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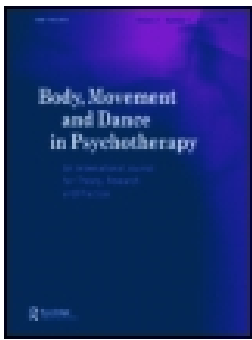
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The protocol for positive body experience (PBE); introducing a psychomotor therapy intervention based on positive body exposure targeting negative body image in eating disorders

Marlies Rekkers ^{a,b}, Mia Scheffers^b, Annemarie A. van Elburg^{a,c}
and Joeske T. van Busschbach^{b,d}

^aFaculty of Social Sciences, Utrecht University, Utrecht, The Netherlands; ^bSchool of Human Movement and Education, Windesheim University of Applied Sciences, Zwolle, The Netherlands; ^cCentre for Eating Disorders, Altrecht Mental Health Institute, Rintveld, Zeist, The Netherlands; ^dRob Giel Research Center, University of Groningen, University Medical Center Groningen, University Center of Psychiatry, Groningen, The Netherlands

ABSTRACT

Negative body experience is a core characteristic of eating disorders, and poses a serious risk factor for its development, maintenance and relapse. This underlines the importance of specific therapeutic attention to body experience. In the past ten years a body-oriented treatment protocol with the focus on *positive* body exposure, called 'Protocol Positive body experience' has been developed. The aim of this paper is to describe the scientific basis of the protocol and to give an impression of its content and structure, illustrated by clinical case vignettes. An important and innovative aspect of the protocol is to enhance not only aesthetic, but also functional and tactile body experience. The protocol enables body-oriented therapists and psychomotor therapists to treat negative body experience in an evidence-based way and facilitates further research to validate the effect of *positive* body exposure.

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KEYWORDS Body experience; body image; positive body exposure; body functionality; eating disorders; psychomotor therapy

Introduction

Eating disorders are associated with significant psychosocial impairment, high comorbidity and elevated mortality rates (Keski-Rahkonen & Mustelin, 2016). A negative or disturbed body image is part of the 'core psychopathology' of eating disorders (Fairburn et al., 2003, p. 510) and thus constitutes a serious risk factor for the development and maintenance of eating disorders (Eshkevari et al., 2014). Moreover, if treatment of a negative or disturbed body image is

CONTACT Marlies Rekkers  m.rekkers@windesheim.nl  School of Human Movement and Education, Windesheim University of Applied Sciences, Zwolle 8017CA, The Netherlands

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ignored, the risk of relapse is high (Keel et al., 2005). Acquiring and maintaining a healthy body image is therefore an important criterion for sustainable recovery (Noordenbos et al., 2018).

In the field of eating disorders, body image is often linked to appearance and weight concerns, but body image may be defined broader (Gaete & Fuchs, 2016). Besides aesthetic experience, such as satisfaction with bodily appearance, the concept also includes bodily awareness and functional and tactile experiences of the body. Therefore, body image may be considered a multidimensional concept (Cash, 2012). To emphasise this multidimensional nature, we prefer to use the term body experience (Scheffers et al., 2017) instead of body image. The term image is too much associated with only the aesthetic aspect of the concept.

Within the field of eating disorders, Gardner (2011) distinguishes between perceptual and attitudinal body experience problems. Perceptual body experience refers to the way individuals perceive the size and shape of their own body, which is often disturbed in patients with anorexia nervosa (Keizer et al., 2011). Keizer et al. (2013) found that patients with anorexia not only think that they are fat: their motor behaviour is consistent with the way they misjudge their real body size. If there is body size and shape misperception it is called disturbed body experience (Challinor et al., 2017).

Attitudinal body experience consists of affective, behavioural and cognitive components. Within the attitudinal dimension we speak of negative body experience (Rekkers et al., 2019). Patients mainly report an intense visual or aesthetic dissatisfaction, the affective component, with their own body or with parts of their body. This can be expressed in several behavioural components like frequently checking one's body (Reas et al., 2002), avoiding looking at one's body (Rosen et al., 1991), comparing one's appearance negatively with that of others (Laker & Waller, 2020; Leahey et al., 2011), and also in cognitive components like criticising and objectifying one's body (Calogero et al., 2005). Negative body experience can lead to a lack of self-confidence, to not feeling at home in one's body and to difficulties with physical contact (Gaete & Fuchs, 2016; Rekkers & Boerhout, 2018). Furthermore, it is associated with low self-esteem (O'Dea & Abraham, 2000), depression (Paxton et al., 2006), social anxiety (Junne et al., 2016), and impaired sexual functioning (Mangweth-Matzek et al., 2007).

The above-mentioned consequences underline the importance of specific attention to negative body experience in the treatment of eating disorders. Body-oriented psychotherapy (BOT) and psychomotor therapy (PMT) in particular focus on developing a healthy and positive relationship with the body and may be suitable forms of therapy to treat negative body experience (Emck & Scheffers, 2019). This focus has given rise to a treatment tradition of BOT and PMT in eating disorders in the Netherlands and Belgium (Butcher & Probst, 2019; Probst et al., 2013; Rekkers & Boerhout, 2018; Rekkers et al., 2019).

In the treatment of negative body experience, body exposure forms a widely used approach. During body exposure, patients stand in front of a mirror and look

at their body, while being stimulated by the therapist to describe what they see, and what they think and feel about it (Jansen et al., 2013). The aim of body exposure is to improve body experience. Several variants of body exposure have been reported (Griffen et al., 2018): *pure* or *mere* exposure, *neutral* exposure and *positive* exposure.

During *pure* or *mere* exposure attention is focused on negatively experienced body parts, with the aim to reduce anxiety, disgust and avoidance regarding those body parts (Key et al., 2002; Moreno-Domínguez et al., 2012). During *neutral* exposure (Hilbert et al., 2002; Probst, 2008) patients are stimulated to focus on their whole body and instructed to use neutral and non-judgemental language to describe their body parts. Versions related to *neutral* exposure are: *guided* exposure (Moreno-Domínguez et al., 2012) and *mindful* exposure (Delinsky & Wilson, 2006). During *positive* exposure attention is exclusively focused on the positively experienced body parts (Jansen et al., 2013; Rekkers, 2005; Rekkers & van Gulik, 2018).

In clinical practice, it is often unclear which variant of body exposure is applied, which procedure is followed and for what purpose (Jansen et al., 2013). Thus, it is important to obtain clarity on the effectiveness of the different exposure variants. Two non-clinical studies have compared *guided* and *pure* body exposure, with the *pure* variant found to be more effective (Díaz-Ferrer et al., 2017; Moreno-Domínguez et al., 2012). Moreno-Domínguez et al. (2012) found that after five sessions *mere* body exposure was more effective than *guided* exposure in reducing body discomfort within and between sessions. In addition, Díaz-Ferrer et al. (2017) found that after six sessions, the *mere* exposure group showed faster habituation of subjective discomfort and a greater physiological response than the *guided* exposure group.

A study comparing *mere* and *positive* exposure (Jansen et al., 2013) showed slightly more favourable results for *positive* exposure. In this study, female students that were extremely dissatisfied with their body received five sessions of either *positive* or *mere* exposure. Both body exposure interventions were effective in the reduction of body dissatisfaction, but only the positive condition led to a decrease of dysfunctional body-related cognitions. Furthermore, the authors concluded that *positive* body exposure is a more pleasant intervention for patients, because it induces positive feelings from the start to the end, while *mere* body exposure initially induces a worsening of feelings (Jansen et al., 2016). This makes *mere* exposure possibly more intense for patients and increases the risk of dropping out of therapy.

Luethcke et al. (2011) compared three forms of body exposure: *mindful*, *neutral* and *positive* exposure. In all conditions mood improved and eating disorder symptoms decreased, but only the condition with the *positive* body exposure elicited a significant increase in body satisfaction. In light of the above-mentioned comparative studies the *positive* variant seems the best option in clinical practice.

Offering body exposure according to a structured and detailed protocol is more effective than having patients look at their own body in the mirror without a clear purpose (Jansen et al., 2013). For this reason, it is crucial that body exposure protocols are available. Until now, this has not been the case. In the past ten years a psychomotor therapy (PMT) protocol based on *positive* body exposure has been developed, called 'protocol Positive Body Experience' (PBE; Rekkers & van Gulik, 2018, p. 7). The structure and content of the protocol are based on techniques from both cognitive-behaviour therapy and body-oriented psychotherapy. Finetuning was done, using knowledge from clinical practice, the professional tradition of PMT and patients' experiences in order to deliver matched care in various treatment settings.

The aim of this paper is to describe the scientific basis of the protocol and to give an impression of its content and structure, illustrated by clinical case vignettes. These clinical case vignettes were based on statements of different patients during their treatment with the protocol PBE and collected by the first author of this paper. To protect confidentiality these statements are merged into a fictitious patient Eva.

Protocol positive body experience

Development of the protocol PBE for *positive* body exposure was based on findings in descriptive studies by Jansen et al. (2005), and Tuschen-Caffier et al. (2015). Jansen et al. (2005) studied a non-clinical sample consisting of women without and women with eating disorder symptoms. The authors found that these two groups take opposite positions when looking at their own body and at other women's bodies. Looking at themselves, women with eating disorders symptoms focus on their self-defined negatively evaluated body parts, whereas women with no such symptoms focus on those parts of their body that they evaluate as most attractive. Looking at bodies of others, women with eating disorder symptoms compare themselves in a negative way, while women without eating disorder symptoms use a positive perspective. Similarly, Tuschen-Caffier et al. (2015) reported that women without a history of an eating disorder dedicated nearly equivalent amounts of time when looking in a mirror at body parts that they identify as their most and their least attractive. Women with anorexia nervosa and bulimia nervosa on the contrary displayed longer and more frequent gazes focussed on their body parts experienced as most ugly compared to those experienced as most beautiful. The way women without eating disorders look at their own body and compare their body with others became the fundamental principle of *positive* body exposure and led to further clinical and experimental research (Glashouwer et al., 2016; Jansen et al., 2013, 2016; Smeets et al., 2011).

In the protocol PBE (Rekkers & van Gulik, 2018) both self-confrontation with the help of a mirror and hetero-confrontation, using comparison exercises, are

key elements of the exposure exercises. During self-confrontation *positive* body exposure elicits a strong emotional response, because patients are not used to speak and feel positively about their own body. Although this causes distress, it also leads to new feelings of pride and satisfaction. Hetero-confrontation refers to looking at images of others (Probst, 2008) and in case of *positive* exposure comparing oneself positively (downward comparison). Leahey et al. (2011) studied comparing oneself positively and comparing oneself negatively (upward comparison) and concluded that downward comparison is an important protective factor against negative body experience.

As mentioned before, patients with eating disorders mainly focus on aesthetic aspects of their body. However, studies have shown that positive functional feelings and thoughts about one's own body or body parts can serve as an important ingredient of body satisfaction (Alleva et al., 2019, 2014; Frisé & Holmqvist, 2010; Wood-Barcalow et al., 2010). Functional body experience results from a functional perception of the body and refers to thoughts and feelings a person has about how one's body functions, including the physical ability and capabilities of the body (Abbott & Barber, 2010).

Frisé and Holmqvist (2010) used a qualitative design to study positive body experience of Swedish adolescents and found that satisfaction with their own appearance was characterised by acceptance of the body, but also by a functional view of the body. They concluded that encouraging mindsets also evaluating the body on functionality might help increase positive body satisfaction. Wood-Barcalow et al. (2010) found the same results in female university students in the United States. They also identified a functional attitude towards one's body to be one of the attributes of a positive evaluation of the body. Halliwell (2015) investigated female university students in the United Kingdom and observed that functional aspects of body image may serve as a protective psychological mechanism against body dissatisfaction.

Apart from functional aspects, tactile aspects of positively experienced body parts could also serve as an important ingredient of positive body experience. Tactile body experience refers to the primary tactile perception (Spitoni et al., 2010). It relates to thoughts and feelings about how one's body feels when touched by him or herself and/or by somebody else. Studies evaluating massage in patients with eating disorders show promising results (Field et al., 1998; Hart et al., 2001). Field et al. (1998) found a positive effect of massage therapy in the treatment of bulimia nervosa patients. Hart et al. (2001) observed increased scores of body satisfaction on the Eating Disorder Inventory in patients with anorexia nervosa when massage therapy was added to treatment as usual.

In accordance with these studies, body exposure in the protocol PBE is not limited exclusively to aesthetic aspects of the positively experienced body parts. During exposure patients are also guided to mention positive functional and tactile aspects, based on the evidence that this will further strengthen positive thoughts and feelings about these body parts. In addition

to boosting functional and tactile aspects of positively experienced body parts during body exposure, a psychomotor therapist helps to expand and endorse these experiences by inviting the patient to engage in a variety of body-activities, such as positively experienced types of sports and dance, body-awareness exercises, touch exercises and massage forms. This broadening of the experience-based approach with the patient not only reflecting on but also experiencing the positive functional aspects of their body may serve as an enrichment of the concept of body exposure.

Content and structure protocol illustrated with vignettes

The protocol PBE offers guidelines and interventions which may be integrated in clinical multidisciplinary settings (day treatment and inpatient treatment) or may be applied in outpatient treatment. PBE needs to be applied by a professional who is specialised in working with eating disorders and is experienced in performing body and movement-orientated interventions as well as exposure techniques.

The intervention includes four phases (Figure 1) and can be used in both individual and group treatment. Adjustments and additional exercises for group therapy are described per phase. In the first and the second phase the central themes are increasing knowledge about one's dysfunctional body experience and comparing this to a healthier body experience. These issues are important, because they are a prerequisite for a successful body exposure in the action phase. Patients are used to look at and to speak negatively about their own body. Therefore, a thorough preparation is essential to take patients out of their comfort zone and to motivate them to look at and speak about their body from a different positive perspective in the action phase.

When Eva was 16 years she started to diet, thinking she was too fat. Although she became very thin because of this, she persevered with restricted eating and exercising two hours a day. After six months her parents became extremely worried and decided to look for help and had Eva consult a professional. During her admission to a specialized inpatient unit for eating disorders, she managed to gain weight and to limit excessive exercise. After she was discharged from the clinic, she was still very dissatisfied with her body, but her parents and sister helped and supported her to maintain a healthy eating and exercise behaviour. After high school she started a psychology study and went to live on her own. At the age of 19, Eva confessed to her twin sister that she binged and vomited again. Her sister motivated her to seek help again. During the assessment phase of an outpatient treatment, Eva realized that she had once more developed a serious eating disorder because the negative body experience had never disappeared during and after her first treatment. At this moment she mentions that she is disgusted with her body and never wears anything that will show her legs or arms, like skirts or short sleeves. In her mind, she constantly criticizes her body and in her social life she often compares her body negatively with the bodies of other women. She does not believe in the compliments about her

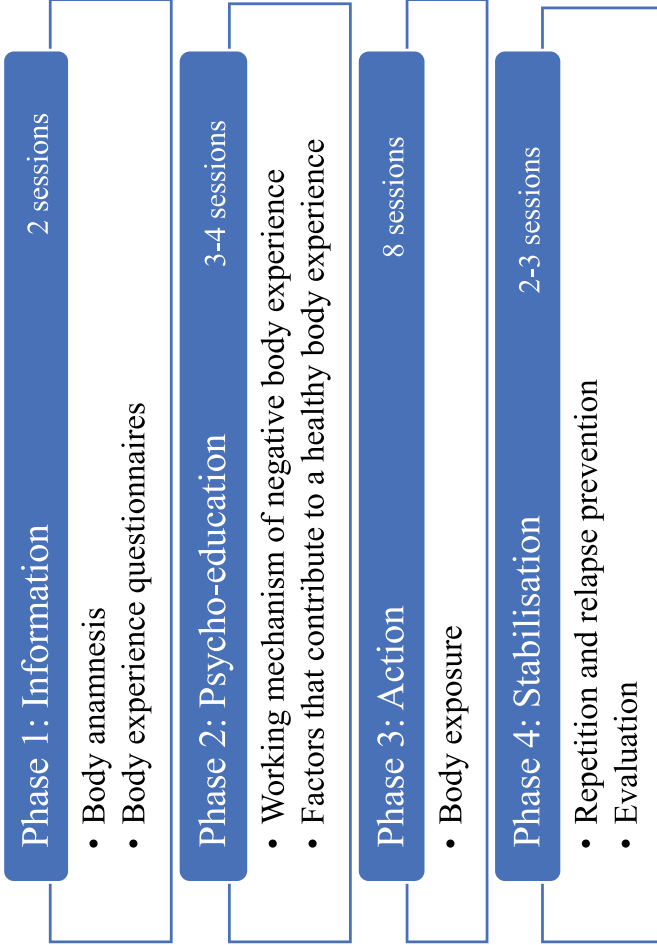


Figure 1. Phases of the protocol PBE.

body her boyfriend pays her and for a long time, there has been no sexual contact between them because she cannot endure her boyfriend seeing and touching her belly.

In the *first phase* of the protocol PBE therapist and patient make an inventory of how the patient experiences her body, with the help of a body anamnesis and body experience questionnaires. Examples of such questionnaires are the Body Attitude Test (BAT; Probst et al., 1995), the Body Cathexis Scale (BCS; Tucker, 1981), and the Functionality Appreciation Scale (FAS; Alleva et al., 2017).

When the psychomotor therapist starts to discuss the results of the different body experience questionnaires, Eva indicates that filling out all the questions concerning her thoughts and feelings about her body felt confronting but that she decided to give honest answers. Together they look at a summary of Eva's scores, set against the scores of women with healthy body experience. Eva is genuinely surprised by seeing the differences. She says: 'I thought that everybody is dissatisfied with their own body, and it is really shocking to notice how much more negative I am. How silly it may sound; it feels good that I am seeking help for this and that I am not a poser where my body experience is concerned.'

When the therapist and the patient have gathered enough information about the current body experience and the course of it in the past, the *second phase* of the protocol, emphasising psycho-education, follows. In this phase the working mechanism of negative body experience and the factors that contribute to a healthy body experience are the main focus. Psycho-education in this protocol is largely experience-oriented, with new information made visible and physically perceptible. An example is the 'rope trick' (Sherman & Thompson, 2001). The rope trick is used as a tool to confront the patient with the differences between one's feelings, thoughts and desire with regard to the size of a body part and the actual size of that body part. In another exercise patients are confronted with their dominant visual perception of the own body and learn more about other ways to think or feel about the body, such as functional and tactile body experience. As a follow-up to this exercise, the therapist may mention research outcomes concerning the important role of the functional perception with respect to positive body experience (Frisén & Holmqvist, 2010; Wood-Barcalow et al., 2010). Finally, the scientific basis for the positive focus of the protocol will be clarified in this phase.

Eva cannot believe her ears and eyes when the psychomotor therapist shows her study results concerning healthy body experience. It also scares her and she says: 'Suppose I am going to think more positive about my body, others will find me arrogant and a boaster'. On the question of whether it bothers her to judge herself so negatively, she reacts with amazement. 'No, because than I am always prepared and I'd rather be realistic than happy'.

The phase of psycho-education ends with the explanation of the purpose and effect of the used exposure technique. Because being confronted with one's own

body in the mirror can evoke a lot of tension, a clear explanation of the working mechanism of exposure strengthen the motivation to take up this challenge. After this explanation therapist and patient together make a hierarchy list of positively experienced body parts.

Eva has made a list of body parts she experiences positively. Her eyes are on top of the list because she thinks her eyes are the easiest to be positive about. Standing in front of the mirror for the first time, she describes her eyes as okay because they are normal in terms of colour and size. Then, she falls silent. With the support and stimulation of her psychomotor therapist, she goes on, using more positive words to describe her eyes. After the body exposure, she describes how strange and uncomfortable it was to say positive things about her eyes in front of the mirror, especially because all the time an inner voice was trying, sometimes successfully, to get her to look at body parts she is disgusted by.

The actually body exposure takes place in the action phase, *phase three*. During this phase all positively experienced body parts on the hierarchy list are described positively in front of a mirror. It is important that the patient practices body exposure at home daily, because the patient has to get used to the positive perception and this requires practice and repetition. It may be necessary to use motivational interviewing (Miller & Rollnick, 2002) and metaphors (Barker, 1996) which help to stimulate and support motivation. During the sessions in the action phase sport and dance forms, body awareness, exercises, touch exercises and massage can be offered, to enrich and endorse the body exposure and make the patient more aware of and familiar with (positive) functional and tactile body experience.

Feet are the third body part in Eva's hierarchy list. She says that before making this list, she never thought about her feet. She does not experience them in a negative way, but in her mind, they are not important and therefore neutral. She starts body exposure with positive aesthetical features such as size and form of her feet and the length of her toes. During the exposure, she becomes conscious of how important functional and tactile aspects are for her. She is very happy that her feet are healthy and that she can walk and run with them, because hiking in nature and playing sports are very important for her. She also realizes how much she enjoys her boyfriend massaging her feet. With these positive statements about her feet she ends the body exposure.

As mentioned before, downward comparison can act as an important protective factor against negative body experience (Paxton & McLean, 2010). For this reason, body exposure in the form of hetero-confrontation is also integrated in the action phase.

Eva shows, with some trepidation, her collage to the psychomotor therapist. The assignment was to collect pictures of other women from magazines and arrange them in a collage. The aim is to compare one's own body parts positively with those of other women in the collage. Eva's collage also contains pictures of models. When discussing the models, it is with a lot of hesitation that

she points out a nose that is too big or eyes that are too small compared with her own. She feels ashamed of criticising the women in the pictures and explains that she has never looked at other women's bodies this way.

In the *fourth and last phase*: the stabilisation phase, the treatment focus lies on repetition and relapse prevention to continue and record obtained results. The treatment is completed with a joint evaluation including also a discussion of the results of a final assessment with the questionnaires on body experience.

Conclusion

In eating disorders, a negative body experience is considered an important factor that indicates the severity of the symptoms and also helps maintain it. The use of evidence-based interventions seems appropriate for the treatment of negative body experience in eating disorders. Findings in descriptive studies and comparative clinical and non-clinical trials show that *positive* body exposure seems the best option in clinical practice. This has led to the development of a psychomotor therapy treatment called 'protocol Positive Body Experience', with the focus on *positive* body exposure. The aim of the protocol is to effectuate a more positive body experience, which is not limited exclusively to aesthetic aspects of the positively experienced body parts, but also includes mentioning and experiencing positive functional and tactile aspects.

The fact that *positive* body exposure is formalised in a protocol and presented in this article creates a foundation for further critical analysis and research on this subject in the future. At present the protocol is predominantly based on experiences of and research with adult western women with and without eating disorders. Further research is required for other groups with eating disorders, such as men, youngsters, and patients with different cultural backgrounds, who may all have distinct body experiences. Furthermore, randomised controlled trials are needed to learn more about the working mechanisms and to examine even better the effect of *positive* body exposure in specific eating disorder groups such as anorexia nervosa, bulimia nervosa and binge eating disorder.

Disclosure statement

Marlies Rekkers declares that she has no conflict of interest. Mia Scheffers declares that she has no conflict of interest. Joeske van Busschbach declares that she has no conflict of interest. Annemarie van Elburg declares that she has no conflict of interest.

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Notes on contributors

Marlies Rekkers is psychologist and psychomotor therapist. She works in a private practice and is specialized in treating body experience in patients with eating disorders. She works also as a researcher and lecturer at the Windesheim University of Applied Sciences, Zwolle. As a PhD candidate at the University of Utrecht she studies the effect of positive body exposure in the treatment of eating disorders as well as the psychometric properties of questionnaires assessing aesthetic and functional body satisfaction.

Mia Scheffers, PhD, is a human movement scientist and psychomotor therapist, currently working as a senior researcher in the research group on Human Movement Behaviour, Health and Wellbeing at the Windesheim University of Applied Sciences, Zwolle. Her research focuses on body- and movement-oriented diagnostics and interventions for trauma related disorders as well as on psychometric evaluation of questionnaires measuring domains of body experience.

Annemarie van Elburg is child and adolescent psychiatrist at Rintveld Centre of Eating Disorders, Altrecht Mental Health Institute, Zeist. She is Professor of Clinical Psychopathology, especially eating disorders, at the Faculty of Social Sciences at the University of Utrecht.

Joske van Busschbach, PhD, is a child psychologist and head of the research group on Human Movement Behaviour, Health and Wellbeing at the Windesheim University of Applied Sciences, Zwolle. She also works as a senior researcher at the Rob Giel Research Centre, a division of the University Centre of Psychiatry, University Medical Centre Groningen/University of Groningen.

ORCID

Marlies Rekkers  <http://orcid.org/0000-0001-8139-4336>

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