Sense of meaning as a predictor of long-term therapy outcome in psychiatric inpatients: results of a one-year follow-up

Meaning and long-term therapy outcome

René Hefti,[1-3] Daren Sunthareswarar,[1] Thomas Wartenweiler,[1] Harold Koenig,[4] Michael Ackert[1]

[1]Research Institute for Spirituality and Health, Langenthal, Switzerland; [2]Department of Psychosomatic Medicine, University Hospital and University of Basel, Switzerland; [3]Clinic SGM for Psychiatry and Psychotherapy, Langenthal, Switzerland; [4]Department of Psychiatry and Medicine, Duke University Medical Center, Durham (NC), USA

ABSTRACT

Identifying predictors of long-term therapy outcome is crucial in shaping effective therapy programs. This study examined sense of meaning in life, religiosity, and spirituality as potential predictors for long-term therapy success following psychiatric-psychotherapeutic inpatient treatment. A total of 127 patients from a psychiatric clinic in Switzerland were included. Standardized self-assessed questionnaires were administered on admission, at discharge, and at a one-year follow-up. The influence of meaning in life, religiosity, and spirituality on the course of depressive symptoms was assessed. Sense of meaning was identified as a significant positive predictor for therapy outcome one year after discharge. Positive associations between sense of meaning, religiosity, and spirituality suggest that there may be indirect effects of religiosity and spirituality on long-term therapy outcomes as well. Boosting a sense of meaning in psychiatric inpatient therapy might enhance long-term treatment outcomes. Possible indirect effects of religiosity and spirituality need further investigation.

Key words: inpatient psychotherapy, long-term predictors, sense of meaning, religiosity, spirituality, existential analysis.

Correspondence: René Hefti, Research Institute for Spirituality and Health, Langenthal Switzerland.
E-mail: rene.hefti@rish.ch

Citation: Hefti, R., Sunthareswarar, D., Wartenweiler, T., Koenig, H., Ackert, M., (2025). Sense of meaning as a predictor of long-term therapy outcome in psychiatric inpatients: results of a one-year follow-up. *Research in Psychotherapy: Psychopathology, Process and Outcome, 28*(2), 859. doi: 10.4081/ripppo.2025.859

Conflict of interest: the authors have no conflict of interest to disclose.

Ethics approval and consent to participate: ethics approval for this study was obtained by the Ethics Committee of the Canton of Bern (Project-ID 2022-02288). All patients gave their written consent to participate in this study.

Consent for publication: all participants provided informed consent for the publication of this article.

Availability of data and materials: all data and materials are available from the corresponding author upon reasonable request.

Acknowledgments: we thank Elias Hefti for the acquisition of the follow-up data by sending out the request letters to the patients, managing the correspondence, and putting together the data file.

Received: 21 February 2025.
Accepted: 24 September 2025.

Publisher's note: all claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article or claim that may be made by its manufacturer is not guaranteed or endorsed by the publisher.

Research in Psychotherapy:
Psychopathology, Process and Outcome 2025; 28:859
doi:10.4081/ripppo.2025.859

Introduction

Inpatient treatment is associated with high costs (Stucki *et al.*, 2023). Therefore, optimizing long-term therapy outcomes of inpatient treatment is crucial. Factors that determine the course of inpatient psychotherapy must be identified. Such factors can be related to the psychotherapeutic method, to therapist-related characteristics, or can represent patient-related predictors (Herrmann & Huber, 2013). Patient-related factors identified in the literature include interpersonal problems (Kuehner & Huffziger, 2013; Schaefer *et al.*, 2008) and the severity of symptoms on admission (Chae *et al.*, 2019), both of which are significant negative predictors of outcome. Activating personal resources in inpatient psychotherapy (Grawe & Grawe-Gerber, 1999; Willutzki & Teismann, 2013), such as the sense of meaning (Längle *et al.*, 2000a), has been shown to positively impact the course of therapy (Valdés-Stauber *et al.*, 2018).

Sense of meaning

Since Viktor Frankl's (1963) seminal work *Man's Search for Meaning* and the development of logotherapy and existential analysis, the role of meaning-making in therapy has received considerable attention in mental health research. Frankl based his logotherapy on the assumption that the existential quest for meaning is a fundamental aspect of mental health (Frankl, 1970). Existen-

tial meaning must be discovered by the individual and renders a purpose to one's life. Failure to achieve it may lead to psychological distress (Steger *et al.*, 2009). Empirical research supports the importance of this principle, demonstrating that individuals with a strong sense of meaning in life exhibit better physical and psychological well-being (*e.g.*, see Aftab *et al.*, 2019). The relationship between meaning and mental health also extends to clinical settings, where interventions focused on enhancing meaning have shown significant benefits, including reduced symptoms of anxiety and increased overall life satisfaction (*e.g.*, Vos & Vitali, 2018). Other findings suggest that a sense of meaning in the lives of inpatients is associated with a higher level of well-being in the longer term (De Smet & Meganck, 2018; Jun & Yun, 2020), a better physical quality of life (Czekierda *et al.*, 2019), and lower recurrence of depression (Read *et al.*, 2005).

The concept of meaning can be understood as the direction or path one takes in life, as well as the motivation to reach one's goals. It contains a dynamic component and cannot be defined as a specific outcome (Schnell, 2016). Meaning in life is usually understood as a multidimensional construct (Martela & Steger, 2016; Schnell, 2016) that can be divided into the three areas of *coherence*, *purpose*, and *significance.* Coherence, a cognitive aspect, comprises *comprehensibility* (*i.e.*, life is predictable and explicable), *manageability* (*i.e.*, enough resources are available to manage life), and *meaningfulness* (*i.e.*, life's challenges are worthy of investment; Antonovsky, 1993). Purpose, a motivational aspect, refers to personal goals in life and life direction. Finally, significance, an affective aspect, describes personal values in life and the extent to which life is considered worth living (Martela & Steger, 2016). Similarly, George and Park (2016) identify the three dimensions of *comprehension*, *purpose*, and *mattering.* Schnell (2016) adds *orientation* and *affiliation* as further elements to the dimensions mentioned.

These various attempts at definition show the complexity and breadth of the concept of meaning. A further distinction has been made between the search for meaning in life and the actual sense of meaning in life (Steger, 2005; Steger *et al.*, 2009). The latter describes the subjective perception (Schischkoff, 1991) or assessment (Schnell, 2016) that one's own life is meaningful or not. In the present study, we used the Existential Scale (Längle *et al.*, 2003) to assess sense of meaning. The scale and the construct behind it will be described later.

Religiosity and spirituality

Issues related to meaning in life are often discussed in connection with religiosity and spirituality (Utsch, 2018). For both psychotherapists (Hofmann & Walach, 2011) and patients (Baetz *et al.*, 2004), this topic is highly relevant in the context of psychotherapy. Meta-analyses have revealed an association between religiosity/spirituality and better mental health (Hodapp & Zwingmann, 2019). This is expressed, for example, in a lower incidence of mental disorders (Bonelli & Koenig, 2013) and in lower rates of depression (Miller *et al.*, 2012). Similarly, Friedrich-Killinger (2020) confirms that the centrality of religion in a patient's life has a significant influence on therapy outcomes. Other studies have likewise found that religiosity and spirituality have a positive impact on therapy (Hefti, 2011).

The distinction between religiosity and spirituality is blurred in the literature. The two terms are often used synonymously in research (*e.g.*, Grom, 2012; Koenig, 2012). Zinnbauer and Pargament (2005) describe the great complexity and the many ways in which these two constructs can be defined. They define spirituality as a search for the sacred, which can occur at both a personal and a group level, and religion as a search for the sacred embedded in a traditional context. Generally, the concept of spirituality tends to be broader than religion (Koenig *et al.*, 2012; Koenig, 2024; Utsch, 2018; Zinnbauer & Pargament, 2005). Sociological changes in recent years, with an increasing rejection of tradition-oriented religiosity and a turn toward individual spirituality, favor a conceptual distinction between religiosity and spirituality (Utsch, 2013; 2020). In this study, a distinction is made between the centrality of religion (assessed with the Centrality of Religiosity Scale [CRS]; Huber, 2008) and general spirituality (assessed with the WHO Quality of Life Spirituality Questionnaire [WHO-QoL-Sp] subscale; Angermeyer *et al.*, 2000).

Koenig (2012) argues that religiosity and spirituality do not necessarily have a direct influence on mental health but have indirect effects through various psychological, social, and behavioral mechanisms. Religiosity and spirituality can be seen as resources that help people cope better with adversity in life.

Objective

The present study aims to investigate whether sense of meaning, religiosity, or spirituality are potential predictors of long-term therapy outcome, hypothesizing that these factors can be understood as personal resources.

Methods

Data collection

The study used a longitudinal within-subjects design (single-group experimental study). Data were collected at three time points at the *Stiftung für ganzheitliche Medizin* (SGM) clinic in Langenthal, Switzerland: at admission to the hospital (T0), at discharge from the hospital (T1), and in a follow-up assessment one year after discharge from the clinic (T2). Patients gave informed consent at admission and at follow-up assessment. Inclusion criteria were an inpatient treatment of at least 4 weeks, 18 years of age or older, sufficient German language skills, and no psychotic symptoms or dementia. All inpatients who fulfilled these criteria and were discharged between June 1, 2018, and March 31, 2021, received a letter with a follow-up questionnaire. They were asked to complete the questionnaire electronically from home via an internet link. Two reminders were sent if they didn't respond to the mailing. The response rate was 25%. The main reasons for non-participation included not feeling well, being overwhelmed by the number of questionnaires, difficulty using the tool (despite support being offered), and negative memories associated with the hospital experience.

To assess a potential bias, we made a *t*-test comparing the participating group (25%) with the non-participating group (75%). Based on the systematic inpatient assessment, all necessary data were available (Kordy & Bauer, 2003). Patients participating in the study had higher education and were slightly more religious but did not differ in gender or age. At hospital admission, there was no difference in the severity of psychiatric (affective) symptoms, interpersonal problems, or sense of meaning. At hospital discharge, study participants had fewer affective symptoms but didn't differ in psychiatric or interpersonal problems. So, they had better recovery from depression during inpatient treatment but not less psychosocial burden.

Ethical approval was given by the Ethics Commission of the Canton of Bern on February 21, 2023.

Sample characteristics

Patients (N=127) who participated in the follow-up survey were between 19 and 80 years old. The average age was 46.5 (standard deviation [SD]=13.62). Women accounted for approximately two-thirds of the sample (69.4%). Approximately half (55.5%) of the patients had children, and 63.3% had a steady partner. In terms of marital status, 53.1% were married, 30.4% were single, 8.6% were divorced, 6.3% were separated, and 1.6% were widowed. The patients' most frequent diagnoses were affective disorders (78.2%), neurotic, stress, or somatoform disorders (15.6%), personality or behavioral disorders (5.4%), and behavioral disorders with physical symptoms (0.8%). Means and SD on the Beck Depression Inventory (BDI-II), Brief Existence Scale (BES), CRS, and WHOQoL-Sp are provided in Table 1.

Inpatient treatment program

Patients participated in a multimodal therapy program including pharmacotherapy, individual and group psychotherapy, psychoeducation, and physical and art therapy. Patients could apply for pastoral counselling, spiritual care, and a spiritual discussion group. There were no specific interventions supporting meaning-making and no predominant psychotherapy approach. Meaning might be boosted by the religious or spiritual background of the patients. After hospital discharge until the assessment one year later, no information was collected on the frequency and content of the outpatient therapy.

Measures

Beck Depression Inventory

Depressive symptoms were assessed using the BDI-II, a widely used, self-report questionnaire designed to assess the severity of depressive symptoms in adolescents and adults aged 13 and older. The inventory consists of 21 items, each corresponding to a specific symptom or attitude related to depression (*e.g.*, sadness, guilt, fatigue, suicidal thoughts). Each item is rated on a 4-point Likert scale (0-3), with total scores ranging from 0 to 63. A score of 0-13 indicates minimal depression, 14-19 mild depression, 20-28 moderate depression, and 29-63 severe depression (Beck *et al.*, 2006). Cronbach's alpha was high at each time point measured (T0=0.89; T1=0.90; T2=0.91).

Brief Existence Scale

Sense of meaning was measured using the BES, based on Frankl's logotherapy (Längle *et al.*, 2000b); the original version consists of 46 items. The scale describes inner meaning in four existential dimensions: self-distance, self-transcendence, freedom, and responsibility. The self-rated scale therefore evaluates these dimensions, also referred to as *personal competencies for existence*, measuring the ability to effectively navigate and engage with both self and the environment in a meaningful way (Längle *et al.*, 2003). For the present study, the short 8-item version of the scale was used. These items include statements such as '*I feel personally addressed by my tasks*' or '*I feel free inside*' and were rated on a 6-point Likert-type scale ranging from 'fully disagree' to 'fully agree' (Längle *et al.*, 2000b). Cronbach's alpha was high at each time point measured (T0=0.81; T1=0.84; T2=0.83).

Centrality of Religiosity Scale

The CRS (Huber, 2008) assesses the relevance of religiosity in a person's life. It consists of five core dimensions of religiosity: public practice, private practice, religious experience, ideology, and the intellectual dimension. These five dimensions represent the entirety of religious life. Typical items are: '*To what extent do you believe that God or something divine exists?*' (ideology), '*How often do you meditate?*' (private practice), or '*How important is it to take part in religious services?*' (public practice; Huber & Huber, 2012). The more central religiosity is in a person's life, the greater the potential influence on other psychological dimensions (*i.e.*, perceptional, emotional, motivational, cognitive). Patients who have a high score are categorized as highly religious. In such cases, religion has a major influence on the patient's everyday life (Huber, 2008). Cronbach's alpha for the CRS was high for each point measured (T0=0.94; T1=0.94; T2=0.93).

WHO Quality of Life Questionnaire

The questionnaire (Angermeyer *et al.*, 2000) includes a subscale for spirituality, which was used for the assessment of spirituality in the present study. This subscale contains four items, *e.g.*, '*Do your personal beliefs give you strength to endure difficulties?*' or '*To what extent do your personal beliefs help you understand the challenges of life?*' and are rated on a five-point Likert scale. The scale defines *spirituality* in general terms. The wording 'personal beliefs' is used, which means that non-religious patients can also answer these questions without problems (Zwingmann *et al.*, 2011). Cronbach's alpha for the WHOQoL-Sp was high at each time point measured (T0=0.90; T1=0.91; T2=0.91).

In addition to the measures described above, age and gender were also collected.

Data analysis

Statistical analysis was performed using the RStudio software (RStudio Team, 2020). Linear modeling was applied to calculate the course of therapy by displaying the total score of the BDI-II at the time of entry (T0), discharge (T1), and at the time of the follow-up survey one year later (T2). Stepwise multiple linear regression models were calculated to answer the main question, using the BDI-II total score as the dependent variable. The independent variables were sense of meaning assessed by the BES, religiosity as determined by the CRS, and spirituality measured with the WHOQoL-Sp. In addition to the demographic variables

Table 1. Characteristics of the sample.

Characteristic	M	SD	%
Age	46.5	13.62	
Gender			
Male			30.6
Female			69.4
Depression (BDI-II, T1)	14.29	9.76	
Sense of meaning (BES, T1)	34.45	7.96	
Religiosity (CRS, T1)	27.72	8.75	
WHOQoL-Sp (T1)	15.52	3.08	

M, mean; SD, standard deviation; T1, discharge from inpatient treatment; BDI-II, Beck Depression Inventory; BES, Brief Existence Scale; CRS, Centrality of Religiosity Scale; WHOQoL-Sp, WHO Quality of Life Spirituality subscale.

(gender and age), the symptom burden at hospital admission (T0) was also controlled for (Chae *et al.*, 2019). Because of the on-screen (clinic) and online (follow-up) assessments, there were few missing data and therefore a high data quality.

Results

Course of depressive symptoms

Severity of the depressive symptoms decreased significantly (t=12.142, 95% confidence interval, CI [12.157; 16.861], p=<.001, Cohen's d=1.45) during the inpatient treatment between hospital admission (T0; M=28.80) and discharge (T1; M=14.29), showing the effect of the psychiatric-psychotherapeutic therapy. Depressive symptoms remain stable (t=−1.41, 95% CI [–4.37; 0.73], p=.16, Cohen's d=–0.17) between hospital discharge (T1; M=14.29) and one-year follow-up (T2; M=16.11), demonstrating the long-term outcome of inpatient treatment (Figure 1).

Predictors of long-term therapy outcome

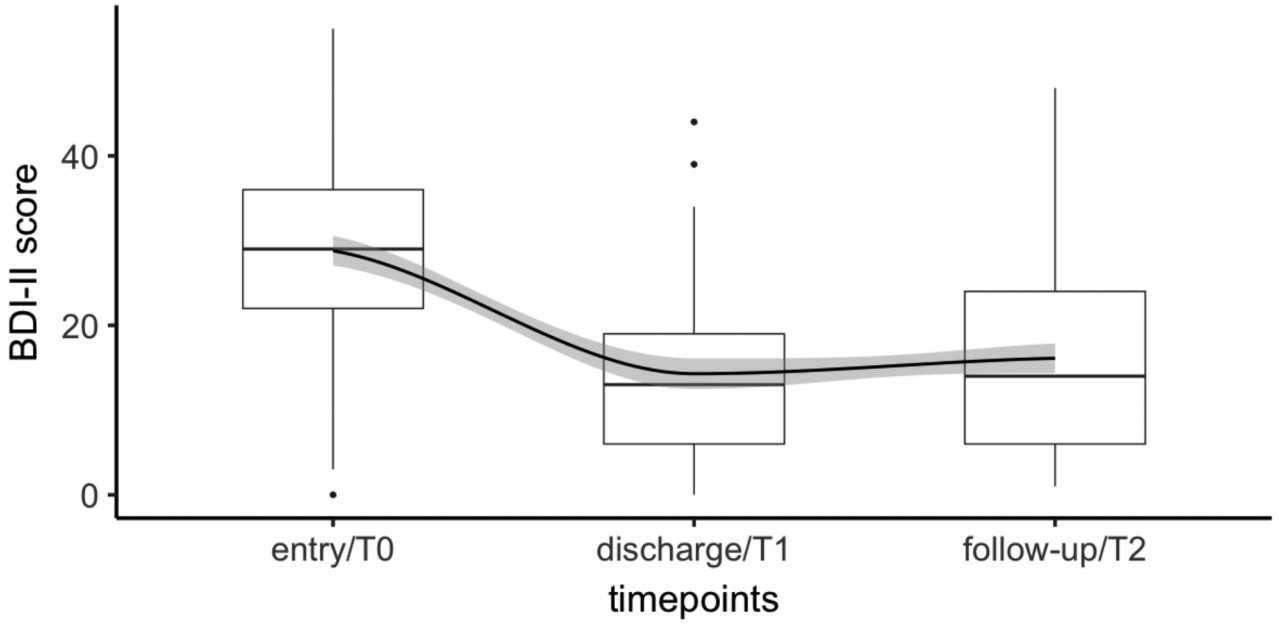
All included predictors correlated significantly with depressive symptoms (BDI-II) at the one-year follow-up (Table 2): sense of meaning (r=−.76, 95% CI [–.82; –.68], p<.001), centrality of religiosity; (r=−.24, 95% CI [–.40; –.07], p=0.006), and spirituality (r=–0,67, p<.001). The stronger sense of meaning and the higher the religiosity and spirituality at the time of discharge (T1), the lower the depressive symptoms one year later (T2). Predictors also showed significant intercorrelations (Table 2).

To determine the predictors' effects on depressive symptom severity (BDI-II) one year after hospital discharge, a regression

Table 2. Correlations of predictors with depressive symptoms and intercorrelations of predictors.

Variable	BDI-II (T2)	BDI-II (T1)	Spirituality (T1)	Meaning (T1)
BDI-II (T1)	.57 [.44; .67](<.001)			
Spirituality (T1)	−.67 [−.76; −.57](<.001)	−.65 [−.74; −.53](<.001)		
Meaning (T1)	−.76 [−.82; −.68](<.001)	−.70 [−.78; −.60](<.001)	.70 [.60; .78](<.001)	
Religiosity (T1)	−.24 [−.40; −.07](.006)	−.23 [−.39; −.06](.010)	.48 [.34; .61](<.001)	.25 [.07; .40](.005)

T1, discharge from inpatient treatment; T2, one-year follow-up; [95% confidence interval]; (p-value); BDI, Beck Depression Inventory.



The boxplot diagram represents the change of symptoms from the beginning of the therapy (timepoint "pre"/T0) to its end (timepoint "post"/T1) and one year after the discharge from the clinic (timepoint "follow-up"/T3) on the x-axis. On the y-axis is the overall BDI-II score in scale points. The greater the score, the higher the symptom severity. The line crossing the boxplots shows the course of the symptom change from one timepoint to the other following the locally estimated scatterplot smoothing (LOESS) method, with 95% confidence intervals represented by the surrounding gray area.

Figure 1. Course of depressive symptoms.

analysis was performed (Table 3). Age, gender, and symptom severity at hospital discharge were included as control variables in Model 1. Only symptom severity at hospital discharge was a significant negative predictor (b=.56, 95% CI [.47; .81], p<.001) of depressive symptoms.

Sense of meaning, religiosity, and spirituality were added in Model 2, which had a better fit and explained more of the variance (ΔR^2=.332). Of the included predictors, only sense of meaning (b=−0.24, 95% CI [–.60; –.05], p<.023) reached statistical significance. A higher sense of meaning in life at hospital discharge predicted lower symptom severity one year later.

Including only patients with affective disorders (N=105) in the regression analysis increased the prediction for symptom severity (b=–0.305, 95% CI [–.708; –.123], p<.006) as well as the model fit (ΔR^2=.382). This indicates that the impact of sense of meaning might be strongest in affective disorders and that the BDI is not the adequate instrument to assess the outcome of non-affective disorders.

Discussion

The present study examined sense of meaning in life, spirituality, and religiosity as potential predictors of long-term therapy outcome. Only sense of meaning was found to be a significant long-term predictor. It remained significant after controlling for symptom severity, which has been shown to be a strong negative predictor of therapy outcome (Chae *et al.*, 2019).

The findings are in line with those of De Smet and Meganck (2018) and Jun and Yun (2020), demonstrating that meaning correlated positively with physical and mental well-being in hospitalized patients. The results of the present study also confirm the findings of Aftab *et al.* (2019), showing that a strong sense of meaning in life is associated with greater psychological well-being and that lack of meaning leads to psychological distress (Steger *et al.*, 2009). Taken together, these findings support Frankl's claim that meaning is a fundamental aspect of mental health (1970).

Although religiosity and spirituality did not prove to be predictors of long-term therapy outcome, the moderate to high correlations with the sense of meaning suggest that they may have an indirect effect on the course of treatment, consistent with the theoretical model described by Koenig *et al.* (2012). The authors assume that religiosity and spirituality influence mental health through multiple pathways, one of which is strengthening a sense of meaning. Schnell (2010) also identified religiosity and spirituality as significant predictors of general meaningfulness. Utsch (2018) even argues for a distinction between religious and secular meaningfulness. The findings of the present study provide preliminary evidence to further explore the interaction between religiosity, spirituality, and a sense of meaning.

Strengths and limitations

The present study has several strengths. These include the longitudinal design (admission, discharge, and one-year follow-up), the quality of the data with few missing values, and the use of validated scales for sense of meaning, religiosity, and spirituality.

However, the study also has limitations. First, only patients from a single clinic in Switzerland were investigated, which limits the sample size and the generalizability. Likewise, the findings can only be generalized to clinics with similar patient characteristics and therapeutic profiles. Second, the low response rate of 25% is a potential source for bias. Based on the available inpatient data, study participants had higher education, were slightly more religious, and had less depression at hospital discharge. Third, not all confounding variables, such as critical life events (divorce, accidents, unemployment, *etc.*), or frequency of hospital readmissions in the follow-up period, were included in the analysis. Forth, only self-report questionnaires were used; therefore, effects of social desirability cannot be excluded. Fifth, BDI was not the ideal measure to assess non-affective disorders (21.8%).

Implications for practice

A sense of meaning was found to be a significant positive long-term predictor of therapy outcome. Based on these findings, particularly if replicated in future longitudinal studies and randomized controlled trials, clinicians should consider addressing patients' sense of meaning in psychotherapy. Previous research has shown that a change in sense of meaning is possible (Hill *et al.*, 2019), and specific training on how to do so is needed (Hill *et al.*, 2017; Längle *et al.*, 2000). Frankl's logotherapy is a well-established approach and can guide therapists in enhancing patients' sense of meaning (Frankl, 1970). Also, existential analysis (Längle *et al.*, 2000) as a meaning-oriented psychotherapy is a highly effective approach.

Insight-oriented interventions to enhance meaning are also being used in this context. For example, patients may be challenged to assign new meaning to past and future life events. In-

Table 3. Regression analyses of predictors of depressive symptoms at one-year follow-up (N=127).

	R^2	Adj. R^2	F	p	b	t	p
Model 1	.314	.309	56.384	<.001			
Age					.039	.511	.610
Gender					−.010	−.129	.898
Symptom severity (T1)					.561 [.472; .811]	7.509	<.001
Model 2	.343	.332	31.849	<.001			
Symptom severity (T1)					.039 [.224; .686]	3.898	<.001
Sense of meaning (T1)					−.235 [−.602; −.046]	−2.308	.023
Religiosity (T1)					−.060	−.562	.575
Spirituality (T1)					−.051	−.661	.510

95% confidence intervals are reported in square brackets only for significant regression coefficients.

terventions that enhance meaning have shown significant benefits, such as reducing symptoms of anxiety and increasing overall life satisfaction (*e.g.*, Vos & Vitali, 2018).

Another approach to improve a sense of meaning is to integrate religiosity and spirituality into psychotherapy and psychiatric treatment (Bonelli & Koenig, 2013; Hefti, 2011), which has been shown to have moderate to large effects on depressive symptoms and other clinical outcomes in randomized controlled trials (Captari *et al.*, 2018).

How can patients with a low sense of meaning be identified in everyday clinical practice? In contrast to patients who explicitly report difficulties in establishing a sense of meaning, there are patients for whom such issues are only implicit (Hill *et al.*, 2017). For such patients, comprehensive measures such as the BES (Längle *et al.*, 2000) might be an effective approach that has already been tested in clinical settings (Hefti *et al.*, 2012).

Conclusions

Sense of meaning was found to be a significant predictor of long-term therapy outcome. Patients with a greater sense of meaning after inpatient treatment had a lower rate of depressive symptoms at a one-year follow-up, demonstrating better coping resources. No direct effect of religiosity or spirituality on the long-term therapy outcome was found. The significant association of these variables with meaning in life suggests indirect pathways on therapy outcomes. The study encourages psychotherapists to address and strengthen the sense of meaning of their patients to benefit from the long-term effects on treatment outcome.

References

Aftab, A., Lee, E. E., Klaus, F., Daly, R., Wu, T.-C., Tu, X., Huege, S., & Jeste, D. V. (2019). Meaning in life and its relationship with physical, mental, and cognitive functioning: A study of 1,042 community-dwelling adults across the lifespan. *The Journal of Clinical Psychiatry*, *81*(1), 11357. doi: 10.4088/JCP.19m13064

Angermeyer, M. C., Kilian, R., & Matschinger, H. (2000). WHOQOL-100 und WHOQOL- BREF. In *Handbuch für die deutschsprachigen Versionen der WHO Instrumente zur Erfassung von Lebensqualität* [Handbook for the German-language versions of the WHO instruments for assessing quality of life]. Hogrefe.

Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social Science & Medicine*, *36*, 725–733. doi: 10.1016/0277-9536(93)90033-Z

Baetz, M., Griffin, R., Bowen, R., & Marcoux, G. (2004). Spirituality and psychiatry in Canada: psychiatric practice compared with patient expectations. *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, *49*(4), 265–271. doi: 10.1177/070674370404900407

Beck, A. T., Steer, R.-A., & Brown, G. K. (2006). *Beck-Depressions-Inventar Revision (BDI-II)*. M. Hautzinger, F. Keller, & C. Kühner (eds.); Revision. Pearson.

Bonelli, R. M., & Koenig, H. G. (2013). Mental disorders, religion and spirituality 1990 to 2010: A systematic evidence-based review. *Journal of Religion and Health*, *52*(2), 657–673. doi: 10.1007/s10943-013-9691-4

Captari, L. E., Hook, J. N., Hoyt, W., Davis, D. E., McElroy-Heltzel, S. E., & Worthington Jr, E. L. (2018). Integrating clients' religion and spirituality within psychotherapy: A comprehensive meta-analysis. *Journal of Clinical Psychology*, *74*(11), 1938-1951.

Chae, W. R., Nagel, J. M., Kuehl, L. K., Gold, S. M., Wingenfeld, K., & Otte, C. (2019). Predictors of response and remission in a naturalistic inpatient sample undergoing multimodal treatment for depression. *Journal of Affective Disorders*, *252*, 99–106. doi: 10.1016/j.jad.2019.04.044

Czekierda, K., Horodyska, K., Banik, A., Wilhelm, L., Knoll, N., & Luszczynska, A. (2019). Meaning in life and physical quality of life: Cross-lagged associations during inpatient rehabilitation. *Rehabilitation Psychology*, *64*(4), 425–434. doi: 10.1037/rep0000281

De Smet, M., & Meganck, R. (2018). Understanding Long-term Outcome from the Patients' Perspective: A Mixed Methods Naturalistic Study on Inpatient Psychotherapy. *Psychologica Belgica*, *58*(1), 276–296. doi: 10.5334/pb.432

Frankl, V. E. (1963). *Man's Search for Meaning*. New York: Simon & Schuster.

Frankl, V. E. (1970). *The will to meaning: Foundations and applications of logotherapy.* New York: New American Library.

Friedrich-Killinger, S. (2020). Centrality of religiosity as a resource for therapy outcome? *Religions*, *11*(4), 155. doi: 10.3390/rel11040155

George, L. S., & Park, C. L. (2016). Meaning in life as comprehension, purpose, and mattering: Toward integration and new research questions. *Review of General Psychology*, *20*(3), 205–220. doi: 10.1037/gpr0000077

Grawe, K., & Grawe-Gerber, M. (1999). Ressourcenaktivierung: Ein primäres Wirkprinzip der Psychotherapie [Resource activation: A primary mechanism of psychotherapy]. *Psychotherapeut*, *44*(2), 63–73. doi: 10.1007/s002780050149

Grom, B. (2012). Religiosität/Spiritualität – eine Ressource für Menschen mit psychischen Problemen? [Religiosity/Spirituality – a resource for people with mental health problems?]. *Psychotherapeutenjournal*, *11*(3), 194–201.

Hefti, R. (2011). Integrating religion and spirituality into mental health care, psychiatry and psychotherapy. *Religions*, *2*(4), 611–627. doi: 10.3390/rel2040611

Hefti, R., Fischer, F., & Teschner, M. (2012). Quantitative Erhebung von Religiosität und Spiritualität im klinischen Alltag: Anwendungserfahrungen, Ergebnisse und Perspektiven [Quantitative assessment of religiosity and spirituality in practice: experiences, results and perspectives]. *Spiritual Care*, *1*(3), 51-67.

Herrmann, A. S., & Huber, D. (2013). Was macht stationäre Psychotherapie erfolgreich? Der Einfluss von Patienten- und Behandlungsmerkmalen auf den Therapieerfolg in der stationären Psychotherapie [What makes inpatient psychotherapy successful? The influence of patient and treatment characteristics on therapy outcomes in inpatient psychotherapy]. *Zeitschrift Für Psychosomatische Medizin Und Psychotherapie*, *59*(3), 273–289. Available from: http://www.jstor.org/stable/23871306

Hill, C. E., Kanazawa, Y., Knox, S., Schauerman, I., Loureiro, D., James, D., Carter, I., King, S., Razzak, S., Scarff, M., & Moore, J. (2017). Meaning in life in psychotherapy: The perspective of experienced psychotherapists. *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, *27*(4), 381–396. doi: 10.1080/10503307.2015.1110636

Hill, C. E., Kline, K. V., Kivlighan, D. M., Aaron, Z., & King, S. (2019). Changes in meaning in life across the course of psychodynamic psychotherapy. *Counselling Psychology Quar-*

terly, *32*(1), 1–17. doi: 10.1080/09515070.2017.1340260

Hodapp, B., & Zwingmann, C. (2019). Religiosity/spirituality and mental health: A meta-analysis of studies from the German-speaking area. *Journal of Religion and Health*, *58*(6), 1970–1998. doi: 10.1007/s10943-019-00759-0

Hofmann, L., & Walach, H. (2011). Spirituality and religiosity in psychotherapy – A representative survey among German psychotherapists. *Psychotherapy Research*, *21*(2), 179–192. doi: 10.1080/10503307.2010.536595

Huber, S. (2008). Der Religiositäts-Struktur-Test (R-S-T). Kernkonzepte und Anwendungsperspektiven [The Religious Structure Test (R-S-T): Core concepts and application perspectives]. *Prävention: Zeitschrift Für Gesundheitsförderung*, *31*(2), 38–39.

Huber, S., & Huber, O. W. (2012). The centrality of religiosity scale (CRS). *Religions*, *3*(3), 710-724.

Jun, W. H., & Yun, S. H. (2020). Mental health recovery among hospitalized patients with mental disorder: Associations with anger expression mode and meaning in life. *Archives of Psychiatric Nursing*, *34*(3), 134–140. doi: doi: 10.1016/j.apnu.2020.03.001

Koenig, H. G. (2012). Religion, spirituality, and health: the research and clinical implications. *ISRN Psychiatry*, 1–33. doi: 10.5402/2012/278730

Koenig, H. G., King, D. E., & Carson, V. B. (2012). *Handbook of Religion and Health* (2nd ed.). New York, NY: Oxford University Press

Koenig, H. G. (2024). Handbook of Religion and Health (3rd ed.). New York, NY: Oxford University Press, pp. 3-14

Kordy, H., & Bauer, S. (2003). The Stuttgart-Heidelberg model of active feedback driven quality management: Means for the optimization of psychotherapy provision. *International Journal of Clinical and Health Psychology*, *3*(3), 615–631.

Kuehner, C., & Huffziger, S. (2013). Factors predicting the long-term illness course in a cohort of depressed inpatients. *European Archives of Psychiatry and Clinical Neuroscience*, *263*(5), 413–423. doi: 10.1007/s00406-012-0379-7

Längle, A., Goertz, A., Rauch, J., Jarosik, H., & Haller, R. (2000a). Effektivitätsstudie zur Existenzanalyse. Explorativer Vergleich mit anderen Psychotherapiemethoden im stationären Setting [Effectiveness study on Existential Analysis: An exploratory comparison with other psychotherapy methods in an inpatient setting]. *Existenzanalyse*, *17*(3), 17–29.

Längle, A., Orgler, C., & Kundi, M. (2000b). *Existenz-Skala* [Existence scale]. Beltz Test.

Längle, A., Orgler, C., & Kundi, M. (2003). The Existence Scale: A new approach to assess the ability to find personal meaning in life and to reach existential fulfillment. *European Psychotherapy*, *4*(1), 135-151.

Martela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *The Journal of Positive Psychology*, *11*(5), 531–545. doi: 10.1080/17439760.2015.1137623

Miller, L., Wickramaratne, P., Gameroff, M. J., Sage, M., Tenke, C. E., & Weissman, M. M. (2012). Religiosity and major depression in adults at high risk: a ten-year prospective study. *The American Journal of Psychiatry*, *169*(1), 89–94. doi: 10.1176/appi.ajp.2011.10121823

Read, S., Aunola, K., Feldt, T., Leinonen, R., & Ruoppila, I. (2005). The relationship between generalized resistance resources, sense of coherence, and health among Finnish people aged 65-69. *European Psychologist* 10, 244–253. doi: 10.1027/1016-9040.10.3.244

RStudio Team. (2020). *RStudio: Integrated Development Environment for R*. RStudio, PBC. Available from: http://www.rstudio.com/

Schaefer, A., Gieler, U., Kurth, R., Brosig, B., Leweke, F., Milch, W. E., Reimer, C., & Beutel, M. E. (2008). Long-term outcomes of short-term and long-term psychosomatic inpatient treatment and their predictors. *Journal of Psychosomatic Research*, *65*(4), 329–336. doi: 10.1016/j.jpsychores.2008.06.003

Schischkoff, G. (1991). *Philosophisches Wörterbuch* [Philosophical Dictionary] (H. Schmidt [ed.]). Kröner.

Schnell, T. (2010). Religiosität und Spiritualität als Quellen der Sinnerfüllung [Religiosity and spirituality as sources of meaningfulness]. In C. Klein, H. Berth, & F. Balck (Eds.), *Gesundheit - Religion - Spiritualität. Konzepte, Befunde und Erklärungsansätze* (pp. 259–271). Juventa.

Schnell, T. (2016). Sinn definieren. In T. Schnell (Ed.), *Psychologie des Lebenssinns* (p. 202) [Psychology of life meaning]. Springer.

Steger, M. F. (2005). *Development and validation of the Meaning in Life Questionnaire: A measure of eudaimonic well-being*. [Dissertation, University of Minnesota].

Steger, M. F., Oishi, S., & Kashdan, T. B. (2009). Meaning in life across the life span: Levels and correlates of meaning in life from emerging adulthood to older adulthood. *The Journal of Positive Psychology*, *4*(1), 43–52. doi: 10.1080/17439760802303127

Stucki, M., Schärer, X., Trottmann, M., Scholz-Odermatt, S., & Wieser, S. (2023). What drives health care spending in Switzerland? Findings from a decomposition by disease, health service, sex, and age. *BMC Health Services Research*, *23*(1), 1149.

Utsch, M. (2013). Der Boom des Irrationalen. Psychodynamik alternativer Glücksrezepte [The boom of the irrational: Psychodynamics of alternative recipes for happiness]. *Materialdienst Der EZW*, *76*(6), 203–209.

Utsch, M. (2018). Begriffsbestimmungen: Religiosität oder Spiritualität? [Definitions: Religiosity or spirituality?] In M. Utsch, R. M. Bonelli, & S. Pfeifer (Eds.), *Psychotherapie und Spiritualität: Mit existenziellen Konflikten und Transzendenzfragen professionell umgehen* (pp. 29–40). Springer. doi: 10.1007/978-3-662-56009-9_3

Utsch, M. (2020). Psychotherapie zwischen Spiritualisierung und weltanschaulicher Neutralität - Zur Bedeutung der religiös-spirituellen Dimension für Psychiatrie und Psychotherapie [Psychotherapy between spiritualization and ideological neutrality – On the significance of the religious-spiritual dimension for psychiatry and psychotherapy]. In N. Mönter, A. Heinz, & M. Utsch (Eds.), *Religionssensible Psychotherapie und Psychiatrie* (1st ed., pp. 52–59). Kohlhammer.

Valdés-Stauber, J., Fuchs, A., Reiner, S., & Bachthaler, S. (2018). Effektivität stationärer psychosomatischer Behandlung – Ergebnisse einer naturalistischen Zweijahresuntersuchung [Effectiveness of inpatient psychosomatic treatment – Results of a naturalistic two-year study]. *Psychotherapie Psychosomatik Medizinische Psychologie*, *68*(7), 290–299. doi: 10.1055/s-0043-106735

Vos, J., & Vitali, D. (2018). The effects of psychological meaning-centered interventions on quality of life and psychological stress: A meta-analysis. *Palliative and Supportive Care*, *16*(5), 608-632. doi: 10.1017/S1478951517000931

Willutzki, U., & Teismann, T. (2013). *Ressourcenaktivierung in*

der Psychotherapie (52nd ed.) [Resource activation in psychotherapy]. Hogrefe.

Zinnbauer, B. J., & Pargament, K. I. (2005). Religiousness and Spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 21–42). The Guilford Press.

Zwingmann, C., Klein, C., & Höfling, V. (2011). Messung von Religiosität/Spiritualität im Rahmen der Gesundheitsforschung: Ein Überblick über deutschsprachige Fragebogenskalen [Measurement of religiosity/spirituality in health research: An overview of German-language questionnaire scales]. In O. Klein, H. Berth, & F. Balck (Eds.), *Gesundheit - Religion - Spiritualität: Konzepte, Befunde und Erklärungsansätze* (pp. 65–91). Juventa.