



The working alliance between homeless young adults and workers: A dyadic approach☆☆☆☆☆☆☆☆



Astrid M. Altena^{a,1}, Manon A.M. Krabbenborg^{a,1}, Sandra N. Boersma^a, Mariëlle D. Beijersbergen^a, Yvonne H.M. van den Berg^b, Wilma A.M. Vollebergh^c, Judith R.L.M. Wolf^{a,*}

^a Radboud University Medical Center, Department of Primary and Community Care, Impuls-Netherlands Center for Social Care Research, PO Box 9101, 6500 HB Nijmegen, The Netherlands

^b Behavioural Science Institute, Radboud University Nijmegen, The Netherlands

^c Department of Interdisciplinary Social Sciences, University of Utrecht, The Netherlands

ARTICLE INFO

Article history:

Received 18 November 2016

Received in revised form 12 January 2017

Accepted 14 January 2017

Available online 16 January 2017

Keywords:

Homeless young adults

Working alliance

One-with-many design

Self-determination

Shelter facilities

ABSTRACT

The development of a strong working alliance between homeless young adults and their social workers is seen as a critical component in the recovery process. The purpose of this study was to examine the composition of the working alliance between homeless young adults and their social workers, and its association with self-determination, resilience and quality of life. A sample of 102 homeless young adults and 32 social workers from ten Dutch shelter facilities participated. Homeless young adults were interviewed twice: when entering the facility (baseline) and sixth months after baseline or when care ended earlier. Social workers were questioned about the working alliance at follow-up. Data were analyzed by using a one-with-many design. Results showed that homeless young adults who generally reported strong alliances with their social worker, do not have a social worker who generally reported strong alliances (generalized reciprocity). In addition, if a young adult reported to have an especially strong alliance with his worker, this worker did not necessarily reported to have a strong alliance in return (dyadic reciprocity). Homeless young adults who perceived a stronger working alliance with their social worker than other young adults, who were supported by the same social worker, improved more on self-determination than young adults who reported to have a weaker alliance. Our results indicate that the working alliance is important in achieving outcomes. A dialogical approach should be encouraged in which young adults feel valued and safe enough to express their expectations and to build a strong working alliance.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

The importance of the therapeutic relationship in treatment, progress and outcome has been supported by research on a variety of treatment types (e.g. psychotherapy) and in different client populations (e.g. children, adolescents and adults) (Horvath, Del Re, Flückiger, & Symonds, 2011; Shirk & Karver, 2003). The quality of the therapeutic

alliance is considered to be an even better predictor of successful treatment outcomes than the content of the technique or intervention that is being used (Duncan, Miller, & Sparks, 2004; Horvath & Symonds, 1991; Horvath et al., 2011; Martin, Garske, & Davis, 2000; Safran & Muran, 2000; Wolf, 2012). Also, in the homeless young adult literature it is strongly emphasized, that the creation of a strong working alliance between homeless young adults and professionals, characterized by commitment, honesty and autonomy, is critical for achieving successful intervention outcomes, such as more self-reliance and independence (Bender, Thompson, McManus, Lantry, & Flynn, 2007; De Winter & Noom, 2003; Kidd, Miner, Walker, & Davidson, 2007; Thompson, McManus, Lantry, Windsor, & Flynn, 2006). A therapeutic- or working alliance has been described as a collaborative relationship between a client and a professional which comprises of two processes: a) the affective bond between client and worker based on trust and respect (the emotional connection), and b) the agreement between client and worker on the goals and tasks of the treatment (the cognitive connection) (Bordin, 1979; Karver, Handelsman, Fields, & Bickman, 2005). In shelter facilities, homeless young adults are typically assigned to a primary social worker who provides them with support and services during their

* Funding: This study was funded by the Netherlands Organization for Health Research and Development (ZonMw) (project no. 80-82435-98-10121).

☆☆ Registration: Dutch trial register (registration number NTR3254, (<http://www.trialregister.nl/trialreg/admin/rctview.asp?TC=3254>).

☆☆☆ Conflict of interest: The authors declare that they have no conflicts of interest.

☆☆☆☆ Acknowledgements: We gratefully acknowledge the participation of all homeless young adults and the social workers in the study.

* Corresponding author.

E-mail addresses: Astrid.Altena@radboudumc.nl (A.M. Altena), Manon.Krabbenborg@radboudumc.nl (M.A.M. Krabbenborg), Sandra.Boersma@radboudumc.nl (S.N. Boersma), mdhalbersma@gmail.com (M.D. Beijersbergen), y.vandenberg@psych.ru.nl (Y.H.M. van den Berg), w.a.m.vollebergh@uu.nl (W.A.M. Vollebergh), Judith.Wolf@radboudumc.nl (J.R.L.M. Wolf).

¹ Contributed equally to this manuscript.

support trajectories. This study extends previous research (Martin et al., 2000) by examining the affective bond between homeless young adults and workers, and the outcomes of service provision in a rehabilitation context, namely shelter facilities for homeless young adults.

A variety of reasons are associated with homelessness among young people. The most common reasons mentioned by homeless young adults to leave their homes are experiences of dysfunctional relationships or abusive family situations (Coates & McKenzie-Mohr, 2010; Edidin, Ganim, Hunter, & Karnik, 2011; Ferguson, 2009; Fransen, Handel, & Wolde, 2011; Thompson, Bender, Windsor, Cook, & Williams, 2010). While homeless, they are susceptible to (physical and sexual) victimization and to becoming involved in high risk behaviors (e.g. substance abuse) and criminal activities (e.g. drug dealing) (Bender, Thompson, Ferguson, Yoder, & Kern, 2014; Thompson et al., 2010). In addition, these young people are at high risk for a variety of adverse health outcomes (e.g. infectious diseases, depression) (Beijersbergen, Jansen, & Wolf, 2008; Edidin et al., 2011; Kelly & Caputo, 2007; Thompson et al., 2010). Although homeless young adults are in critical need of support, they often feel disconnected from other people and support systems, including the professional care system (De Rosa et al., 1999; De Winter & Noom, 2003; Whitbeck, Hoyt, & Ackley, 1997; Wolf & van der Laan, 2005). Because of the stress, trauma and negative experiences with previous (adult) relationships (Stefanidis, Pennbridge, MacKenzie, & Pottharst, 1992; Tavecchio, Thomeer, & Meeus, 1999) it may be difficult for them to build strong alliances with adults (De Rosa et al., 1999; De Winter & Noom, 2003; Eltz, Shirk, & Sarlin, 1995; Thompson et al., 2006). For this vulnerable group in particular, a strong working alliance is of great importance for attaining positive outcomes of support trajectories (Chinman, Rosenheck, & Lam, 2000). From the attachment perspective, it is essential to first establish an affective bond (Obegi, 2008), so that homeless young adults become more willing to accept help from a social worker and, hence, will become more motivated to work together on improvements in their lives (De Winter & Noom, 2003). This study, therefore, focuses on the affective bond, as an important facet of the working alliance, between homeless young adults and social workers.

Among homeless adults it was found that having a strong working alliance with a social worker is associated with a higher quality of life (Chinman, Rosenheck, & Lam, 1999; Chinman et al., 2000), improved social functioning (Goering, Wasylenki, Lindsay, Lemire, & Rhodes, 1997; Tsai, Lapidus, Rosenheck, & Harpaz-Rotem, 2013), and increased client satisfaction (Klinkenberg, Calsyn, & Morse, 1998). In addition, it has been suggested that a strong mutual working alliance promotes feelings of trust and safety (De Vries, 2008), through which experiences of self-determination may be fostered (Ritholz, Festinger, Siegel, & Stanhope, 2011; Thompson, Pollio, Eyrich, Bradbury, & North, 2004). Experiences of self-determination are essential for psychological growth, integrity and well-being (Deci & Ryan, 2000). The extent to which people experience self-determination depends on the degree of fulfillment of three basic psychological needs: autonomy, competence and relatedness (Ryan & Deci, 2000). The social environment where people live is important in the fulfillment of these psychological needs (Deci & Ryan, 2000). Many homeless young adults are psychologically disadvantaged as their self-determination is consistently hindered by their challenging living situation, including abuse, victimization, and limited social support. Shelter facilities should therefore provide an environment that encourages and strengthens the development of self-determination in homeless young adults as an important part of their recovery process (Bender et al., 2007; Thompson et al., 2004; Winter de & Noom, 2003). Promoting self-determination includes the support of opportunities for self-direction by the encouragement of goal setting, goal attainment and advocacy skills. Nowadays, self-determination is considered an important key principle guiding social work practice for homeless young people (Johnson & Pleace, 2016; Krabbenborg, Boersma, van der Veld, van Hulst, Vollebergh, & Wolf, 2015a; Straaten van, 2016). A positive association between a therapeutic alliance and self-determination has

been found among clients with mental health problems who received ambulatory care (Ritholz et al., 2011). Although, research into self-determination among homeless young adults is scarce, a positive association between self-determination and perceived quality of life was found in homeless young adults (Krabbenborg, Boersma, van der Veld, Vollebergh, & Wolf, 2015b). Whether the working alliance between homeless young adults and workers is related to experiences of self-determination is not known.

Homeless young adults are confronted with many stressful events and hazards in their lives. However, some of them are able to effectively cope with, or adapt to their stressful and challenging circumstances, show perseverance, self-reliance, and equanimity, and so can experience life as meaningful (Rew & Horner, 2003; Wagnild, 2010). Research on resilience indicated that resilient people have certain strengths and abilities to benefit from protective factors that help them to overcome difficulties and adverse life conditions (Zolkoski & Bullock, 2012). This framing of resilience as an ability implies that resilience is not stable over time. Rather, it is subject to change and can be optimized by strengthening five essential characteristics of resilience (resilience core): Meaningful life (purpose), Perseverance, Self-reliance, Equanimity, and Coming home to yourself (existential aloneness) (Wagnild, 2010). For homeless young adults, resilience can play a very important role at times of stress, victimization, and a lack of basic needs in preserving health and quality of life (Kidd & Shahar, 2008; Rew & Horner, 2003). As such, resilience has the potential to reduce the negative impact of (extreme) stressful life events. Social workers could foster homeless young adults' resilience by helping them to improve their ability to overcome health problems and adversities in their lives (Rew & Horner, 2003), which subsequently could lead to a higher quality of life (De Vries, 2008). In this study, we will therefore examine whether a strong working alliance between homeless young adults and their social workers indeed fosters their self-determination, resilience and quality of life.

The development of a strong working alliance is a mutual and dynamic process in which homeless young adults and social workers collaborate in order to address young adults' needs. Some studies have shown that when a client reports a strong relationship with a therapist, the therapist also reports a strong relationship with that client (Bordin, 1979; Fitzpatrick, Iwakabe, & Stalikas, 2005). This convergence of views on the alliance contributes to the quality of the therapeutic process (Cummings, Martin, Hallberg, & Slemmon, 1992; Kivlighan & Arthur, 2000; Marmarosh & Kivlighan, 2012). However, in therapeutic settings it has also been found that therapists and clients do not always have similar views on the alliance: Clients may perceive stronger working alliances than therapists or the other way around (Blum, 1998; Marcus, Kashy, & Baldwin, 2009). When looking at client outcomes, clients' views are more strongly related to outcomes than therapists' views (Fitzpatrick et al., 2005). Given the importance of the perception of both the homeless young adults and workers in the relationship, the alliance in this study has been considered from a dyadic perspective by using a one-with-many design (Marcus et al., 2009). This approach takes into account the hierarchical structure of the data and the potential reciprocity in ratings of the working alliance (Marcus et al., 2009). Each young adult is supported by a single social worker (the one), but social workers typically assist multiple homeless young adults (the many). The social workers are the upper level unit (level 2) and homeless young adults are the lower level unit (level 1).

As far as we know, we are the first to investigate the reciprocity of the working alliance between homeless young adults and their workers and its impact on outcomes in order to understand the association between these outcomes and a strong working alliance. The research questions of this study are:

- 1) When homeless young adults generally report strong alliances with their social workers, do these social workers also report strong alliances with all their homeless young adults (generalized reciprocity)?

- 2) When a homeless young adult reports a strong alliance with his social worker (stronger than other homeless young adults), does this social worker also report an especially strong alliance with this homeless young adult, stronger than he rates his alliance with other homeless young adults (dyadic reciprocity)?
- 3) Are positive working alliance ratings from the perspectives of homeless young adults and social workers associated with more self-termination, resilience and quality of life in the course of the support trajectory?

2. Methods

2.1. Recruitment, selection and procedure

We used the baseline and follow-up data from a study on the effectiveness of a strengths-based method for homeless young adults, called 'Houvast' (Dutch for 'grip'). This was conducted among 10 Dutch shelter facilities for homeless young adults ≥ 18 years old (Krabbenberg, Boersma, & Wolf, 2013). To be eligible to participate in this study shelter facilities had to meet the following inclusion criteria: a) delivering ambulant and/or residential care to homeless young adults; b) providing services to at least 15–20 homeless young adults per year; c) providing care for an average period of at least three months consecutively. As the study variables did not significantly differ between the intervention and the control group; and the analyses revealed no differences in results when controlled for condition in our analyses, we treated our data as one single unconditional study.

In total, 251 homeless young adults were interviewed at baseline by trained research assistants experienced in interviewing vulnerable people. The interview was conducted approximately two weeks after admission to the shelter facility. Of these 251 participants, 198 homeless young adults participated at follow-up (78.9%). Follow-up interviews were conducted when care ended during a period up to six months after the first interview. Participants received 10 euros for the baseline interview and 20 euros for follow-up. After the follow-up measurement, the social worker was asked to fill out an electronic questionnaire about the working alliance. The working alliance was only assessed at follow-up measure to make sure enough time was allowed to establish a working alliance ($M = 5.55$ months; $SD = 1.35$ months) between the homeless young adults and their social worker. To perform our analyses, at least two young adults were required to see the same social worker. Therefore, data of 32 out of 65 social workers and 102 out of 198 young adults were analyzed in order to answer our research questions (56% of the workers had contact with more than two homeless young adults). No significant differences were found in the study variables between our subsample of homeless young adults ($n = 102$) and the original sample ($n = 198$). Additionally, no significant differences were found in the reported working alliance by social workers in the subsample ($n = 32$) and the original sample of social workers ($n = 65$).

All participants were assured of confidentiality and signed an informed consent statement prior to participation. Upon consultation, the Ethics Committee stated that due to the behavioral character of the intervention, the study was exempt from formal review (registration number 2011/260).

2.2. Participants

Table 1 presents the demographics of the 102 homeless young adults and 32 social workers. The majority of the young adults were male and the mean age was 20 years. More than half of the group had at least one parent who was born outside The Netherlands. Most of the young adults had a low to moderately low education level. More than half of the group had been homeless for three months or longer.

The majority of the social workers were female, with a mean age of 36 years. Most of them had completed higher vocational education and had Dutch nationality. On average, a social worker provided reports on their working alliance with three clients (range 2–10).

Table 1
Demographics of the participants (mean (SD), or %).

| Characteristics | HYA ($n = 102$) | Social workers ($n = 32$) |
|---|------------------------------|-----------------------------------|
| Gender (female) | 33% | 72% |
| Age | 20 (1.64) | 36 (10.23) |
| Nationality (non-native) | 52% | 9% |
| Education level ^a | | |
| Low | 24% | |
| Moderately low | 46% | |
| Moderately high | 30% | 16% |
| High | | 84% |
| Homelessness duration (>3 months) | 52.5% (range 0–84 months) | n/a |

Note. HYA = Homeless young adults.

^a Low education level = only elementary school or no education; moderately low = preparatory, lower-level vocational education or lower general secondary education; Moderately high education level = intermediate vocational education; High education level = intermediate vocational education, senior general secondary education or (pre-)university.

2.3. Working alliance

The Psychological Availability and Reliance on Adult (PARA) questionnaire was administered to assess the affective bond between homeless young adults and their social workers (Schuengel, Venmans, Van Ijzendoorn, & Zegers, 2005; Zegers, 2007). The PARA consists of two parallel versions: the homeless young adult-rated and the worker-rated version. Each version consists of 19 items with one subscale measuring the affective bond (seven items) between homeless young adults and their social worker. One example item for homeless young adults and social workers respectively is: "If something good happens you would like to tell your mentor" and "If something good happens he would like to tell me". The items are rated on a 4-point Likert scale, ranging from 1 (disagree) to 4 (agree). A higher mean score indicates a stronger affective bond. The Cronbach's α of the homeless young adult-rated affective bond was 0.72 and of the worker-rated affective bond 0.70.

2.4. Self-determination

The theoretical concept of self-determination was measured with the basic psychological needs scale that consists of three subscales: autonomy, competence and relatedness (Deci & Ryan, 2000; Johnston & Finney, 2010). Homeless young adults were asked to what extent they agreed with 21 statements on a 7-point Likert scale, ranging from 1 (not true at all) to 7 (definitely true). An example item is: "I feel like I can decide for myself how to live my life". In this study the total score was used with a higher mean score on self-determination, indicating the experience of more autonomy, competence and relatedness. The Cronbach's α for the total scale was 0.80 at baseline and 0.85 at follow-up.

2.5. Resilience

The Dutch version of the Wagnild resilience scale (RS-NL) was used to measure resilience; which is conceptualized as social and psychological competence; characterized by equanimity, meaningfulness, existential aloneness and self-reliance (Portzky, Wagnild, De Bacquer, & Audenaert, 2010; Wagnild & Young, 1993). The scale consists of 25-items with a 7-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). An example item is: "My belief in myself gets me through hard times". Higher mean scores reflect higher resilience. Cronbach's α was 0.84 at baseline and 0.89 at follow-up.

2.6. Quality of life

To indicate general quality of life the abbreviated Dutch version of the Lehman Quality of Life Interview (QOLI) was used (Lehman, Kernan, & Postrado, 1995). Homeless young adults were asked how satisfied they were with their lives in general at the beginning and at the end of the interview (1 = terrible, 7 = delighted). The mean score of these two items were computed with higher scores indicating higher satisfaction with quality of life. Cronbach's α was 0.72 at baseline and 0.85 at follow-up.

2.7. Statistical analyses

We based our approach on Marcus et al. (2009). The first step of a one-with-many analysis is to decompose the total variance of homeless young adults and worker ratings into perceiver, partner, and relationship variances. From the worker alliance ratings, the *perceiver variance* was calculated. This measures the extent to which a social worker is generally inclined to report a positive or negative working alliance across all of his homeless young adults. The *partner variance* was calculated by means of the ratings of the homeless young adults. The partner variance indicates the degree to which homeless young adults of the same social worker report to have similar alliances. The *relationship variances* were calculated from the social workers' alliance ratings and the homeless young adults' alliance ratings. The worker-rated relationship variance measures the degree to which workers report unique working alliances with each of their homeless young adults. The homeless young adult-rated relationship variance indicates the degree to which homeless young adults report to have a unique working alliance with their social worker.

Variance partitioning into three components is necessary to be able to compute the dyadic and the generalized reciprocity. *Generalized reciprocity* refers to the degree to which homeless young adults who generally report strong alliances with their social workers, have social workers who generally report strong alliances with their homeless young adults. *Dyadic reciprocity* refers to the degree to which an individual homeless young adult and a social worker report similar levels of agreement with their unique working alliance. Statistically, this was computed by the correlation of the two variance components: the perceiver and the partner variance (generalized reciprocity) and the worker-rated relationship variance and the homeless young adult-rated relationship variance (dyadic reciprocity)

To examine the relationship between the working alliance ratings and outcome variables, we first computed residualized change scores for the outcome variables. This was done by regressing the follow-up scores on the baseline scores for all homeless young adults. In the next step two variables, a worker-level and a homeless young adult-level variable, were calculated, based on the scores for each outcome (Marcus et al., 2009). The worker-level variable was computed by taking the average residualized change score across the homeless young adults of one worker. By subtracting this average change score from the homeless young adults' residualized change score, the homeless young adult-level variable was computed. Finally, the perceiver, partner and relationship effects were related to the outcome variables at the homeless young adult- and worker-level.

3. Results

3.1. Descriptive statistics

Homeless young adults' scores on resilience and self-determination at follow-up were barely different from baseline. On average, homeless young adults rated their working alliance similar to social workers (see Table 2). At baseline, young adults were 'equally satisfied and dissatisfied' to 'mostly satisfied' with their quality of life and 'mostly satisfied' to 'pleased' at follow-up.

Table 2

Baseline and follow-up scores for the study variables reported by homeless young adults and social workers (mean (SD)).

| Study variables | Baseline | Follow-up | Social workers |
|--------------------|-------------|-------------|----------------|
| | HYA | HYA | |
| Working alliance | | 2.33 (0.70) | 2.26 (0.54) |
| Self-determination | 5.03 (0.68) | 5.15 (0.74) | |
| Resilience | 3.27 (0.38) | 3.38 (0.39) | |
| Quality of life | 4.72 (1.23) | 5.32 (1.16) | |

Note. HYA = Homeless young adults.

3.2. Variance partitioning

As can be seen in Table 3, the variance partitioning of the homeless young adult-rated alliance shows that the workers (partner variance) only accounted for a small and non-significant amount of variance in the young adult ratings (6.9%). This indicates that there was barely any consensus between homeless young adults on how they perceived the working alliance with their social worker. Thus, certain social workers are not perceived by their homeless young adults as having established a stronger working alliance than other social workers.

The variance partitioning of the worker-rated alliance shows that 34.1% of the variance in their ratings was due to the perceiver (see Table 3). This indicates that some social workers generally reported a stronger alliance with all of their homeless young adults, whereas others reported to have a generally weaker working alliance with their homeless young adults. The largest part of the variance (93.2%) in the young adult-rated scores of the working alliance can be attributed to the undifferentiated relationship, including a perceiver and/or error variance component. The same accounts for the reported alliance by social workers: the largest amount of the variance (65.9%) can be attributed to the undifferentiated relationship, including a partner and/or error variance.

3.3. Reciprocity

The generalized and dyadic reciprocity appeared not to be significant (generalized, $r = 0.37$, $p = 0.56$; dyadic, $r = 0.12$, $p = 0.34$). The non-significant generalized reciprocity means that homeless young adults who generally reported strong alliances with their social worker, did not have a social worker who generally reported strong alliances. The non-significant dyadic reciprocity means that, when a particular young adult reported a strong working alliance with a social worker (stronger than reported by other homeless young adults of this social worker), this social worker did not necessarily report a strong working alliance with this particular homeless young adult (stronger than his alliance with other homeless young adults).

3.4. Working alliance and outcomes

Table 4 indicates that the homeless young adults whose social workers generally perceived a stronger working alliance (perceiver effect), did not improve more on average in all the dependent variables

Table 3

The variance partitioning (in percentages) of the working alliance between young homeless young adults and social workers.

| Rater | Proportion of variance | | | Total variance |
|---------------|------------------------|---------|--------------|----------------|
| | Perceiver | Partner | Relationship | |
| HYA | | 6.85 | 93.15*** | 0.49 |
| Social worker | 34.08* | | 65.92*** | 0.30 |

Note. HYA = Homeless young adult.

* $p < 0.05$.

*** $p < 0.001$.

Table 4
Standardized regression coefficients of the association between working alliance components and self-determination, resilience and quality of life.

| Variance component affective bond | Self-determination | Resilience | Quality of life |
|-----------------------------------|--------------------|-------------------|-----------------|
| Perceiver | 0.04 | −0.15 | −0.12 |
| Partner | −0.15 | −0.17 | 0.15 |
| Client relationship | 0.21** | 0.14 [~] | 0.13 |
| Worker relationship | −0.05 | −0.04 | 0.02 |

[~] $p < 0.10$.

** $p < 0.01$.

than would be expected from their baseline scores (self-determination, $\beta = 0.04$, $t(28) = 0.31$, $p = 0.76$; resilience, $\beta = -0.15$, $t(24) = -0.78$, $p = 0.44$; quality of life, $\beta = -0.12$, $t(28) = -1.03$, $p = 0.31$). In addition, there is no evidence that social workers whose homeless young adults generally reported stronger working alliances with them (partner effect), saw more improvement as a result (self-determination, $\beta = -0.15$, $t(28) = -1.07$, $p = 0.29$; resilience, $\beta = -0.17$, $t(21) = -0.87$, $p = 0.39$; quality of life, $\beta = 0.15$, $t(24) = 1.20$, $p = 0.24$). Based on the homeless young adult-level variable, it appears that homeless young adults who reported a stronger working alliance (relative to the ratings provided by their social workers' other homeless young adults) improved more in self-determination than would be expected from the baseline scores, compared with other homeless young adults of that particular social worker ($\beta = 0.21$, $t(68) = 2.76$, $p = 0.01$). A marginally significant relationship was found for the association between resilience and working alliance ($\beta = 0.14$, $t(68) = 1.95$, $p = 0.06$). No association was found between quality of life and working alliance ($\beta = 0.13$, $t(66) = 1.57$, $p = 0.12$). Furthermore, workers did not report a stronger working alliance with homeless young adults who improved more than others, (self-determination, $\beta = -0.05$, $t(66) = -0.97$, $p = 0.33$; resilience, $\beta = -0.04$, $t(65) = -0.79$, $p = 0.43$; quality of life, $\beta = 0.02$, $t(66) = 0.40$, $p = 0.69$).

4. Discussion

This was the first study to report on the working alliance between homeless young adults and their social workers and its relation with self-determination, resilience and quality of life, using a one-with-many approach. There was no evidence that homeless young adults perceived specific workers as better skilled in developing a working alliance than others (no significant partner effect). However, some workers reported strong alliances, whereas other workers reported weaker alliances across their homeless young adults (significant perceiver effect), indicating that some workers saw themselves as establishing stronger alliances with their homeless young adults compared to others. This significant perceiver effect might be the result of individual differences in social workers' ability to establish a strong working alliance, or in their personality traits, such as self-confidence or being a more optimistic or pessimistic person (Marcus et al., 2009). The majority of the variance in the working alliance ratings of the homeless young adults and the social workers could be attributed to the undifferentiated relationship effects, which is consistent with previous studies about therapeutic alliances (Hatcher, Barends, Hansell, & Gutfreund, 1995; Marcus, Kashy, Wintersteen, & Diamond, 2011; Marcus et al., 2009). However, as the relationship effect from the homeless young adults point of view is confounded with perceiver variance and error, and the relationship effect from the social worker includes partner variance and error, a more conservative estimate of the unique dyadic relationship in establishing an working alliance is the dyadic reciprocity.

The generalized reciprocity was not significant. Based on the perceiver effect, it seems that individual differences between social workers did exist regarding their perception of the working alliance with his/her clients. However, it seemed that homeless young adults did not make such a distinction. It is likely that homeless young adults

were not able to recognize these differences between workers in this service context. Maybe, homeless young adults reported a strong working alliance with their social worker, not knowing that the working alliance with most other workers would actually be stronger. The social worker, on the other hand, genuinely might have reported a rather weak alliance compared to other workers (Marcus et al., 2009). A possible reason for the non-significant dyadic reciprocity could be that particular characteristics or experiences of the homeless young adults may play a role in establishing good working alliances. Given the often troubled histories of maltreatment, abuse and trauma contributing to physical, psychological and emotional disturbances in homeless young adults, it is likely that these negative factors affected their ability to establish a good working alliance (Eltz et al., 1995). Moreover, many homeless young adults had had bad former experiences in shelter facilities and lost their trust in social workers (De Winter & Noom, 2003; Planije, van't Land, & Wolf, 2003). As a result relationship building is a great challenge for both. In therapeutic settings, it has also been found that clients who externalize problems experience more difficulties with authority figures, which in turn influences relationship building (DiGiuseppe, Linscott, & Jilton, 1996; Shirk & Karver, 2003). As such, developmental and behavioral problems may also have influenced the formation of a working alliance between homeless young adults and social workers. Even though these challenges exist, same gender client-worker dyads (and racial matching to a lesser extent) may contribute to establishing a strong working alliance (dyadic reciprocity) between homeless young adults and their workers, because it was found that patients and therapists of the same sex have similar perspectives on problematic issues (Wintersteen, Mensinger, & Diamond, 2005).

Our findings provide evidence that homeless young adults who report stronger alliances than their social worker's other homeless young adults (homeless young adult-rated relationship effect) improved more in self-determination and seem to improve more in resilience ($p = 0.056$) than the social workers' other homeless young adults. Similar results were found in a previous study among adolescents in substance abuse treatment: clients who rated their alliances stronger than other clients of the same therapist had a greater reduction in cannabis use (Marcus et al., 2011). Additional research is needed to determine the mechanisms underlying the relationship between the working alliance and improvements in self-determination and marginally in resilience.

Further, there was no significant association between the worker-rated relationship effect and outcomes. Thus, workers did not report a stronger working alliance with their homeless young adults (worker-rated relationship effect) when these homeless young adults improved more than other homeless young adults. There was no evidence of significant associations between the perceiver effect of the alliance and outcomes. This indicates that social workers who on average reported stronger working alliances, supported homeless young adults who did not necessarily improve on these outcomes. Furthermore, social workers who generally form stronger alliances with homeless young adults according to these young adults (partner effect), do not necessarily support homeless young adults who improved in outcomes. We were not able to find an association between establishing a working alliance and improving quality of life. Possibly, instead of a direct relationship, there might be an indirect association between working alliance and quality of life. In fact, self-determination and resilience are likely to precede quality of life (Krabbenborg et al., 2015b; Ryan & Deci, 2000). In addition, it might be that a change in quality of life is not feasible within five to six months, given the severe and multiple problems in many life domains of homeless young adults.

By using a one-with-many design, we took into account the interdependence between social workers and homeless young adults. In addition, a one-with-many analysis enabled variance partitioning which was an improvement on analyses that ignore nested designs. In this study, we used data of an intervention study with an intervention and control group. Although we found no differences when controlling for

condition, we have to bear in mind this limitation. Because the working alliance is not a one-dimensional construct, as it consists of the collaboration of tasks and goals and the bond between client and therapist, different aspects of this working alliance might produce different results (Fitzpatrick et al., 2005). For example, the agreement on tasks and goals of the service support might yield different alliance components (partner/perceiver effects) and relate differently to outcomes. Therefore, future research should include these constructs. In addition, our sample is relatively small with a large group of social workers that support two homeless young adults. To increase the power of the analysis and the possibility to detect significant relationships, a larger sample size is required with more young adults per worker. Nevertheless, we were able to find significant associations despite of our relatively small sample size. Future research might also use observation methods for measuring the working alliance between homeless young adults and social workers, which would allow for the making of objective inferences.

Our study emphasizes the importance of a strong working alliance between homeless young adults and their social workers. Although we found no evidence for the relational nature of the working alliance (dyadic reciprocity), the homeless young adults' perception of the working alliance is important in achieving a positive outcome. This finding is clinically relevant as it is important to bear in mind that, irrespective of the strength of the working alliance from the perspective of social workers, the working alliance is essential for homeless young adults to become more self-determined and most likely to enhance their resilience. Therefore, it is important that social workers encourage a dialogical approach in which homeless young adults feel safe enough to express their feelings, expectations and needs in order to build a strong working alliance with their social worker. From the start of the support trajectory, it is crucial that workers evaluate their relationship with homeless young adults on a regular basis in order to remain up to date and responsive to their needs. An open approach might lead to more convergence in the perceptions of the working alliance between homeless young adults and workers. More convergence can contribute to the quality of the rehabilitation process and is seen as an important predictor of client outcomes (Cummings & et al., 1992; Marmarosh & Kivlighan, 2012; Kivlighan & Arthur, 2000).

References

- Beijersbergen, M., Jansen, C., & Wolf, J. (2008). *Zwerfjongeren in Utrecht*. Nijmegen: UMC St Radboud.
- Bender, K., Thompson, S. J., McManus, H., Lantry, J., & Flynn, P. M. (2007). Capacity for survival: Exploring strengths of homeless street youth. *Child & Youth Care Forum*, 36, 25–42. <http://dx.doi.org/10.1007/s10566-006-9029-4>.
- Bender, K. A., Thompson, S. J., Ferguson, K. M., Yoder, J. R., & Kern, L. (2014). Trauma among street-involved youth. *Journal of Emotional and Behavioral Disorders*, 22(1), 53–64.
- Blum, R. (1998). Healthy youth development as a model for youth health promotion: A review. *Journal of Adolescent Health*, 22, 368–375. [http://dx.doi.org/10.1016/S1054-139X\(97\)00261-9](http://dx.doi.org/10.1016/S1054-139X(97)00261-9).
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16, 252–260. <http://dx.doi.org/10.1037/h0085885>.
- Chinman, M. J., Rosenheck, R., & Lam, J. A. (1999). The development of relationships between people who are homeless and have a mental disability and their case managers. *Psychiatric Rehabilitation Journal*, 23, 47–55. <http://dx.doi.org/10.1037/h0095195>.
- Chinman, M. J., Rosenheck, R., & Lam, J. A. (2000). The case management relationship and outcomes of homeless persons with serious mental illness. *Psychiatric Services*, 51, 1142–1147. <http://dx.doi.org/10.1176/appi.ps.51.9.1142>.
- Coates, J., & McKenzie-Mohr, S. (2010). Out of the frying pan, into the fire: Trauma in the lives of homeless youth prior to and during homelessness. *Journal of Sociology & Social Welfare*, 37, 65–96.
- Cummings, A. L., Martin, J., Hallberg, E., & Slemmon, A. (1992). Memory for therapeutic events, session effectiveness, and working alliance in short-term counseling. *Journal of Counseling Psychology*, 39(3), 306–312.
- De Rosa, C. J., Montgomery, S. B., Kipke, M. D., Iverson, E., Ma, J. L., & Unger, J. B. (1999). Service utilization among homeless and runaway youth in Los Angeles, California: Rates and reasons. *Journal of Adolescent Health*, 24, 190–200. [http://dx.doi.org/10.1016/S1054-139X\(98\)00081-0](http://dx.doi.org/10.1016/S1054-139X(98)00081-0).
- De Vries, S. (2008). *Basismethodiek Psychosociale Hulpverlening*. Houten: Bohn Stafleu van Loghum.
- De Winter, M., & Noom, M. (2003). Someone who treats you as an ordinary human being... homeless youth examine the quality of professional care. *British Journal of Social Work*, 33, 325–338. <http://dx.doi.org/10.1093/bjsw/33.3.325>.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268. http://dx.doi.org/10.1207/S15327965PLI1104_01.
- DiGiuseppe, R., Linscott, J., & Jilton, R. (1996). Developing the therapeutic alliance in child—Adolescent psychotherapy. *Applied and Preventive Psychology*, 5, 85–100. [http://dx.doi.org/10.1016/S0962-1849\(96\)80002-3](http://dx.doi.org/10.1016/S0962-1849(96)80002-3).
- Duncan, B. L., Miller, S. D., & Sparks, J. A. (2004). *The heroic client: A revolutionary way to improve effectiveness through client-directed, outcome-informed therapy*. New York: Jossey-Bass.
- Edidin, J. P., Ganim, Z., Hunter, S. J., & Karnik, N. S. (2011). The mental and physical health of homeless youth: A literature review. *Child Psychiatry and Human Development*, 43, 354–375. <http://dx.doi.org/10.1007/s10578-011-0270-1>.
- Eltz, M. J., Shirk, S. R., & Sarlin, N. (1995). Alliance formation and treatment outcome among maltreated adolescents. *Child Abuse and Neglect*, 19, 419–431. [http://dx.doi.org/10.1016/0145-2134\(95\)00008-V](http://dx.doi.org/10.1016/0145-2134(95)00008-V).
- Ferguson, K. M. (2009). Exploring family environment characteristics and multiple abuse experiences among homeless youth. *Journal of Interpersonal Violence*, 24(11), 1875–1891. <http://dx.doi.org/10.1177/0886260508325490>.
- Fitzpatrick, M. R., Iwakabe, S., & Stalikas, A. (2005). Perspective divergence in the working alliance. *Psychotherapy Research*, 15, 69–80. <http://dx.doi.org/10.1080/10503300512331327056>.
- Fransen, N., Handel, C., & Wolde, L. (2011). *Zwerfjongeren in beeld: Literatuurstudie naar kennisontwikkeling over zwerfjongeren*. Amsterdam: DSP-groep.
- Goering, P., Wasylenko, D., Lindsay, S., Lemire, D., & Rhodes, A. (1997). Process and outcome in a hostel outreach program for homeless clients with severe mental illness. *American Journal of Orthopsychiatry*, 67(4), 607–617. <http://dx.doi.org/10.1037/h0080258>.
- Hatcher, R. L., Barends, A., Hansell, J., & Gutfreund, M. J. (1995). Patients' and therapists' shared and unique views of the therapeutic alliance: An investigation using confirmatory factor analysis in a nested design. *Journal of Consulting and Clinical Psychology*, 63, 636–643. <http://dx.doi.org/10.1037/0022-006X.63.4.636>.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38, 139–149. <http://dx.doi.org/10.1037/0022-0167.38.2.139>.
- Horvath, A. O., Del Re, A., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. *Psychotherapy*, 48, 9–16. <http://dx.doi.org/10.1037/a0022186>.
- Johnson, G., & Pleace, N. (2016). How do we measure success in homelessness services? Critically assessing the rise of the homelessness outcomes star. *European Journal of Homelessness*, 31–51.
- Johnston, M. M., & Finney, S. J. (2010). Measuring basic needs satisfaction: Evaluating previous research and conducting new psychometric evaluations of the Basic Needs Satisfaction in General Scale. *Contemporary Educational Psychology*, 35, 280–296. <http://dx.doi.org/10.1016/j.cedpsych.2010.04.003>.
- Karver, M. S., Handelsman, J. B., Fields, S., & Bickman, L. (2005). A theoretical model of common process factors in youth and family therapy. *Mental Health Services Research*, 7, 35–51. <http://dx.doi.org/10.1007/s11020-005-1964-4>.
- Kelly, K., & Caputo, T. (2007). Health and street/homeless youth. *Journal of Health Psychology*, 12, 726–736. <http://dx.doi.org/10.1177/1359105307080594>.
- Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: The key role of self-esteem. *American Journal of Orthopsychiatry*, 78, 163–172. <http://dx.doi.org/10.1037/0002-9432.78.2.163>.
- Kidd, S. A., Miner, S., Walker, D., & Davidson, L. (2007). Stories of working with homeless youth: On being “mind-boggling”. *Children and Youth Services Review*, 29(1), 16–34. <http://dx.doi.org/10.1016/j.childyouth.2006.03.008>.
- Kivlighan, D. M., Jr., & Arthur, E. G. (2000). Convergence in client and counselor recall of important session events. *Journal of Counseling Psychology*, 47(1), 79–84.
- Klinkenberg, W. D. P. D., Calsyn, R. J. P. D., & Morse, G. A. P. D. (1998). The helping alliance in case management for homeless persons with severe mental illness. *Community Mental Health Journal/January*, 34(6), 569–578.
- Krabbenborg, M. A. M., Boersma, S. N., & Wolf, J. R. L. M. (2013). A strengths based method for homeless youth: Effectiveness and fidelity of Houvast. *BMC Public Health*, 13, 359–369. <http://dx.doi.org/10.1186/1471-2458-13-359>.
- Krabbenborg, M. A. M., Boersma, S. N., van der Veld, W. M., van Hulst, B., Vollebergh, W. A. M., & Wolf, J. R. L. M. (2015a). A cluster randomized controlled trial testing the effectiveness of Houvast: A strengths-based intervention for homeless young adults. *Research on Social Work Practice*. <http://dx.doi.org/10.1177/1049731515622263>.
- Krabbenborg, M. A. M., Boersma, S. N., van der Veld, W., Vollebergh, W. A. M., & Wolf, J. R. L. M. (2015b). Self-determination in relation to quality of life in homeless young adults: Direct and indirect effects through psychological distress and social support. *The Journal of Positive Psychology*, 1–11. <http://dx.doi.org/10.1080/17439760.2016.1163404>.
- Lehman, A. F., Kernan, E., & Postrado, L. (1995). *Toolkit for evaluating quality of life for persons with severe mental illness*. Baltimore: Human Services Research Institute.
- Marcus, D. K., Kashy, D. A., & Baldwin, S. A. (2009). Studying psychotherapy using the one-with-many design: The therapeutic alliance as an exemplar. *Journal of Counseling Psychology*, 56, 537–548. <http://dx.doi.org/10.1037/a0017291>.
- Marcus, D. K., Kashy, D. A., Wintersteen, M. B., & Diamond, G. S. (2011). The therapeutic alliance in adolescent substance abuse treatment: A one-with-many analysis. *Journal of Counseling Psychology*, 58, 449–455. <http://dx.doi.org/10.1037/a0023196>.
- Marmarosh, C. L., & Kivlighan, D. M. (2012). Relationships among client and counselor agreement about the working alliance, session evaluations, and change in client

- symptoms using response surface analysis. *Journal of Counseling Psychology*, 59(3), 352–367.
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68, 438–450. <http://dx.doi.org/10.1037/0022-006X.68.3.438>.
- Obegi, J. H. (2008). The development of the client-therapist bond through the lens of attachment theory. *Psychotherapy (Chicago, Ill.)*, 45(4), 431–446.
- Planije, M., van't Land, H., & Wolf, J. (2003). *Hulpverlening aan zwerfjongeren*. Utrecht: Trimbos-instituut.
- Portzky, M., Wagnild, G., De Bacquer, D., & Audenaert, K. (2010). Psychometric evaluation of the Dutch resilience scale RS-nl on 3265 healthy participants: A confirmation of the association between age and resilience found with the Swedish version. *Scandinavian Journal of Caring Sciences*, 24, 86–92. <http://dx.doi.org/10.1111/j.1471-6712.2010.00841.x>.
- Rew, L., & Horner, S. D. (2003). Youth resilience framework for reducing health-risk behaviors in adolescents. *Journal of Pediatric Nursing*, 18(6), 379–388.
- Ritholz, S. K., Festinger, T., Siegel, J., & Stanhope, V. (2011). The relationship among client self-determination, therapeutic alliance and mental health recovery. *Dissertation Abstracts International*, 73–74.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. <http://dx.doi.org/10.1037/0003-066X.55.1.68>.
- Safran, J. D., & Muran, J. C. (2000). Resolving therapeutic alliance ruptures: Diversity and integration. *Journal of Clinical Psychology*, 56(2), 233–243. <http://dx.doi.org/10.1002/%28SICI%2910974679%28200002%2956:2%3C233::AID-JCLP9%3E3.0.CO;2-3>.
- Schuengel, C., Venmans, J., Van IJzendoorn, M., & Zegers, M. (2005). *Gehechtheidsstrategieën van zeer problematische jongeren: Onderzoek, diagnostiek en methodiek*. Amsterdam: SWP.
- Shirk, S. R., & Karver, M. (2003). Prediction of treatment outcome from relationship variables in child and adolescent therapy: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 71, 452–464. <http://dx.doi.org/10.1037/0022-006X.71.3.452>.
- Stefanidis, N., Pennbridge, J., MacKenzie, R. G., & Pottharst, K. (1992). Runaway and homeless youth: The effects of attachment history on stabilization. *American Journal of Orthopsychiatry*, 62, 442–446. <http://dx.doi.org/10.1037/h0079343>.
- Straaten van, B. (2016). *On the Way Up? Exploring homelessness and stable housing among homeless people in the Netherlands*. (PhD) Rotterdam: Erasmus Universiteit Rotterdam.
- Tavecchio, L. W., Thomeer, M., & Meeus, W. (1999). Attachment, social network and homelessness in young people. *Social Behavior and Personality: An International Journal*, 27, 247–262. <http://dx.doi.org/10.2224/sbp.1999.27.3.247>.
- Thompson, S. J., Pollio, D. E., Eylich, K., Bradbury, E., & North, C. S. (2004). Successfully exiting homelessness: Experiences of formerly homeless mentally ill individuals. *Evaluation and Program Planning*, 27, 423–431. <http://dx.doi.org/10.1016/j.evalprogplan.2004.07.005>.
- Thompson, S. J., McManus, H., Lantry, J., Windsor, L., & Flynn, P. (2006). Insights from the street: Perceptions of services and providers by homeless young adults. *Evaluation and Program Planning*, 29, 34–43. <http://dx.doi.org/10.1016/j.evalprogplan.2005.09.001>.
- Thompson, S. J., Bender, K., Windsor, L., Cook, M. S., & Williams, T. (2010). Homeless youth: Characteristics, contributing factors, and service options. *Journal of Human Behavior in the Social Environment*, 20, 193–217. <http://dx.doi.org/10.1080/10911350903269831>.
- Tsai, J., Lapidus, A., Rosenheck, R. A., & Harpaz-Rotem, I. (2013). Longitudinal association of therapeutic alliance and clinical outcomes in supported housing for chronically homeless adults. *Community Mental Health Journal*, 49, 438–443. <http://dx.doi.org/10.1007/s10597-012-9518-x>.
- Wagnild, G. M. (2010). *Discovering your resilience core*. (Retrieved September 23, 2014, from the resilience scale website: http://www.resiliencescale.com/papers/pdfs/Discovering_Your_Resilience_Core.pdf).
- Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the resilience scale. *Journal of Nursing Measurement*, 1, 165–178.
- Whitbeck, L. B., Hoyt, D. R., & Ackley, K. A. (1997). Families of homeless and runaway adolescents: A comparison of parent/caretaker and adolescent perspectives on parenting, family violence, and adolescent conduct. *Child Abuse and Neglect*, 21, 517–528. [http://dx.doi.org/10.1016/S0145-2134\(97\)00010-0](http://dx.doi.org/10.1016/S0145-2134(97)00010-0).
- Winter de, M., & Noom, M. (2003). Someone who treats you as an ordinary human being... Homeless youth examine the quality of professional care. *British Journal of Social Work*, 33, 12.
- Wintersteen, M. B., Mensinger, J. L., & Diamond, G. S. (2005). Do gender and racial differences between patient and therapist affect therapeutic alliance and treatment retention in adolescents? *Professional Psychology: Research and Practice*, 36, 400–408. <http://dx.doi.org/10.1037/0735-7028.36.4.400>.
- Wolf, J. (2012). *Herstelwerk een krachtgerichte basismethodiek voor kwetsbare mensen*. Nijmegen: Radboudumc.
- Wolf, J., & van der Laan, G. (2005). *De bitterzoete werkelijkheid: De relatie tussen methodiek en organisatie in een begeleid wonen-project voor zwerfjongeren*. Amsterdam: SWP.
- Zegers, M. A. M. (2007). *Attachment among institutionalized adolescents. Mental representations, therapeutic relationships and problem behavior* (Amsterdam).
- Zolkoski, S. M., & Bullock, L. M. (2012). Resilience in children and youth: A review. *Children and Youth Services Review*, 34, 2295–2303. <http://dx.doi.org/10.1016/j.childyouth.2012.08.009>.