
Original Article

A New Intervention Skills and Measurement Method for Clinical Social Work Practice

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Abstract We present an intervention skills and measurement method for assessing transformation dynamics in clinical social work practice. This social constructionist framework, influenced by Wittgenstein's language game theory, overcomes the conflict between traditional qualitative and quantitative research methods. Our theoretical framework is constructed through the following procedure. Problems are defined as a complaint behavior of complaint-obeying rules of utterance and meaning constructions composed in a language game process by clients. Clearly defined techniques to transform language game rules are then systematized, encouraging the client to find a self-solving activity. Thereafter, we present new methods for measuring these transformation processes. The dynamics of the transformation process, generated by new intervention techniques, are measured quantitatively and qualitatively using Bales' interaction process analysis. The effectiveness of this measuring method is assessed through a case study of chronic pain. The transformation processes of the client's language game are visually depicted in our original three-dimensional graphs. This new measurement method can contribute to measuring activities in social work practice, which aims to alter a deviance amplifying process of transaction in a human eco-system.

Key words: language game, measurement method, intervention technique, Bales' interactional process analysis, chronic pain

I. Introduction

We develop a new social constructionist intervention skills and research method by critically examining two fundamental theoretical presuppositions of qualitative research and transformation methods. These are: 1) the common presupposition of pure description of phenomena in traditional qualitative research; and 2) the problem of narrative reductionism, typically revealed

by Hartman's social constructionist theory applied in social work. Based on this critical examination, we present a new framework of measurement and examine its effectiveness in our case study.

II. Philosophical Issues

Sherman and Reid describe traditional qualitative research as follows:

Qualitative research can be defined simply as research that produces descriptive data based upon spoken or written words and observable behavior. And qualitative methods can be

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defined as procedures for identifying the presence or absence of something, or describing the amount of something in words, in contrast to quantitative methods, which involve numerically measuring the degree to which some feature is present. (Sherman and Reid, 1994: 1)

Thus, qualitative measurement methods value pure, unmediated description through spoken or written words, avoiding misinterpretation by dominant scientific narratives. This pure description necessitates the existence of a transcendent subject, similar to Husserl's transcendental ego, who describes the world. However, Sherman and Reid do not refer to this subject directly.

Hartman, regarded as one of the creators of the new social work based on social constructionism, emphasizes the role of the researcher as a transcendental subject, able to objectively observe oppression:

As many of our clients have been powerless and oppressed, their knowledge has been subjugated, their insights have been excluded from the discourse by those empowered to define the "truth." (Hartman, 1994: 462)

This subject, who can recognize the essential problems of our society while being unrestrained by suppressive knowledge, is evidently Husserl's transcendental ego that "precedes the being of the world" (Husserl, 1974: 237). At the same time, it is able to produce a grand narrative that constructs a world and can explain how oppression in a society constructs problems in a life world. Phenomenological theory provides a definition of the subject as transcendental ego. At the same time, however, this is a socially constructed subject, delimited by the explanatory force of a dominant narrative. Thus, the theoretical framework of Hartman's research method is contradictory and a new measurement method that overcomes this contradiction is required.

Social constructionism contends that the individual's world construction process differs from that of third-party observation. Moreover, it

insists that an essence of the world does not exist and that there is no transcendental subject. Accordingly, a problem is defined as a complaint constructed by a person involved in a social transaction. A clear difference exists between the definition of a subject in the above-discussed qualitative research method and in a social constructionism-based research method. Social constructionism denies the existence of the transcendental subject, insisting that the meaning of a client's description cannot be complete without the social worker's involvement. That is, the observer's participation affects the dynamics of the relationship between members within a system. Therefore, pure description of phenomena from a transcendental standpoint, unaffected by the forces of reality construction of a narrative, is impossible. A new measurement method is thus needed to measure the client's transformation of reality construction influenced by the social worker's interviewing skills.

III. Theoretical Considerations: A Basic Theoretical Framework for the New Measurement Method

1. The social worker's intervention as a language game

Language game theory is the philosophical basis of this approach to evaluate world construction activities. Utterance transmission can be defined as a language game directed by multiple and overlapping rules. Wittgenstein describes language games as follows:

I can think of no better expression to characterize these similarities than "family resemblances"; for the various resemblances between members of a family: build, features, color of eyes, gait, temperament, etc. overlap and criss-cross in the same way.—And I shall say: 'games' form a family. (Wittgenstein, 2001: 27–28)

Utterances in a family are defined as the playing of language games directed by multiple rules.

As each of these rules is produced within multiple contexts of generation, ambiguity and contradiction exist within this structure. However, some rules of act selection and meaning construction are reified as the truth in a process of transaction, and their correctness is exempted from doubt (Wittgenstein, 1969). It is difficult to doubt the correctness of these reified rules in daily life.

For example, the practice of social work is one example of a language game, and the rules of this game are constructed through practice activities that are the contexts of their construction. Some rules of a practice become accepted and are then reified as true. Social workers accept these reified intervention and measurement rules unquestioningly.

Repeated utterance activities create institutionalized rules, which operate as contextual forces to direct those activities. A self-referential relationship exists between utterance activities and reified rules. The method of utterance selection ('s') and observation is derived from the multi-layered context of the utterer's relational definitions and cultural background. Moreover, his or her 's' and observations operate as a force that composes and reifies interpersonal relationships. Neither client nor social worker can escape from this self-referential dynamic.

In social work practice, utterances of language games are exchanged between a social worker and client. Their language games are performed in compliance with helping rules, notably the social worker's questioning rules and the client's rules for reflecting and responding. In any dialogue, each participant produces special rules that they follow in their transaction. The client modifies the rules of his/her solutions to problems, while the social worker modifies rules for questioning. The continually generated rules direct their activities in their language game. It is impossible for the social worker to obtain a meta-rule that directs his/her practice activities, or for the client to identify a transcendental rule of 's' and meaning construction ('m').

Another approach to helping activities that dif-

fers from those of positivism and qualitative intervention is derived from language game theory.

Mountain climbers use maps to help them climb mountains. However, a map is merely a guide. In social work practice, the social worker functions as a guide to help the client solve his or her problems. The social worker has to identify the particularities in the client's complaints while referring to the map provided. However, the social worker's "map" is only a tool for effective practice, differing from reality. Consequently, the social worker is unable to precisely recognize the client's complaints from any map and to provide a solution by relying purely on the map.

2. A measurement framework in social work practice

Social constructionist practice ethics is the philosophical basis of this measurement method. It encourages differentiation of the dynamics of transaction between activities of clients and rules of utterance and meaning constructions produced by clients' activities. This method is always connected to the transformational activities of the social worker, differing from surveillance studies that aim to acquire objective data.

Usually the client expresses his or her problems in the following way: "Although I have tried to solve things, the problem has only gotten worse." This is a negative description of the subject's life world in accordance with a particular set of rules of 'm.' In other words, the client's complaint follows the rules of a language game involving a pseudo-solution.

A complaint is an utterance following a person's rule of 's,' 'm,' and expectations about others' responses. An utterance can be understood as a process in which particular forces operate. These forces include prefigurative force (PreF), practical force (PraF), reflexive needs (RN), and effects that others generate (Ef) (Cronen and Pearce, 1985: 74). PreF is a structure of regulative rules of 's' and 'm.' PraF refers to a person's transformative force to modify an old rule of reality construction. RN and Ef are forces that connect activities between individuals. There are

Table 1 The Bales' System of Categories

| Categories | Abbreviation |
|--|--------------|
| A. Social-emotional area: positive reactions | |
| 1. <i>Shows solidarity</i> , raises other's status, gives help, rewards | (A1) |
| 2. <i>Shows tension release</i> , jokes, laughs, shows satisfaction | (A2) |
| 3. <i>Agrees</i> , shows passive acceptance, understands, concurs, complies | (A3) |
| B. Task area: neutral attempted answers | |
| 4. <i>Gives suggestion</i> , direction, implying autonomy for others | (B4) |
| 5. <i>Gives opinion</i> , evaluation, analysis, expresses feelings, wish | (B5) |
| 6. <i>Gives orientation</i> , information, repeats, clarifies, confirms | (B6) |
| C. Task area: neutral questions | |
| 7. <i>Asks for orientation</i> , information, repetition, confirmation | (C7) |
| 8. <i>Asks for opinion</i> , evaluation, analysis, expression of feeling | (C8) |
| 9. <i>Asks for suggestion</i> , direction, possible ways of action | (C9) |
| D. Social-emotional area: negative reactions | |
| 10. <i>Disagrees</i> , shows passive rejection, formality, withholds resources | (D10) |
| 11. <i>Shows tension increase</i> , asks for help, withdraws out of field | (D11) |
| 12. <i>Shows antagonism</i> , deflates other's status, defends or asserts self | (D12) |

(Bales, 1950)

reflexive relationships among PreF, PraF, RN, and Ef.

Although Cronen and Pearce located these forces on the same level, the concepts of PreF and PraF explain the dynamics of stabilization and transformation of RN and Ef.

A complaint is solved by altering a functional relationship among these forces. If 's' or 'm' is modified, a radical change of each of these forces occurs in the sequential structure of communication. Forces to transform these language game rules, which are exempted from doubt, exist at a primordial level of communication, that is, in 's' or 'm.' These elements are the targets for change. Social work practice should clearly define the skills that can be applied to these targets for change. We present a procedure to construct a clear framework for intervention and evaluation.

3. Categorization of measurement units

To intervene in a client's pseudo-problem-solving activities, the social worker needs to assess the pattern whereby deviance amplifying or transformative force spreads to a whole struc-

ture of multi-layered meanings. In this model, the most concrete variables ('s' and 'm') of assessment and measurement are categorized by applying Bales' interactional process analysis (Table 1). Bales' well-known interactional categories, developed in the 1950s, continue to provide a sociological framework for interactional process analysis. The assignment of Bales' categories in this study was determined by more than two specialists who analyzed the verbatim record.

4. Categorization of intervention skills

Transformation skills that trigger modification of 's' and 'm' at the primordial level were also categorized (Table 2). The categorization of intervention skills was decided by more than two specialists who analyzed the verbatim record.

Problem-solving activities are conducted according to a controlled method of skill selection by a social worker. Tomm's circular questions were invented as a technique that can be used in clinical practice to transform the dynamics between a person's practice and his/her embedded contexts (Tomm, 1985). His approach,

Table 2 Question Categories

| Categories | | Abbreviation |
|------------|--|--------------|
| I-1 | Difference Questions | DifQ |
| 1) | Category Differences | CDa |
| | a) between persons | CDa |
| | b) between relationships | CDb |
| | c) between perception/ideas/beliefs | CDc |
| | d) between actions/ events | CDd |
| | e) category difference in past | CDe |
| | f) category difference in future | CDf |
| 2) | Temporal Differences | TDa |
| | a) between past and past | TDa |
| | b) between past and present | TDb |
| | c) between past and future | TDc |
| | d) between present and future | TDd |
| | e) between future and future | TDc |
| 3) | Ordering a Series of Differences | OSDa |
| | a) distinction made by one person | OSDa |
| | b) distinction made by several | OSDb |
| I-2 | Contextual Questions | ConQ |
| 1) | Categorical Contexts | CCa1 |
| | a) -1 meaning to action | CCa1 |
| | -2 action to meaning | CCa2 |
| | b) -1 content/speech act | CCb1 |
| | -2 speech act/episode | CCb2 |
| | -3 episode/relationship | CCb3 |
| | -4 relationship/life script or family myth | CCb4 |
| | -5 family myth/cultural pattern | CCb5 |
| | -6 mixed | CCb6 |
| 2) | Temporal Contexts | TCa |
| | a) behavioral effects in a dyadic field | TCa |
| | b) behavioral effects in a triadic field | TCb |
| | c) behavioral effects in larger fields | TCc |
| II | Solution Focused Questions | SFQ |
| 1) | Exploring the exception | EE |
| 2) | Miracle question | MQ |
| 3) | Scaling question | SQ |
| 4) | Getting by question | GQ |
| III | Paradox | Pa |
| 1) | Positive reframing | PR |
| 2) | Paradoxical prescription | PP |

(Tomm, 1985; Oshita and Kamo, 2011)

in combination with other therapy skills, provides the principle means for clients to generate a modified meaning of their reality construction activities. We define these intervention activities as a game observing a specific rule.

The new rule of a practitioner's language game is defined as a rule of questioning. The social

worker asks the client questions to modify his or her rigid rule of problem amplification. This is the first rule of the social worker's language game.

Usually, the social worker's questioning potentially has two or more times the number of meanings at an initial stage of intervention. The client's language game rule, which amplified

deviance, is transformed multidimensionally by this questioning as the client is encouraged to freely construct meaning based on his or her own context.

If a context for change is generated by questions, it is necessary to select questions that strengthen this context. This is the second rule of the social worker's language game. It involves asking a question to enforce and stabilize transformation triggered by polysemous circular questions at the initial stage. When classifying a question, the technique that the social worker emphasizes the most is applied first.

IV. Case Analysis¹

The client was a woman in her 70s diagnosed with complex regional pain syndrome (CRPS) caused by residual disability from a traffic accident two years earlier. Although she took more than the prescribed dose of sleeping pills to escape from pain, she had never slept well and her situation had deteriorated. Her psychiatrist referred her to a social worker with the skills to improve the social adaptation level of patients suffering from chronic pain.

1. Assessment

1.1. Assessment of the patient's rules of reality construction

The patient complained about strained relationships with her children, colleagues, and friends as well as about her acute pain. She said that her life was meaningless and that she wanted to die to end her suffering. Her suffering was assessed to be a complaint behavior that tried to draw support from others as directed by language game rules. A change in the rules of her language game to reduce complaints of pain and increase her social adaptation was chosen as the transformation strategy.

Abbreviations in the client's remarks in the case record indicate categories of force theory.

¹This study was carried out with the approval of Hiroshima University's ethics examination committee in 2008.

The social worker's questioning techniques are categorized based on Table 2. Both sets of categorization were agreed on by two specialists who analyzed the verbatim record.

CL1: I have become lazy since I had this disabled and painful body (strong PraF: 'm' and 's'). I always paid careful attention to others before the accident, but now, if an acquaintance calls and says, "Are you free today?" I routinely refuse, like a depressive, saying, "It is difficult for me to go out now" (weak PraF). If I were the old me, I would have replied, "Shall we go out now?" Even if someone asked me to go to karaoke, my most favorite thing, I couldn't help but refuse every time (strong PraF: 'm' and 's').

SW2: Had you already noticed the difference in responses between the old you and the present you? (TDb, CDd, and CCa2)

CL3: Yes, I know, but I couldn't overcome the present weak me easily (weak PraF: 's').

SW4: Are you trying to search for the possibility of choosing a message to overcome the present lazy you whenever you receive a call from your friends? (CCa2 and CCb2)

CL5: Of course, but I cannot do it well (weak PraF: 's').

SW6: Do you think it is more difficult for you to choose a message after receiving the other person's invitation? (CCa1 and CCa2)

CL7: Yes (positive PraF: minimization of problem). Because I am not good at disguising my feelings...but... even when I am not so tired, I do not have the strength to go out (weak PraF: 's'). Therefore, when I was unable to accept the other person's invitation, I could not help but feel I was losing the old me (negative PraF: 'm').

SW8: When you refused someone's invitation, did you feel that your refusal was very different from the response that you would have chosen before the traffic accident? (CCa1, CCa2, CCb2, and CCb3)

CL9: That's right! Even when I felt bad, I used

to choose behavior that would make other people feel happy (strong PraF: 's'). But it would be tough for me were I to do so now (negative PreF: 'm').

SW10: Do you think that you should not go to places where people enjoy themselves if you cannot act to make others feel happy, like you could before? (CCa1 and CCa2)

CL11: Well... one of my friends said to me, "Don't worry about it! You only need to go to karaoke once to overcome your worry." But...(weak PraF: 'm' and 's').

SW12: What do you think of that message? (CCa1 and CCa2)

CL13: I think she is right! But it bothered me to be asked about details of my affairs (negative PreF: 'm'). I would go there if everyone could accept that I will just sing my songs (RN). Nobody will let me (negative Ef).

In this dialogue record, the data of negatively constructed life events surfaced through circular questions with multiple meanings for the client such as TDb, CDd, and CCa2. The dynamics of this life event were clarified by CCa1 and CCa2. Strong, negative PreF, which interrupts a differentiation of pseudo-problem-solving activities, and a weak PraF were identified. The client constructed the meaning of others' utterances as non-useful messages for her (PreF: 'm'), and chose to select withdrawal behavior from public situations (PreF: 's'), based on her original rules of 'm.' At the same time, she wished for positive responses from others, but the responses were weak (RN). Others' negative responses continued (Ef), and her PraF was depleted. A circular problem amplifying relation existed among PreF, PraF, RN, and Ef. Transforming these rules of negative reality construction was the intervention strategy in this case.

A social worker positively reframed her refusal of her friends' invitations as an effort to overcome her laziness. She then started to reflect on her life in the context of the positive self-definition. The social worker asked her what she needed to be a person who could handle adver-

sity in the future. She answered that she would need to keep pursuing small dreams, one of which was to go to karaoke for the first time in almost a year.

1.2. Measuring a problematic situation

The social worker subsequently encouraged her to describe conversations with karaoke club members that she was worried might occur. The sequential data, clarified by using descriptive circular questions, are shown in Table 3.

This table shows categorizations of speech acts described by the client in response to the social worker's questioning (Oshita and Kamo, 2011). The numeral 1 in the categorization row in Table 3 refers to the question categories based on Table 2. The numeral 2 indicates the temporal order of speech acts in the client's description of the problematic situation. 'O' is the abbreviation of others and 'cl' indicates client. The numeral 3 in the categorization row indicates an abbreviation of Bales' category (see Table 1). The data categorizations were agreed on by two researchers who were well versed in this method of categorization. The abbreviations of Bales' category in Table 3 were plotted on the *X*-axis and *Y*-axis of a three-dimensional graph (Figure 1). First, an other's (O1) speech act ('s') was categorized as A1s and plotted on the *X*-axis (the first Bales' category). Then, the client (cl2) constructed A1s as an insult message ('m'), which was categorized as D12m and plotted on the *Y*-axis (the second Bales' category). The crossing-point of these elements was indicated as (1) A1s→D12m. The meaning, D12m, ascribed to the other's speech act, triggered the emergence of the client's next behavior selection, categorized as D12s. The crossing-point of these elements was presented as (2) D12m→D12s. D12m (cl2) on the *Y*-axis in crossing-point (1) was replaced on the *X*-axis in crossing-point (2), and D12s (cl3) was then plotted on the *Y*-axis. The client's speech act, categorized as D12s, produced the other's speech act, categorized as D10s. The crossing-point of these elements was indicated as (3) D12s→D10s.

Figure 1 shows a pattern of 'm' and 's' that are

Table 3 Pre-intervention data

| Subject | The intervention process | Categorization | | | Crossing point number |
|---------|---|----------------|-----|------|-----------------------|
| | | 1 | 2 | 3 | |
| SW14 | What kind of worry do you have when you will go to kara-oke from now? | TCc, CCa1 | | | |
| CL15 | When someone asked me about my left arm; "How is your left arm? (O1)", I would come close to give back an aggressive message to him/her. Because these messages brought me the meaning of insult for my handicapped body. | | O1 | A1s | (1) |
| SW16 | Do you think other's message to ask your left arm has meaning of insult for you, don't you? | CCa2 | | | |
| CL17 | Yes. I think. Moreover, they don't understand my suffering at all (cl2). So, I might be strong and say, "I resolutely live with my disabled left arm!! (cl3)" | | cl2 | D12m | (2) |
| | | | cl3 | D12s | |
| SW18 | What would happen there after you said like that? | TCc | | | (3) |
| CL19 | They stopped asking me and said to me, "There is nothing for you to do except responding to your disease (O4)." If someone will say to me this message now, I would get angry about other's lack of understanding (cl5). | | O4 | D10s | (4) |
| | | | cl5 | D12m | |
| SW20 | You thought others didn't understand you at all then? | CCa2 | | | (5) |
| CL21 | I think so. And then, though I don't want to say, I can't help but shout, "Don't be selfish. It's not easy for me (cl6)." | | cl6 | D12s | |
| SW22 | What would happen there next? | TCc | | | |
| CL23 | An awkward situation will be caused by these messages. | | | | |

SW: social worker; CL and cl: client; O: other; TCc, CCa1, and CCa2: question categories; A1, D10, and D12: Bales' categories; s: utterance selection; m: meaning construction

basic elements of the client's reality construction. The structure and dynamics of each element are not fixed and may change. Therefore, if the dynamics of the crossing-point number (1) A1s→D12m is modified, the sequence dynamics will completely change.

2. Intervention strategy

To transform the client's language game rules, the following strategies were adopted:

The first strategy encouraged reflection on the negatively expected episode (Ef) to identify her positive self-definition.

The second strategy recomposed the 's' and 'm' of the negatively anticipated episode as a time

series.

The third strategy attempted to transform an element that kept creating rules for the client's suffering world construction through the social worker's circular questions.

3. Intensive intervention

The following case record shows the intervention activities carried out to encourage the client to find a problem-solving utterance contrary to others' utterances (O1).

SW24: What kind of meaning will you construct for others' utterances that ask about your left hand? (CCa2)

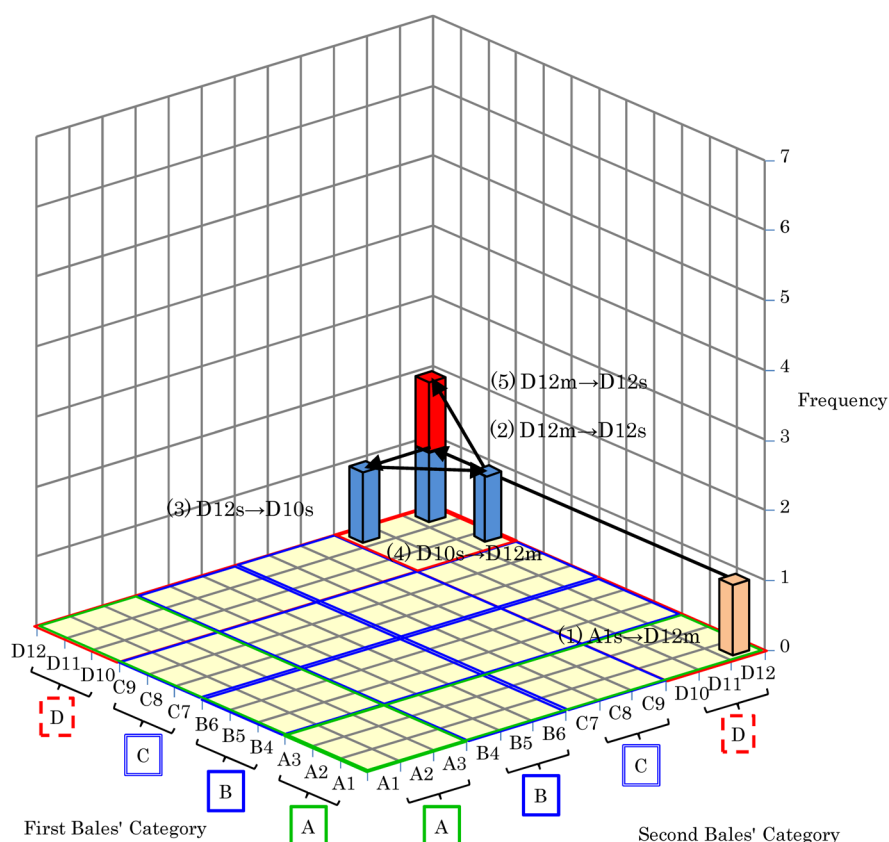


Figure 1 Pre-intervention phase

A1–A3, B4–B6, C7–C9, D10–D12: Bales' categories

s: utterance selection, m: meaning construction

The other's speech act (categorized as A1s) is plotted on the X-axis (the first Bales' category). The client's meaning construction of the other's A1s (categorized as D12m) is then plotted on the Y-axis (the second Bales' category). The crossing-point of these elements is indicated as (1) A1s→D12m.

CL25: I just can't see others' messages straightforwardly now. I think that I have almost changed the way of constructing the meaning of others' utterances from before (positive PraF: 'm').

SW26: If you were able to construct the meaning of others' messages (O1) straightforwardly like before, what kind of messages would you choose to see there? (CCa1 and CCa2)

CL27: I recall now that there were some understanding people there. They never asked me anything in an inconsiderate way about my disabled left hand and just lis-

tened silently to my singing (positive PraF: 'm').

SW28: You understand that there were two types of people there...well...what kind of utterance do you choose for those who asked about your disabled left hand? (CDa, CCa1, and CCa2)

CL29: I understand that their questions are out of politeness (positive PraF: 'm' of O1) and I'm not easily swayed by someone who talks without thinking. But to keep a good atmosphere there, I moderately try to acknowledge others' messages (positive PraF: 's').

The data showed a transition of reality construction forces from the old problem-continuing PreF to a new problem-solving PraF. The client found her problem-solving activities through the social worker's careful CCa1 and CCa2 circular questions.

4. Results: Measurement

The client reported at the next session that she could go to the karaoke club for the first time after an interval of almost one year. The concrete dialogue between the client and others in the karaoke club was gathered using descriptive circular questions, as shown in Table 4.

The data were plotted on the three-dimensional graph as well as in Figure 1. Comparing the graphs of pre-intervention and post-intervention, the first crossing-point (1) (A1s, D12m) in Figure 1 changed to crossing-point (1') (A1s, A1m) in Figure 2. The second crossing-point (2) (D12m, D12s) in Figure 1 changed to crossing-point (2') (A1m, A3s), as shown in Figure 2.

Consequently, the categorized area of elements was changed from D to A, B, and C and the resultant dynamics were different, as shown in Figures 1 and 2. This difference in the sequence dynamics indicated a change in the client's language game rules in terms of the 'm' of 's' and the client's expectations of others.

The client started going to karaoke once a week after this session and gradually reduced her dosage of sleeping pills. After one year, her

adaptation level had improved, and she was able to sing children's songs in a club. She acquired many new friends and rediscovered herself as a person who could encourage others through her songs, as before. Consequently, her complaint of interpersonal pain was reduced and her excessive consumption of sleeping pills stopped.

V. Discussion

The measurement method that was developed and applied in this study clearly defines and categorizes meaning constructions and behavior selections, which are basic elements of human transaction. It can describe a transformation process of a sequence of basic elements. A practitioner who uses this method can choose a meaning construction or a behavior as a clarified intervention point and can explain both a problem amplifying mechanism and the problem-solving process produced by his/her intervention. This is an original feature of the measurement method.

Through the case study, the effectiveness of the measurement method was demonstrated as follows. First, the intervention point (A1s→D12m) was indicated during the assessment phase, and a transformed structure and dynamics of a problematic sequence were created through clearly defined intervention skills during the intervention phase. The effects of the intervention were then visually depicted using three-dimensional

Table 4 Post-intervention data

| Subject | Sequence elements | Categorization | Crossing point number |
|---------|---|----------------|-----------------------|
| O1 | How is your condition? | A1s | } (1') |
| cl2 | Greeting of daily conversation. | A1m | |
| cl3 | So-so | A3s | } (2') |
| O4 | What happened to your left hand? Have you used your left hand too much? | C8s | } (3') |
| cl5 | This message is also ordinary greeting. | A1m | } (4') |
| cl6 | Yeah. Yeah. | A3s | } (5') |

O: other; cl: client; s: utterance selection; m: meaning construction; A1, A3, C8: Bales' categories

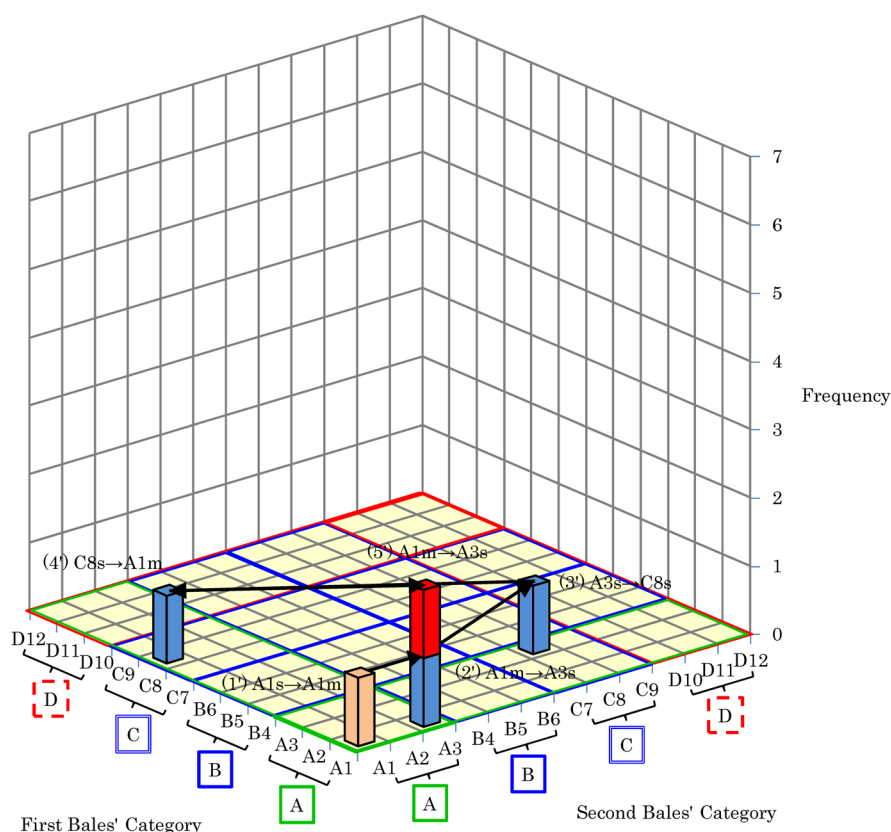


Figure 2 Post-intervention phase

A1–A3, B4–B6, C7–C9, D10–D12: Bales' categories

s: utterance selection, m: meaning construction

The other's speech act (categorized as A1s) is plotted on the *X*-axis (the first Bales' category). The client's meaning construction of the other's A1s (categorized as A1m) is then plotted on the *Y*-axis (the second Bales' category). The crossing-point of these elements is indicated as (1') A1s→A1m.

graphs.

The method can contribute to measuring activities in social work practice, which aims to alter a deviance amplifying process of transaction in a human eco-system.

However, an adequately systematized training method for the acquisition of intervention skills to produce a sequential change has not been developed. In addition, categorization standards for the transaction elements have not been clearly defined. More stringent standards for categorizing a client's behavior and meaning construction are, therefore, necessary.

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