



Individual treatment goals and factors influencing goal attainment in patients with somatic symptom disorder from the perspective of clinicians: A concept mapping study

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ABSTRACT

Objective: Overviews of treatment goals and influencing factors may support shared decision making and optimize customized treatment to the patient with somatic symptom disorder (SSD). The aim of this study was to identify and structure comprehensive sets of treatment goals and factors influencing goal attainment in patients with SSD from the perspective of clinicians.

Methods: Using a concept mapping procedure, clinicians participated in interviews ($N = 17$) and card sorting tasks comprising 55 treatment goals and 55 factors influencing goal attainment ($N = 38$).

Results: We identified four overarching categories (A to D) of nine clusters (1 to 9) of treatment goals: A. empowerment (A1. personal values, A2. committed action, A3. self-esteem), B. skill improvement (B4. interpersonal skills, B5. emotion and stress regulation), C. symptom reduction (C6. dysfunctional beliefs, C7. somatic symptoms, C8. psychological symptoms), and D9. active and structured lifestyle. Also, we identified four overarching categories (A to D) of nine clusters (1 to 9) of factors influencing goal attainment: A1. therapeutic alliance, B. social and everyday context (B2. [family] system, B3. meaningful daily schedule, B4. social and economic circumstances), C. ability to change (C5. externalizing tendency, C6. reflective and psychological skills, C7. perspective and motivation), and D. psychological vulnerability (D8. vulnerable personality, D9. [psychiatric] comorbidity).

Conclusion: The overviews of treatment goals and factors influencing goal attainment reflect different paradigmatic backgrounds of clinicians. The results can be used, in combination with the perspective of the patient, to define treatment goals, and to monitor and evaluate change in outcomes.

1. Introduction

Somatic symptom disorder (SSD) is characterized by one or more somatic symptoms that are distressing or significantly disruptive to daily life, accompanied by excessive thoughts, feelings, or behaviors related to the symptoms [1]. The prevalence of SSD is estimated to be 5 to 7% of the general adult population [1]. Cognitive behavioral therapy has been proposed as best-established treatment for somatoform disorder, the precursor diagnostic category of SSD [2]. Meta-analyses showed that

cognitive behavioral therapy and other types of psychotherapies are beneficial for patients with somatoform disorder and SSD, but that there is also room for improvement of the small to medium treatment effects [3,4]. Although these modest outcomes may realistically reflect that SSD is difficult to treat, an additional explanation is that the commonly used outcome measures do not validly reflect the personal goals that are pursued in treatment [5].

In the evaluation of treatment effects in SSD, mostly generic outcome measures are used. However, given the great heterogeneity within this

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group [6], these nonspecific outcome measures will often not fit the individual patient. In order to select appropriate outcome measures that better fit the individual patient, a European expert group recommended a broad set of six core outcome domains to be considered in clinical trials on SSD: classification of disorder and comorbid mental problems, assessment of somatic symptoms, psychobehavioral features, illness consequences, consumer satisfaction, and unwanted negative effects [7]. This recommendation is a significant step forward in the evaluation of treatment effects in patients with SSD. Nevertheless, we believe that another step could be made by using, next to generic outcome measures, outcome measures that are based on individual treatment goals.

Ideally, at the start of therapy in daily practice, patients and clinicians together set individual treatment goals [8]. While patients are experts on their own needs, preferences, and values, clinicians are experts on current clinical information and the evidence for effectiveness, risks, and benefits for treatment options [9]. Therapeutic goal setting of clinicians will likely also be determined by their own paradigmatic background and competencies as well as by practical restrictions, such as the number of treatment sessions they can offer. Therefore, the specific treatment goals that are set by individual clinicians may greatly differ, and perhaps the more in SSD for which clear treatment recommendations are lacking [10].

To increase the likelihood of attaining goals in treatment, clinicians should also consider factors that influence the attainment of these goals. Previous studies have already shown some factors to be related to the course or outcome of somatoform disorder and SSD, such as age, gender, symptom duration, current depressive or anxiety disorder, negative life events, functional disability, and attributional style [3,11,12]. However, all these studies examined only part of the factors that may influence the attainment of treatment goals, while a comprehensive overview is missing.

Comprehensive maps of treatment goals and factors influencing goal attainment from the perspective of both clinicians and patients may help in shared decision making and to optimally personalize treatment in patients with SSD. The current study focuses on clinicians. Our aim was to identify and structure a comprehensive map of treatment goals and influencing factors in patients with SSD from the perspective of clinicians.

2. Method

2.1. Design and procedure

We used a four-step concept mapping procedure [13] to quantify qualitative information. First, open-questioned interviews with clinicians yielded extensive sets of treatment goals and influencing factors. Second, researchers and clinicians selected a representative set of treatment goals and influencing factors from the interviews. Third, in two card sorting tasks, clinicians sorted these treatment goals and influencing factors according to similarity of meaning. Fourth, we performed hierarchical cluster analyses to get a structured overview of treatment goals and influencing factors. The study was approved by the Ethics Committee of the Faculty of Social and Behavioral Sciences of Utrecht University, the Netherlands (FETC17–099). Participants provided written informed consent. The study was done in compliance with the declaration of Helsinki and later amendments.

2.2. Participants

Eligible participants were clinicians working with patients with SSD. By forwarding an email, members of the project group asked colleagues with different professions and from different institutions in the Netherlands working with SSD whether they wanted to be informed about the study. Especially clinicians offering specialized care were recruited, because the diagnostic classification and treatment of SSD mostly takes place in specialized and highly specialized institutions.

Clinicians who showed interest received an information letter and informed consent form. For the first step of the concept mapping procedure, we aimed at a minimum of ten interviews; more if saturation was not reached during the last two interviews. For the third step of the concept mapping procedure, we aimed at a minimum of 30 participants in the card sorting task. A sample size of 10 to 20 participants per group has been shown to be a workable number for concept mapping ensuring a variety of opinions [13], and numbers of participants higher than 30 do likely yield similar results to those of several hundred participants [14].

2.3. Data collection and analysis

2.3.1. Step 1: interviews

The interviews were performed by two master students in clinical psychology from Utrecht University who were trained and supervised by one of the members of the project group (RG). These interviews were conducted according to the preferred mode of the clinician as a face-to-face, telephone, or email interview. Open questions encouraged participants to think of as many as possible answers. Participants were asked which treatment goals they could set from their own perspective in consultations with patients with SSD and which factors might hinder or facilitate goal attainment. These questions were followed by asking the clinicians which treatment goals they had set and which barriers and facilitators to goal attainment they had experienced in their five most recent patients, and in their five least and five most complex patients with SSD.

2.3.2. Step 2: selection of treatment goals and factors influencing goal attainment

In the first phase of the selection procedure, members of the project group (IB, LK, RG) selected treatment goals and influencing factors from the interviews. The selection consisted of 1) removal of duplicate statements and statements that were too abstract, vague, or general (e.g., “biopsychosocial problems”), 2) splitting of statements comprising two or more components, 3) rephrasing of negative statements into positive statements by removing words such as “no(ne)”, and 4) removal of non-indicative words such as “too” and “highly”.

In the second phase of the selection procedure, clinicians working with SSD from different institutions (MR, PL, SvB, SvE) performed a two-round Delphi procedure. In the first round of selecting statements, each clinician rated a third of statements to be removed (score 1), a third to be retained (score 3), and a third as unsure whether they should be removed or retained (score 2). In the second round, the same clinicians (except SvE) reviewed the decisions that were made in the first round. They were asked which statements they wanted to attain and which to exclude with the instruction to keep the set varied as much as possible. Also, they were asked to explain their decisions. The following statements were retained: 1) statements with a sum score of 8 or higher in the first round, 2) statements with a sum score of at least 6 in the first round and which were in the second round chosen by at least two experts of the project group to keep, and 3) those statements with a sum score of 5 or lower in the first round on which one of the members suggested in the second round to keep the statement and the others agreed.

In the third phase of the selection procedure, three members of the project group (IB, LK, RG) independently sorted all statements based on similarity of content. To reduce the number of statements, those categorized in the same group by all members of the group were combined by means of a more inclusive reformulation.

2.3.3. Step 3: sorting by content similarity

Participants completed the card sorting task either offline or online (due to the COVID-19 pandemic) using the program OptimalSort [15]. For each of the two card sorting tasks, we provided a set of cards: 55 cards with treatment goals and 55 cards with influencing factors. Participants grouped cards based on their similarity of content. The

Table 1
 Characteristics of clinicians who participated in the interviews and card sorting task.

	Interviews (N = 17)	Card sorting task (N = 38)
Sex, n (%)		
Male	6 (35%)	9 (24%)
Female	11 (65%)	29 (76%)
Mean age in years (min–max)	47.5 (32–65)	44.7 (24–66)
Profession, n (%)		
Clinical psychologist	10 (59%)	26 (68%)
Psychiatrist	2 (12%)	5 (13%)
Medical doctor	3 (18%)	5 (13%)
Physical therapist	1 (6%)	2 (5%)
Occupational therapist	1 (6%)	0 (0%)
Employed in a highly specialized institution, n (%) ^a		
Yes	6 (35%)	29 (76%)
No	10 (59%)	8 (21%)
Mean years of experience working with SSD patients (min–max)	13.1 (6–35)	11.6 (0–40) ^b

^a One missing in the interviews and in the card sorting task.

^b Five missings in the data.

following rules applied: 1) all statements had to be grouped, 2) each statement could be placed in only one group, 3) a minimum of four and a maximum of twelve groups had to be formed, and 4) each group could contain a minimum of two and a maximum of 25 statements. When rules had not been followed, for example, cards had not been sorted or had been sorted twice, then separate groups with single cards were made.

2.3.4. Step 4: hierarchical cluster analyses

Hierarchical cluster analyses, in SPSS statistical software version 25, were used to hierarchically classify the treatment goals and influencing factors that were individually sorted by the participants during step 3 according to similarity of meaning. In cluster analysis, the cells of the input matrix of cards comprised the number of times that two cards were

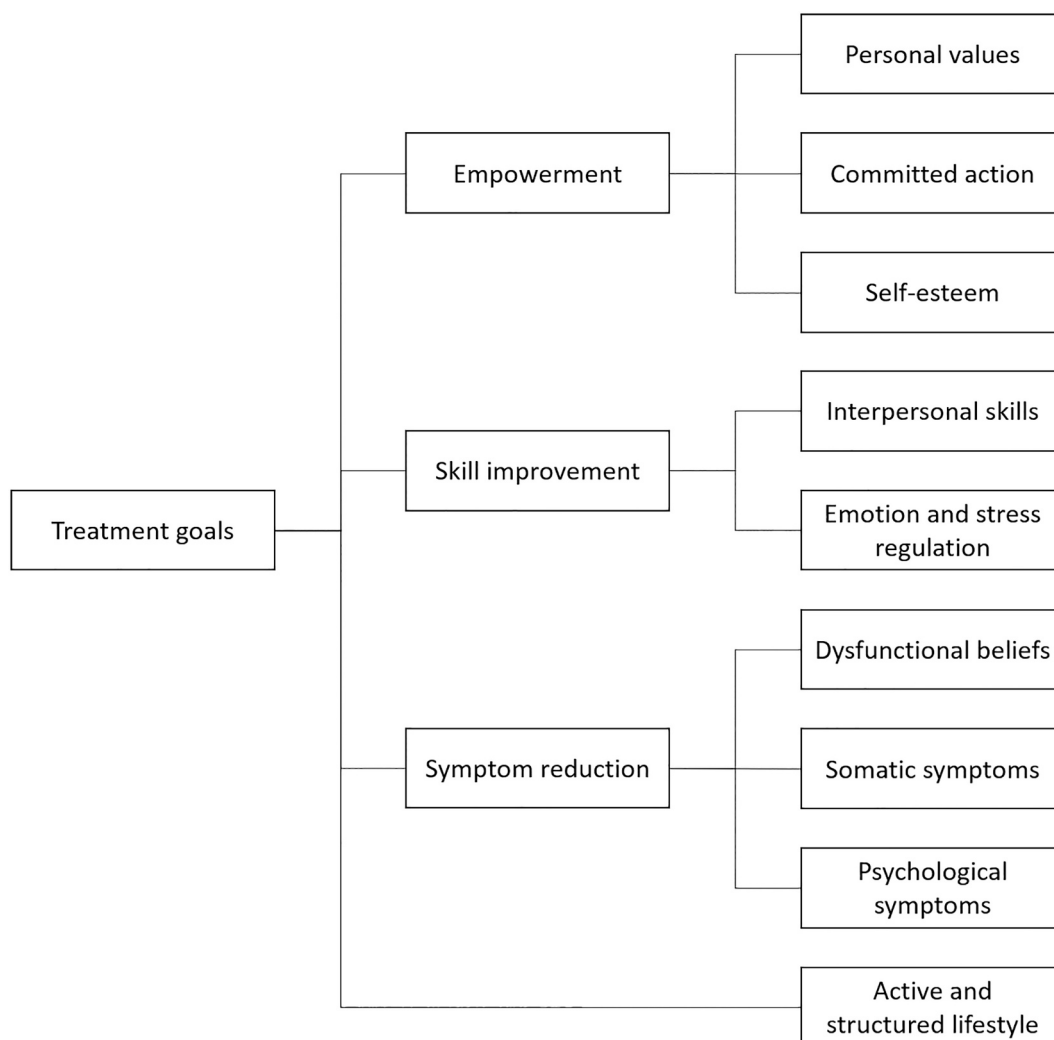


Fig. 1. Schematic representation of the hierarchical structure of treatment goals according to clinicians working with somatic symptom disorder.

Table 2
Overview of 55 treatment goals and the corresponding nine clusters.

<p>Cluster 1: Personal values</p> <ul style="list-style-type: none"> 6. to explore what is worth focusing on in life 9. to enhance the quality of life by setting and implementing goals that fit with values 46. to enable the patient to learn who they are and what makes them happy 19. to find new therapeutic perspective <p>Cluster 2: Committed action</p> <ul style="list-style-type: none"> 4. work reintegration 47. to build up social contacts 2. to develop tailored solutions for activities the patient likes to do 32. to have fun again and undertake enjoyable activities <p>Cluster 3: Self-esteem</p> <ul style="list-style-type: none"> 20. to gain more awareness of the things I can be satisfied with 26. to learn to be content 11. to have self-worth despite the handicap and somatic symptoms 30. to learn self-compassion 1. acceptance of the symptoms 12. to learn to set less high standards for myself 50. to lower the bar 52. to strengthen identity and sense of self 53. to promote autonomy <p>Cluster 4: Interpersonal skills</p> <ul style="list-style-type: none"> 39. to improve interpersonal skills such as communicating 44. to learn to ask for support 55. to improve coping skills 38. to learn to recognize and set boundaries <p>Cluster 5: Emotion and stress regulation</p> <ul style="list-style-type: none"> 51. to improve emotion regulation 54. to improve stress regulation 41. to learn to recognize, express, and verbalize feelings and emotions 43. to learn to recognize tension 3. to reduce tension through relaxation exercises 13. to learn to recognize early signals of syncope or a pain attack 31. to learn to recognize the interaction between emotions and somatic symptoms 21. to learn to trust your body 	<p>Cluster 6: Dysfunctional beliefs</p> <ul style="list-style-type: none"> 10. a change in illness cognitions (illness beliefs) 37. to reduce negative thoughts associated with the symptoms, for example, illness beliefs or trauma-related thoughts 22. to attend less to the symptoms 29. to attend less to health concerns 28. to stop with looking for a medical explanation for the symptoms 14. to learn to deal differently with somatic symptoms and limitations <p>Cluster 7: Somatic symptoms</p> <ul style="list-style-type: none"> 35. to decrease headache 36. to reduce conversive syncopes and relapses 25. to reduce (the impact of) chronic pain <p>Cluster 8: Psychological symptoms</p> <ul style="list-style-type: none"> 17. exposure in case of anxiety/fear 40. to put a stop to avoidance behavior 33. to improve mood 34. comorbid psychopathology (depression, anxiety, and posttraumatic symptoms) 23. to reduce excessive worrying 48. one or more goals focusing on state, for example, "I want more peace in my head" 18. to taper off addictive substances (analgesics, cannabis, benzodiazepines) <p>Cluster 9: Active and structured lifestyle</p> <ul style="list-style-type: none"> 16. to activate/expand activities 24. to lay less in bed or on the couch 8. to improve physical functioning 27. to enhance physical condition 49. to improve general health 15. a better daily schedule 42. to improve day and night rhythm 7. to learn to have more balance between activity and rest (activity pacing) 5. to create a hierarchy of priorities in daily activities 45. to sleep better <p>Note: Treatment goals started with the sentence "An individual goal in treatment is..."</p>
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not sorted in the same pile. Squared Euclidean distances were computed between each pair of cards and Ward's method was used to derive the hierarchical structure of the sorts. This resulted in dendrograms of treatment goals and factors influencing goal attainment and corresponding agglomeration schedules produced by the statistical software program showing which statements were being combined at each stage of the hierarchical clustering process. The number of clusters was decided by the project group. The main criterion was that clusters should reflect distinct treatment goals and influencing factors. First, members of the project group (KH, RG) decided on the initial cluster solution. Subsequently, six subgroup meetings with the project group took place as well as several email contacts afterwards in which the contents of both a lower and a higher number of clusters were compared, a final decision on the number of clusters was taken, and the labels of the clusters and overarching categories were decided based on the content included in the clusters.

3. Results

3.1. Participants

Table 1 presents the characteristics of the participants. Seventeen participants were interviewed. Of the 38 participants in the card sorting tasks, 21 participated in the offline card sorting task and 17 participants in the online card sorting task. One participant sorted treatment goals, but did not sort factors influencing goal attainment.

3.2. Concept mapping

3.2.1. Interviews and selection

Fifteen participants were interviewed by email, one participant face-to-face, and one participant by phone. The interviews took about 60 min to complete. The interviews provided a total of 136 treatment goals and 310 factors influencing goal attainment, which were reduced to 55 treatment goals and 55 factors influencing goal attainment after application of the selection criteria. Fig. S1 (supplementary material) shows a flowchart of the three phases of the selection procedure.

3.2.2. Treatment goals

A schematic representation of the dendrogram of the hierarchical cluster analysis of treatment goals is shown in Fig. 1 (Fig. S2 in the supplementary material shows the full dendrogram). The items included within each cluster are also shown in Table 2. The project group chose a nine-cluster solution with four overarching categories: empowerment (personal values, committed action, and self-esteem), skill improvement (interpersonal skills and emotion and stress regulation), symptom reduction (dysfunctional beliefs, somatic symptoms, and psychological symptoms), and active and structured lifestyle. In the decision of the number of clusters, also an eight- and a ten-cluster solution were considered. Decreasing the number of clusters from nine to eight clusters would combine the clusters of personal values and committed action, which represent related but separate processes in the hexaflex model of psychological flexibility [16]. Increasing the number of clusters from nine to ten clusters would split the cluster of self-esteem into two clusters. The project group decided to not split this cluster, because both new clusters would include items referring to self-esteem.

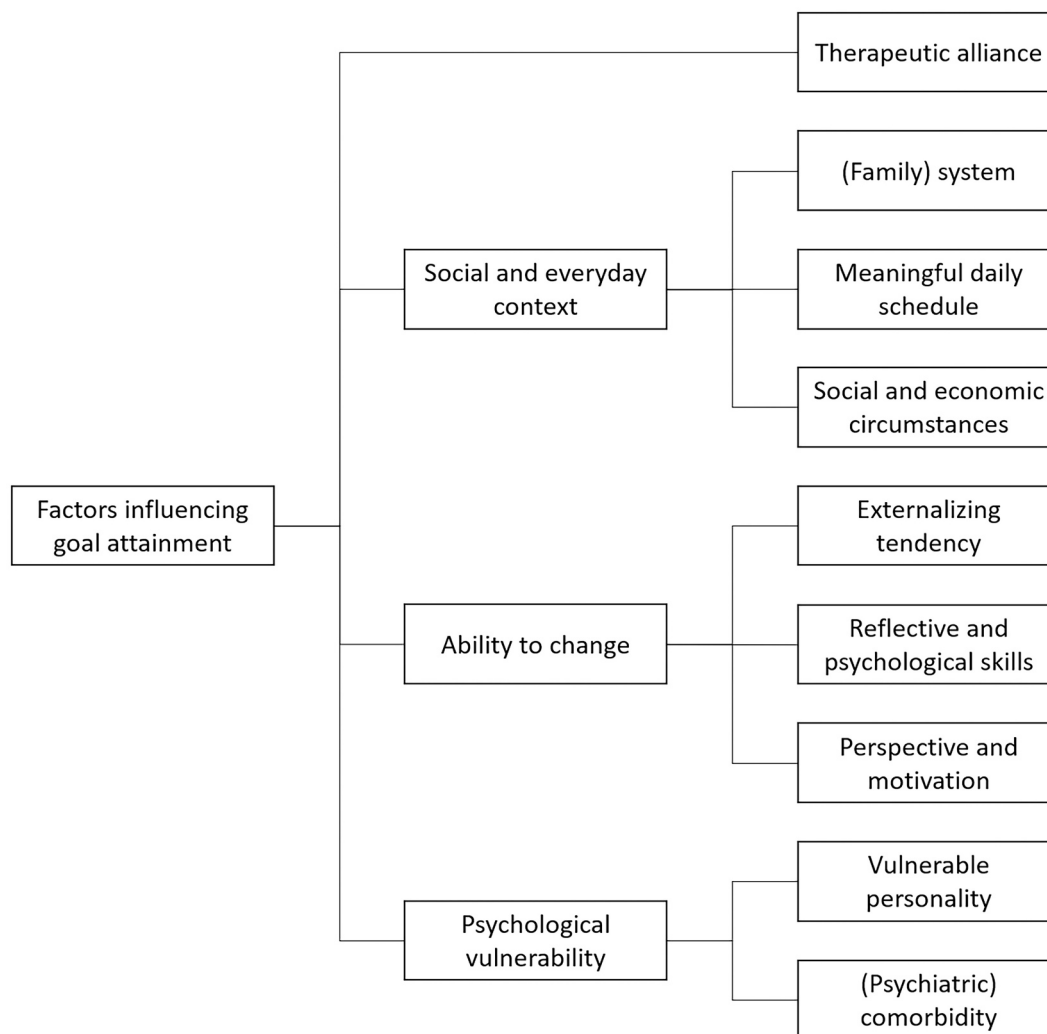


Fig. 2. Schematic representation of the hierarchical structure of factors influencing goal attainment according to clinicians working with somatic symptom disorder.

3.2.3. Factors influencing goal attainment

A schematic representation of the dendrogram of factors influencing goal attainment is shown in Fig. 2 (Fig. S3 in the supplementary material shows the full dendrogram). The items included within each cluster are also shown in Table 3. The project group chose a nine-cluster solution with four overarching categories: therapeutic alliance, social and everyday context ([family] system, meaningful daily schedule, and social and economic circumstances), ability to change (externalizing tendency, reflective and psychological skills, and perspective and motivation), and psychological vulnerability (vulnerable personality and [psychiatric] comorbidity). In the decision of the number of clusters, also an eight- and a ten-cluster solution were considered. Decreasing the number of clusters from nine to eight clusters would combine the clusters of reflective and psychological skills and perspective and motivation. Although both are related to ability of change, the first relates more to capabilities and the second to the prospects of the patient. Increasing the number of clusters from nine to ten would split the cluster of therapeutic alliance into two clusters with one cluster containing only two items. As both clusters came down to therapeutic alliance, the project group decided to not split this cluster.

4. Discussion

This concept mapping study provided comprehensive and structured overviews of treatment goals as well as factors influencing goal

attainment in patients with SSD from the perspective of clinicians. A total of four overarching categories of treatment goals (empowerment, skill improvement, symptom reduction, and active and structured lifestyle) and four overarching categories of factors influencing goal attainment (therapeutic alliance, social and everyday context, ability to change, and psychological vulnerability) were identified. Categories of both treatment goals and factors influencing goal attainment were further subdivided into nine clusters of treatment goals and nine clusters of factors influencing goal attainment, respectively.

The clinicians with different professions from different paradigmatic backgrounds yielded a wide variety of treatment goals that were related to different treatment approaches. While none of the treatment goals is exclusively specific to any paradigm, treatment goals related to personal values have been especially emphasized in acceptance and commitment therapy [16], treatment goals related to self-esteem in compassion-focused therapy [17], treatment goals related to emotion and stress regulation in emotion regulation therapy [18], treatment goals related to dysfunctional beliefs in cognitive therapies, and treatment goals related to a structured and active lifestyle in behavioral, rehabilitation, and physical therapy approaches. Overall, the overview included several treatment goals related to the positive psychology movement [19] and third-wave cognitive behavioral therapies [16]. Moreover, in line with a current definition of health [20], our study indicated that not only outcomes such as symptom severity, physical functioning, and mental well-being are considered treatment goals in patients with SSD, but also

Table 3
Overview of 55 factors influencing goal attainment and the corresponding nine clusters.

<p>Cluster 1: Therapeutic alliance</p> <ul style="list-style-type: none"> 3. feeling recognized and taken seriously by the clinician 4. a good working relationship between patient and clinician 13. trust between patient and clinician 41. a clinician who dares to be open to the hidden but real core concerns of the patient 15. the ease of establishing a good contact with the patient 25. overestimating the opportunities of the patient 16. agreement about goals between clinician and patient 30. a difference of views on perpetuating factors between patient and clinician 5. the inclusion of treatment goals that are suggested by the patient in the treatment plan 49. agreement on the rationale of therapy 31. setting feasible goals 50. hopeful techniques with which some improvement can be achieved quickly, such as Eye Movement Desensitization and Reprocessing (EMDR) or dosed daily schedule 52. doctors being on the same page so that there is clarity about the diagnosis <p>Cluster 2: (Family) system</p> <ul style="list-style-type: none"> 8. a supportive system 23. stability within the family system 1. problems in the family system, such as addiction problems or illness of a family member 44. relationship problems 9. social isolation <p>Cluster 3: Meaningful daily schedule</p> <ul style="list-style-type: none"> 2. the content and structure of the day 46. stable, meaningful activities <p>Cluster 4: Social and economic circumstances</p> <ul style="list-style-type: none"> 11. financial problems 27. work-related problems 12. ongoing legal proceedings about personal injury, damage, social allowance, or disability pension allowance 47. work reintegration 48. a loss experience or a major life event during the treatment 43. a language barrier <p>Cluster 5: Externalizing tendency</p> <ul style="list-style-type: none"> 6. the patient's continued hope that a solution is found from an external source or invented by another person 20. the patient's continued search for a somatic explanation or solution (surgery or medication) 26. not letting go of the past (when one was still healthy) 35. being in a victim role 	<p>Cluster 6: Reflective and psychological skills</p> <ul style="list-style-type: none"> 40. the introspective and reflective ability of a patient 42. the patient's ability to take a different perspective 18. the patient recognizing perpetuating factors 32. knowledge of and insight into the association between symptoms and (chronic) stress 45. being able and willing to perceive and share emotions and associated somatic sensations 51. being able to remember and integrate what has been said in a therapy session 7. acceptance of living life with symptoms 33. the coping style of a patient <p>Cluster 7: Perspective and motivation</p> <ul style="list-style-type: none"> 28. the patient seeing an opportunity for recovery 29. the patient having a future perspective 19. motivation 39. willingness to change 17. commitment of the patient to do home exercises <p>Cluster 8: Vulnerable personality</p> <ul style="list-style-type: none"> 22. attachment problems of the patient 55. having a vulnerable personality 21. having a negative self-image and punishing style of thinking about oneself 10. being unable to feel his or her boundaries 34. emotion regulation problems 24. being anxious, especially in contact with others <p>Cluster 9: (Psychiatric) comorbidity</p> <ul style="list-style-type: none"> 38. being dependent of substances (alcohol, drugs) 53. excessive use of medication (analgesics, sedatives, sleep medication) 36. comorbidity, such as depression, anxiety, attention deficit hyperactivity disorder, personality disorder, eating problems, posttraumatic stress disorder, autism, or dissociation 37. suicidality 14. a disrupted day-night rhythm 54. the severity and nature of the somatic symptoms
<p>Note: Factors influencing goal attainment started with the sentence "Attaining treatment goals is positively or negatively influenced by..."</p>	

improving the patient's ability to adapt to and self-manage future health challenges. Thus, our study summarized a great variety of possible treatment goals reflecting the varied orientations and skills of the clinicians, which could be set by clinicians in consultation with patients with SSD. Given that we expect individual patients with SSD also to have varied needs and goals and that these may be different from clinicians [21–23], setting treatment goals together with patients with SSD may be an intensive process.

Four overarching categories that summarized the factors influencing goal attainment according to the perspective of clinicians reflected two sets of interpersonal factors (therapeutic alliance and social and everyday context) and two sets of personal factors (ability to change and psychological vulnerability). Therapeutic alliance is a well-known core factor for favorable psychotherapy outcomes across patients with different psychopathologies [24,25]. A good therapeutic alliance depends on the clinician and patient. It might be hampered by low epistemic trust rooted in insecure attachment [26]. The other interpersonal factor included barriers and facilitators from the family system and broader social context including meaningful activities during the day. That this factor is included suggests that it should not be recommended to offer a focused psychotherapy, to at least a number of patients, without also attending to interpersonal and social factors that may obstruct the outcome of therapy.

Of the two overarching categories summarizing personal factors, the

category of psychological vulnerability reflected barriers that were summarized in the clusters of vulnerable personality and (psychiatric) comorbidity. This category emphasizes known features that have been linked to somatoform disorder or SSD, such as insecure attachment [27,28] and several psychiatric comorbidities [29]. For example, insecure attachment may be present in 74 to 88% of patients with somatoform disorder [27,28] and has generally been linked to poorer outcomes from a range of treatment interventions [30]. However, the clinicians also identified factors that may facilitate attaining treatment goals. The positive psychology movement including third-wave cognitive behavioral therapies has given a boost to the study of psychological flexibility, compassion, resilience, and other constructs that reflect skills and strengths of a person instead of weaknesses [16,19]. These were included in the category of ability to change. The facilitators itself may be core ingredients of psychotherapy. For instance, mindfulness- and mentalization-based interventions are directed at improvement of introspective and reflective abilities [31,32], and compassion-based approaches are directed at acceptance of self by learning to be non-judgmental, soothing, accepting, and kind towards oneself [17,33–35]. Furthermore, the items included in the cluster of perspective and motivation may be addressed by explicitly focusing on stages of readiness to change [36] or by using motivational interviewing [37].

Comparisons between our study and other studies investigating treatment goals are hampered by different aims of the study and by

different participants and analyses. Nevertheless, other studies suggest that many of the identified treatment goals in our study are common in other mental disorders as well; for instance, treatment goals such as those related to the reduction of or coping with symptoms [38–41], the interpersonal domain [38–42], and self-esteem [38–42]. This overlap may reflect shared underlying processes [43] or frequent comorbidity [29,44] in mental disorders. However, differences between treatment goals in SSD and other mental disorders may occur as well. For example, one study showed that treatment goals related to vegetative complaints and pain relief are more often chosen by patients with somatoform disorder than by patients with other mental disorders [45], while treatment goals related to somatic symptoms in depression may more clearly reflect somatic symptoms included in the diagnostic criteria of a depressive disorder, such as symptoms related to weight, sleep, or energy [1,39,41]. Both the specificity of treatment goals and the priority given to these treatment goals may be more pronounced on item-level than on cluster-level. Using a similar design, future research should clarify similarities and differences in taxonomies of treatment goals across mental disorders as well as differences in priorities given to specific treatment goals.

In clinical practice, the overviews of treatment goals and factors influencing goal attainment of this study can be used as screening lists during clinical intake. Moreover, questionnaires can be developed to support getting a quick overview of factors that are important for a specific patient during intake. Subsequently, in shared decision making, the perspectives of the clinician and patient could be combined to decide which specific treatment goals can be addressed during treatment and which factors influencing goal attainment should be monitored or targeted during the treatment. In addition, the overviews could be used to define for each patient outcome measures based on individual treatment goals that can be used to monitor and evaluate treatment progress. These treatment outcomes may be more relevant and show larger effects than the outcome domains that are commonly used in evaluation studies [3,4], and they could be used next to generic assessments according to the core set of outcome domains as suggested by an expert group [7].

A major strength of our study that used a combination of qualitative and quantitative methods, is that clinicians were involved in all four stages of this concept mapping study. This allowed a description beyond the subjective interpretation of researchers, because clinicians instead of researchers categorized the items in meaningful constructs. There were some limitations of the study. First, only the perspective of clinicians was examined in this study. In previous studies including the perspectives of patients and clinicians, there was agreement on the majority of items but there were also differences between the groups [22,46]. Our next study will therefore examine treatment goals and influencing factors from the perspective of patients. Second, all clinicians worked in institutions in the Netherlands, which may hamper generalizability to other countries and cultures. Third, the sample of the study was mostly represented by clinical psychologists. Therefore, the overviews may especially include treatment goals and factors influencing goal attainment that require a psychological approach. This suggests that the overviews may be especially useful for clinical psychologists and less for other professions, except when there is a direct collaboration with clinical psychologists, for example, in multidisciplinary centers.

To conclude, this study provided a structured and comprehensive overview of treatment goals and factors influencing goal attainment from the perspective of clinicians. In clinical practice, while taking account of needs, preferences, and expectations of patients, the clusters of treatment goals and influencing factors can be used during intake in shared decision making to define treatment goals customized to the person, and to monitor and evaluate change on a personalized set of outcome measures.

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Data availability statement

The data of the current study are available from the corresponding author on reasonable request.

Declaration of competing interest

The authors have no competing interests to report.

Appendix B. Supplementary data

Supplementary data to this article can be found online at [<https://doi.org/10.1016/j.jpsychores.2021.110712>].

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