

Therapeutic Use of Metaphors in Medical English Scenario Writing: A Case Study of Nervous System Writing by Three Medical Majors in Xinxiang Medical University

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Abstract

For future doctors, it is quite common to use metaphors in therapy. In the therapy process, one goal for therapists is to develop metaphors that can present the client's problem as a solution. The solution metaphors should be as close as possible to the client's own language. Here, metaphors can be seen as a tool to provide explanations to and communicate with clients. Therefore, to cultivate students' use of metaphors in therapy, after watching and analyzing a video of the nervous system, students are required to write short essays according to the given scenario. Students are allowed to use metaphorical sentences in their essay. The analysis of these sentences shows that structural metaphors, orientational metaphors, and ontological metaphors were used in their writing. The scenario writing exercise not only improved students' metaphoric competence but also provided them with a new approach for their future career.

Keywords: conceptual metaphor, metaphors in therapy, medical scenario writing

1. Introduction

With the rapid development of medical science, a massive vocabulary has come to characterize Medical English. Medical English is a compulsory subject in medical college, making the problem of how to effectively improve students' Medical English learning a pressing one.

Metaphors, a ubiquitous feature of our everyday conversations, can facilitate communication through the use of familiar concepts to describe abstract and complex ones. It helps doctors become good communicators in clinical practice because metaphoric language does provide an understanding of clinical reality and helps patients understand their condition (Sontag, 1978; Reisfield & Wilson, 2004; Vyjeyanthi, 2008; Casarett, 2010). Doctors can use metaphors to reduce patients' anxiety, improve patients' psychological state, and adjust their behaviors to achieve a therapeutic purpose.

However, most medical students do not realize the importance of using metaphors to communicate with patients. They spend a great deal of time mainly on obtaining medical knowledge and neglect the improvement of language competence. According to Kecskes (2006), the linguistic study of metaphors should be included in English as a foreign language (EFL) curricula, which can provide medical students with appropriate instruction to improve their English proficiency (2006, p. 12). Devrim (2015) conducted action research to develop an approach to teaching grammatical metaphors to undergraduate students who used English as a second language. Hilliard (2017) explored the effectiveness of metaphor instruction in developing reading, writing, listening, and speaking skills for both EFL and ESL learners. Therefore, the current study attempted to stimulate year-one students' Medical English learning and improve their metaphorical competence through metaphor-enriched medical supplementation. According to students' feedback, the supplementary video was novel and informative, and it greatly increased students' interest in learning. Additionally, the case scenario writing exercise improved their metaphoric thinking.

2. Literature Review

George Lakoff and Mark Johnson put forward the conceptual metaphor theory in their 1980 book, *Metaphors We Live By*. Lakoff (2003) defined conceptual metaphor as “mapping from a source domain to a target domain” (p. 205). The formula “Target Domain Is Source Domain” (A IS B), or “Target Domain as Source Domain” (A AS B) was used for mapping. For example, for the conceptual metaphor LIFE IS PLAY, LIFE is the target domain and PLAY is the source domain. In medical vocabulary instruction, metaphor makes abstract concepts more concrete because of its cognitive features. Metaphorical thinking influences Medical English vocabulary the most, including common English words and medical terms. It can be taught as a part of EFL curricula to assist medical students in answering their patients’ queries (Mungra, 2007; Shokoui & Isazadeh, 2009).

Regarding the therapeutic use of metaphors, health-care practitioners employ metaphors for the following reasons: first, to foster clarity by transferring meaning effectively and economically. Metaphors bridge the communication gap between the patient and the doctor. Second, metaphors can bring forth empathy between doctors and patients, which is one of the most necessary elements of communication for health care. Friedberg and Wilt (2010) found that physicians frequently (almost two-thirds of the time) used metaphors in their conversations with patients who had a serious condition. Third, physicians who used more metaphors to communicate with patients were seen as better communicators because they reduced difficulty in patients’ understanding of complex medical concepts and made patients feel as if their doctors were making extra efforts to ensure they understood their condition (Casseret, p. 258). Metaphors are a fundamental mechanism through which our minds conceptualize the world around us, especially in times of adversity. Metaphors can thus help physicians communicate the details of complex diseases to patients and help them feel better and recover.

Stott et al. (2010) listed reasons to pay close attention to clients’ own metaphors, stating that cognitive and behavioral therapy therapists have introduced a large number of metaphors into their therapy process. Many useful therapist-generated metaphors for certain classes of psychological issues such as eating disorders, psychosis, and bipolar disorder have been introduced. Freidberg and Wilt (2010, p. 104) concluded that “metaphors and stories need to be individualised to match a child’s individual circumstances, ethnocultural context, and developmental level.” They suggested that focusing on clients’ metaphor helps counsellors build a relationship with the clients, give new meaning to their problems or experiences, and provide them with new solutions to their problems.

McLeod and Cooper (2011) believed that using metaphors to develop an understanding of clients’ processes characterizes the nature of therapists’ professional work and is indicative of their pluralistic approach. Jonathan (2015) conducted a heuristic study on the therapeutic use of metaphors, finding that the use of metaphors in therapy is pervasive. Metaphors that reflect an empathic connection and encounter between the therapist and the client have been identified, and therapists have been recommended to focus on the construction of metaphors and the mutual development of therapist-client relationship (pp. 230-232). Cuccio (2018) accounted for the effect of body experience on conceptual metaphors in the light of neuroscientific discoveries (p. 3).

Hommerberg et al. (2020) investigated the use of metaphors in blogs by 27 people with advanced cancer and explored possible patterns associated with individuals, age, and gender based on a dataset totaling 2,602,479 words produced from 2007 to 2016. Both qualitative and quantitative research were used. The results showed that using different metaphors allows people with advanced cancer to highlight different experiences. Despite variations in age, gender, and cancer forms, bloggers are a part of a culturally consistent cohort in metaphors relating to “journey,” “battle,” “imprisonment,” and “burden.” Patients’ metaphoric awareness helps health professionals identify metaphorical patterns and develop a common language similar to patients’ metaphors, which is very important in person-centered palliative care.

3. Research Design

To investigate students’ medical metaphor production, the instructor required three students, after watching a video of the nervous system, to write a short essay according to the given three case scenarios relating to the nervous system: the presentation of the client, the past history of the client, and the on-examination situation. The essay needed to be about 200 words long, and students were required to generate metaphors to help clients understand their current situation and provide suggestions for treatment. These scenarios were adapted from George’s *Healing with Stories: Your Casebook Collection for Using Therapeutic Metaphors* (2007, pp. 55-56). The title of the relevant chapter was “Climbing Anxiety Mountain,” which aimed at generating metaphors in acceptance and commitment therapy. This book is intended to develop therapists’ skills at using metaphors and demonstrate the variety of approaches to work with, understand, and use metaphors.

4. Data Analysis

In the selected scenario, Aaron was a college student and mountaineer who developed anxiety after a failed mountaineering experience. He was experiencing some somatic symptoms, including a racing heart and sweaty palms. After talking to him, the therapist found that Aaron had developed a compulsive fear in his school years and avoided social interactions. After the assessment, his behavior was diagnosed as experiential avoidance, which means he was unwilling to remain in contact with particular thoughts, feelings, memories, or bodily sensations. Students were required to use metaphors to highlight the psychological processes occurring within his battle with anxiety, and to help him understand this battle and engage in a meaningful, value-based life.

4.1 Analysis of Student A's Scenario Writing

Student A was a female student who majored in Clinical Medicine. In her writing, she compared Aaron to a hedgehog and his anxiety to the hedgehog's thorns:

I regard him as a hedgehog because his social anxiety is just like a hedgehog's thorns.

There is a metaphor implied in this sentence: Aaron is a hedgehog whose anxiety is the hedgehog's thorns. It is known that the hedgehog will wrap itself [up] when encountering a problem. This is very much like the symptom of experiential avoidance, and the readers can understand his anxiety immediately.

Thus, a metaphor is implied above: AN ANXIOUS PERSON IS A HEDGEHOG. To help Aaron realize that there is joy in social communication, student A used another metaphor:

I told him the process of making friends and communicating with others was just like climbing mountains, and joking and laughing would supplement the process of healing.

There is a metaphor in this sentence as well: MAKING FRIENDS IS LIKE CLIMBING MOUNTAINS. Although the process is difficult, it can give a great deal of happiness.

To encourage Aaron to fight his anxiety bravely, student A used two more metaphors. She said, "And the battle between him and anxiety is just like sitting on a seesaw," or in other words, FIGHTING WITH ANXIETY IS LIKE SITTING ON A SEESAW. The braver Aaron is, the less anxious he will be. This in turn will give Aaron more courage to fight his anxiety. Student A also said, "If he has faith in his heart, anxiety will escape like a deserter," or, ANXIETY IS A DESERTER. This metaphor compares anxiety to a deserter, emphasizing the contradictory relationship between faith and anxiety.

Based on the above, how can Aaron's anxiety be treated? Student A used a related metaphor: "And now what Aaron needs to do is to treat anxiety as a bad-tempered kid, comforting it and let anxiety calm down." In this sentence, ANXIETY IS A BAD-TEMPERED KID. If anxiety is a kid, the best method is to comfort it and make it calm down. Therefore, the best way to calm down an anxious person is to comfort them and help them achieve a peaceful mind.

Through the five metaphorical sentences, Aaron's feelings of anxiety were described vividly and the therapist (Student A) proposed other metaphors as well to encourage Aaron to find happiness in social communication. She also suggested an approach to deal with anxiety.

4.2 Analysis of Student B's Scenario Writing

Student B was a female student who majored in medical imaging. In her essay, she compared Aaron's anxiety to falling into a swamp: "I fell into the swamp of anxiety; the more I wanted to escape, the more I sank, endlessly." This sentence implies the following metaphor: ANXIETY IS LIKE FALLING INTO A SWAMP. It is a part of the frequently used orientational metaphor, SAD IS DOWN. The similarity between anxiety and falling into a swamp is that both are harmful to the body. Through this metaphor, Aaron's misery and struggle with anxiety can be immediately understood.

To help Aaron relax, student B suggested that Aaron lay on the couch and describe his inner feelings. Aaron stated that he felt he was standing in a desert with sand all around. His feet were being sucked into the sand. This statement evokes a precise image in our mind, and Aaron's confusion and hopelessness can be sensed immediately. The therapist told Aaron to imagine he was not sinking deeply into the desert sand but was standing on it. In this way, Aaron gradually controlled his anxiety and fear. Therefore, the therapist concluded that what Aaron needed was guidance and courage to wean him away from his fixation with anxiety and to help him create a new positive image as an efficient treatment method.

The term 'image' is often used in psychology to refer to a psychological representation. It implies that a person can imagine something that is not present though the cognitive ability to form an impression in the mind without external physical stimulation input. By arriving at conclusions from Aaron's metaphors for anxiety and his image of the desert, the therapist can conduct psychotherapy accordingly.

4.3 Analysis of Student C's Scenario Writing

Student C was a female student who majored in psychiatry. In her essay, when describing Aaron's appearance, she used the following expression: there was a squirrel-like alertness in his eyes. The word "squirrel-like" is so vivid that people can visualize an alert squirrel easily. When someone touches a big tree with a squirrel on it, it will run and hide under the branches or find another big tree. If someone's eyes are full of squirrel-like alertness, they must be very nervous and anxious. To relieve Aaron's tension and anxiety, the therapist invited him to sit on a chair and gave him a cup of warm water. From his conversation about his troubles, the therapist learned that Aaron's failed mountaineering experience had left him with unpleasant memories that caused him to seek to escape from the outside world. The following sentence describes Aaron's state of avoidance: "Like a frog trapped alone in his own world, he does not want to touch more things." The metaphor implied here is, AN ANXIOUS PERSON IS A FROG (TRAPPED IN HIS OWN WORLD). The frog always stays in its well and does not want to go outside, evoking Aaron's avoidance of the external world. If the therapist directly spoke about Aaron's troubles, Aaron might have become more anxious. Therefore, the therapist told Aaron a story instead:

A frog named Sam liked jumping up in search of food, but he didn't make it because he didn't control it well. He began to exercise himself, refuse[d] to share his mood with other frogs, and became anxious. One day his friend said to him, "Hey! Man, you are jumping so high, I've never jumped so high like you!" Sam suddenly realized that his previous failure had contributed to his own progress, and that the other frogs did not care about his failure. Later, he began to share his mood with other frogs, and soon got along well with the frog family.

After listening to this story, Aaron was lost in thought. Then, he realized that what he was anxious about might not be very important to others. Through the metaphor of the squirrel and the metaphorical story of the frog, Aaron realized his problem and was able to open his heart to others.

5. Findings

Three kinds of conceptual metaphors were applied to students' writing. When talking about anxiety, the property of anxiety was highlighted, for instance, "hedgehog," "deserter," and "a bad-tempered kid." The second kind highlighted the process of fighting with anxiety. For example, "sitting on a seesaw" emphasized that the patient should overcome their nervous feelings and be brave. When talking about the feeling of "making friends," student A compared it to "climbing mountains," implying that the process was difficult but happy. When talking about the severity of the sadness feeling, student B compared it to "falling into a swamp." This metaphor is a part of the classic orientational metaphor, SAD IS DOWN. The images of the "squirrel" and "frog" by student C vividly described the psychology of the patient's intentional avoidance of the external world. It will inspire the patient to recognize himself again.

6. Conclusions

6.1 Implications

In scenario writing, when the patient is illiterate or does not understand the doctor's treatment, it will be helpful for the doctor to communicate with the patient using metaphors. Kövecses (2007, p. 7) highlighted the importance of individual metaphors as follows: "It seems to me that psychotherapy and psychoanalysis are some of the richest areas for the creation of individual metaphors." Bleakley (2017, p. 118) claimed that metaphors can offer a powerful therapeutic possibility, especially at the level of the "extended metaphor." Metaphors offer specific therapeutic leads: one depressed patient may say, "I'm down in the dumps," whereas another might say, "I can't see a way out," and a third may say, "My head's in a vice." These metaphors invite differing therapeutic responses.

Regarding metaphor categories, ontological metaphors are the most commonly used ones. Anxiety can be metaphorized as "hedgehog", "deserter", "bad-tempered kid", and "frog". Structural metaphors are also frequently used. When talking about how to overcome one's anxiety, student A proposed the metaphorical expression, MAKING FRIENDS IS LIKE CLIMBING MOUNTAINS. She also used the metaphorical expression, FIGHTING WITH ANXIETY IS LIKE SITTING ON A SEESAW, to encourage the patient to be braver. An orientational metaphor, SAD IS DOWN, was used in student B's writing. This is a common metaphor to describe a person's feeling in terms of spatial orientation. As Casseret et al. (2017) stated, metaphors may

offer a valuable supplemental strategy that physicians can use to enhance communication (pp. 255-260). Through this approach, doctors can use metaphors to reduce patients' anxiety, improve patients' psychological state, and adjust their own behaviors to achieve the therapeutic purpose.

6.2 Limitations

First, there was a time constraint in applying metaphors to college EFL instruction. The teacher could not use all the supplementary materials they had prepared. Second, as a cognitive approach, metaphor includes history, geography, social systems, lifestyles, values, beliefs, and philosophies. This puts us in a position where we still need to work hard to determine how to teach metaphor more systematically and emphatically in the future.

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