vlaskamp en dr. M. van Nieuwenhuijzen wil ik oprecht bedanken voor het kritisch lezen en beoordelen van dit proefschrift.

De trainers van het Opleidingscentrum Cello en de videofeedbacktrainers vanuit de deelnemende instellingen wil ik graag bedanken voor de altijd prettige samenwerking. Twee trainers wil ik in het bijzonder bedanken. Jill van den Akker (Opleidingscentrum Cello), wij leerden elkaar kennen in de pilot-fase van het onderzoek. Jij begon toen net met je nieuwe baan als trainer bij het Opleidingscentrum. Ik begon aan mijn nieuwe baan als onderzoeker. Nu zijn we zes jaar verder en ben jij uitgegroeid tot een zeer integere, betrokken en competente trainer en bovenal een lieve collega met een enorm vermogen om echt te kunnen luisteren! Twan van Dijck, gedragskundige bij De La Salle, wil ik ook graag expliciet bedanken. Twan, jij bent betrokken geweest als videofeedbacktrainer bij het project. Petri en ik waren meteen erg enthousiast over jou en je expertise. Jij hebt een aantal mooie trainingen verzorgd en veel begeleiders geraakt en geïnspireerd! Ik heb genoten van onze trein- en autoreizen samen.

Graag wil ik een aantal studenten bedanken voor hun inzet bij het verzamelen van data voor dit proefschrift. Judith en Esther, bedankt voor het afnemen van een grote hoeveelheid vragenlijsten bij een grote groep begeleiders van Dichterbij en Gastenhof. Bram en Danielle, dank voor de vele uren observatie op de woongroepen bij STEVIG. Het viel niet altijd mee om in de vroege ochtenden en tijdens avonddiensten langdurig te observeren, maar door jullie flexibiliteit en leergierigheid hebben we mooie data kunnen verzamelen.

Mijn fijne collega's van Tranzo en in het bijzonder van de Academische Werkplaats Leven met een Verstandelijke Beperking wil ik graag bedanken voor alle steun die ze me hebben gegeven de afgelopen maanden. Jullie zijn zo betrokken en geïnteresseerd geweest tijdens de laatste loodjes van mijn promotietraject! Jullie deuren staan altijd open, voor een praatje, een kop koffie, sparren over onderzoek, kletsen over het weekend. Ik ben dankbaar dat we blijven samenwerken! Lieve Cécile, weet je nog, zes jaar geleden? Ik begon met dit onderzoeksproject en wij werden kamergenootjes. Jij was al even bezig. Wat hebben we het gezellig gehad samen! Jij hebt me wegwijs gemaakt in onderzoeksland en door jouw humor was ik in staat om tegenslagen die bij praktijkonderzoek horen,

snel te boven te komen. Ik mis onze samenwerking en onze gezamenlijke kamer. Bedankt! Lieve Wietske, wij hebben inmiddels heel wat meegemaakt samen. Rome, Halifax, Lissabon, wat hebben we het fijn gehad! Samen naar allerlei lezingen, lekker eten en drinken, lange gesprekken gevoerd over werk en over de leuke en minder leuke dingen in het leven, maar bovenal veel gelachen. De afgelopen maanden heb je mij ondersteund in het bijzondere proefschrift-proces, dat jij al achter je hebt liggen. Je bent voor mij een voorbeeld op het gebied van onderzoek doen. Ik leer veel van je, als collega, maar vooral als mens. Bedankt! Lieve oud-collega's Anneke en Nienke, bedankt voor de fijne etentjes en gesprekken die we hebben gehad de afgelopen jaren. Zo bijzonder dat we elkaar nog steeds zien! Arlette en Hilde, samen vormen wij de "coping-LVB ladies". Bedankt voor de samenwerking, het mooie congres in Halifax en de gezellige lunches. Harm, dank voor de kans die je me hebt gegeven en het vertrouwen dat je hebt in de training Begeleiders in Beeld en in mij. Petra, we zijn pas sinds kort collega's en trekken samen de kar met betrekking tot Begeleiders in Beeld. Ik vind het heel plezierig om met jou samen te werken! Bedankt voor je betrokkenheid de afgelopen maanden.

Graag wil ik mijn familie en schoonfamilie bedanken. Ik weet dat jullie je vaak afvroegen waarom ik zo hard werkte en wat ik precies heb gedaan de afgelopen jaren. Ik hoop dat dit boek jullie het antwoord op die vragen geeft.

Lieve vrienden, waar moet ik beginnen? Wat is het leven mooi met jullie om me heen! Jullie hebben allemaal direct of indirect bijgedragen aan de totstandkoming van dit proefschrift, door inspirerende gesprekken, oprechte interesse en de nodige afleiding en relativering. Wat heerlijk dat ik deze mijlpaal mag delen met jullie! Imke J., Imke K. en Anika, ook al wonen we niet zo dicht bij elkaar, we zullen elkaar altijd blijven opzoeken en elkaars keuzes in het leven accepteren en waarderen. En daarnaast blijven we natuurlijk ook samen de kroeg induiken om teveel te drinken en van onze barkrukken af te vallen van het lachen! Bedankt voor onze waardevolle vriendschap! Lieve Rob en Suuz, wat hebben jullie een groot hart. Bij jullie voel ik mij altijd welkom en thuis. Ik wens jullie heel veel goeds voor de toekomst. Lieve Fenna, je werd lang geleden het vriendinnetje van mijn mannelijke paranimf, en nu ben je een hele goede vriendin geworden die ik voor altijd in mijn hart heb gesloten. Bedankt voor al die bijzondere gesprekken de afgelopen maanden. Imke V., wat heb ik bewondering voor de keuze die jij hebt gemaakt. Het roer om! Ik leer ontzettend veel van jouw kijk op het leven, mensen en relaties. Bedankt! Manpreet, jij werd ooit het vriendje van mijn vrouwelijke paranimf, en wat ben ik blij met jou! Jouw heerlijke nuchtere kijk op dingen brengt me wanneer dat nodig is weer met beide benen op de grond. Dank! Lieve Irene en Erwin, ik ben dankbaar dat ik jullie heb leren kennen een aantal jaren geleden. We spreken elkaar te weinig, maar als we bij elkaar zijn, hebben we de mooiste gesprekken over onze levens, onze kinderen en ons werk. Jullie zijn heel bijzonder voor mij! Mijn twee dierbare studievriendinnetjes, Merel en Elle, wat heerlijk dat het lijntje tussen ons nog steeds bestaat! Jullie hebben de afgelopen jaren voor de nodige relativering gezorgd. Bedankt!

En dan mijn lieve paranimfen. Eric, roeije, wat zijn we allang maatjes en wat hebben we veel gedeeld de afgelopen jaren. Je bent een heerlijk mens met het hart op de goeie plek. Een vriend voor het leven... Leefste Maike, mien vriendinke, wat ben ik dankbaar voor onze vriendschap. Jij kent mij door en door, jij weet wie ik ben, je kent mijn krachten en mijn valkuilen en je accepteert mij zoals ik ben, onvoorwaardelijk. Je zit voor altijd in mijn hart... Bedankt voor alles!

Frans, duizend maal dank voor jouw treffende gedicht.

De mensen die mijn basis vormen wil ik uit de grond van mijn hart bedanken. Lieve pap, mam en Roy, bedankt voor het heerlijke warme nest dat jullie geboden hebben en nog altijd bieden. Pap, jij hebt mij geleerd wat hard werken is. Jouw doorzettingsvermogen, optimisme, en betrokkenheid bij je werk hebben mij gestimuleerd om mezelf te blijven ontwikkelen en het onderste uit de kan te halen. Mam, leef meuderke, jouw lieve, zorgzame en zachtaardige karakter maakt dat ik me zo thuis voel bij jou. Bij jou voelt het warm. Leef breurke, jouw lach en energie kunnen mijn dag goed maken. We zijn samen opgegroeid en delen zoveel dierbare herinneringen! Bedankt!

Sjoerd, miene leefste, bedankt voor alle steun de afgelopen maanden en jaren. Wat ben ik blij dat wij elkaar vijf jaar geleden ontmoetten. Alles viel op z'n plek. *Alleen in dien erm bin ik thoés...* Lieve Joes, ôs maedje, ik kan niet in woorden vatten hoe jij ons leven verrijkt hebt en hoe gelukkig je ons maakt. Wat voel ik me een rijk mens door jou!

## **Curriculum Vitae**

Linda Zijlmans werd op 14 oktober, 1983, in Venlo geboren. In 2002 behaalde zij haar VWO-diploma aan het Blariacumcollege te Venlo. Vervolgens studeerde ze Pedagogische Wetenschappen aan de Radboud Universiteit in Nijmegen. In 2007 ronden ze deze opleiding succesvol af. Daarna heeft ze zes maanden als begeleider bij Dichterbij in Velden gewerkt op vier woongroepen voor mensen met een verstandelijke beperking en gedragsproblemen. Tevens voerde ze in 2007 als onderzoeksassistente vanuit de Radboud Universiteit onderzoekstaken uit in het reguliere basisonderwijs. In februari 2008 is ze aan de Radboud Universiteit gestart met haar vijf jaar durende promotieproject. Dit onderzoek richtte zich op de relatie tussen gedragsproblemen van cliënten met een verstandelijke beperking en gedrag en emoties van begeleiders. Daarnaast werd het effect van de training Begeleiders in Beeld onderzocht. In 2010 zette Linda haar promotieproject voort aan de Universiteit van Tilburg, eerst bij de sectie Klinische Psychologie, en vervolgens bij Tranzo, een departement dat zich volledig richt op praktijkgestuurd onderzoek in de zorg. Tijdens haar promotieonderzoek gaf Linda tevens les aan studenten Psychologie en begeleidde ze studenten bij het schrijven van hun Bachelor- of Masterthesis. Momenteel werkt Linda als trainer bij STEVIG Dichterbij in Oostrum. Vanuit deze functie implementeert en verzorgt zij de training Begeleiders in Beeld in de klinische praktijk. Daarnaast is ze als science practitioner een dag in de week verbonden aan Tranzo (Academische Werkplaats Leven met een Verstandelijke Beperking), waar zij onderzoek blijft doen naar de effectiviteit van Begeleiders in Beeld.



## Publications

### International

- Zijlmans, L. J. M., Embregts, P. J. C. M., Bosman, A. M. T., Gerits, & L., Derksen, J. J. L. (in press). Engagement and avoidance in support staff working with people with intellectual disability and challenging behaviour: A multiple-case study. *Journal of Intellectual and Developmental Disability*.
- Zijlmans, L. J. M., Embregts, P. J. C. M., & Bosman, A. M. T. (2013). Emotional intelligence, emotions, and feelings of support staff working with clients with intellectual disabilities and challenging behavior: An exploratory study. *Research in Developmental Disabilities, 34*, 3916-3923.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Bosman, A. M. T., & Willems, A. P. A. M. (2012). The relationship among attributions, emotions, and interpersonal styles of staff working with clients with intellectual disabilities and challenging behavior. *Research in Developmental Disabilities, 33*, 1484-1494.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2011). Training emotional intelligence related to treatment skills of staff working with clients with intellectual disabilities and challenging behaviour. *Journal of Intellectual Disability Research, 55*, 219-230.

### National

- Zijlmans, L. J. M., & Embregts, P. J. C. M. (2013). Begeleiders in Beeld: Een onderzoek naar de effecten van een training voor begeleiders. In R. Didden & X. Moonen (red.), *Met het oog op behandeling 3, diagnostiek en behandeling bij mensen met een licht verstandelijke beperking* (pp 91-96). Amersfoort: Bergdrukkerij
- Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2012). *Effecten van Begeleiders in Beeld. Kenniskatern (Markant), 8/2012*, 20-23.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Bosman, A. M. T., & Willems, A. P. A. M. (2012). Attributies, emoties en interpersoonlijke stijl van begeleiders van mensen met een verstandelijke beperking en gedragsproblemen. *NTZ: Nederlands Tijdschrift voor de Zorg aan Verstandelijk Gehandicapten, 38(4)*, 217-231.
- Zijlmans, L. J. M., Embregts, P. J. C. M., Gerits, L., Bosman, A. M. T., & Derksen, J. J. L. (2010). Begeleiders in Beeld, een training gericht op emotionele intelligentie van begeleiders van mensen met een verstandelijke beperking. *Orthopedagogiek: Onderzoek en Praktijk, 49*, 401-411.
- Zijlmans, L., Embregts, P., Gerits, L., Bosman, A., & Derksen, J. (2009). Begeleiders in Beeld: Een onderzoek naar de effectiviteit van een training voor begeleiders van cliënten met een lichte verstandelijke beperking en gedragsproblemen. *Onderzoek & Praktijk, 7(1)*, 5-10.



