

ORIGINAL ARTICLE

Ambivalent toward life, ambivalent toward psychotherapy? An investigation of the helping alliance, motivation for treatment, and control expectancies in patients with suicidal ideation in inpatient psychotherapy

Mareike Ernst PhD^{1,2}  | Rüdiger Zwerenz PhD¹ | Matthias Michal MD¹ |
Jörg Wiltink MD¹ | Inka Tuin MD¹ | Manfred E. Beutel MD¹

¹Department of Psychosomatic
Medicine and Psychotherapy,
University Medical Center of the
Johannes Gutenberg-University Mainz,
Mainz, Germany

²Department of Clinical Psychology,
Psychotherapy and Psychoanalysis,
Institute of Psychology, University of
Klagenfurt, Klagenfurt am Wörthersee,
Austria

Correspondence

Mareike Ernst, Department of
Psychosomatic Medicine and
Psychotherapy, University Medical
Center of the Johannes Gutenberg-
University Mainz, Untere Zahlbacher
Straße 8, 55131 Mainz, Germany.
Email: [mareike.ernst@unimedizin-
mainz.de](mailto:mareike.ernst@unimedizin-mainz.de)

Funding information

Johannes Gutenberg Universitat
Universitätsmedizin

Abstract

Background: Research has found that patients with suicidal ideation (SI) are at high risk for unfavorable outcomes. The present work aimed to expand the knowledge about their characteristics and treatment success.

Methods: Data were drawn from a routine assessment of $N=460$ inpatients. We used patients' self-report data as well as therapists' reports covering baseline characteristics, depression and anxiety symptoms (at the start and end of therapy), psychosocial stress factors, helping alliance, treatment motivation, and treatment-related control expectancies. In addition to group comparisons, we conducted tests of associations with treatment outcome.

Results: SI was reported by 232 patients (50.4% of the sample). It co-occurred with higher symptom burden, more psychosocial stress factors, and negation of help. Patients reporting SI were more likely to be dissatisfied with the treatment outcome (although their therapists were not). SI was related to higher levels of anxiety symptoms after treatment. In regression models of depression and anxiety symptoms, interactions of SI with the external control expectancy powerful others were observed, suggesting that in patients with frequent SI, this control expectancy hindered recovery.

Discussion/Conclusion: Patients reporting SI are a vulnerable group. Therapists could support them by addressing (potentially conflicting) motivations and control expectancies.

KEYWORDS

control expectancies, motivation, outcome, psychotherapy, suicidal ideation, working alliance

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2023 The Authors. *Suicide and Life-Threatening Behavior* published by Wiley Periodicals LLC on behalf of American Association of Suicidology.

INTRODUCTION

Suicide is a major public health crisis. The World Health Organization estimates that more than 700,000 people die by suicide every year (World Health Organization, 2021) and the numbers of individuals attempting suicide are many times higher—for instance, the Centers for Disease Control and Prevention (CDC) specifies a factor of 30 (Centers for Disease Control and Prevention, 2021). As suicidal crises often occur in the context of mental disorders (e.g., Turecki et al., 2019), it is not surprising that prevalence rates of suicidal ideation (SI) are higher in clinical populations, including individuals in outpatient or inpatient treatment for mental disorders (Vuorilehto et al., 2014). For example, in a recent naturalistic psychotherapy study of chronic depression, the proportion of psychosomatic inpatients who reported SI at the start of the study was 18.4% (Zeeck et al., 2016; compared with lifetime prevalence rates of SI that range around 10% for the general population, Nock et al., 2008).

However, research has also highlighted particular challenges in the treatment of suicidal patients (e.g., Schechter et al., 2022b). In previous studies, they were characterized by more severe depression symptoms than other patients, more comorbidities, earlier age of onset, a history of suicidal behavior, current unemployment, and single status (Rudd et al., 1993; Zimmerman et al., 2018). In two large French cohorts (combined $N=6506$), depressed patients who reported SI also reported more anxiety and depression symptoms, and they were less likely to achieve remission after being treated with antidepressant medication (Nobile et al., 2022). Suicidal patients also showed worse outcomes following cognitive-behavioral and supportive interventions (Barbe et al., 2004; von Brachel et al., 2019) and they needed longer treatments in a psychodynamic psychotherapy study (Perry et al., 2013).

While the complex clinical picture outlined above—combining a chronic course of illness, pronounced severity, and comorbidities—likely contributes to less favorable symptom courses, other variables that are theoretically and empirically implicated in the success of psychotherapy as common factors (Wampold, 2015) also deserve attention.

First, this concerns the therapeutic relationship/working alliance: The working alliance has consistently been shown to be an important predictor of treatment outcomes irrespective of treatment approaches and patients' diagnoses (Fluckiger et al., 2018). A patient's suicidality can challenge the establishment of a strong and trusting working alliance. Patient suicide has been conceptualized as an "occupational hazard" (Chemtob et al., 1989) and therapists have reported perceiving working with suicidal patients as highly stressful (Berman et al., 2015). Moreover,

clinical and research reports have described a wide range of therapists' negative emotional reactions to suicidal patients, including feelings of anxiety and ineptitude (Soulié et al., 2018), but also anger and rejection (coined "counter-transference hate"; Maltzberger & Buie, 1974).

Second, the ambivalence inherent in suicidal crises could have implications for treatment motivation: Shneidman (1998) noted that suicidal individuals were ambivalent toward life and death, with Kovacs and Beck (1977) describing suicidality as an "internal struggle." This notion has been supported by research showing that an individual's will to live and desire for death are two distinct constructs that can exist side by side with different intensities, therefore, both can be present at the same time (Bergmans et al., 2017; Chochinov et al., 1999). In the context of prevention and intervention efforts, this ambivalence can manifest as vague motivation, noncompliance, or premature discontinuation of treatment (Crawford & Wessely, 1998; Lizardi & Stanley, 2010).

Third, patients who reported SI were more likely than others to feel hopeless (Cuijpers et al., 2013). This could affect their ability to accept help and benefit from it. Hom et al. (2015) highlighted help negation (the refusal to accept available offers of help) as a specific barrier to mental health support in individuals with SI. If patients have no hope, they might not believe that psychotherapy (or any other type of support) can help them get better. Such convictions have been termed outcome expectancies (Constantino et al., 2011; Greenberg et al., 2006) and have been ascribed a crucial role in models of how symptom improvement in the context of psychotherapy is achieved (Snyder et al., 2000). Especially control expectancies have drawn attention because of their posited relevance for patients' commitment to psychotherapy (Delsignore & Schnyder, 2007). They build on the locus of control concept which discerns whether individuals see themselves as in control of their own life (internal locus of control) or whether feel their life is being controlled by others or by chance (external locus of control) (Levenson, 1973; Rotter, 1966). Previous research has indicated that an internal locus of control is associated with better treatment outcomes (Delsignore & Schnyder, 2007). In stark contrast, the subjective experience of suicidal individuals has been characterized by powerlessness, discouragement, and a lack of agency (e.g., Canetto, 2008; Schechter et al., 2019), although a research gap exists regarding the association of SI, control expectancies, and treatment outcome.

Aims of the present research

There is a paucity of research systematically investigating the working alliance, patient motivation, and outcome

expectancies in suicidal patients. The present work addressed this research gap to contribute to a better understanding of how suicidal patients fare in psychotherapy. In addition, we also investigated stressors at the start of therapy to get an insight into particular risk constellations associated with suicidal crises. We used routine data from inpatients treated at a German University Hospital to answer the following research questions:

1. Do patients who report SI differ from other patients regarding...
 - a. sociodemographic and clinical characteristics, including psychosocial stress factors, at the start of treatment?
 - b. the working alliance (as reported by the patient and the psychotherapist)?
 - c. self-reported motivation for treatment?
 - d. therapy-specific control expectancies?
2. Is SI at the start of treatment associated with worse treatment outcomes (both directly and via its interplay with control expectancies and treatment motivation)?

MATERIALS AND METHODS

Participants and setting

Data used in the present work were drawn from the routine assessment of inpatients treated at a clinic for Psychosomatic Medicine and Psychotherapy in Mid-Germany, collected from 07/2010 to 01/2014.

In a psychosomatic clinic, patients are treated and supported by a multi-professional team including psychotherapists (with a medical and/or psychological background), nursing specialists, and social workers. The goal is to address both the physical and psychological components of the condition, with the aim of improving overall health and well-being. Inpatient treatment, in particular, is indicated for complex disorders, individuals in crisis, and if outpatient treatment has failed or is unavailable. The intensive multimodal, integrative inpatient therapy includes individual psychotherapy (twice a week), art therapy (twice a week), body-oriented therapy (once to twice a week), and group therapy sessions (twice to three times a week) (Beutel et al., 2008). In previous evaluations of the clinic's basic documentation, the most frequent diagnoses were depressive disorders (ICD-10: F32, F33, F34) at just under 60%, followed by anxiety disorders (ICD-10: F40, F41) with one-third of patients, and somatoform disorders with another fifth (Beutel et al., 2014).

The main purpose of the collection of the data used in the present work is the evaluation of the clinic's services. Its use for research purposes is regulated by the state

hospital act and was approved by the Rhineland-Palatinate Chamber of Physicians (nr. 837.191.16 (10510)).

The main analyses included only those for whom symptom measures from two measurement points (before and after several weeks of inpatient treatment) were available, but no further inclusion or exclusion criteria were applied.

Data and measures

Sociodemographic data were collected before starting psychotherapy, including patients' age, gender, marital status, nationality, children, and level of education. Clinical characteristics included anamnestic information such as diagnoses and previous treatments.

The Global Assessment of Functioning (GAF), as included in the DSM-IV (American Psychiatric Association, 2000), refers to patients' functioning concerning everyday activities over the course of the last 7 days. The index ranges from 1 to 100, with 100 indicating perfect functioning in all domains (social, occupational, and psychological). In the present context, it was ascertained before the start of treatment by the treating member of staff (psychotherapist or medical doctor).

Standardized questionnaires

Symptom measures and psychosocial stress factors

We assessed SI using the item "Over the past two weeks, how often have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?" included in the depression module (PHQ-9) of the Patient Health Questionnaire. This widely used questionnaire quantifies depression symptoms by inquiring about the frequency of being bothered by the nine diagnostic criteria of Major Depression. It has shown good psychometric properties including good internal consistency (in the present sample, McDonald's ω was 0.80). For each symptom, the occurrence over the course of the past 2 weeks is rated on a scale ranging from 0 to 3: 0 = "not at all," 1 = "several days," 2 = "more than half the days," 3 = "nearly every day". Clinically relevant symptom burden has been defined by a cutoff-score ≥ 10 for the PHQ-9 (Kocalevent et al., 2013) as well as for the PHQ-8 (which excludes the SI item; Spangenberg et al., 2012). In the following, references to "depression symptoms" relate to the PHQ-8 sum score.

Anxiety symptoms were assessed with the generalized anxiety disorder screener GAD-7 which uses the same response options to assess symptoms of generalized anxiety disorder. Its sum score ranges from 0 to 21.

Spitzer et al. (2006) reported that a cutoff of ≥ 10 achieved a sensitivity of 89% and a specificity of 82% for detecting generalized anxiety disorder. The GAD-7 has also shown good internal consistency ($\alpha = 0.89$) in an investigation of a representative German community sample (Löwe et al., 2008). In the present sample, its internal consistency was $\omega = 0.88$.

The stress module of the Patient Health Questionnaire (Gräfe et al., 2004) was included to assess psychosocial stressors that were present during the past month. Its 10 items cover health, work and financial, and social and traumatic stress. Response options range from 1 = “not at all” to 2 = “bothered a lot.” A sum score can be created to indicate the overall level of stress experienced by the participant: It ranges from 0 to 20, but there are no established cutoffs. In the present sample, its internal consistency was acceptable: $\omega = 0.73$.

Therapy-related inventories

The Helping Alliance Questionnaire (HAQ) (Nübling et al., 2017), which was originally developed by Alexander and Luborsky (1986), includes 11 (therapist version) or nine items (patient version), respectively. An example item from the patient version is “I feel I can depend upon the therapist.” Response options range from 1 = “completely disagree” to 4 = “completely agree.” Following Bassler et al. (1995), two scales were created that capture what were deemed the main characteristics of the helping alliance: relation to the therapist and satisfaction with treatment outcome. They have previously shown good internal consistencies: relation to the therapist: $\alpha = 0.89$, outcome satisfaction: $\alpha = 0.89$ (Bassler et al., 1995). In the present sample, we could also confirm good internal consistencies (relation to the therapist: $\omega = 0.91$, outcome satisfaction: $\alpha = 0.90$).

Patients' motivation was assessed using a short form of the Motivation for Psychotherapy Questionnaire (FPTM, an acronym for the German title “Fragebogen zur Psychotherapiemotivation”; Nübling et al., 2002). In the original version, a total of 39 items cover the following six domains: level of suffering, attention from others, hope for improvement, the negation of the need for help, initiative, and knowledge about psychotherapy. Its six-factor solution and good psychometric properties have previously been confirmed based on large patient samples (Nübling et al., 2002). For use in the clinic's routine monitoring, only the item with the best psychometric properties from each scale was included (e.g., “I suffer greatly from mental problems”). Response options ranged from 1 = “not true” to 4 = “true.”

Control expectancies were assessed using the Questionnaire on Control Expectancies in Psychotherapy (TBK, an acronym for the German title “Fragebogen zu

therapiebezogenen Kontrollerwartungen”; Delsignore et al., 2006). Its 18 items on 3 scales capture one internal (internality, example item: “Whether or not I actively engage in therapy depends on my own efforts”) and two external control expectancies (powerful others, example item: “My therapist will ask me about my concerns and priorities and decide what is good for me based on his/her experience”; and chance, example item: “Whether or not I relapse after therapy has ended is a matter of chance”), all of which relate to the context of psychotherapy. It has previously been validated in a patient sample and shown good psychometric properties (the scales' internal consistencies ranged from $\alpha = 0.77$ to $\alpha = 0.81$) (Delsignore et al., 2006). In the present sample, they ranged from $\omega = 0.76$ to $\omega = 0.82$.

Statistical analyses

General points

All analyses were conducted using R statistics (version 4.2.2) (R Core Team, 2022). Effect sizes and coefficients are interpreted following Cohen (1992). Due to small amounts of missing data (<2% per variable of interest), we used list-wise deletion.

The internal consistency of questionnaire measures is reported as McDonald's ω (Hayes & Coutts, 2020).

Descriptive statistics

To conduct group comparisons between individuals reporting/not reporting SI, the respective PHQ-9 item was dichotomized by summarizing individuals reporting SI on “several days,” “more than half the days,” and “nearly every day” (in line with previous research; e.g., Ernst et al., 2020; Michal et al., 2010). Univariate comparisons of sociodemographic and clinical characteristics were performed as independent *t*-tests or X^2 tests, respectively. Their results are supplemented by effect sizes so that readers can also judge their magnitude.

Main analyses

In preparation for the regression models of depression and anxiety symptoms after treatment, we conducted an a priori sample size calculation (Soper, 2022). For a multiple linear regression model with a desired power level of 0.8 and 16 predictors (in the case of the largest regression models), the available sample was large enough to detect medium effect sizes (with the minimum required sample

size being $N=142$). In order to detect multicollinearity, we calculated the variance inflation factor (VIF) (Miles, 2014) which describes how high the independent variables' correlations within the model and measures the increase in variance compared with an orthogonal basis. No observed VIF was larger than 4, indicating no concerning levels of multicollinearity (with 10 being the critical threshold proposed by Myers, 1990).

In addition to the statistical predictors of interest (SI and control expectations as well as their interaction with SI and treatment motivation and their interaction with SI, respectively), we included the following covariates as they constitute potential confounders: age and gender were included because both the symptoms of interest (anxiety and depression symptoms) (e.g., Kuehner, 2017; McLean & Anderson, 2009; Sutin et al., 2013) and SI (e.g., Klonsky et al., 2016) have been shown to vary in the population according to both characteristics. Further, we included treatment duration as patients with SI were shown to need longer treatment times in previous research (Perry et al., 2013), however, they were also prone to treatment discontinuation (Lizardi & Stanley, 2010). Last, the symptom level at baseline was included as it is an important source of variance of the symptom level at discharge and as patients with SI entered the clinic with higher symptom scores. For relevant interaction effects, we calculated the Johnson-Neyman interval in order to identify the range of values of the moderator variable for which the effect of the predictor variable is significant) (Johnson & Fay, 1950).

RESULTS

Sample characteristics

Regarding the symptom measures, data at the start and end of psychotherapy were available for $N=460$ individuals. They constitute the analysis sample of this work. The sample characteristics are shown, stratified by the presence of SI, in Table 1. Before starting treatment, $n=232$ patients (50.4%) reported some degree of SI ($N=156$ on "several days," $N=49$ on "more than half the days," and $N=27$ on "almost every day"). The mean treatment duration for the whole sample was 51.18 days ($SD=42.67$).

Comparison of patients with and without SI regarding sociodemographic and clinical characteristics

Univariate comparisons showed group differences regarding both sociodemographic and clinical characteristics.

Among patients who reported SI, unmarried individuals were overrepresented. There was also a trend toward younger age. Patients who reported SI also reported significantly more depression and anxiety symptoms than other patients. These differences were large. Further, those with SI scored lower on the Global Assessment of Functioning (as rated by the clinician). They had more psychological diagnoses, more previous outpatient treatments, and longer inpatient treatments. Regarding the current inpatient treatment, individuals with SI would also stay longer than others (with mean values closer to 8 weeks rather than just below 7 weeks).

Details of comparisons regarding the PHQ stress module are shown in Table 2. Patients with SI reported more psychosocial stress factors overall ($d=0.65$), with a medium effect size. Statistically significant differences pertained to most of the single items: The largest difference was observed for having nobody to talk to ($d=0.62$), followed by financial troubles ($d=0.45$) and traumatic memories/nightmares ($d=0.42$). We found differences with small to medium effect sizes regarding work or school ($d=0.36$), partnership ($d=0.35$), and weight concerns ($d=0.34$). The smallest statistically significant differences were observed concerning family ($d=0.27$) and a bad event that happened recently ($d=0.26$). Domains that did not differ between the groups in a statistically significant way were health concerns and libido.

Comparison of patients with and without SI regarding treatment-related variables

Helping alliance

Therapists' rating of their relationship satisfaction ($p=0.97$) or satisfaction with the outcome ($p=0.74$) did not differ in a statistically significant way between patients with and without SI. Patients did not differ regarding their relationship satisfaction ($p=0.24$), however, satisfaction with the outcome was lower among patients with SI ($M=3.61$, $SD=1.00$ vs. $M=3.90$, $SD=0.95$, $t(446)=3.13$, $p=0.002$, $d=0.30$), although this difference was small.

Treatment motivation

Patients with SI differed from other patients with respect to five of the six motivational domains. These single comparisons are also visualized in Figure 1. In particular, patients with SI felt more hopeless ($M=2.79$, $SD=0.91$ vs. $M=2.21$, $SD=0.89$, $t(446)=6.75$, $p<0.001$, $d=0.64$) and reported more suffering ($M=3.68$, $SD=0.59$ vs. $M=3.21$, $SD=0.86$, $t(446)=6.67$, $p<0.001$,

TABLE 1 Sample characteristics (stratified by the presence of suicidal ideation before treatment).

	Patients reporting SI (N = 232)	Patients not reporting SI (N = 228)	Group comparison	
			Significance level	Effect size
Sociodemographic characteristics				
Gender (n, % women)	132 (56.9)	139 (61.0)	0.40	
Age (M, SD)	36.40 (13.49)	38.81 (13.43)	0.056	
High level of education (n, %)	122 (52.6)	106 (46.5)	0.19	
Married (n, %)	46 (19.8)	80 (35.1)	<0.001	0.35
Parenthood (n, %)	86 (37.1)	92 (40.4)	0.55	
Nationality (n, % German)	217 (93.5)	218 (95.6)	0.41	
Clinical information				
Depression symptoms (PHQ-8) (M, SD)	17.04 (4.39)	12.42 (5.18)	<0.001	0.94
Anxiety symptoms (GAD-7) (M, SD)	14.23 (4.42)	10.36 (5.02)	<0.001	0.82
Global Assessment of Functioning (GAF) during the last week (M, SD)	43.89 (7.94)	45.52 (7.55)	0.030	0.20
Major depression diagnosis (n, %)	198 (85.3)	102 (44.7)	<0.001	0.94
Psychological diagnoses (n, %)				
1	26 (11.2)	34 (14.9)	<0.001	0.40
2	69 (29.7)	104 (6.1)		
≥3	137 (59.1)	91 (39.9)		
Somatic diagnoses (n, %)				
0	95 (40.9)	97 (42.5)	0.95	
1	61 (26.3)	56 (24.6)		
2	36 (15.5)	38 (16.7)		
≥3	40 (17.2)	37 (16.2)		
Treatment information				
Previous outpatient treatments (n, %)				
0	44 (19.0)	76 (33.3)	0.004	0.34
1	98 (42.2)	83 (36.4)		
2	54 (23.3)	37 (16.2)		
≥3	36 (15.5)	32 (14.0)		
Duration of previous inpatient treatments (weeks) (M, SD)	7.05 (12.63)	3.57 (10.37)	0.005	0.26
Duration of the current inpatient treatment (days) (M, SD)	51.53 (24.25)	47.48 (21.26)	0.032	0.20

Note: Effect sizes are reported for single comparisons that yielded statistically significant results only. All of them refer to Cohen's d (in the case of proportions [χ^2 tests], they were transformed accordingly to allow for easier comparisons).

Bold values indicate statistically significant comparisons/associations.

Abbreviation: SI, suicidal ideation.

$d = 0.63$). Further, they reported to have more knowledge about psychotherapy ($M = 2.48$, $SD = 1.04$ vs. $M = 2.19$, $SD = 1.03$, $t(446) = 3.04$, $p = 0.002$, $d = 0.29$) and to receive less attention from others ($M = 2.55$, $SD = 1.00$ vs. $M = 2.80$, $SD = 1.00$, $t(446) = 2.60$, $p = 0.010$, $d = 0.25$). They also negated needing help ($M = 2.41$, $SD = 1.13$ vs. $M = 2.15$, $SD = 1.05$, $t(446) = 2.52$, $p = 0.012$, $d = 0.24$). The levels of reported initiative did not differ in a statistically significant way ($p = 0.20$).

Control expectancies

Patients who reported SI were more likely to endorse statements summarized under the external control expectancy chance ($M = 9.60$, $SD = 5.00$ vs. $M = 7.57$, $SD = 4.57$, $t(446) = 4.31$, $d = 0.41$). Differences regarding internality ($p = 0.12$) or the other external control expectancy powerful others ($p = 0.58$) were not statistically significant.

TABLE 2 Psychosocial stress factors (stratified by the presence of suicidal ideation before treatment).

	Patients reporting SI (N = 225)	Patients not reporting SI (N = 223)	Group comparison	
			Significance level	Effect size
Sum score (PHQ stress module) (M, SD)	10.22 (4.10)	7.58 (3.84)	<0.001	0.65
Single items				
Health concerns (M, SD)	1.57 (0.65)	1.57 (0.66)	0.96	
Weight concerns (M, SD)	1.29 (0.74)	1.03 (0.82)	<0.001	0.34
Libido (M, SD)	1.03 (0.87)	0.91 (0.89)	0.15	
Partnership (M, SD)	0.93 (0.83)	0.64 (0.78)	<0.001	0.35
Family (M, SD)	0.67 (0.86)	0.57 (0.79)	0.004	0.27
Work/school (M, SD)	0.88 (0.87)	0.57 (0.79)	<0.001	0.36
Financial troubles (M, SD)	1.09 (0.84)	0.73 (0.80)	<0.001	0.45
Nobody to talk to (M, SD)	1.10 (0.81)	0.62 (0.73)	<0.001	0.62
Recent bad events (M, SD)	0.72 (0.86)	0.50 (0.81)	0.006	0.026
Traumatic memories/nightmares (M, SD)	0.93 (0.87)	0.58 (0.80)	<0.001	0.42

Note: Effect sizes are reported for single comparisons that yielded statistically significant results only. All effect sizes denote Cohen's *d* (in the case of proportions [χ^2 tests], they were transformed accordingly to allow for easier comparisons).

Bold values indicate statistically significant comparisons/associations.

Abbreviation: SI, suicidal ideation.

Associations of SI with treatment outcome

Tests of interactions with treatment motivation: the results of the multiple linear regression analyses of depression or anxiety symptoms, respectively, after psychotherapy are shown in Table 3. SI was not associated with the levels of symptoms after psychotherapy. While more hope at baseline was associated with fewer symptoms at the end of treatment, more knowledge about psychotherapy was associated with higher levels of depression symptoms. Neither in the statistical prediction of depression symptoms nor of anxiety symptoms did SI and treatment motivation variables interact. Relevant covariates comprised symptoms at baseline and age (with younger age being associated with both more depression and anxiety symptoms after treatment).

Tests of interactions with control expectancies: Table 4 depicts the results of the models testing the effects of control expectancies. SI was not a statistically significant predictor of depression symptoms after psychotherapy either. However, it was associated with higher levels of anxiety symptoms after treatment. In both models, the external control expectancy of powerful others was related to fewer symptoms. There was also a statistically significant interaction effect with SI in both models (see Figure 2 for the model predicting depression symptoms and Figure 3 for the model predicting anxiety symptoms). In the context of both regression

models, the effects of the powerful others expectancy were moderated by patients' level of SI in the sense that in the presence of SI, the powerful others expectancy was related to *higher* symptom levels after psychotherapy. Statistically significant covariates were symptoms at baseline, which were positively associated with symptoms after psychotherapy in both models. In the case of anxiety symptoms, younger age was also associated with more symptoms.

Tests of simple slopes revealed that in both models, the slope of the powerful others control expectancy was only statistically significant for individuals reporting no SI or SI on at least "more than half the days." In the model of depression symptoms, the slope of the powerful others control expectancy was statistically significant for values on the SI item below <0.33 or >1.27 (simple slopes: $M - 1$ SD: $B = -0.16$ [SE = 0.06], $p = 0.01$; M : $B = -0.03$ [SE = 0.04], $p = 0.49$; $M + 1$ SD: $B = 0.14$ [SE = 0.05], $p = 0.03$). In the model of anxiety symptoms, we observed a significant effect for values <0.22 or >1.52 (simple slopes: $M - 1$ SD: $B = -0.01$ [SE = 0.05], $p = 0.01$; M : $B = -0.01$ [SE = 0.04], $p = 0.70$; $M + 1$ SD: $B = 0.10$ [SE = 0.05], $p = 0.04$).

DISCUSSION

The present work aimed to contribute to a better understanding of the specific characteristics and challenges of

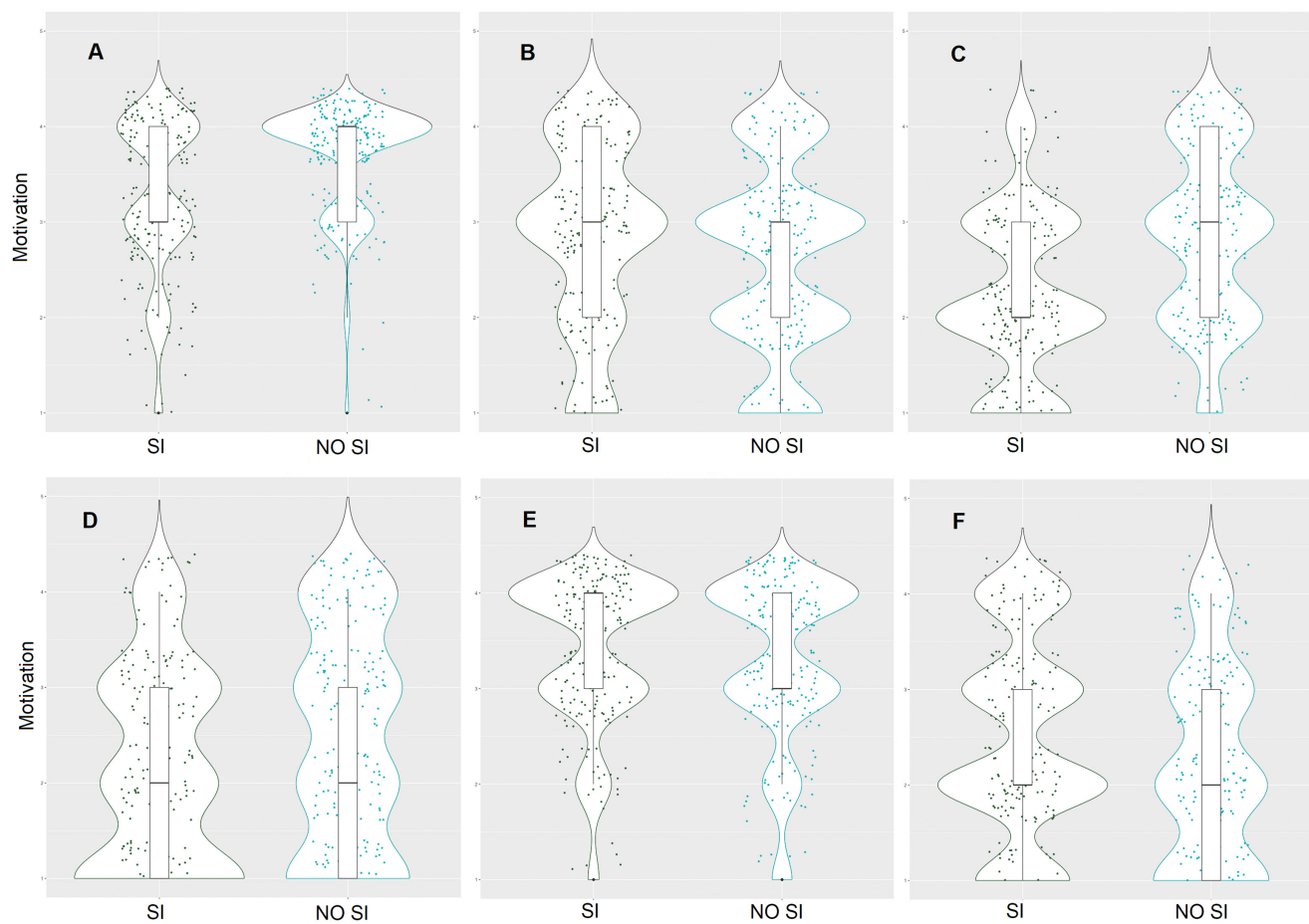


FIGURE 1 Comparison of patients with and without suicidal ideation regarding motivation for treatment (reported before starting psychotherapy). No SI, no suicidal ideation; SI, suicidal ideation. The combined violin and boxplots show the distribution and mean values of patients' responses regarding six domains of motivation for treatment. Panel A: Level of suffering; Panel B: Attention from others; Panel C: Hope; Panel D: Negation of the need for help; Panel E: Initiative; Panel F: Knowledge about psychotherapy. Statistically significant group differences were observed for all domains except initiative: Compared with other patients, patients with suicidal ideation reported more suffering ($d=0.63$) and more knowledge about psychotherapy ($d=0.29$). They were more likely to negate needing help ($d=0.24$). At the same time, patients with suicidal ideation reported less attention from others ($d=0.25$) and they had less hope ($d=0.64$).

suicidal patients and their therapists within the context of inpatient psychotherapy. To this end, we used routine clinical data from a German university hospital that included information about patients' sociodemographic and clinical characteristics before the start of treatment, clinical course, valuation of the working alliance, and therapy-specific motivational factors as well as control expectancies.

The main findings confirmed patients with suicidal ideation to be a highly vulnerable group who differed from other patients in important ways, including treatment motivation, and that suicidal ideation had implications for the success of psychotherapy.

The large proportion of patients reporting SI highlights the severity of distress that is present in the studied patient group. Still, in line with previous international research, suicidal patients were particularly burdened by depression and anxiety symptoms and numerous psychological

comorbidities (Rudd et al., 1993; Zimmerman et al., 2018). Furthermore, the analysis of sociodemographic characteristics and psychosocial stress factors highlighted relevant difficulties in all domains of life, both professional and private, mirroring the multitude of risk factors associated with suicidal thoughts and behaviors that have been described by previous research (Franklin et al., 2017; Klonsky et al., 2016).

Alarmingly, suicidal patients' intense distress was coupled with convictions of not needing help, mirroring previous descriptions of suicidal individuals' tendency to forego available support offers (Hom et al., 2015) and of their success in the context of psychotherapy being due to chance, suggesting a fatalistic worldview. This pattern represents a severe barrier to engagement in a psychotherapeutic process.

Similar to a previous naturalistic psychodynamic psychotherapy study, individuals who reported SI

TABLE 3 Multiple linear regression analyses of depression and anxiety symptoms at the end of psychotherapy on suicidal ideation and motivation for psychotherapy.

Predictors	Depression symptoms			Anxiety symptoms		
	β	<i>B</i> (SE)	<i>p</i>	β	<i>B</i> (SE)	<i>p</i>
Intercept		4.44 (1.17)	<0.001		4.67 (1.02)	<0.001
Baseline symptoms	0.45	0.45 (0.05)	<0.001	0.50	0.49 (0.05)	<0.001
Suicidal ideation	0.01	0.09 (0.35)	0.79	0.06	0.36 (0.31)	0.24
Age	-0.10	-0.04 (0.02)	0.015	-0.10	-0.04 (0.01)	0.010
Gender	0.01	0.09 (0.46)	0.85	-0.04	-0.43 (0.41)	0.29
Level of suffering	-0.03	-0.21 (0.41)	0.61	-0.07	-0.48 (0.36)	0.19
Attention from others	0.02	0.11 (0.29)	0.71	0.06	0.31 (0.26)	0.23
Hope	-0.12	-0.64 (0.30)	0.030	-0.15	-0.79 (0.30)	0.008
Negation of the need for help	0.07	0.35 (0.29)	0.23	0.03	0.14 (0.25)	0.59
Initiative	-0.04	-0.23 (0.37)	0.54	-0.04	-0.24 (0.33)	0.47
Knowledge about psychotherapy	0.17	0.95 (0.34)	0.006	-0.12	-0.58 (0.25)	0.59
Level of suffering × Suicidal ideation	-0.04	-0.33 (0.50)	0.52	0.00	0.02 (0.45)	0.96
Attention from others × Suicidal ideation	-0.05	-0.24 (0.25)	0.32	-0.02	-0.05 (0.22)	0.84
Hope × Suicidal ideation	0.01	0.04 (0.29)	0.88	-0.05	-0.22 (0.26)	0.39
Negation of the need for help × Suicidal ideation	0.02	0.10 (0.24)	0.68	0.02	0.07 (0.21)	0.76
Initiative × Suicidal ideation	0.03	0.14 (0.30)	0.64	0.04	0.19 (0.27)	0.48
Knowledge about psychotherapy × Suicidal ideation	0.03	0.14 (0.26)	0.58	0.04	0.16 (0.23)	0.48

Note: Model of depression symptoms: adj. $R^2 = 0.298^{***}$. Model of anxiety symptoms: adj. $R^2 = 0.324^{***}$.

Bold values indicate statistically significant comparisons/associations.

TABLE 4 Multiple linear regression analyses of depression and anxiety symptoms at the end of psychotherapy on suicidal ideation and treatment-related control expectancies.

Predictors	Depression symptoms			Anxiety symptoms		
	β	<i>B</i> (SE)	<i>p</i>	β	<i>B</i> (SE)	<i>P</i>
Intercept		4.94 (1.23)	<0.001		5.41 (1.04)	<0.001
Baseline symptoms	0.45	0.45 (0.05)	<0.001	0.47	0.46 (0.04)	<0.001
Suicidal ideation	0.07	0.41 (0.31)	0.19	0.09	0.54 (0.26)	0.039
Age	-0.08	-0.03 (0.02)	0.057	-0.09	-0.03 (0.01)	0.026
Gender	-0.05	-0.51 (0.48)	0.29	-0.08	-0.81 (0.41)	0.052
Treatment duration	0.00	0.00 (0.01)	0.92	0.02	0.00 (0.00)	0.60
Internality	-0.08	-0.10 (0.08)	0.21	-0.06	-0.07 (0.06)	0.29
Powerful others	-0.16	-0.14 (0.05)	0.009	-0.14	-0.11 (0.04)	0.016
Chance	0.06	0.06 (0.07)	0.36	0.11	0.11 (0.06)	0.06
Internality × suicidal ideation	0.06	0.06 (0.06)	0.31	0.03	0.03 (0.05)	0.55
Powerful others × suicidal ideation	0.21	0.15 (0.04)	<0.001	0.19	0.13 (0.04)	<0.001
Chance × suicidal ideation	0.01	0.00 (0.06)	0.90	-0.03	-0.03 (0.05)	0.57

Note: Model of depression symptoms: adj. $R^2 = 0.268^{***}$. Model of anxiety symptoms: adj. $R^2 = 0.333^{***}$.

Bold values indicate statistically significant comparisons/associations.

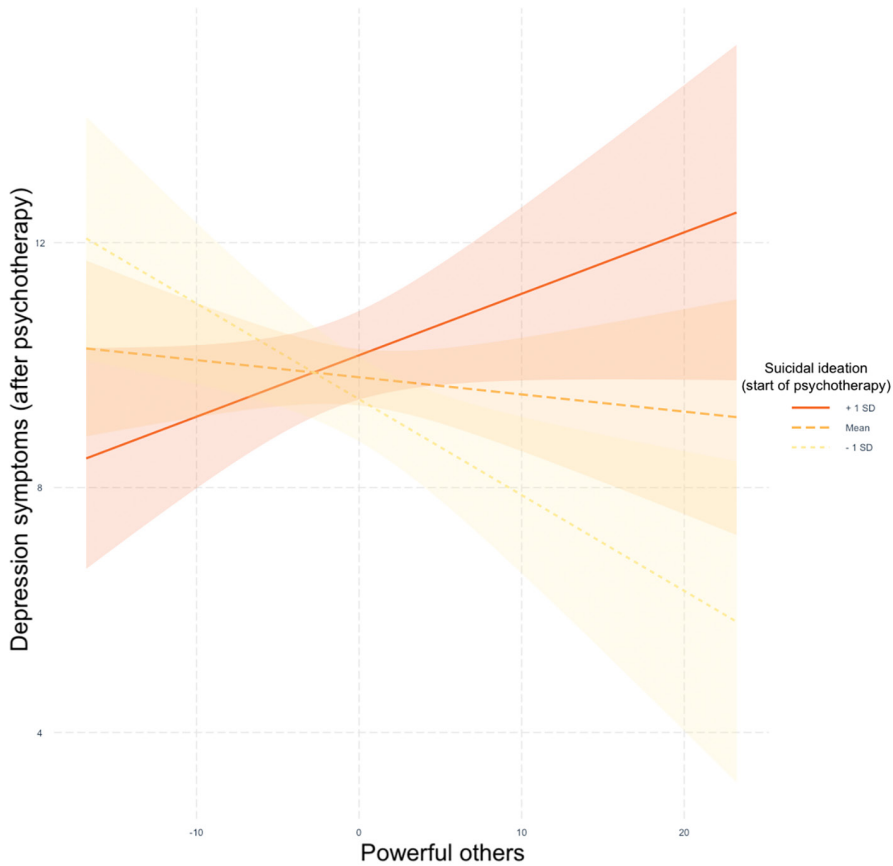


FIGURE 2 Visualization of the interaction of suicidal ideation and the external control expectancy powerful others in the context of the statistical prediction of depression symptoms after psychotherapy. For patients reporting more frequent suicidal ideation at baseline, the expectancy of powerful others in psychotherapy was associated with higher levels of depression symptoms after multiple weeks of psychotherapy, that is, it was a factor hindering recovery.

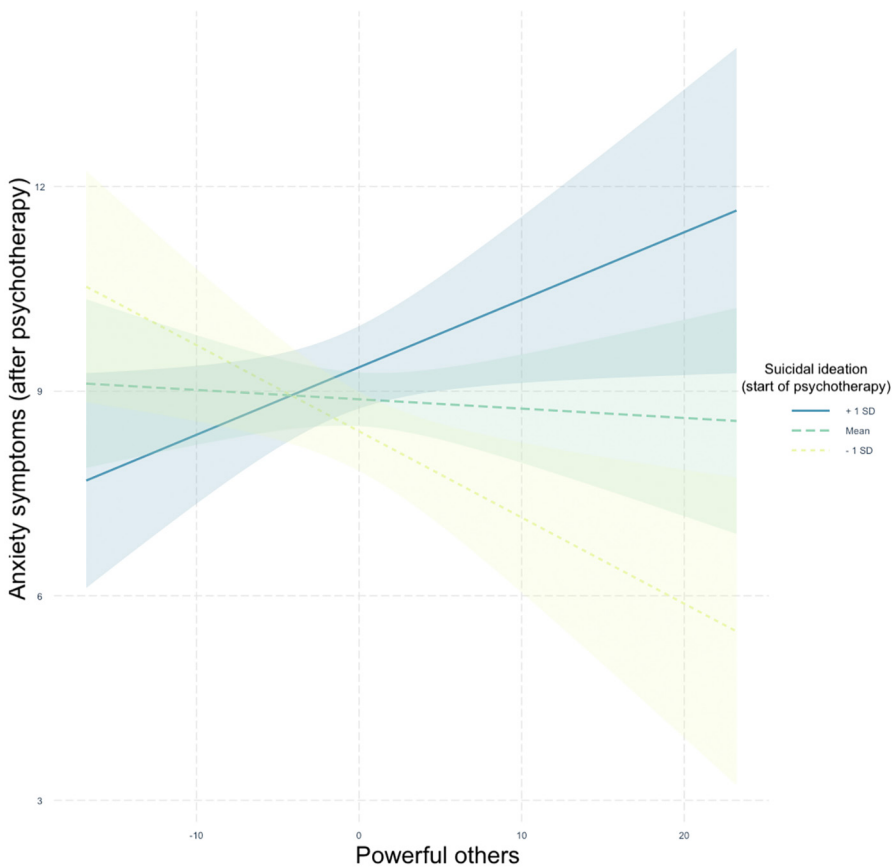


FIGURE 3 Visualization of the interaction of suicidal ideation and the external control expectancy powerful others in the context of the statistical prediction of anxiety symptoms after psychotherapy. For patients who reported more frequent suicidal ideation at baseline, the expectancy of powerful others in psychotherapy was associated with higher levels of anxiety symptoms after multiple weeks of psychotherapy, that is, it was a factor hindering recovery.

underwent longer treatments (Perry et al., 2013). In one of the linear regression models, SI was related to more anxiety symptoms after psychotherapy, however, it was not associated with the level of depression symptoms at discharge. This observation contrasts with previous findings (von Brachel et al., 2019), although negative associations of SI at intake with treatment outcome were not consistently reported (Courtney et al., 2022; Tunvirachaisakul et al., 2018; Webb et al., 2020). Concerning the prediction of the symptom burden after psychotherapy SI did not interact with motivational variables. However, the finding that hope for improvement was beneficial mirrors earlier findings (Holtforth et al., 2011; Snyder et al., 1999).

Furthermore, with respect to the overall sample, the external control expectancy of powerful others was related to fewer symptoms after treatment. Previous research has shown inconsistent results regarding the association of locus of control with psychotherapy outcome (Delsignore & Schnyder, 2007), including the opposite direction, that is, that low endorsement of powerful others was associated with better outcomes in cognitive-behavioral group therapy (Delsignore et al., 2008). However, we also observed a statistically significant interaction of the external expectancy powerful others with SI in both regression models. Analyses of the simple slopes showed that these associations were relevant only in the extreme groups: patients reporting no SI at all, or frequent SI. In the absence of SI, the view of powerful others was associated with *lower* symptom levels after psychotherapy, but in those suffering from frequent SI, the view of powerful others was associated with *higher* symptom levels. Thus, we could not confirm the assumptions that internality fosters recovery, or that external control expectancies generally constitute a risk factor for negative outcomes. Indeed, if we move beyond the locus of control concept and scrutinize the contents of the items used to assess it, the association of powerful others' beliefs with lower symptom levels after psychotherapy could also be understood as an expression of turning to others and trusting that they will be helpful (e.g., "My therapist will ask me about my concerns and priorities and decide what is good for me based on her/his experience"). Keeping in mind that the present sample includes a large proportion of individuals who have experienced abuse and neglect in their earliest relationships (Ernst et al., 2022), such expectancies can be considered a resource because they enable patients to make new, corrective emotional experiences (Alexander, 1980). Furthermore, suicidal patients have been described as a particular subgroup who might also react differently to treatment than others, based on the notion that suicidal ideation and behavior constitute a distinct nosological entity, for example, in terms of the proposed Suicide Behavior

Disorder in the DSM-5 (Fehling & Selby, 2021). This has implications for the therapeutic technique. For instance, Schechter et al. (2022b) have stressed the importance of an active stance of the psychotherapist when working with suicidal patients. This aids to counter patients' "psychic retreat" (Steiner, 2003), a withdrawal that serves to avoid contact with reality and unbearable mental pain.

Future research could explore whether the operationalizations of the constructs included in the present study have the same meaning for suicidal individuals: Going back to the single items of the TBK, it becomes apparent that they map onto themes that have been implicated in suicidal crises from psychodynamic perspectives, comprising general relational topics as well as more precisely formulated mental conflicts (such as dependence vs. autonomy and desire for care vs. autarchy) (see, e.g., Huprich, 2004; Suicide and Self-Destructive Behaviors Study Group, 2018). Following the recommendations by Schechter et al. (2022a) to harness existing operationalizations of psychodynamic concepts, a more thorough exploration of these themes could yield further insights into the specific constellations of vulnerability factors and resources and motivations of suicidal patients seeking psychotherapy (e.g., using the Operationalized Psychodynamic Diagnosis [OPD-2], OPD Task Force, 2008).

Limitations

Data were drawn from the clinic's routine assessment which had originally not been designed with the research questions of the present work in mind. This has consequences that constitute limitations of these analyses and the insights that can be gained from them. First, we had only scarce information about patients' suicidal ideation and behavior. Not every individual who reports SI will engage in dangerous suicidal behavior and SI needs to be taken seriously as a symptom of its own because it indicates great despair. However, information about previous self-injurious behavior would have been valuable as well because self-harm has been highlighted as a specific risk factor for future suicide attempts (see, e.g., its conceptualization as a motivational moderator in the Integrated Motivational-Volitional Model of Suicidal Behaviour; O'Connor & Kirtley, 2018). By contrast, the mere presence of SI (especially in the form of passive death wishes/thoughts of self-harm as assessed by the PHQ-9 item) has only weak associations with a person's actual risk of suicide (e.g., Klonsky et al., 2016). In the psychotherapeutic context from which this study's data were drawn, therapists might even have had more knowledge about past behavior. In this case, we can assume that it would have

(a) enabled them to conduct a more adequate risk assessment and (b) had implications for their feelings and actions, including the therapeutic relationship. Therefore, future research building on this work should ideally include a more differentiated assessment of current SI (e.g., with validated, longer questionnaire measures such as the Beck Scale of Suicide Ideation (Kliem et al., 2017)) and a more thorough inquiry of previous self-harm and suicidal behavior.

Further, the present study could give no insight into therapists' and patients' emotions and cognitions regarding the therapeutic relationship (besides the specific domains captured by the HAQ), thus, the present investigation cannot speak to phenomena such as transference/countertransference hate (Maltzberger & Buie, 1974) and their implications for treatment success. Last, patient motivation was assessed using a short form of the FPTM that has presently not been validated, and the HAQ was administered at the end of psychotherapy only. Therefore, control expectancies, assessed with the TBK, were the only construct that could be meaningfully investigated as a predictor of outcome (both on its own and in interaction with SI). The therapeutic relationship should ideally be assessed at the start and at multiple times over the course of therapy. Respective data could reveal whether individuals with SI and their therapists experience the therapeutic relationship differently, whether they experience more ruptures of the alliance, etc., and deepen our understanding of the process of psychotherapy with suicidal patients.

CONCLUSIONS

Based on a large, naturalistic sample of psychosomatic inpatients, we found that those who reported SI were a particularly vulnerable group characterized by severe distress and diverse psychosocial stress factors. They differed from other patients regarding specific therapy-related motivations and expectancies and the latter played a different role in their recovery in the sense that expectancies of powerful others were associated with higher symptom levels. However, SI was not generally associated with worse outcomes. Therapists should seek to understand their patient's subjective experience of suicidality, for example, by exploring the dialectics of suffering and help negation, or conflicting desires for care and self-sufficiency.

ACKNOWLEDGMENTS

We thank all patients who provided information and all staff who were involved in data collection and management. Open Access funding enabled and organized by Projekt DEAL.

FUNDING INFORMATION

This research received no grant from any funding agency, commercial, or not-for-profit sectors.

CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest to declare.

DATA AVAILABILITY STATEMENT

The underlying patient data are confidential and cannot be shared.

ETHICS STATEMENT

This work used data from the routine assessment of a clinic and polyclinic for psychosomatic medicine and psychotherapy in Mid-Germany (collected from 07/2010 to 01/2014). The paramount aim of the collection of this data is the evaluation of the clinic's services. Its use for research purposes is regulated by the state hospital act and was approved by the Rhineland-Palatinate Chamber of Physicians (nr. 837.191.16 (10510)).

ORCID

Mareike Ernst  <https://orcid.org/0000-0003-4952-9717>

REFERENCES

- Alexander, F. (1980). *Psychoanalytic therapy: Principles and application* (Vol. 1946). U of Nebraska Press.
- Alexander, L. B., & Luborsky, L. (1986). The Penn Helping Alliance Scales. In L. S. Greenberg & W. M. Pinsof (Eds.), *The psychotherapeutic process: A research handbook* (pp. 325–366). Guilford Press.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). American Psychiatric Association.
- Barbe, R. P., Bridge, J., Birmaher, B., Kolko, D., & Brent, D. A. (2004). Suicidality and its relationship to treatment outcome in depressed adolescents. *Suicide and Life-Threatening Behavior*, 34(1), 44–55.
- Bassler, M., Potratz, B., & Krauthauser, H. (1995). Der "helping Alliance questionnaire" (HAQ) von Luborsky. Möglichkeiten zur Evaluation des therapeutischen Prozesses von stationärer Psychotherapie. *Psychotherapeut*, 40, 23–32.
- Bergmans, Y., Gordon, E., & Eynan, R. (2017). Surviving moment to moment: The experience of living in a state of ambivalence for those with recurrent suicide attempts. *Psychology and Psychotherapy*, 90(4), 633–648. <https://doi.org/10.1111/papt.12130>
- Berman, N. C., Stark, A., Cooperman, A., Wilhelm, S., & Cohen, I. G. (2015). Effect of patient and therapist factors on suicide risk assessment. *Death Studies*, 39(7), 433–441.
- Beutel, M. E., Michal, M., & Subic-Wrana, C. (2008). Psychoanalytically-oriented inpatient psychotherapy of somatoform disorders. *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, 36(1), 125–142.
- Beutel, T., Weiser, P., Zwerenz, R., Wiltink, J., Subic-Wrana, C., & Michal, M. (2014). Ungesunder Lebensstil bei Patienten einer

- psychosomatischen Poliklinik und Konsilambulanz. *PPmP – Psychotherapie Psychosomatik Medizinische Psychologie*, 64(9/10), 378–383. <https://doi.org/10.1055/s-0034-1375634>
- Canetto, S. S. (2008). Women and suicidal behavior: A cultural analysis. *American Journal of Orthopsychiatry*, 78(2), 259–266.
- Centers for Disease Control and Prevention. (2021). Facts about suicide. <https://www.cdc.gov/suicide/facts/index.html>
- Chemtob, C. M., Bauer, G. B., Hamada, R. S., Pelowski, S. R., & Muraoka, M. Y. (1989). Patient suicide: Occupational hazard for psychologists and psychiatrists. *Professional Psychology: Research and Practice*, 20(5), 294–300.
- Chochinov, H. M., Tataryn, D., Clinch, J. J., & Dudgeon, D. (1999). Will to live in the terminally ill. *The Lancet*, 354(9181), 816–819.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159.
- Constantino, M. J., Arnkoff, D. B., Glass, C. R., Ametrano, R. M., & Smith, J. Z. (2011). Expectations. *Journal of Clinical Psychology*, 67(2), 184–192.
- Courtney, D. B., Watson, P., Krause, K. R., Chan, B. W. C., Bennett, K., Gunlicks-Stoessel, M., Rodak, T., Neprily, K., Zentner, T., & Szatmari, P. (2022). Predictors, moderators, and mediators associated with treatment outcome in randomized clinical trials among adolescents with depression. *JAMA Network Open*, 5(2), e2146331. <https://doi.org/10.1001/jamanetworkopen.2021.46331>
- Crawford, M. J., & Wessely, S. (1998). Does initial management affect the rate of repetition of deliberate self harm? Cohort study. *BMJ (Clinical Research Ed.)*, 317(7164), 985–990.
- Cuijpers, P., de Beurs, D. P., van Spijker, B. A., Berking, M., Andersson, G., & Kerkhof, A. J. (2013). The effects of psychotherapy for adult depression on suicidality and hopelessness: A systematic review and meta-analysis. *Journal of Affective Disorders*, 144(3), 183–190. <https://doi.org/10.1016/j.jad.2012.06.025>
- Delsignore, A., Carraro, G., Mathier, F., Znoj, H., & Schnyder, U. (2008). Perceived responsibility for change as an outcome predictor in cognitive-behavioural group therapy. *The British Journal of Clinical Psychology*, 47(Pt 3), 281–293. <https://doi.org/10.1348/014466508X279486>
- Delsignore, A., & Schnyder, U. (2007). Control expectancies as predictors of psychotherapy outcome: A systematic review. *British Journal of Clinical Psychology*, 46(4), 467–483.
- Delsignore, A., Schnyder, U., & Znoj, H. (2006). Erfassung spezifischer Kontrollerwartungen: der fragebogen zu therapiebezogenen kontrollerwartungen (TBK). *Verhaltenstherapie*, 16(1), 43–49.
- Ernst, M., Beutel, M. E., Zwerenz, R., & Krakau, L. (2022). Seeing the past in a new light: Change in reports of childhood abuse and neglect before and after inpatient psychotherapy and its relevance for change in depression symptoms. *Psychotherapy Research*, 33, 222–234. <https://doi.org/10.1080/10503307.2022.2088313>
- Ernst, M., Reiner, I., Fieß, A., Tibubos, A. N., Schulz, A., Burghardt, J., Klein, E. M., Brähler, E., Wild, P. S., Münzel, T., König, J., Lackner, K. J., Pfeiffer, N., Michal, M., Wiltink, J., & Beutel, M. E. (2020). Sex-dependent associations of low birth weight and suicidal ideation in adulthood: A community-based cohort study. *Scientific Reports*, 10(1), 12969. <https://doi.org/10.1038/s41598-020-69961-5>
- Fehling, K. B., & Selby, E. A. (2021). Suicide in DSM-5: Current evidence for the proposed suicide behavior disorder and other possible improvements. *Frontiers in Psychiatry*, 11, 499980.
- Fluckiger, C., Del Re, A. C., Wampold, B. E., & Horvath, A. O. (2018). The alliance in adult psychotherapy: A meta-analytic synthesis. *Psychotherapy (Chicago, Ill.)*, 55(4), 316–340. <https://doi.org/10.1037/pst0000172>
- Franklin, J. C., Ribeiro, J. D., Fox, K. R., Bentley, K. H., Kleiman, E. M., Huang, X., Musacchio, K. M., Jaroszewski, A. C., Chang, B. P., & Nock, M. K. (2017). Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research. *Psychological Bulletin*, 143(2), 187–232. <https://doi.org/10.1037/bul0000084>
- Gräfe, K., Zipfel, S., Herzog, W., & Löwe, B. (2004). Screening psychischer Störungen mit dem “Gesundheitsfragebogen für Patienten (PHQ-D)”. *Diagnostica*, 50(4), 171–181.
- Greenberg, R. P., Constantino, M. J., & Bruce, N. (2006). Are patient expectations still relevant for psychotherapy process and outcome? *Clinical Psychology Review*, 26(6), 657–678. <https://doi.org/10.1016/j.cpr.2005.03.002>
- Hayes, A. F., & Coutts, J. J. (2020). Use omega rather than Cronbach’s alpha for estimating reliability. But.... *Communication Methods and Measures*, 14(1), 1–24.
- Holtforth, M. G., Krieger, T., Bochsler, K., & Mauler, B. (2011). The prediction of psychotherapy success by outcome expectations in inpatient psychotherapy. *Psychotherapy and Psychosomatics*, 80(5), 321–322. <https://doi.org/10.1159/000324171>
- Hom, M. A., Stanley, I. H., & Joiner, T. E., Jr. (2015). Evaluating factors and interventions that influence help-seeking and mental health service utilization among suicidal individuals: A review of the literature. *Clinical Psychology Review*, 40, 28–39. <https://doi.org/10.1016/j.cpr.2015.05.006>
- Huprich, S. K. (2004). Psychodynamic conceptualization and treatment of suicidal patients. *Journal of Contemporary Psychotherapy*, 34(1), 23–39.
- Johnson, P. O., & Fay, L. C. (1950). The Johnson-Neyman technique, its theory and application. *Psychometrika*, 15(4), 349–367.
- Kliem, S., Lohmann, A., Mossle, T., & Brahler, E. (2017). German Beck scale for suicide ideation (BSS): Psychometric properties from a representative population survey. *BMC Psychiatry*, 17(1), 389. <https://doi.org/10.1186/s12888-017-1559-9>
- Klonsky, E. D., May, A. M., & Saffer, B. Y. (2016). Suicide, suicide attempts, and suicidal ideation. *Annual Review of Clinical Psychology*, 12, 307–330. <https://doi.org/10.1146/annurev-clinpsy-021815-093204>
- Kocalevent, R. D., Hinz, A., & Brähler, E. (2013). Standardization of the depression screener patient health questionnaire (PHQ-9) in the general population. *General Hospital Psychiatry*, 35(5), 551–555. <https://doi.org/10.1016/j.genhosppsych.2013.04.006>
- Kovacs, M., & Beck, A. T. (1977). The wish to die and the wish to live in attempted suicides. *Journal of Clinical Psychology*, 33(2), 361–365.
- Kuehner, C. (2017). Why is depression more common among women than among men? *The Lancet Psychiatry*, 4(2), 146–158. [https://doi.org/10.1016/s2215-0366\(16\)30263-2](https://doi.org/10.1016/s2215-0366(16)30263-2)
- Levenson, H. (1973). Multidimensional locus of control in psychiatric patients. *Journal of Consulting and Clinical Psychology*, 41(3), 397–404.

- Lizardi, D., & Stanley, B. (2010). Treatment engagement: A neglected aspect in the psychiatric Care of Suicidal Patients. *Psychiatric Services, 61*(12), 1183–1191. <https://doi.org/10.1176/ps.2010.61.12.1183>
- Löwe, B., Decker, O., Muller, S., Brahler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and standardization of the generalized anxiety disorder screener (GAD-7) in the general population. *Medical Care, 46*(3), 266–274. <https://doi.org/10.1097/MLR.0b013e318160d093>
- Maltsberger, J. T., & Buie, D. H. (1974). Countertransference hate in the treatment of suicidal patients. *Archives of General Psychiatry, 30*(5), 625–633.
- McLean, C. P., & Anderson, E. R. (2009). Brave men and timid women? A review of the gender differences in fear and anxiety. *Clinical Psychology Review, 29*(6), 496–505.
- Michal, M., Wiltink, J., Till, Y., Wild, P. S., Munzel, T., Blankenberg, S., & Beutel, M. E. (2010). Type-D personality and depersonalization are associated with suicidal ideation in the German general population aged 35–74: Results from the Gutenberg heart study. *Journal of Affective Disorders, 125*(1–3), 227–233. <https://doi.org/10.1016/j.jad.2010.02.108>
- Miles, J. (2014). *Tolerance and variance inflation factor*. Wiley Statsref: Statistics Reference Online.
- Myers, R. (1990). *Classical and modern regression with applications* (2nd ed.). Duxbury.
- Nobile, B., Olié, E., Dubois, J., Guillaume, S., Gorwood, P., & Courtet, P. (2022). Characteristics and treatment outcome of suicidal depression: Two large naturalistic cohorts of depressed outpatients. *Australian & New Zealand Journal of Psychiatry, 56*(4), 347–364.
- Nock, M. K., Borges, G., Bromet, E. J., Alonso, J., Angermeyer, M., Beautrais, A., Bruffaerts, R., Chiu, W. T., de Girolamo, G., Gluzman, S., de Graaf, R., Gureje, O., Haro, J. M., Huang, Y., Karam, E., Kessler, R. C., Lepine, J. P., Levinson, D., Medina-Mora, M. E., ... Williams, D. (2008). Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. *The British Journal of Psychiatry, 192*(2), 98–105. <https://doi.org/10.1192/bjp.bp.107.040113>
- Nübling, R., Kraft, M., Henn, J., Kriz, D., Lutz, W., Schmidt, J., Wittmann, W., & Bassler, M. (2017). Psychometrische Überprüfung des Helping Alliance Questionnaire (HAQ) in unterschiedlichen Versorgungssettings. *PPmP-Psychotherapie · Psychosomatik · Medizinische Psychologie, 67*(11), 465–476.
- Nübling, R., Schmidt, J., & Schulz, H. (2002). *FPTM. Fragebogen zur Psychotherapiemotivation*. Paper presented at the Diagnostische Verfahren in der Psychotherapie.
- O'Connor, R. C., & Kirtley, O. J. (2018). The integrated motivational-volitional model of suicidal behaviour. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences, 373*(1754). <https://doi.org/10.1098/rstb.2017.0268>
- OPD Task Force. (2008). *Operationalized psychodynamic diagnosis OPD-2. Manual of diagnosis and treatment planning*. Hogrefe & Huber.
- Perry, J. C., Bond, M., & Presniak, M. D. (2013). Alliance, reactions to treatment, and counter-transference in the process of recovery from suicidal phenomena in long-term dynamic psychotherapy. *Psychotherapy Research, 23*(5), 592–605.
- R Core Team. (2022). *A language and environment for statistical computing*. R Foundation for Statistical Computing.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, 80*(1), 1–28.
- Rudd, M. D., Dahm, P. F., & Rajab, M. H. (1993). Diagnostic comorbidity in persons with suicidal ideation and behavior. *The American Journal of Psychiatry, 150*(6), 928–934. <https://doi.org/10.1176/ajp.150.6.928>
- Schechter, M., Goldblatt, M. J., Ronningstam, E., & Herbstman, B. (2022a). The psychoanalytic study of suicide, part I: An integration of contemporary theory and research. *Journal of the American Psychoanalytic Association, 70*(1), 103–137.
- Schechter, M., Goldblatt, M. J., Ronningstam, E., & Herbstman, B. (2022b). The psychoanalytic study of suicide, part II: An integration of theory, research, and clinical practice. *Journal of the American Psychoanalytic Association, 70*(1), 139–166.
- Schechter, M., Ronningstam, E., Herbstman, B., & Goldblatt, M. J. (2019). Psychotherapy with suicidal patients: The integrative psychodynamic approach of the Boston suicide study group. *Medicina (Kaunas, Lithuania), 55*(6), 303. <https://doi.org/10.3390/medicina55060303>
- Shneidman, E. S. (1998). *The suicidal mind*. Oxford University Press.
- Snyder, C. R., Ilardi, S. S., Cheavens, J., Michael, S. T., Yamhure, L., & Simpson, S. (2000). The role of hope in cognitive-behavior therapies. *Cognitive Therapy and Research, 24*(6), 747–762.
- Snyder, C. R., Michael, S. T., & Cheavens, J. S. (1999). Hope as a psychotherapeutic foundation of common factors, placebos, and expectancies. In M. A. Hubble, B. L. Duncan, & S. D. Miller (Eds.), *The heart and soul of change: What works in therapy* (pp. 179–200). American Psychological Association.
- Soper, D. (2022). Free statistics calculators. A-priori sample size calculator for multiple regression. <https://www.danielsoper.com/statcalc/default.aspx>
- Soulié, T., Bell, E., Jenkin, G., Sim, D., & Collings, S. (2018). Systematic exploration of countertransference phenomena in the treatment of patients at risk for suicide. *Archives of Suicide Research, 24*, 96–118.
- Spangenberg, L., Brähler, E., & Glaesmer, H. (2012). [Identifying depression in the general population - a comparison of PHQ-9, PHQ-8 and PHQ-2]. *Zeitschrift für Psychosomatische Medizin Und Psychotherapie, 58*(1), 3–10. <https://doi.org/10.13109/zptm.2012.58.1.3>
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092–1097. <https://doi.org/10.1001/archinte.166.10.1092>
- Steiner, J. (2003). *Psychic retreats: Pathological organizations in psychotic, neurotic and borderline patients*. Routledge.
- Suicide and Self-Destructive Behaviors Study Group. (2018). Integrative psychodynamic model for understanding and assessing the suicidal patient. *Psychoanalytic Psychology, 35*(4), 424–432.
- Sutin, A. R., Terracciano, A., Milanese, Y., An, Y., Ferrucci, L., & Zonderman, A. B. (2013). The trajectory of depressive symptoms across the adult life span. *JAMA Psychiatry, 70*(8), 803–811. <https://doi.org/10.1001/jamapsychiatry.2013.193>
- Tunvirachaisakul, C., Gould, R. L., Coulson, M. C., Ward, E. V., Reynolds, G., Gathercole, R. L., Grocott, H., Supasitthumrong, T., Tunvirachaisakul, A., Kimona, K., & Howard, R. J. (2018). Predictors of treatment outcome in depression in later life: A systematic review and meta-analysis. *Journal of Affective*

- Disorders*, 227, 164–182. <https://doi.org/10.1016/j.jad.2017.10.008>
- Turecki, G., Brent, D. A., Gunnell, D., O'Connor, R. C., Oquendo, M. A., Pirkis, J., & Stanley, B. H. (2019). Suicide and suicide risk. *Nature Reviews Disease Primers*, 5(1), 1–22.
- von Brachel, R., Teismann, T., Feider, L., & Margraf, J. (2019). Suicide ideation as a predictor of treatment outcomes in cognitive-behavioral therapy for unipolar mood disorders. *International Journal of Clinical and Health Psychology*, 19(1), 80–84. <https://doi.org/10.1016/j.ijchp.2018.09.002>
- Vuorilehto, M., Valtonen, H. M., Melartin, T., Sokero, P., Suominen, K., & Isometsa, E. T. (2014). Method of assessment determines prevalence of suicidal ideation among patients with depression. *European Psychiatry*, 29(6), 338–344. <https://doi.org/10.1016/j.eurpsy.2013.08.005>
- Wampold, B. E. (2015). How important are the common factors in psychotherapy? An update. *World Psychiatry*, 14(3), 270–277. <https://doi.org/10.1002/wps.20238>
- Webb, C. A., Cohen, Z. D., Beard, C., Forgeard, M., Peckham, A. D., & Bjorgvinsson, T. (2020). Personalized prognostic prediction of treatment outcome for depressed patients in a naturalistic psychiatric hospital setting: A comparison of machine learning approaches. *Journal of Consulting and Clinical Psychology*, 88(1), 25–38. <https://doi.org/10.1037/ccp0000451>
- World Health Organization (Producer). (2021). Suicide data. <https://www.who.int/teams/mental-health-and-substance-use/suicide-data>
- Zeeck, A., von Wietersheim, J., Weiss, H., Scheidt, C. E., Völker, A., Helesic, A., Eckhardt-Henn, A., Beutel, M., Endorf, K., Treiber, F., Rochlitz, P., & Hartmann, A. (2016). Prognostic and prescriptive predictors of improvement in a naturalistic study on inpatient and day hospital treatment of depression. *Journal of Affective Disorders*, 197, 205–214. <https://doi.org/10.1016/j.jad.2016.03.039>
- Zimmerman, M., Balling, C., Chelminski, I., & Dalrymple, K. (2018). Understanding the severity of depression: Which symptoms of depression are the best indicators of depression severity? *Comprehensive Psychiatry*, 87, 84–88. <https://doi.org/10.1016/j.comppsy.2018.09.006>

How to cite this article: Ernst, M., Zwerenz, R., Michal, M., Wiltink, J., Tuin, I., & Beutel, M. E. (2023). Ambivalent toward life, ambivalent toward psychotherapy? An investigation of the helping alliance, motivation for treatment, and control expectancies in patients with suicidal ideation in inpatient psychotherapy. *Suicide and Life-Threatening Behavior*, 53, 557–571. <https://doi.org/10.1111/sltb.12964>