Assumptions embedded in wh-questions: An interactional approach to the analysis of goal setting

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A B S T R A C T

Goal-setting is promoted in healthcare guidelines as a way to engage patients. However, not much is known about how this process is accomplished in practice. The objective was to identify how goal-setting is initiated in physiotherapy. The data comprise of 14 patient–therapist interactions in which physiotherapists inquire about goals using a wh-question (e.g. “what do you expect from therapy?”). Conversation analytic findings indicate that those questions embed assumptions a) that patients have a goal beforehand, and b) that they are able to articulate it. Patients’ hesitant responses, however, show that those assumptions are not always mutually oriented to.

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1. Introduction

Goal setting theories were developed in industrial North America in the 1950s and 1960s. The World Health Organisation’s (WHO, 2004) defines a goal as “a general or specific objective toward which to strive; an ultimate desired state toward which actions and resources are directed” (p. 27). When goal setting is described in the rehabilitation literature, it is referred to as a formal process where health professionals negotiate goals collaboratively with patients (Wade, 2009). It is suggested that setting a goal influences human behavior in a way such that it increases performance and motivation (Locke & Latham, 2002). This approach has now been adapted in contemporary rehabilitation practice (Scobie, Wyke, & Dixon, 2009) and is promoted in professional standards of practice (PhysioSwiss, 2006). Most often, those guidelines propose an approach to define quantifiable goals, known as SMART, an acronym for Specific Measurable Achievable Realistic and Time sensitive goals (Bovend’Eerdt, Botell, & Wade, 2009). Yet, this process has shown to have some limitations (Rosewilliam, Roskel, & Pandyan, 2011), and barriers to goal setting have been identified (Schoeb & Burge, 2012).

Evidence about effectiveness of goal setting has shown to be moderate (Levack, Dean, Siegert, & McPherson, 2011). A gap seems to exist between participants’ perception about and actual practice of goal setting (Sugavanam, Mead, Bulley, Donaghy, & van Wijck, 2013), but only a few studies have looked in detail at the goal setting process (Barnard, Cruice, & Playford, 2010; Parry, 2004). Those studies have argued that goal setting is not only about an exchange of information, but that there are social processes underlying this process. It is known from medical consultations that questions often convey additional dimensions, such as topical and action agenda, assumptions, information related to knowledge claims (epistemics) and preferences (Heritage, 2010). The aim of this study is to shed light onto how the goal setting process is initiated in practice in a German-speaking physical therapy outpatient setting. The focus will be specifically on the design of questions and on assumptions embedded in the goal inquiry, and concludes with some reasons why sometimes those discussions do not go so smoothly.

2. Methodology

Conversation analysis is an inductive, observational method that uses video- or audio-recordings as data. It is a rigorous approach in which the analysis tries to describe the orientations participants display themselves about an unfolding interaction (Clayman & Gill, 2004). Its strength is that conversation analysis focuses on sequences of communication rather than on individuals’ talk and can therefore take into consideration the co-constructed aspect of communication (Barnes, 2005). Conversation analysis has become the preeminent means of analyzing medical communication (Heritage & Maynard, 2006), as well as to provide empirical
Table 1
Overview of cases (N = 28).

<table>
<thead>
<tr>
<th>Wh-question</th>
<th>Yes-No-Interrogative</th>
</tr>
</thead>
<tbody>
<tr>
<td>B03</td>
<td>B17</td>
</tr>
<tr>
<td>B04</td>
<td>B12</td>
</tr>
<tr>
<td>B06</td>
<td>G01</td>
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<tr>
<td>B07</td>
<td>B14</td>
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<tr>
<td>B08</td>
<td>B15</td>
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<td>B09</td>
<td>B17</td>
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<tr>
<td>B10</td>
<td>G03</td>
</tr>
<tr>
<td>B11</td>
<td>G04</td>
</tr>
<tr>
<td>B16</td>
<td>G07</td>
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<tr>
<td>B18</td>
<td>G08</td>
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<tr>
<td>B19</td>
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<tr>
<td>B20</td>
<td></td>
</tr>
<tr>
<td>G02</td>
<td></td>
</tr>
<tr>
<td>G05</td>
<td></td>
</tr>
</tbody>
</table>

14 cases 1 cases 3 cases 10 cases

evidence of interactions in other professions, such as pharmacy (Plnick, 1998), physical therapy (Martin, 2004; Parry, 2009), genetic counseling (Plnick, 2002), psychology (Antaki, 2008), and nursing (Jones, 2009). The detailed analysis of interactions can identify both patterns of behavior as well as communication strategies (Drew, Chatwin, & Collins, 2001).

2.1. Sampling, data collection and data analysis

Ten physical therapists and 28 patients with musculoskeletal problems (e.g. low back pain, knee problems) referred to an outpatient department of a hospital or a private practice – all in German-speaking Switzerland – participated in the study. A theoretical sampling procedure was used as this is more appropriate for qualitative studies than a probability sampling method (Murphy, Dingwall, Greatbatch, Parker, & Watson, 1998). The conversation analytic approach used for this study assumes that every case is “worthy of an intense and detailed examination” (ten Have, 1999: p. 51). For each patient, the first three consultations were video-taped. Therapists were fitted with a wireless microphone to enjoy freedom of movement without compromising the quality of the sound. For the purpose of this paper, only the 14 cases were included in which physical therapists inquire explicitly about goals using a WH-question (see Table 1). Ethics committee approval was granted by the local commission and, consistent with the Declaration of Helsinki (WMA, 2008), all participants signed an informed consent form.

A detailed systematic analysis of each video-recorded consultation was performed using the methods of conversation analysis (Heritage, 2005; ten Have, 1999). The focus was on aspects of turn-design (how turns are organized and structured; e.g. the wording and intonation of questions and responses), sequence organization (e.g. how goal setting activity starts, continues and closes down), on vocabulary chosen (e.g. discourse particles, response tokens) and whether asymmetries were observable (Heritage, 2004, 2005). Sequences related to goal setting were selected, viewed and transcribed using Jefferson’s (2004) transcription conventions (see Appendix 1).

The presentation of the findings includes simplified transcripts of the actual spoken interaction. For the purpose of this article and in accordance with CA conventions, data is represented with transcripts using a three line translation (Nikander, 2008): the first line is transcribed in spoken Swiss German, the second an exact translation of those words in English and the third line in an idiomatic representation of English (Jenks, 2011). When translation for a word was difficult (e.g. modal particles), the second line includes the indication “MOD” or “PRd” while the third line keeps the original word in italics. The use of PRd in the second line is in line with examples from other German studies (Golato & Fagyal, 2008). Footnotes provide an approximate translation into English.

3. Findings

A physical therapist, like any other health professional, requires information in order to understand the patient’s problem and to be able to propose a treatment addressing that problem. The focus is on how physical therapists inquire about goals and how patients respond to those questions. Extracts will initially be presented on consultations that are interactionally ‘smooth’ to illustrate how participants maintain two assumptions underlying the goal inquiry question: a) that patients have a goal and b) that patients are able to articulate it. An interaction is considered ‘smooth’ when participants treat each other’s talk as unproblematic. Features of trouble in interaction are for example: delayed onset of responses (Goodwin & Heritage, 1990), prolonged silences (Peräkylä et al., 2007), the use of hesitation markers (Schegloff, 2007), or laughter (Hakaana, 2002).

3.1. Question format

WH-questions are questions using words such as ‘what’, ‘why’, ‘when’, who’, ‘where’ and ‘how’ (Stivers, 2010). Schegloff argues that questions should be understood as a “category of action” emphasizing a shift from “linguistic questions” to “interactional ones” (Schegloff, 1984, p. 34). One of the few existing studies in German on WH-questions categorized questions (interrogatives) into three actions:

1) doing information-seeking only;
2) ambiguity of doing information seeking while doing another activity such as challenging, inviting or requesting;
3) doing challenging only (Egbert & Vögé, 2008, p. 18).

In our data, WH-questions are used most commonly by physical therapists to elicit goals from patients (doing information-seeking). In 11/15 cases, physical therapists use a question of the type “And what is your goal?” (B08 PfT Rz2 R 9.56). Less commonly (3/15), they pose an abbreviated version of a similar question, e.g. “And your goal now or your expectation for physical therapy?” (B20 PTC Rz1 23.39). In one instance a Yes/No format was used: “Do you have a certain goal in mind?” (B17 PTh Rz1 34.40). Table 2 provides an overview of the question types of all cases.

The three question formats show common features across the examples:

- Physical therapists ask the question about one goal, not several goals
- Physical therapists inquire explicitly about the patient’s goal (your goal), sometimes with an emphasis on “your” or in some examples by naming the person, for example “Your goal? (.) Mr. X” (B09 PfT Rz1 R 20.06)
- Different lexical terms are used in these questions, such as “goals”, “expectations” and “achievement”, sometimes used in combination or as clarification when the first question was not answered

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Table 2
Explicit goal inquiry.

<table>
<thead>
<tr>
<th>Code</th>
<th>Question and location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wh-question in the beginning of the first consultation (first 7 minutes)</strong></td>
<td></td>
</tr>
<tr>
<td>B04 PTd</td>
<td>Eehm yes and what is your goal?</td>
</tr>
<tr>
<td>Rx1_6.56</td>
<td>Eehm ja und was isch dis Ziel?</td>
</tr>
<tr>
<td>B19 PTb</td>
<td>What would be the goal then now for () this treatment phase again?</td>
</tr>
<tr>
<td>Rx1_5.55</td>
<td>Was wür s'Ziel denn jetzt vu () dere Therapiephase no einisch?</td>
</tr>
<tr>
<td>G02 PTn</td>
<td>And what is the goal.</td>
</tr>
<tr>
<td>Rx1_6.48</td>
<td>Und was ist das Ziel.</td>
</tr>
<tr>
<td>B11 PTd</td>
<td>What is your goal?</td>
</tr>
<tr>
<td>Rx1_4.53</td>
<td>Was isch eues Ziel?</td>
</tr>
<tr>
<td><strong>Wh-question at the end of the information-gathering phase</strong></td>
<td></td>
</tr>
<tr>
<td>B18 PTb</td>
<td>What would you like to achieve? () or what are the expectations for physiotherapy for you?</td>
</tr>
<tr>
<td>Rx1_19.50</td>
<td>Was würd gern erreiche? () oder was wür sachli d’Erwarlig ad Physiotherapie fur euch?</td>
</tr>
<tr>
<td>B07 PTa</td>
<td>Your goal? what would you here like to () achieve</td>
</tr>
<tr>
<td>Rx1_14.33</td>
<td>Üches Ziel? was mischted Ihr do () erreiche</td>
</tr>
<tr>
<td>B06 PTf</td>
<td>And what kind of goal? (0.8) What would you like to achieve with therapy</td>
</tr>
<tr>
<td>Rx1_16.06</td>
<td>Und was für des Ziel? (0.8) Was möchteder erreiche mit de Therapie</td>
</tr>
<tr>
<td>B16 PTe</td>
<td>.hh What is your goal here for the therapy</td>
</tr>
<tr>
<td>Rx1_16.10</td>
<td>.hh Was isch üches Ziel do vu de Therapie</td>
</tr>
<tr>
<td>G05 PTk</td>
<td>What do you () expect () from physiotherapy? “what do you expect from me”</td>
</tr>
<tr>
<td>Rx1_13.16</td>
<td>Was- was erwarte () sie () vu de Physiotherapie? “was erwarte sie vu mir”?</td>
</tr>
<tr>
<td><strong>Wh-question in the beginning of the second consultation</strong></td>
<td></td>
</tr>
<tr>
<td>B19 PTg</td>
<td>What do you expect from the therapy at the moment, what is your goal, what would you like to achieve.</td>
</tr>
<tr>
<td>Rx2_4.29</td>
<td>Was erwarten sie von der Therapie this time, was ist ihr Ziel, was möchten Sie erreichen.</td>
</tr>
<tr>
<td>B08 PTd</td>
<td>.hh And what is your goal? () what would you like to be able to do again if this</td>
</tr>
<tr>
<td>Rx2_10.04</td>
<td>.hh Und was isch eues Ziel? () was möchteder wieder mache nachher wenn das.</td>
</tr>
<tr>
<td><strong>Abbreviated wh-question – at the end of the information-gathering phase</strong></td>
<td></td>
</tr>
<tr>
<td>B09 PTe</td>
<td>Your goal? () Mister X? (0.3) here in therapy.</td>
</tr>
<tr>
<td>Rx1_20.22</td>
<td>Üches Ziel? () Herr X? (0.3) do ide Therapie.</td>
</tr>
<tr>
<td>B03 PTc</td>
<td>So your goal or your expectation for physiotherapy [...] (1.6) your goal or your expectation</td>
</tr>
<tr>
<td>Rx1_22.34</td>
<td>Aso eues Ziel oder eui Erwarlig ad Physiotherapie [...] (1.6) eues Ziel oder eui Erwarlig</td>
</tr>
<tr>
<td>B20 PTc</td>
<td>And () your: goeal! ↑ now or your expectation for physiotherapy?</td>
</tr>
<tr>
<td>Rx1_23.39</td>
<td>And () Eues: Zlie! ↑ jetzt oder Eui Erwarlig ad Physiotherapie?</td>
</tr>
<tr>
<td><strong>YNI – during intervention phase</strong></td>
<td></td>
</tr>
<tr>
<td>B17 PTb</td>
<td>Do you have a certain ↑ goal? () in ↑ mind?</td>
</tr>
<tr>
<td>Rx1_34.04</td>
<td>Heiter es bestimmts ↑ Ziel? () vor ↑ Auge?</td>
</tr>
</tbody>
</table>

*Legend: wh-question = a question formed with an interrogative word (what, when, where, etc.); YNI = Yes/No-Interrogative: question that expects a Yes or a No as an answer.*

wh-question = a question formed with an interrogative word (what, when, where, etc.); YNI = Yes/No-Interrogative: question that expects a Yes or a No as an answer.
immediately, for instance: “And what kind of goal? (0.8) what would you like to achieve with therapy” (B06 PTf Rx1, 17.43).

3.2. Assumptions

Apart from those common features, there are two assumptions embedded in the question: (1) that the patient has one goal in mind that is acceptable for physical therapy, and (2) that he/she is able to articulate it. The next section now looks at those assumptions and how they play out in the interaction.

3.2.1. Assumption 1: Patients have a goal

The patient in Extract 1.1 consults the physical therapist for a whiplash injury that occurred two months earlier. It is important to know that the patient has undergone physical therapy treatment with another therapist, but was referred to the outpatient department so that her treatment would not be interrupted while her treating therapist was on holiday. The patient is currently on medical leave (she works in a factory) but continues to do housework, although with difficulty. The sequence takes place in the beginning of the second consultation. The prior discussion was about the activities that are difficult for the patient to do. Some non-vocal aspects that I argue are particularly salient to the activity of goal setting are included in the transcript.

Extract 1.1: B10 PTf Rx2: 4.22

8 Physio Die nächste Frage ist ↑ die (...) was erwarten sie von der Therapie im Moment. The next question is ↑ this (...) what expect you from the therapy at the moment.

9 was ist ihr Ziel was möchten Sie erreichen. what is your goal what would like you to achieve.

10 was ist ihr Ziel was möchten Sie erreichen. what is your goal what would like you to achieve.

11 Patient Dass mini Bewegüe wieder cha mache That I my movements again can make

12 That I can move again (2.0)

13 Physio Ihre Bewegungen das heisst? Your movements that means?

14 Which means that you can move again? (0.2)

15 Patient Auso dass mer ned immer wieder schwindlig wird PRF that me not always again dizzy get

16 Auso↑ that I don’t get dizzy all the time (0.7)

17 Physio ↑Mhm

18 (1.4)

19 Patient >Dass i nümm so igischränkt b< >That I not any more so restricted am<

20 That I am not so restricted anymore (2.9)

21 Physio Also weniger Schwindel. So less dizziness. So less dizzy.

22 Patient Ja Yes

23 (0.7)

24 Physio Wenn Sie weniger Schwindel (...) möchten Sie dann machen. If you less dizziness (...) would you then do.

25 If you were less dizzy (...) what would you do then. (1.3) ((Physio continues to look at the patient until patient starts to speak))

26 Patient De würdi (...) d’Sache wieder schneller mache Then would (...) the things again faster make

27 Then I would do things faster again (1.0)

28 Patient D’Arbeit schneller mache The work faster make

29 Do the work faster (0.8)

30 Physio Zum Beispiel Betten (...) schneller machen oder was] For example beds (...) faster make or what]

31 Patient [ja oder] [Ja oder] [yes or] yeah (Yes or) yeah (0.4)

32 Patient D’Chuchiarbeitet- The kitchen work-

33 Patient The kitchen work-

Approximate translation: “well”.


dd
The physical therapist uses three words (expectation, goal, and achievement) for the goal inquiry: “What do you expect from therapy at the moment? What is your goal? What would you like to achieve.” (lines 8–9). In addition to verbal aspects (wh-question, pitch), the physical therapist uses gaze to coordinate his talk. Even though the physical therapist looks at his chart for long stretches, at certain moments his shift of gaze to the patient is associated with the patient’s response and coordinated with small pauses (line 39).

The patient then provides an answer (“That I can move again” – line 11), which is used as the starting point for determining a goal. The physical therapist begins this process by repeating the patient’s terms “Which means that you can move again?” (line 13). The patient provides additional information (line 15 – “Well that I don’t get dizzy all the time”) and, after a short pause, adds “that I am not so restricted anymore” (line 19). However, the physical therapist does not take up the latter point, but comes back to the patient’s reported dizziness by repeating the same words prefaced by a “so” (line 21 – “so less dizzy”). Bolden (2006) describes “so” as an interactional resource used to demonstrate engagement with and interest in the affair of the interlocutor. This discourse marker can also be used to launch a new action, which is what the physical therapist does with the next question: “If you were less dizzy (...) what would you do then?” (line 24). This question links to one of the initial questions (line 9 – “what would you like to achieve”). Through questioning (and repeating) the physical therapist and the patient collaboratively construct a goal.

The further talk (lines 26–35) has the task of defining more specific activities relevant for physical therapy. Initially, the patient’s response to this question is relatively broad (line 26 – “Then I would do things faster again”), but later adds some more details (line 28 – “to do the work faster”). The physical therapist proposes housework activity (line 30 – “For example to make the beds faster”). Once the activity is agreed upon (line 31) and expanded by the patient (line 33 – “The kitchen work”), the physical therapist inquires about the speed when doing this work (line 35 – “At the moment you are slow”). This statement is based on the patient’s previous description of being slow (line 26 and 28) to which the patient aligns with the physical therapist. The physical therapist uses a “so”-prefaced formulation (“so to do your housework (...) faster” – line 39) and closes down this turn. The patient ratifies this suggestion (“Yes” – line 40), and the therapist moves on to the next topic.

The assumption of the wh-question is that patients have a ‘a-priori’ physical therapy goal, and that both physical therapist and patient collaboratively construct it in a way that is acceptable for physical therapy. In this smooth interaction, the physical therapist and the patient both seem to orient to the same assumption – that the patient has a single goal in mind. The analysis shows how a patient responds to the goal inquiry and how a therapist then does work on those responses until a goal can be ratified by both patient and therapist.

The next example – Extract 1.2 – demonstrates that the alternative question format (abbreviated wh-question) conveys the same assumptions about goals. Even though an abbreviated question does not include a wh-word, it is conversationally and interactionally treated as a wh-question (Schegloff & Lerner, 2009).

The patient is referred to physical therapy after shoulder surgery. He was discharged from the hospital a few days before. The extract starts directly with the abbreviated wh-question.

The goal inquiry starts in line 11 (“your goal?”), to which the physical therapist adds “Mister X” (line 11). The patient’s response “to become completely pain free” (line 14) is ratified by the therapist’s modified repeat (“to become pain free” – eliding “completely”) indicating that she has heard and understood the patient’s response (repeat as a linguistic device – Hutchby, 2005) and by documenting that response in the chart (line 15). The reviewed case shows that abbreviated questions in this context have the same function as wh-questions. In both goal inquiry episodes reviewed here, the assumption that patients have a goal in mind is oriented to by both participants. While Extracts 1.1 and 1.2 show examples initiated by physical therapists’ inquiries and subsequent questions about specific goals, the next example shows how the patient volunteers information without being prompted, thereby including a second assumption embedded in the goal inquiry: that patients are able to articulate a goal.

3.2.2. Assumption 2: Patients are able to articulate goals

In order to be able to formulate goals, either the patient must have knowledge about the nature of physical therapy and have specific expectations with regard to physical therapy or have had previous experience with physical therapy treatment.

Extract 1.3 shows an interaction in which the question is asked in the beginning of the first consultation, and the patient provides information about goals immediately without being prompted. The patient seeks physical therapy for a knee problem: she gets
knee pain after one hour of running and has difficulty kneeling down.

In this example the therapist initiates the goal activity using – and as preface (line 13). In medical interactions – and – prefaced questions indicate a routine or agenda-based character of the inquiry (Heritage & Sorjonen, 1994). The physical therapist uses a response token with rising intonation (“↑Mhm”) – line 16, Gardner, 1997, 2001), and the patient continues her talk without delay. In line 19, the patient adds additional information with regards to the goal, before the physical therapist closes down the sequence with a falling “Mhm.” (Gardner, 2001).

While the patient in this extract is able to formulate an ‘acceptable’ goal without delay, the next example illustrates that goal discussions require a certain “expertise” in physical therapy. Extract 1.4 shows a patient who has previously been treated by the same physical therapist for his hip problem (arthritis). The patient’s previous experience is taken into consideration by the physical therapist when he inquires about the goal. As the patient is considered too young for hip replacement surgery, the physician prescribed nine physical therapy sessions to reduce the pain and improve muscle strength.

4 Approximate translation: “just”.

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**Extract 1.4: B19 P7b Rx1. 5.56**

1 Physio Was wär s Ziel de letzte wundere (↑Therapie[phase no enisch])

What would be the goal then now of this (↑Therapie[phase once again])

What would be the goal for now for this (↑Therapie[phase this time])

2 Patient [He ja ↑stabilisier (↑)]

[He PRT to ↑stabilise (↑)]

He ja↑ to stabilise

3 m[gh gi]-meh liet jo nümme dinne

m[gre is-] mgre lies well not any more in ↓It

m[ore there is-] there is not much more possible

4 Physio [Ja]

[↑Mhm]m

[Yes]

5 (2.9)

6 Patient Aso idgnek meh liet nümme dinne

PRT I think more lies not any more in ↓It

Aso↑ I think there is not much more possible

7 (0.4)

8 Physio Ja

Yes

The vocabulary chosen (“for now”, “for this therapy”, “this time” – line 1) makes reference to the current reason for consultation. The therapist formulates the question in a hypothetical form (“What would be the goal”). Responding to the therapist’s question, the patient utters a goal (“to stabilize” – line 2) that he would be happy to achieve as an outcome for therapy, treating the question as unproblematic. Yet, the evidential marker “I think” (line 6) indexes uncertainty with regard to the patient’s knowledge claim about goals.

The reviewed extracts demonstrate that therapists not only embed the assumption that patients have a goal into their questions, but also that patients are able to articulate this goal. It will become evident in the next examples that this capacity to formulate a goal cannot be expected from all patients. Section 3.2.3 some cases are presented in which the goal inquiry seems to be interactionally challenging.

3.2.3. When assumptions are not shared or mutually oriented to

Whereas in examples shown previously patients and physical therapists achieve interactionally unproblematic goal discussions, sometimes those assumptions embedded in physical therapists’ goal inquiry are not shared and interactional difficulties become evident.

5 Approximate translation: “well”.

6 Approximate translation: “well” or “so”.
In the following Extract 1.5, the assumption that the patient has ‘an idea’ about what goal to achieve is challenged by the patient. The patient seeks physical therapy services for his low back pain due to a work injury. He has been on medical leave for the previous two weeks from his work as a mechanic.

Extract 1.5: B16 PT eRk1 16.35

8 Physio Okay (.). Jh Was ich eines Ziel davon de Therapie
Okay (.). Jh What is your goal here for therapy

9 1.7
10 Patient “Kei Ahnjg he[hehe]”
“No idea he[hehe]”

11 Physio [hehehe] Waium siet ihr dg was soll andersch werde [dhh]
[hehehe] Why are you here what should different become [dhh]
hehehe Why are you here what should be different

12 Patient “[Wir]eder (lauf) denki”
“[Ag]ain (walking) think I”
To walk again I think

13 (0.2)
14 Physio \Mhm
15 (3.5) (/Physical therapist writes in chart/)
16 Physio Heiter e Vorstellig vu de Schenmm her.
Have you an imagination/aspiration of the poin from.
Do you have an idea with regard to your pain.

17 (1.0) (/Physical therapist shifts gaze to patient/)
18 Patient “Aso wie meint der Vorstellig”
“PRT what mean you imagination”
Also what do you mean by an idea

19 Physio Aso saged(eh-ehm (.)) o lott schmerzfrei si und-
So say you- ehm (. yes I want painfree to be and-
So you say- ehm yes I would like to be painfree and-

20 Patient [Dass sie wgg gb]
[That they away go]
That it goes away

21 (1.5)
22 Physio So chöve schafte oder heitermach- was hat der do für Vorstellige
So be able to work or have you- what have you here for imagination
To be able to work or do you have- what do you expect

In this example the physical therapist initiates the goal inquiry by a similar wh-question presented earlier (“What is your goal here for therapy” – line 8). The patient does not respond immediately to the therapist’s question (line 9). There is a delay of 1.7 s followed by a soft “No idea” which is accompanied by laughter. By responding in such a way, the patient denies having the knowledge required to provide an answer. This ‘non-access’ response (Raymond, 2003) creates interactional difficulties, and so this Extract exemplifies the potential non-straightforwardness of the response to a question about goals (Schegloff & Lerner, 2009). In this example, shared laughter (lines 10–11) is used as a resource to deal with this interactionally delicate situation. Laughter can be an indicator of having a shared understanding when solving interactional difficulties (Hakaan, 2002). The physical therapist then rephrases the question, adding clarification by asking “Why are you here what should be different” (line 11). The patient’s response is mitigated (“I think” – line 12) and spoken softly which attenuates his statement (Schegloff, 2007).

The response token from the physical therapist (line 14) gives the floor immediately back to the patient (Gardner, 2001), but the patient does not add more information. After a prolonged pause (line 15) in which the physical therapist writes in her chart, she inquires more about the patient’s ideas (line 16). The gaze shift from the physical therapist is coordinated with the patient retaking the floor. Instead of answering, the patient counters the question with another question (line 18 – “Well what do you mean by idea”). The function of a counter is to defer the answer (Schegloff, 2007). Doing that, the patient reverses the direction of the question’s constraint. As soon as the therapist answers (line 19), the patient provides a response in overlap with the physical therapist (“That it goes away” – line 20), making reference to his low back pain. As the patient does not provide more information, the physical therapist proposes a functional goal rather than a symptomatic one (“to be able to work or do you have – what do you expect” – line 22).

This interaction illustrates that when the physical therapist starts out the goal inquiry with the assumptions that patients should articulate a goal independently, the interaction can become troublesome for the patient if he or she is not able to respond. By asking such questions at the outset, physical therapists potentially create discomfort for patients who are not able to respond without any “outside” help. Evidence of specific interactional difficulties may occur: laughter, delays and lengthy interactions with justifications from the patient (data not shown here).

The next example offers some insights into a goal discussion that is treated by the patient as problematic. In the previous extract the physical therapist was required to rephrase her goal inquiry from “what is your goal?” to “why are you here?” in order to elicit a response. In the next example, however, the physical therapist maintains the constraint of the question when she does not reformulate the question, but only minimally acknowledges the patient’s question.

In Extract 1.6, the patient seeks physical therapy services for her acute low back pain problem. This episode takes place very much in the beginning of the first consultation. The physical therapist initiated her goal inquiry after having discussed the patient’s leisure activities (data not shown) and the patients’ appointment schedule with the physician (beginning of the extract). Immediately after this, she poses the question about the patient’s goal.

7 Approximate translation: “well”.
In the beginning of the extract, the physical therapist inquires about the patient’s appointment with her general practitioner. The patient responds with no delay to those questions about leisure activities (data not shown) or doctor’s appointments (line 62, in overlap with the therapist’s question). However, without an indication of closing the prior topic, the physical therapist then continues to inquire about the patient’s goal (line 71 – “What is your goal?”). The patient’s response is not immediately forthcoming (pause of 1.3 s – line 72). The patient then returns a question with an “insert expansion” (line 73 – “my goal?”). Insert expansions are described as interactional devices that compromise the progressivity of a sequence (Schegloff, 2007; p. 100). The physical therapist pursues the patient’s response by using the response token “mhm” with a rising intonation (line 74), thereby indicating that she expects more to come (Gardner, 1997). The physical therapist in this extract maintains both assumptions that the patient has a goal (first assumption) and is able to articulate it (second assumption). Even though the patient finally produces a response, she does so at first in a less than straightforward way (line 72 – pause of 1.3 s).

In summary, goal inquiries initiated by a wh-question or an abbreviated wh-question are frequently combined with a rising pitch and increasing volume at the end of the utterance and are coordinated with gaze in order to mobilize a response. The wh-questions convey the assumptions that patients do arrive at a goal that is acceptable for physical therapy (assumption 1) and that they are able to articulate it (assumption 2). However, when patients do not provide straightforward answers, physical therapists sometimes are able to use the patients’ responses and collaboratively construct them into physical therapy-acceptable goals. Interactional resources deployed by physical therapists to achieve this action are repeats and “so”-prefaced formulations. Yet, difficulties arise when participants do not share the assumptions built into the wh-question. The interactional devices used by patients to orient to physical therapists’ assumptions are either a counter (Extract 1.5) or an insert expansion (Extract 1.6).

4. Discussion

This paper investigates the way physical therapists inquire about goals in physical therapy. The findings shed light on how therapists treat goals as ideas existing in patients’ head prior to coming to physical therapy. Physical therapists build assumptions into their question that (1) patients have a goal that is acceptable for physical therapy, and (2) that they are able to articulate those goals. By analyzing interactions between patients and health professionals, assumptions were made explicit that challenge some of the guidelines of professional behavior advocated in the rehabilitation literature and policy papers. This study was also able to show that when patients are required to answer questions with regard to a goal, problems arise when they orient to having less knowledge and are less sure about what an acceptable response is. Furthermore, it is the first German-language interactional study on goal setting.

Wh-questions are commonly chosen by physical therapists to inquire about goals. Several features of turn design can help mobilize a response: grammar (interrogative morphosyntax, i.e. the way words are put together in phrases or sentences), interrogative intonation (prosody), recipient epistemic expertise on the topic relative to the speaker, and gaze (Stivers & Rossano, 2010). Several of the described elements to mobilize a response are recurrent in my data: wh-question, epistemic stance and gaze.

The epistemic gradient is described as an important dimension of questions (Heritage & Clayman, 2010). When physical therapists in this study ask a wh-question, they tend to start off with a level of not much knowledge (Heritage & Clayman, 2010). The question “what is your goal?” implies that the questioner (the physical therapist) does not claim any knowledge about goals. Depending on the patient’s response, therapists reduce the epistemic gradient by proposing a goal (e.g. Extract 1.1, line 30 – “for example to make the beds faster or what”) and thereby make the choice more restricted for the patient. This shift from a less knowledgeable to a more knowledgeable position (Heritage, 2010) can only be achieved if the physical therapist has gained some knowledge throughout the inquiry. As in Extract 1.1 where the goal inquiry takes place in the beginning of the second consultation, the therapist can draw on
knowledge previously discussed with the patient. In goal inquiries that take place in the beginning of the first consultation and where the therapist and patient have exchanged less information, the epistemic gradient is not reduced (Extract 1.6). Asking about the goal in the beginning of the first consultation, then, offers fewer possibilities to adjust to the epistemic gradient.

Apart from the epistemic dimension, assumptions embedded in the questions (Heritage & Clayman, 2010) are a key finding from this study. Smooth interactions are built collaboratively, and physical therapists and patients share and maintain those two assumptions that are conveyed by the question. Goal discussions can be inter-actionally more difficult when physical therapists start out with their goal inquiry with embedded assumptions and patients do not respond in a straightforward manner. Several interactional features in this paper have illustrated difficulties with the turn: Laughter (Extract 1.5), delays (Extract 1.6), or claims of no knowledge (“no idea” – Extract 1.5).

The argument of this paper is that goal setting should be understood as an interactive achievement, rather than as an individual process initiated by the patient’s expectations. However, when therapists’ embed assumptions into their questions, patients might not be able to respond to the goal inquiry. The interactional difficulties made explicit in this paper might explain some of the shortcomings of the goal setting approach discussed in the literature (Levack et al., 2011; Rosewilliam et al., 2011; Schoe & Burge, 2012; Sugavanam et al., 2013). It might be the right time for goal setting to be shifted from ‘rhetoric’ to a new conceptualisation (Levack et al., 2011). Looking at actual practice, as this study has done, might help readjust some of current professional theories.

4.1. Limitations of the study

There are a few limitations to this study related to sampling and data collection. It can be argued that with a limited sample size, the findings cannot be generalized. However, this study relied on the concept of theoretical sampling rather than a probability sampling method, and the “basis for generalization in qualitative research is therefore not representativeness, but rather that the case is, in some way, held to either exhibit or test some theoretical principle” (Murphy et al., 1998; p. 95).

The video-recordings were done in two settings only; therefore, no representation of practices can be claimed. In addition, all participants were volunteers which makes the selection more arbitrary. However, Peräkylä and Vehviläinen (2003) argue that it is preferable to get insights into actual practice (rather than just talk about it by interviewing participants) as a detailed analysis might help reflect on professional theories and their underlying assumptions. Knowing that therapists’ goal inquiry embeds the discussed assumptions, this evidence could be taken into consideration when designing guidelines for best practice for physical therapy. The capacity to formulate goals cannot be expected from all patients, and wh-questions might not be the appropriate question design to elicit patients’ views about goals.

In accordance with Murphy et al.’s (1998) suggestion above, results of this study makes a contribution to the theoretical principle of German linguistic research. Today, only a few studies are published investigating the German language from an interaction perspective (Deppermann, 2011; Frey, 2010; Golato & Fagyal, 2008; Werlen, 1985). Even though this study looks only at 14 episodes, it still contributes to the growing evidence-base of interactional research in German.

Future research should include a wider data set as well as detailed investigation into patient-initiated goal setting (see Table 2). Additionally, the research agenda on German modal particles should be pursued in order to get a better understanding of participants’ actions during turns-at-talk.

5. Conclusion

Physical therapists discuss goals and expectations with patients in various ways. In approximately half of the cases (15/28) physical therapists do this by posing explicit questions about goals. Most commonly physical therapists use either a wh-question of the following types: What is your goal? What do you expect from physical therapy? What would you like to achieve?, or an abbreviated version of the wh-question. The findings of this paper provide insight into goal setting as they explicate some of the interactional features of question designs and their dimensions, as well as the underlying assumptions embedded in therapists’ goal inquiry: a) that patients have a goal in their heads before coming to physical therapy, and b) that they are able to articulate it. The study also provides insight into the consequences when those assumptions are not mutually oriented to by patients and professionals.

Appendix A. Transcription Convention (Jefferson, 2004)

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>]</td>
<td>Indicates the point where overlap begins and ends</td>
</tr>
<tr>
<td>(0.1)</td>
<td>Indicates elapsed time in silence in tenths of a second either within or between utterances</td>
</tr>
<tr>
<td>()</td>
<td>Indicates a gap of less than 0.1 s</td>
</tr>
<tr>
<td>†</td>
<td>Indicates marked shifts into higher or lower pitch in the utterance immediately following the arrow</td>
</tr>
<tr>
<td>-</td>
<td>Horizontal dash indicates that the word sounds abruptly “cut off”</td>
</tr>
<tr>
<td>-</td>
<td>Indicates quieter passage of talk compared to the surrounding talk</td>
</tr>
<tr>
<td>Word</td>
<td>Indicates some form of stress, via pitch and/or amplitude</td>
</tr>
<tr>
<td>:</td>
<td>Indicates an extension of the syllable it follows</td>
</tr>
<tr>
<td>=</td>
<td>Indicates that there is no interval between two utterances</td>
</tr>
<tr>
<td>+</td>
<td>Indicates a continuing indication, as when someone is reading items from a list</td>
</tr>
<tr>
<td>-</td>
<td>Indicates a stopping fall in tone</td>
</tr>
<tr>
<td>?</td>
<td>Indicates a rising intonation</td>
</tr>
<tr>
<td>WORD</td>
<td>Indicates especially loud sounds relative to the surrounding talk</td>
</tr>
<tr>
<td>hhh</td>
<td>Indicates an inbreath, without a dot an outbreak</td>
</tr>
<tr>
<td>w/</td>
<td>Indicates breathiness, as in laughter, crying, etc.</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>Indicates slowing down</td>
</tr>
<tr>
<td>&lt; &gt;</td>
<td>Indicates speeding-up</td>
</tr>
<tr>
<td>( ) (word)</td>
<td>Indicates that the transcriptionist is not able to hear the utterance</td>
</tr>
<tr>
<td>( )</td>
<td>Indicates a description of a phenomenon (e.g. laughter, noise, . . .)</td>
</tr>
</tbody>
</table>

References


