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Can we Modulate Therapeutic Interpersonal Style Experimentally to Address Alliance? A Proof-of-Concept Study

Isabel Schamong¹ • Simon Bollmann¹ · Nele Struck¹ · Tobias Kube^{1,2} · Lisa D'Astolfo¹ · Eva-Lotta Brakemeier^{1,3}

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Abstract

Background With a lack of experimental designs that explore which therapeutic style is helpful for which patient, the aim of this study was to test the feasibility of experimentally varying the therapeutic style under realistic conditions and to investigate how this affects alliance ratings by clients and counselors.

Methods We defined two manualized therapeutic styles (neutral/distant relational style vs. high affiliation relational style) based on the interpersonal circumplex. In a randomized two-group design, 64 healthy university students (70% female, $M_{\rm age} = 23.78$, $SD_{\rm age} = 2.81$) received a single psychological counseling session on interpersonal conflicts by one of four counselors and in one of the two styles. We checked the manipulation success using observer-rated degree of affiliation and ratings of counselors' interpersonal behavior with the Interpersonal Message Inventory (IMI-R). A series of linear regression models analyzed whether the style predicted working alliance, assessed via the Working Alliance Inventory (WAI). **Results** In accordance with the hypotheses, significant differences in the rated degree of affiliation ($p \le .001$) and IMI-R ratings ($p \le .001$ in *friendly*, p = .003 in *hostile* dimension) were found between the two groups. Overall, alliance ratings were high across groups and raters (WAI overall scores ranging from 3.76 to 4.07). The style did not predict clients' alliance ratings

Conclusion The experimental variation of the therapeutic style proved feasible under realistic conditions with high overall alliance ratings. The novel experimental design may provide a basis for further research.

Keywords Therapeutic alliance · Psychotherapy process research · Therapeutic interpersonal styles · Counseling session

Introduction

The therapeutic alliance is one of the most studied therapeutic variables with an undisputed importance for psychotherapy—both from a clinical and scientific point of view (e.g. Norcross & Lambert, 2018). In line with findings that different treatment approaches yield similar outcomes, analyzing potential differences in alliance between treatment forms has not revealed significant differences either (Doran,

- ☐ Isabel Schamong isabel.schamong@uni-marburg.de
- Department of Clinical Psychology and Psychotherapy, Philipps University Marburg, Gutenbergstrasse 18, 35032 Marburg, Germany
- Department of Clinical Psychology and Psychotherapy, University of Landau, Landau, Germany
- Department of Clinical Psychology and Psychotherapy, University of Greifswald, Greifswald, Germany

2016; Flückiger et al., 2012; Horvath et al., 2011). Therefore, a number of empirical studies have investigated specific elements (e.g. therapist self-disclosure: for an overview see Köhler et al., 2017) in relation to the therapeutic alliance (for an overview see Norcross & Lambert, 2018). To our knowledge, however, there are no studies so far that have looked into the formation of an initial alliance in a realistic, face-to-face counseling setting in dependence of counselors' interpersonal style in the context of an experimental design. As a first step, it seems important to look more closely at the possibility for counselors to actively and deliberately shape their interpersonal style and thus stimulus character. Such an experimental variation is needed initially in order to gain differential insight into the formation of a viable alliance. By connecting alliance formation to interpersonal behavior of the therapist, we can address a central question in psychotherapy research—what works for whom?—which has been raised repeatedly since its first mention by (Gordon L. Paul in 1969; Hofmann & Hayes, 2019; Kazdin, 2007;



Norcross & Wampold, 2010). It is essential to unravel the mechanisms behind the working alliance in order to better tailor its formation and use to the individual patient's needs.

For the present study, we refer primarily to the pantheoretical model of the working alliance by Bordin (1979) and focus on its definition and operationalization. We will thus use this terminology throughout the article. According to Bordin, three components must be fulfilled in order to achieve a good working alliance: (a) agreement regarding goals between patient and therapist, (b) agreement about tasks in order to reach these goals, and (c) a strong emotional bond. Bordin's conceptualization of the working alliance has provided one of the most robust, well empirically grounded, and widely used to date (Doran, 2016).

Within the contextual model formulated by Wampold and Imel (2015) and the ongoing debate of specific vs. nonspecific factors of psychotherapy, the alliance is discussed as a common factor among others such as patients' expectations regarding treatment or therapist effects (Mulder et al., 2017; Wampold, 2015). A reciprocal link has been proven between alliance and outcome, showing a moderate, robust correlation (Ardito & Rabellino, 2011; Horvath et al., 2011; Martin et al., 2000) of approximately 8% of shared variance (Flückiger et al., 2018; Horvath et al., 2011). A recent metanalysis has found evidence for the causal link of better early alliance prediciting better outcome, which advocates alliance as a main mechanism of change (Flückiger et al., 2020).

The Role of the Therapist and Therapeutic Interpersonal Style

Descriptions of alliance emphasize the collaboration between both therapist and patient—making it a dyadic phenomenon to which both contribute (Barber et al., 2010). There is sound evidence regarding the impact of the therapist's role in relation to the alliance-outcome link (Baldwin et al., 2007; Del Re et al., 2012; Flückiger et al., 2018). Wampold and Imel (2015) consider the therapist one of the most influential therapeutic factors (see also Dinger et al., 2017). In their meta-analysis, Del Re et al. (2012) showed that variance in the therapist's ability to form an alliance with the patient is more important regarding therapy outcome than variance between patients. In other words, there are therapists whodue to their behavior or specific characteristics—can build strong relationships across many patients, and others, who are less able to do so (also see Dinger et al., 2017). As the therapeutic alliance is formed in the early stages of therapy and thus has an early impact on therapy outcome, the client's first impression of the psychotherapist may have a direct impact on client satisfaction and seems to be quite consistent over time (Bar et al., 2006; Flückiger et al., 2020; Wampold, 2015). The therapist's behavior is a prerequisite for how the relationship between patient and therapist is formed at this early stage. Competence and skill of therapists are key influencing factors, while treatment and in-session processes have an inherently nested nature. For current literature, please see Kazantzis (2018) for an introduction and overview to a special issue on processes of CBT and Kazantzis et al. (2018) for a review of meta-analyses on the matter.

There is a growing body of literature that addresses the question of how interpersonal behavior or the interpersonal stimulus of a therapist relates to the formation and maintenance of alliance and outcome, embedded into interpersonal theory by classifying the therapeutic interpersonal impression in the Interpersonal Circumplex (Kiesler, 1983). Within the model, interpersonal behavior is characterized on two main axes within a circumplex model: (a) the communion/ affiliation/warmth axis and (b) the axis of agency/dominance. The first axis addresses the extent to which a person portrays approach behavior, with opposite poles (warm behavior vs. cold/hostile behavior). Warmth/friendliness can be considered a key component of empathy. It grasps perceived intention and motives, friendliness, helpfulness, sincerity, trustworthiness, and morality and when considering the interpersonal circumplex, the way we perceive a person's warmth determines our approach-avoidance behavioral tendencies towards them (also see Fiske et al., 2006). For example, a person's friendly interpersonal style increases the chance for others to behave in a friendly manner in turn. The agency axis considers dominant vs. submissive behavior. Based on these axes, the model consists of eight dimensions of interpersonal behavior that are in a circular relationship to each other. As such, a category is positively correlated with adjacent categories and less positively correlated with more distant categories, with opposite categories being negatively correlated (Kiesler, 1983). Complementary response tendencies can be derived from here, i.e., how we behave towards others under certain conditions (e.g., friendly behavior entailing friendly behavior in return).

So far, studies that aim to examine different therapeutic styles and its contribution to a facilitative alliance-outcome relation have mostly concentrated on therapists' agency (e.g. Choi et al., 2020; Karno & Longabaugh, 2005). Since the distinction between a directive and non-directive style can be traced back to the different psychotherapeutic orientations of Albert Ellis and Carl Rogers (see Kiesler & Goldston, 1988), this concept has been historically more consolidated than the distinction based on affiliation. Moreover, in dismantling and investigating specific variances in therapeutic styles, studies to date have used analogue experimental designs with no direct interpersonal contact between a counselor/therapist and client/patient. For example, Moors and Zech (2017) investigated the effects of psychotherapists' interpersonal styles when interacting with patients. In a laboratory experiment, videos with distinctive therapeutic behaviors were



used to simulate a first psychotherapy session with participants. The results showed that besides agency, warmth was identified as an additional predictor of client satisfaction. These effects depended on the clients' own interpersonal agentic profiles, but therapists' warmth seems to be essential regarding client satisfaction. In addition, empirical evidence suggests that therapists' or counselors' warmth positively impacts the therapeutic alliance (Ackerman & Hilsenroth, 2003; Dinger et al., 2007). Studies also show that friendliness and perceived empathy as well as authenticity of the therapist are important aspects for patients when rating the therapeutic alliance (Bedi et al., 2005; Nienhuis et al., 2018). Warmth and thus validation may also have an impact on the emotional state of patients, as Benitez et al. (2019) were able to show that—in ongoing psychotherapy—therapist's use of validation strategies was linked to a decrease in negative affect for patients, while experiencing invalidation increased perceived negative affect after the session. This line of research is still in the early stages, but may indicate that for clients or patients, perceived warmth may present a key facilitator in an initial therapeutic encounter for a viable alliance and therapeutic success. In turning to placebo research in medicine, there are isolated studies that modulated the therapeutic style experimentally regarding perceived empathy (Kaptchuk et al., 2008) as well as both warmth and competence (Howe et al., 2017), showing a positive, independent effect on the placebo response for both factors.

Purpose of the Present Study

Building on these initial findings, it seems relevant to further explore the effects of therapists' interpersonal behavior—especially with regard to the affiliation/warmth axis on patient perception. Although the alliance concept is a broadly investigated variable, previous methodological approaches are limited in taking a closer look at the actual process of the alliance formation under realistic, face-to-face conditions and have not sufficiently considered the role of therapists' interpersonal behavior. It should be kept in mind that dismantling studies regarding the alliance in clinical samples are difficult to realize due to ethical reasons (Flückiger et al., 2018). Therefore, unraveling how a therapist's interpersonal style should be shaped in a first contact to be positively perceived by both patient and therapist seems an important, promising perspective. To our knowledge, no studies have yet pursued this path by experimentally varying the therapeutic style in a non-laboratory, realistic setting. This study presents a novel experimental approach under realistic conditions to contribute as to how interpersonal therapeutic behavior might facilitate good alliance formation and overall outcomes by examining its effects on client perception of alliance.

Therefore, we sought to actively manipulate two interpersonal therapeutic styles—with regard to the affiliation/ warmth axis in the interpersonal circumplex—by means of an experimental pilot project. In a single psychological counseling session regarding interpersonal conflicts of university students, counselors took on (a) a warm, friendly, and self-disclosing style (high affiliation relational style) or (b) a more psychoeducative and neutral role (neutral/distant relational style). The two styles were classified and verified according to the Interpersonal Circumplex (Kiesler, 1983) and were realized in a randomized two-group design in order to compare the two conditions. Our primary aim was to test whether our specific experimental variation of the interpersonal style was feasible under non-laboratory, realistic conditions in the context of a single counseling session. In an exploratory fashion, we wanted to further investigate whether the style influenced the perception of the clientrated working alliance. Due to the above described limited research on which style is helpful for which client as well as the fact that basic therapeutic principles such as empathy were met in both conditions and these were based on evidence-based treatment guidelines as described in more detail in the methods section, we did not specify any predictions. In addition, we expected symptom severity of clients to decrease by means of the session and we investigated whether there were differences between the conditions.

Method

Participants and Recruitment

Undergraduate and postgraduate students were recruited via notices, leaflets, and mailing lists at a German University, offering a one-time, free of charge counseling session concerning an interpersonal conflict. Participants had to fulfill the following inclusion criteria: (a) age between 18 and 30, (b) enrolled student at the local University, and (c) fluency in the German language. Exclusion criteria were (a) a reported psychiatric disorder and (b) psychotherapeutic/psychiatric pre-treatment or prior experience. They were eligible to participate if they had an ongoing interpersonal conflict to be discussed in the counseling session. All participants gave informed consent and the institutional ethics review board approved the study (reference number 2017-08 k). 118 persons expressed an interest in the study, of which 64 students (70% female; $M_{\text{age}} = 23.78$ years old, $SD_{\text{age}} = 2.81$) actually took part in the study. Fifty-four participants were excluded from the study due to the following reasons: exclusion criteria met for n=7, cancellations of fixed dates for n=12, nonappearances for the counseling session for n = 35. Participants had a mean BDI-II score of 12.34 (SD = 7.13) at baseline, which is below the threshold of clinically relevant depressive



symptoms according to Beck et al. (1996). The sample indicated low mean levels of interpersonal problems (M=1.37, SD=0.49). Differences between the two conditions regarding the distribution of specific sample characteristics were found for gender, χ^2 (1)=4.25, p=0.039, and moving as a stressful life event, χ^2 (1)=0.1, p=0.014 (Table 1).

Design

Counseling Session

Participants received a single counseling session with an ongoing interpersonal conflict as the main topic. Four

postgraduate trainee psychotherapists (between 26 and 32 years old; $M_{\rm age} = 28$; 50% female) with different training levels conducted the sessions. They showed similar personality characteristics according to the German version of the NEO-Five Factor Inventory (NEO-FFI: Borkenau & Ostendorf, 2008): $M_{\rm Neuroticism} = 20$, range 18-22; $M_{\rm Extraversion} = 24$, range 23-25; $M_{\rm Openness} = 19$, 75, range 18-21; $M_{\rm Agreeableness} = 19$, range 18-21; $M_{\rm Conscientiousness} = 27$, range 24-29. Counselors presented low, but heterogenous mean levels of interpersonal problems and dominance/affiliation tendencies, as assessed via the Inventory of Interpersonal Problems (IIP-32; Horowitz et al., 2016; $M_{\rm Interpersonal\ Problems} = 1.06$, range

Table 1 Sociodemographic and clinical characteristics of participants (N=64)

Characteristics	Neutral/distant (n=33)	High affiliation $(n=31)$		
Age in years, M (SD), range	23.2 (2.59), 20–28	24.5 (2.92), 19–29		
Gender, n (%) of female participants	27 (81.8)	18 (58.1)		
University degree, n (%)	10 (31.3)	15 (48.4)		
Marital status, n (%) ^a				
Single	10 (30.3)	15 (48.4)		
Committed relationship	21 (63.6)	14 (45.2)		
Married	1 (3.0)	1 (3.2)		
Divorced	_	1 (3.2)		
Stressful live events n (%) ^b				
Job change	4 (12.1)	4 (12.9)		
Move	19 (57.6)	8 (25.8)		
Severe personal illness	2 (6.1)	1 (3.2)		
Severe illness of a relative, close friend	10 (30.3)	13 (41.9)		
Death of a family member	7 (21.2)	7 (22.6)		
Experiences of childhood maltreatment n (%) ^c				
Emotional abuse	13 (39.4)	11 (35.5)		
Physical abuse	2 (6.1)	4 (12.)		
Sexual abuse	7 (21.)	3 (9.7)		
Emotional neglect	16 (48.5)	10 (32.3)		
Physical neglect	8 (24.2)	9 (29.0)		
BDI-II $M(SD)^d$	11.85 (6.38)	12.87 (7.92)		
No/minimal depressive symptomatology	18 (54.5%)	19 (61.3%)		
Mild depressive symptomatology	13 (39.4%)	5 (16.1%)		
Moderate depressive symptomatology	2 (6.1%)	6 (19.4%)		
Severe depressive symptomatology	_	1 (3.2%)		
IIP-32 Interpersonal problems $M(SD)^{e}$	1.40 (0.54)	1.34 (0.44)		
IIP-32 Dominance tendencies	- 0.39 (0.77)	- 0.24 (0.71)		
IIP-32 Affiliation tendencies	0.49 (0.67)	0.26 (0.80)		

M = mean, SD = standard deviation



^aMissing values (neutral/distant n = 32)

^bMultiple answers possible

^cAt least low to moderate in Childhood Trauma Questionnaire (CTQ, Bernstein et al., 2003)

^dBecks Depression Inventory (BDI-II; Beck et al., 1996; German: Hautzinger et al., 2006) cut-off scores (Kühner et al., 2007)

^eInventory of Interpersonal Problems (IIP-32; Horowitz et al., 2016) total score, range 0–4, missing values (high affiliation n = 29)

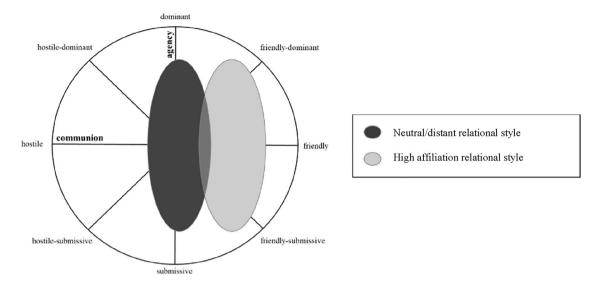


Fig. 1 Areas of action of the counselors within the interpersonal circumplex model

0.69–1.50; $M_{\text{Dominance tendencies}} = -0.57$, range -0.92–0.10; $M_{\text{Affiliation tendencies}} = 0.36$, range 0.00–0.60).

Each counselor conducted 16 sessions, balanced for condition and gender of participants, such that every counselor conducted at least seven sessions in each condition. Clients were randomly assigned to condition and counselors. In 52% of cases, gender between counselor and client was not congruent; in 34% female gender was congruent; in 14% male gender was congruent. In addition to a general questionnaire package prior to all counseling sessions, counselors completed a specific questionnaire package after each session (to rate the alliance, interpersonal impression of the client, and perceived fit between client and condition).

Therapeutic Styles

As a theoretical basis for the two therapeutic styles, we used the Interpersonal Circumplex (Kiesler, 1983) and conceptualized two areas of action/styles of counselors. The two styles were primarily defined and operationalized by the proximity and distance—respectively—which the counselor conveyed to the client. Varying counselors' areas of action specifically on the communion/affiliation axis implies an area of overlap, which shows that basic therapeutic variables such as empathy, acceptance and authenticity were naturally applied in both conditions (see Fig. 1). At the same time, counselors were not specifically instructed to vary their behavior on the control axis, such as to act in a particularly open or leading way in one condition and in contrast mainly passive in the other condition. Due to the given structure of the session, a certain degree of control/dominance was automatically required of the counselor in both conditions,

while more restrained behavior could be used in certain parts, depending on the course of the session.

Independent of the style and thus condition, counselors conducted standardized interventions from the evidence-based interpersonal psychotherapy (IPT; Weissman et al., 2000) in each counseling session regarding the specific interpersonal problem of the participant: (a) identification and (b) definition of the interpersonal conflict, (c) communication analysis, and (d) rules of communication. The variation between conditions was thus limited to the interpersonal component. The procedure was semi-structured according to an interview guideline (material available at https://mfr.osf.io/render?url=https%3A%2F%2Fosf.io%2Ffce2x%2Fdownload; Bollmann et al., 2017). The guideline manualized the interpersonal style and behavior of the counselors and content for each condition.

The high affiliation interpersonal style was defined as an area of action for the counselors that is centered on the friendly pole within the affiliation axis. The neutral/distant relational style was shifted towards the center of the axis, still extending its area of action to the friendly pole. A further shift towards the hostile dimension of the circumplex was foreclosed due to ethical aspects and in order to ensure basic conditions obligatory in conducting a psychological counseling session. The high affiliation relational style, however, was not defined as an exaggerated use of empathy, but rather conceptualized as a very warm and empathic general thrust with consistent use of validation strategies and self-disclosure when possible. In addition, counselors were instructed to use nonverbal cues such as frequent smiling as well as an open and slightly forward-leaning posture and "mirror" and reinforce nonverbal signals of the client. In the neutral/distant relational style, the counselor had a more



psychoeducative, supportive expert role with the main focus on problem solving and the factual, problem-focused levelthat is, the topic of the conflict itself. Benevolent neutrality was to be provided instead of self-disclosure. Counselors were to focus on the professional competence and not on emotional warmth, understanding, or the like. They were instructed not to mirror facial expressions and gestures of clients and retain a more neutral facial expression, with less smiling. Further, there were to retain a neutral, restrained posture, sometimes even taking back the upper part of the body a little to signal distance. Natural fluctuations of counselor behavior within the session were given, taking into account client characteristics and the interplay between client and counselor. We can therefore assume an area of action, in which the counselor—starting at the respective pole of the defined interpersonal style—moved with the client and the interactive processes in a natural and authentic way. At the same time, he or she stayed within the defined area of action and returned to the pole as often as possible by means of behavioral, verbal and nonverbal cues. This inevitably leads to movement within the area of action and a certain overlap between the two interpersonal styles (see Fig. 1). The above mentioned semi-structured interview guideline was used to ensure counselors adhered to the two conditions.

Procedure

When a participant contacted the researchers, a short screening via telephone was conducted in order to assess inclusion and exclusion criteria. When eligible to participate, they were invited to the psychological institute of the local university for a first pre-session assessment (T0; one week prior to the actual counseling session) and gave informed consent (including video recording of the session). Participants were blinded with respect to the actual aim of the study. Subsequently, they were randomly assigned to one of the two conditions and a counselor was selected according to availability. Participants completed a further questionnaire package directly before the session (T1). The 50 min counseling session was conducted in a standardized room at the psychological institute of the local university. After the counseling session, participants and counselors completed a last questionnaire package (T2). Afterwards, participants were given a debriefing in which questions and comments were clarified and further need for support was enquired. If indicated, participants were referred to a psychotherapeutic outpatient clinic.

61 videotaped sessions were rated by blinded observers (trained student assistants) by watching the entire session for further analyses (observer-rated degree of affiliation and interpersonal impressions of counselor and client). Raters were trained in two workshops with exemplary videos and

tested in individual test ratings, which were compared to expert ratings until a satisfactory level of concordance was reached. Eight randomly chosen videos were each rated by three raters to further verify interrater reliability. Afterwards, two raters revaluated 14 videotaped sessions each and one rater evaluated 25 videotaped sessions.

Measures

Observer-Rated Degree of Affiliation

The rating was designed specifically for the present study, as no suitable rating measure was found in the literature. In addition to the described theoretical considerations of the two styles, we based it on scales for assessing adherence and interpersonal relationship quality according to McCullough (2006) and on rating scales by Truax (1962a, 1962b) and Carkhuff (1969). The measure went through an extensive revision process with support from research colleagues to establish good interrater reliability. The final rating consists of six scales: (a) emotional warmth and empathy, (b) level of communication, (c) validation, (d) self-disclosure, (e) work attitude and work process, and (e) gestures and facial expressions, as well as a total score of the overall degree of affiliation. Sample items include: "To what extent are general validation strategies used?" (scale c), "To what extent does the counselor express his or her own emotions and perceptions?" (scale d), and "To what extent is the focus of the conversation on the objective clarification of the interpersonal problem?" (scale e). The rating has a total of 42 items with a five-point Likert scale. To distinguish between the two styles, items that focus on key aspects of an applied neutral/distant relational style were inverted; e.g. "To what extent is a factual, 'sober' reference to the theoretical models and interventions used observable (definition of the interpersonal conflict, communication analysis and rules of communication)?". Therefore, higher values in the rating correspond to a higher degree of behavior associated with the high-affiliation style, whereas lower values correspond to a higher degree of behavior associated with the neutral/ distant style. The rating also assessed whether or not a specific therapeutic strategy from IPT as defined before was used in a counseling session. Internal consistency was excellent in the present study (Cronbach's $\alpha = 0.98$) with good to excellent internal consistency for all subscales (ranging from Cronbach's α of 0.86 to 0.94). Intra-class correlation coefficients (ICC, two-way mixed model based on single rater and consistency) were conducted to check for a satisfying ICC based on the 95% confidence interval of an at least moderate degree according to Koo and Li (2016), which was found for the randomly selected eight videos rated by all three raters. The intra-class correlation coefficient (ICC, two-way mixed



model based on single rating and consistency) was 0.84, 95% CI [0.57, 0.96], F(7,14) = 16.86, p < 0.001.

Impact Message Inventory (IMI)

The Impact Message Inventory is a questionnaire developed by Donald Kiesler (1983). As a "non-objective" instrument, it captures the impression a person makes on another person by describing the interpersonal characteristics of that person, i.e. their interpersonal impact or stimulus character (Caspar et al., 2016). The questionnaire consists of 64 items rated on a four-point Likert scale. They are categorized according to the eight dimensions of the interpersonal circumplex and all begin with the phrase "When I am with him/her, I have the feeling that...". Within the therapeutic context, the IMI is used to assess the interpersonal personality and to describe interpersonal communication patterns (Caspar, 2002). Initial data from the German version indicate sufficient psychometric properties (Caspar et al., 2016). Ratings were conducted by clients, counselors, and observers directly following the session at T2.

Working Alliance Inventory—Short Revised (WAI-SR)

The WAI-SR is a questionnaire to assess the quality of the working alliance, based on Bordin's pan theoretical concept. We used the 12-item patient (WAI-C) version to rate alliance by clients at T2. The questionnaire has three subscales of agreement on goals, agreement on tasks, and the emotional bond. Each subscale consists of four items, with a five-point answer format. Since we did not administer the WAI-SR in a psychotherapeutic setting, we slightly adapted its wording to the counseling context. There is support for the validity of the WAI-SR from previous studies (Huber et al., 2019; Munder et al., 2010; Zilcha-Mano, 2017). In the present study, internal consistency of the WAI-C was good (Cronbach's α =0.85), with acceptable to good values for the subscales (Cronbach's α : 0.70–0.82).

Perceived Fit of the Relational Style

Counselors were asked to answer the single question of "How would you assess the fit of the relational style used in this counseling session for this client?" on a visual analog scale ranging from 0 to 10 at T2. The wording for observers was slightly different, as they were blinded for the condition ("How would you assess the fit of the counselor's behavior with regard to the relationship between the counselor and the client in this counseling session for this client?").

Symptom-Checklist-K-9 (SCL-K-9)

The SCL-K-9 is the German short form (9 items) of the long version (90 items) by Derogatis and Cleary (1977), used as a self-report screening of symptoms (Klaghofer & Brähler., 2001). Participants were asked to rate nine items about problems and complaints in the last seven days at T0 (one week before the session) and directly after the session (T2).

Additional Measures Assessed Prior to the Counseling Session

To further objectify the exclusion criteria of an existing psychiatric disorder, we used the 21-item self-report BDI-II (Beck et al., 1996; German version: Hautzinger et al., 2006), which was administered at T0. Interpersonal problems were assessed with the German short form (32 items) of the Inventory of Interpersonal Problems (IIP-32; Horowitz et al., 2016), based on the Interpersonal Circumplex Model by Kiesler (1983). Childhood maltreatment was assessed via the Childhood Trauma Questionnaire (CTQ-SF; Bernstein et al., 2003; German version: Wingenfeld et al., 2010).

Statistical Analysis

All statistical analyses were conducted using SPSS (Version 25). Normal distribution was examined with the Kolmogorov-Smirnov Test. Values with a standard deviation of three or more were identified as outliers and excluded for statistical analyses of data. To analyze counselors' successful implementation and compliance to the two manualized conditions, multiple independent two sample t-tests were conducted. For comparison of symptomatic change, a paired sample t-test was conducted. Because of multiple testing, we conducted Bonferroni correction to adjust the level of significance. In reporting the results, we refer to unadjusted p-values (two-tailed) and provide the Bonferroni-corrected significance level in the note of the table. In addition, we conducted Cohen's d (Cohen, 1988) for calculated comparisons. Regarding the question whether or not the style predicted the perception of the working alliance by clients, we conducted a series of linear regression models. To account for possible counselor effects we followed the recommendation of McNeish and Stapleton (2016) for a nested data structure with very few clusters and included counselors as fixed effects in every single linear regression model. We added exploratory analyses on possible differences between individual counselors and possible effects of gender (non-) congruence. We will refer to these analyses in every section of the results.



Results

Manipulation Check as Rated by Trained Raters

For the preliminary analyses, we conducted an experimental manipulation check to test realization and compliance to the two relational styles (high affiliation vs. neutral/distant). This was done via two different paths: (a) observer ratings of the degree of affiliation in counselors' interpersonal therapeutic style, and (b) ratings of counselors' interpersonal impressions.

Observer Ratings of the Degree of Affiliation

Objective raters assessed the overall degree of affiliation. Ratings showed significant differences between the two conditions, t = 12.37 (59); p < 0.001; d = 3.17, with higher values for the high affiliation (HA) condition compared to the neutral/distant (ND) condition (see Table 2). An additional comparison of the mean values of the individual subscales of the rating using multiple t-tests showed that the conditions differed significantly on all six scales, p < 0.001; d = 1.83 - 3.55 (see Table 2).

On an individual counselor level, all counselors differed significantly between the two conditions (p < 0.001). We also found no differences between the four counselors in ratings in the overall sample, F(3, 57) = 1.41, p = 0.248. In addition, no effect of gender congruence was found in observer ratings of overall rated affiliation and individual subscales (HA: p = 0.127 - p = 0.774; ND: p = 0.102 - p = 0.844).

The objective raters assessed whether or not a specific therapeutic strategy from IPT as defined earlier was used in the session. All four pre-defined and manualized strategies (i.e., (a) identification and (b) definition of the interpersonal conflict, (c) communication analysis, and (d) rules of communication) were used in 68.9% of the sessions and at least three strategies were used in 85.2% of the evaluated 61 counseling sessions. There were no significant differences between the two conditions in the frequency and distribution of use of the four elements or strategies.

Interpersonal Impressions as Rated by Observers

Observer ratings of counselors' interpersonal behavior showed significant group differences for the friendly and hostile scales (see Table 3 for precise values). On average, they rated counselors significantly friendlier, t = -4.11(59), p < 0.001, d = 0.94, and less hostile, t = 3.12(59), p = 0.003, d = 0.73, in the high affiliation condition. The friendly scale correlated positively with overall affiliation ratings (see above)—with higher values indicating counselor behavior according to the high-affiliation condition, r(61) = 0.64, p < 0.001. The hostile scale correlated negatively with the observer-rated degree of affiliation—whereby lower values indicate behavior according to the neutral/distant condition, r(61) = -0.42, p = 0.001. In the other dimensions of the interpersonal circumplex model, the two styles were not perceived significantly different. Observer ratings about clients' interpersonal impressions revealed no significant group differences for the eight dimensions, p = 0.324 - p = 0.828. Figure 2 visually illustrates the perceived differences in the interpersonal circumplex.

No differences in observer ratings were found between individual counselors' interpersonal impressions in the overall sample, F(3, 57) = 3.72, p = 0.016 - F(3, 57) = 0.42, p = 0.743 (p < 0.0063, Bonferroni adjusted alpha). In the high-affiliation condition, counselors' interpersonal impressions rated by observers differed in the *friendly-submissive* subscale, F(3, 27) = 6.61, p = 0.002, $n^2 = 0.42$.

Table 2 Comparison of ratings of degree of affiliation between high affiliation (HA; n = 31) and neutral/distant (ND; n = 30) condition

	HA		ND		t(df)	p a	95% CI		Cohens d
	\overline{M} S	SD	\overline{SD} \overline{M}	SD			LB	UB	
Emotional warmth and empathy ^b	3.46	0.52	2.53	0.50	7.13 (59)	<.001	.67	1.19	1.83
Level of communication ^b	2.75	0.55	1.26	0.52	10.88 (59)	<.001	1.21	1.76	2.79
Validation	3.01	0.57	1.79	0.73	7.62 (59)	<.001	0.94	1.61	1.95
Self-disclosure ^b	3.12	0.53	1.21	0.54	13.87 (59)	<.001	1.63	2.18	3.55
Work attitude and work process b	2.91	0.39	1.78	0.42	10.88 (59)	<.001	0.92	1.34	2.79
Gestures and facial expressions ^c	3.16	0.38	2.24	0.40	8.69 (52)	<.001	0.70	1.13	2.37
Total score (overall degree of affiliation) ^b	3.08	0.35	1.87	0.41	12.37 (59)	<.001	1.01	1.40	3.17

M mean, CI confidence interval, SD standard deviation

^cMissing values (high affiliation n=27, neutral/distant n=27)



^aUnadjusted p-values (Bonferroni corrected level of significance α≤.0071)

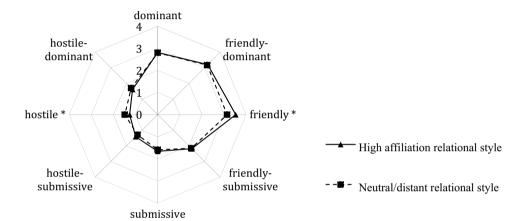
^bAccording to the Kolmogorov Smirnov Test assumption of normal distribution was violated in at least one group, results of nonparametric statistical analyses did not differ from parametric statistical analyses

Table 3 Comparisons of IMI ratings of objective raters about counselors between high affiliation (HA; n=31) and neutral/distant (ND; n=30) conditions

Dimension	HA		ND		t(df)	p ^a	95% CI		Cohens d
	M	SD	\overline{M}	SD			LB	UB	
Friendly	3.53	0.36	3.14	0.38	4.11 (59)	<.001	.20	.58	0.937
Friendly-submissive	2.18	0.22	2.15	0.48	0.31 (59)	.758	16	.22	0.079
Submissive	1.66	0.30	1.59	0.32	0.86 (59)	.396	09	.23	0.220
Hostile-submissive	1.41	0.39	1.29	0.33	1.26 (59)	.212	07	.30	0.323
Hostile	1.27	0.24	1.49	0.32	- 3.12 (59)	.003	37	08	0.731
Hostile-dominant	1.61	0.29	1.70	0.37	- 1.04 (59)	.304	26	.08	0.266
Dominant	2.81	0.31	2.80	0.29	0.29 (59)	.777	13	.18	0.704
Friendly-dominant	3.20	0.29	3.17	0.29	0.40 (59)	.688	12	.18	0.102

IMI impact message inventory, *CI* confidence interval of the difference, *LB* lower bound, *UB* upper bound ^aUnadjusted p-values (Bonferroni corrected level of significance $p \le .0063$)

Fig. 2 Objective observer ratings of counselors' interpersonal impressions in the interpersonal circumplex model via the impact message inventory. Ratings via the impact message inventory (Kiesler, 1983) for the high affiliation and neutral/distant relational style. Scale ranges from 1 to 4 with higher scores indicating a higher degree of the observed interpersonal characteristics.*p < .0063 (Bonferroni adjusted alpha)



In the neutral/distant condition, differences between the four counselors were found in the *hostile-dominant* subscale, F(3, 26) = 5.51, p = 0.005, $\eta^2 = 0.39$. Gender congruence showed no effect on observers' ratings of interpersonal impressions (p = 0.107 - p = 0.817).

Differences Between the Two Therapeutic Styles

Interpersonal Impressions as Rated by Counselors and Clients

Client ratings of counselors' interpersonal impressions showed no significant group differences, p = 0.103 - p = 0.842. In contrast, counselors rated clients as more submissive, t = -2.16(62), p = 0.035, in the neutral/distant condition and conversely more friendly-dominant, t = 2.30(62), p = 0.025, in the high affiliation condition (see Fig. 3). However, after alpha adjustment, none of the differences were statistically significant. Regarding the congruence of interpersonal ratings of clients about counselors and vice versa, no significant differences between the calculated differences were found for the two styles, p = 0.077 - p = 0.993 (see Fig. 3).

In addition, using multiple one-way ANOVA's, we found no differences between the four counselors in counselors' ratings about clients (adjusted alpha = 0.0063 after Bonferroni correction: p = 0.009 - p = 0.986) and vice versa (p = 0.048 - p = 0.885).

With regard to gender congruence, no differences were found in the overall sample for client ratings of counselors' interpersonal impressions (p = 0.170 - p = 0.986) and counselor ratings of clients' interpersonal impressions (p = 0.013 - p = 0.799; unadjusted p-values, Bonferroni corrected level of significance p = 0.0063). Furthermore, no differences were found for the two subsamples of therapeutic style (ND: clients about counselors, p = 0.019 - p = 0.684; counselors about clients, p = 0.118 - p = 0.885 and HA: clients about counselors, p = 0.522 - p = 0.976; counselors about clients, p = 0.033 - p = 0.956; unadjusted p-values, Bonferroni corrected level of significance $p \le 0.0063$).

Working Alliance as Rated by Clients

Overall, the therapeutic alliance was rated highly by clients in both conditions (see Table 4).



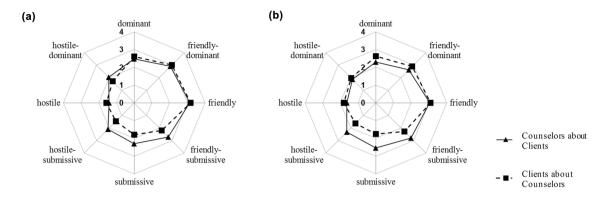


Fig. 3 Client ratings of counselors' interpersonal impressions and vice versa in the interpersonal circumplex model via the Impact Message Inventory. Ratings via the Impact Message Inventory (Kiesler,

1983) for the **a** high affiliation and **b** neutral/distant relational style. Scale ranges from 1 to 4 with higher scores indicating a higher degree of the observed interpersonal characteristics

Linear regression models including prior created counselor dummy-variables as fixed effects examined if the therapeutic style predicted alliance as perceived by clients (Table 5). The therapeutic style was found to neither influence the overall client-perceived overall working alliance, F(4, 58) = 0.985, p = 0.437, $R^2 = 0.062$, adjusted $R^2 = -0.003$, nor any subscale, bond: F(4, 58) = 1.295, p = 0.282, $R^2 = 0.082$, adjusted $R^2 = 0.019$; tasks: F(4, 58) = 0.208, p = 0.933, $R^2 = 0.014$, adjusted $R^2 = -0.054$; goals: F(4, 58) = 1.97, p = 0.111, $R^2 = 0.12$, adjusted $R^2 = 0.059$.

Analyses revealed no significant differences in the client-rated working alliance between the four counselors in the overall sample, Welch's F(3, 31.9) = 1.18, p = 0.331, nor for the three subscales (bond: p = 0.183; tasks: p = 0.863; goals: p = 0.061). There were also no differences in the subsamples, HA: F(3, 26) = 0.41, p = 0.749; ND: F(3, 29) = 1.59, p = 0.214.

With regard to gender congruence, no differences were found (p = 0.609 - p = 0.857) in the overall sample and in the two subsamples (*ND*: clients, p = 0.213 - p = 0.465; *HA*: clients, p = 0.190 - p = 0.967).

Table 4 Descriptive values of the working alliance and its subscales for the high affiliation (HA, n=30) and neutral/distant (ND, n=33) condition as rated by clients

	HA	-	ND		
	\overline{M}	SD	\overline{M}	SD	
WAI by clients	3.94	0.57	3.93	0.51	
Bond	4.03	0.66	4.11	0.59	
Tasks	3.70	0.74	3.64	0.80	
Goals	4.09	0.65	4.03	0.63	

WAI working alliance inventory

Table 5Summary of linear regression analyses with counselors as fixed effects for therapeutic style (HA vs. ND) predicting working alliance and its subscales (bond, tasks, goals) as rated by clientsVariableBSEB β tp

Variable	B	SEB	β	t	p
Client-rated alliance (WAI)					
Therapeutic style	022	.136	020	-0.16	.874
Client-rated bond dimension					
Therapeutic style	.071	.148	.061	0.48	.632
Client-rated task dimension					
Therapeutic style	064	.199	042	-0.32	.750
Client-rated goal dimension					
Therapeutic style	071	.156	056	-0.46	.650

n = 63

WAI working alliance inventory

Perceived Fit of the Relational Style

Objective observers rated the high affiliation condition more fitting for clients than the neutral/distant condition, t=4.50(57), p<0.001, d=1.19. Concurrently, analyses revealed that counselors perceived the high affiliation condition as significantly more fitting for clients than the neutral/distant condition, t=4.38(51), p<0.001, d=1.20. The latter results are attributable to two counselors, t(12)=2.81, p=0.016, d=1.52 and t(11)=4.33, p=0.001, d=2.4, who perceived the high affiliation condition as significantly more fitting for clients, whereas the other two counselors did not perceive any differences, t(11)=1.72, p=0.114, d=0.95 and t(11)=1.30, p=0.220, d=0.72. Gender congruence showed no effect on the perceived fit of the style (observer, p=0.228; counselor, p=0.243).



SCL Symptom Severity

Symptom severity was significantly lower after the counseling session (M=2.09) than one week before the session (M=2.23), t=2.40, p=0.020. There were no significant group differences when comparing the differences from one week prior to (t=0.525, p=0.602) and after the session (t=-0.137, p=0.892). The change in symptom severity did not differ between the two conditions (t=0.891, p=0.376). or between the four counselors (F(3, 58)=1.37, p=0.26). Also, no effect regarding gender congruence was found on the change in symptom severity (p=0.995).

Discussion

To our knowledge, the present study is the first to look into the formation of an initial alliance in (a) a realistic, face-to-face counseling setting and (b) in dependence of counselors' interpersonal style in the context of an experimental design. We were able to demonstrate the feasibility of an experimental variation of the therapeutic style that created different interpersonal impressions of counselors concerning their warmth/affiliation (i.e., friendliness and hostility). Their successful realization of the two styles was confirmed by an extensive rating. In addition, alliance was rated highly in both styles by clients.

Realization of the Two Styles

Ratings of the degree of affiliation by objective and trained raters speak to counselors' successful realization of the two styles. In line with our theoretical assumptions in the interpersonal circumplex and the proposed conceptual differences, observers evaluated counselors friendlier and less hostile in the high affiliation condition. The friendlier counselors were rated, the higher the ratings of the degree of affiliation, indicating intended behavior in the defined area of action of the high affiliation condition (and vice versa for the hostile dimension and neutral/distant condition). These results underpin the theoretical interpersonal framework of varying the styles along the affiliation axis (see Fig. 1).

Differences Between the Two Styles

Counselors' Areas of Action and Perceived Interpersonal Impressions

Observers rated counselor behavior differently between the styles concerning friendliness and hostility in the interpersonal circumplex, while clients only rated it as such on a descriptive level. Interestingly, clients' own interpersonal behavior was also not rated differently between the two styles by raters and observers. Since counselors were instructed to

act with a friendly and empathic therapeutic stance per se and independent of the condition, we speculate that clients may have felt understood and supported to a similar extent. Thus, they may not have perceived counselors differently on the affiliation axis, e.g., not less friendly in the neutral/ distant condition, especially since they had no comparison. Further, they may have intuitively reacted complementary to the perceived stimulus character of counselors, as proposed by the interpersonal complementarity principle (Kiesler, 1983). A closer look at the interpersonal profiles reveals that they were indeed congruent in their mutual ratings of the other party, independent of the therapeutic style (also see Fig. 3). Both counselors and clients showed similar high affiliation ratings, which is an important finding, considering that a therapist's warmth has a large impact on client satisfaction and is necessary for initiating a good alliance, especially in the beginning of psychotherapy (Ackerman & Hilsenroth, 2003; Moors & Zech, 2017). This can be further underlined by findings of Dinger and colleagues (2007), who were able to show that higher affiliation values of clients also lead to an improved alliance. Counselors in our study were also perceived as being more agentic than clients—in accordance with the complementary principle—which is in line with research by Moors and Zech (2017), who showed that it seems helpful for counselors to show some assertive instead of nonassertive behavior in a first session in order to increase client satisfaction. In considering agency and affiliation with regard to alliance formation, our results suggest that feelings of warmth may be more important for clients than feeling agentic (also see Cuddy et al., 2008).

Perception of the Therapeutic Alliance and Symptom Severity

The qualitatively high consistent alliance suggests that counselors were able to build a first viable therapeutic alliance in a single counseling session. We speculate that missing differences for clients may be explained by a high overall intrinsic motivation regarding the session, which can be linked to expectation effects and a rather positive perception of the session in general and its benefits (e.g., therapeutic alliance) (Kube et al., 2019; Wampold, 2015). Furthermore, clients showed more facilitative affiliation tendencies in both conditions (measured via the IIP), which can be linked to a good overall ability of our sample in realizing satisfying relationships with others and subsequently forming a viable alliance with their counselor. Also, basic Rogerian therapeutic principles such as empathy were similarly applied in both styles, presumably entailing a positive effect on clients' alliance perception. As we controlled for possible counselor effects, the positively rated alliance and non-significant differences as rated by clients cannot be traced back to a



missing conceptual differentiation of the styles or insufficient counselor adherence.

Our results suggest that a consistently good alliance and symptom reduction seem to be established regardless of the two manualized interpersonal styles in a single counseling session as long as basic Rogerian principles are met, from which we can cautiously assume its effectiveness for healthy university students with interpersonal problems. As especially early alliance is positively associated with consecutive therapeutic success (e.g. Zilcha-Mano et al., 2016), our results could provide preliminary evidence for positive longer-term effects of such a single counseling session. The alleviation of symptom severity can be very well integrated into study findings on single-session psychotherapy, where effectiveness has been well established for intrapsychic and interpersonal problems, parenting factors, crisis interventions, and as an additional treatment component for medical conditions (Bloom, 2001; Cardamone-Breen et al., 2018; Pinkerton & Rockwell, 2010). In particular, single-session approaches to interpersonal conflicts have been shown to be efficient and effective in studies (Brown, 1984; Schwebel, 1985), matching our results.

Strengths and Limitations

We want to point to the novel experimental design, which we carefully developed on the basis of the already discussed practical and theoretical considerations. In order to minimize the risk of bias and thus enhance validity of the study, we conducted a computer-based randomization by an independent trained student assistant and our objective raters were blinded trained student assistants. We also took a closer look at the three subscales of the WAI-SR, yielding more differential results, as this three-factor structure has been validated in previous studies (e.g. Munder et al., 2010), but is oftentimes not considered.

At the same time, we wish to address several limitations with regard to the study design. The generalizability of our results is limited, as the study sample was healthy by preselection and comprised of rather young students. As participants self-selected into the study, it is not truly representative of realistic clinical conditions such as psychotherapy, so that results must be interpreted against this backdrop. Despite these slight constraints, we would like to emphasize that we conducted actual counseling sessions with real clients, counselors, and interpersonal problems, and did not employ analogue experimental designs with no direct interpersonal contact between client and counselor (e.g., using video simulation; also see Moors & Zech, 2017). Another limitation of our study arises from the sample size, which limits statistical power and may be inadequate to detect an effect, as we did not calculate an a-priori power analysis. We would also like to note that counselors were not blinded to the session and we did not assess their preferences and expectations towards the styles, so we cannot rule out possible preferences for one condition or the other (also see perceived fit). In addition, only four counselors conducted the sessions, which limits the statistical power. As we did not conduct a prior study of the psychometric properties of the ratings of the degree of affiliation, we have to label it as a non-validated scale with possible underlying circular reasoning. However, moderate to excellent internal consistencies and ICC scores can be considered positive indicators of this scale. A further limitation stems from the complexity of the therapeutic process, as the interaction between client/patient and counselor/therapist can only be partially depicted within our study design. A multitude of interacting and interdependent variables have to be considered and the experimental variation (a) only targeted one specific variable and (b) could not control and account for dynamic, natural forces within the therapeutic process. Another shortcoming relates to the single nature of the session and the single alliance assessment. In addition, we did not include a followup measurement. Accordingly, temporal implications are limited regarding alliance, symptom change, and especially their stability.

Implications

Albeit our study consists of a non-clinical sample, our results hold promising research and clinical implications we wish to address. The question of whether they can be transferred to a clinical population remains open for now and poses some ethical issues. However, we argue that although our study sample was healthy, the results may also be of interest to clinical practice (particularly psychotherapy), as the interpersonal conflict was perceived as a psychological burden by clients.

In clinical practice, the first encounter between client and counselor is decisive and guiding for clients, especially in light of the oftentimes high burden of client suffering. In this context—and while considering a possible underpowering of the study—it is interesting that it may not be as important to clients what interpersonal style counselors use with regard to their perception of alliance and symptom relief. As such, counselors and therapists may have more freedom in choosing an interpersonal style that seems fitting with their own characteristics and stance and in consequence seems fitting for the client. Other variables, such as personality, trait/state like alliance, or the interpersonal stimulus character may be more important and should be considered. Also, counselors' interpersonal style may not be so relevant in a single session with regard to clients' alliance perception but may become more important for longer-term encounters and therapies. Zuroff et al. (2007) were able to show that the perceived friendliness of therapists increases the autonomous



motivation of patients, which in turn is positively linked to alliance and outcome. Hence, increasing therapists' friendliness to a certain extent may prove beneficial, especially in a first contact or in clinical settings—with limited time to attend to the patient and alliance formation. As there is a call of therapists for training with regard to adequately delivering therapeutic interventions to patients (Fairburn & Cooper, 2011), starting points could be interpersonal behavior and impressions of therapists. This could increase patients' autonomous motivation for planned interventions and thus strengthen therapeutic alliance (De Nadai et al., 2014), as well as enrich empirical input for already existing alliance focused trainings (Eubanks-Carter et al., 2015). We should also consider that it may not be as important.

As our results suggest the effectiveness of a one-time psychological counseling session for healthy individuals with an interpersonal burdened conflict, this entails that such sessions may serve as stand-alone interventions and provide the possibility of an easily accessible, cost-effective approach as primary and secondary prevention strategies. It has been shown that time-limited psychotherapy offers, such as short-term therapy or one-time interventions, seem to be equally effective as time-unlimited offers (Bloom, 2001). This should be kept in mind and seems a promising alternate and additional approach, considering the continuously rising costs in our health care systems. Another argument for single-session or short-term psychotherapy is that therapeutic progress occurs in the initial phase of therapy and the curve flattens over time (Bloom, 2001). Patients who show an early response in treatment also show better and more stable treatment outcomes compared to patients who show delayed or no response (Lambert, 2005).

In clinical practice, alliance must always be seen within the context of therapists' ability to form alliances, patients' features that facilitate or hinder its formation, and their interaction. Our experimental design provides a feasible way and basis to examine and compare different aspects of the alliance in relation to the therapeutic interpersonal style and characteristics of clients and counselors in future studies. The differentiation between a trait-like component of alliance, comprising the patient's ability to form sustainable social relationships, and a state-like component of alliance, defined as changes within the therapeutic alliance, should also be considered (see Zilcha-Mano, 2017). It is suggested that state-like changes in alliance can result in trait-like changes within patients regarding symptomatology, quality of life, and perception of interpersonal relationships (Crits-Christoph et al., 2006). In the present study, the nature of the single alliance assessment most probably targeted the trait-like alliance. We demonstrated the possibility of actively shaping different therapeutic styles. Longitudinal study designs with multiple alliance measures are needed to reveal differential results. This may yield an important clinical implication to keep in mind—the effect of changes in state-like alliance on further trait-like alliance as a possible therapeutic tool and change mechanism for counseling sessions and therapy—as it is done in specific treatment forms such as the Cognitive Behavioral Analysis System of Psychotherapy (CBASP; McCullough, 2000) or Dialectic-Behavioral Therapy (DBT; Linehan, 1993).

Conclusion and Outlook

Our results underline the possibility for counselors to actively and deliberately shape their interpersonal style and thus stimulus character, which may have consequences for the perception of the working alliance (Grosse-Holforth et al., 2014; Zilcha-Mano et al., 2018). Clearly, counselors and therapists integrate a large number of methods and techniques in their everyday clinical practice, and a dynamic structure emerges in which they adapt intuitively to the needs and behavior of the patient. However, precisely for this reason, it seems important to disentangle the two styles in this experimental design. As Norcross and Wampold (2018) highlighted that therapists and counselors are indeed capable of adapting their style to fit patient and client characteristics, the present study can be seen as a supplemental experimental proof-of-concept and may present a small additional piece to the puzzle. With this experimental design, we are able to contribute methodologically to the current research landscape. It seems promising to investigate the effects of therapeutic behavior on patients' perceptions and thus alliance and outcome and to explore how certain behavior might facilitate the formation of a sustainable alliance. Such an experimental variation is important as a first step to gain differential insights into this very formation and shaping of the alliance. By linking alliance formation to interpersonal therapeutic behavior, we can address the question of what works for whom. It seems essential to decipher the underlying mechanisms of the alliance to better tailor it to the individual patients' needs. Our design should encourage future research to unravel variables and active ingredients involved in the building and perception of the therapeutic alliance. Results may also indicate what variables to include in naturalistic settings. We are planning to provide more detailed information on differential relationship forming by analyzing possible mediating and moderating client and counselor characteristics such as personality traits, expectations and interpersonal problems. The focus on specific variables in this new experimental approach may present an important contribution to personalized treatment. Our novel experimental design may be helpful in regard to the question of an optimal individualized relationship style in the sense of what works for whom, by taking a closer look at specific aspects of the therapeutic alliance itself as well as client/patient and



counselor/therapist characteristics. The design may also be applied for specific research questions such as the possible role and function of interpersonal expectations as part of dismantling studies.

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Data Availability The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Conflicts of Interest Isabel Schamong, Simon Bollmann, Nele Struck, Tobias Kube, Lisa D'Astolfo, Eva-Lotta Brakemeier, have to relevant financial or non-financial interests to disclose.

Ethical Approval Approval for this study was obtained by the institutional ethics review board (reference number 2017-08k).

Animal Rights No animal studies were carried out by the authors for this article.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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