

Role-play Therapy as Treatment for Anorexia Nervosa using the Script from the Hayao Miyazaki Animated Movie Kiki's Delivery Service (Majo no Takkyuubin)

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A 14-years-old schoolgirl having suffered from anorexia nervosa for a year was referred to our counseling room by her family doctor. She was admitted to the hospital suffering from weakness, fatigue, and amenorrhea as a result of marked weight loss over a six-month period. She was a high achiever who pushed herself to excel in every facet of school life, falling short only in her social relationships. She put pressure on herself to excel in every academic subject and was worn out, leaving little time for friends, and ultimately leading to social isolation. The constant pressure led to anorexia. Using role-plays based on Kiki's Delivery Service (KDS) scripts (Hayao Miyazaki animated movie, "Majo no takkyuubin"), we helped her discover her personal style and develop her interpersonal social skills. Our role-play model proved to be a successful treatment for anorexia nervosa and we recommend these methods for patients with anorexia nervosa needing a more developed sense of identity.

Keywords: anorexia nervosa, role-play therapy, animated movie, "Kiki's Delivery Service", identity

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1. Introduction

Anorexia nervosa frequently occurs among adolescent girls who characteristically refuse to maintain normal body weight and have an intense fear of becoming fat (American Psychiatric Association, 1994). The detailed psychodynamic mechanism of anorexia nervosa remains unknown. However, psychoanalytic clinicians have reported that patients have generally been unable to psychologically separate themselves from the mother and have failed to establish an identity during adolescence. These psychological vulnerabilities can be triggered by trauma and may result in a loss of normal body image (Guntrip, 1971, Bruch, 1973). Other reports have suggested that many patients feel their bodies are somehow under the control of someone else, so that only an extraordinary act

such as self-starvation can give them validation as a unique and special person (Selvini Palazzpli, 1978, Mogul, 1980). From a psychoanalytical viewpoint, patients with anorexia nervosa potentially have a bent projective identification process involved in the their parent-child interactions (Tsutsumi, 1990).

Unfortunately incidents of bullying and isolation based on a failure to develop close personal relationships can easily produce the symptoms of anorexia nervosa in adolescence (Steiner-Adoir, 1986).

We hypothesized that role-play therapy may be effective in developing the relationship between patients with anorexia nervosa and others, resulting in a strengthened sense of autonomy and selfhood. We reported the case of a patient who suffered from anorexia nervosa brought on by being excluded from peer groups at school. We sought to foster

her self-identification during counseling by using role-plays centered around the script from the Hayao Miyazaki animated movie *Kiki's Delivery Service* (KDS).

The purpose of the case report is to demonstrate the effectiveness of this new method of role-play therapy which, by having the patient project her identity onto characters (Kiki, Ursula, et al) from an animated movie, helps the patient to generate self-awareness and foster a sense of autonomy, selfhood, and sympathy for others.

2. Case Report

2.1. Ethical considerations arising from privacy issues in case reports.

In order to carry out this study we first obtained verbal consent from the patient and her guardians. On completion of the report we provided the patient and her guardians with a copy for the purpose of having them make corrections to any factual errors. Finally we sought and obtained formal written consent to have the report included in this journal. Certain elements not affecting the results (past history, identity of family members) were altered in order to protect the patient's privacy.

One of the authors is not an accredited clinical psychologist but a graduate student of social psychology. In this capacity she assisted in the preparation of scripts for use in the role-plays and provided a third party viewpoint as to whether the role-plays had a therapeutic benefit on the patient's ability to form close personal relationships and whether they were effective in treating the patient's anorexia.

2.2. Case presentation

A 14-years-old schoolgirl called Yumi (not her real name) who had suffered from anorexia nervosa for a year was referred to our counseling room by her family doctor. Yumi was admitted to the hospital suffering from weakness, fatigue, and amenorrhea as a result of marked weight loss over a six-month period. She spent 10 days as an inpatient and on admission weighed 30kg with a BMI of 16. We assessed whether Yumi's symptoms and signs met with each of the four criteria for anorexia nervosa as set out in DSM-IV. Yumi has a bodyweight of 30kg

and stands 137 centimeters tall. With a height of 137cm, Yumi's expected body weight should be more than 37.5kg, based on a BMI in the 'lean' category (this calculation is based on a BMI of 20, which is the upper limited value in the 'lean' category). Yumi's present body weight is 30kg, however, her expected bodyweight is in the vicinity of 37.5kg. The ratio of Yumi's actual weight compared to her expected body weight is 80 percent. This satisfies criteria A.

Despite Yumi maintaining a low body weight and refusing to attend school, she was strongly motivated to perform in a local musical concert. She practiced piano for more than four hours every day and refused bed rest prescribed to her for the purpose of gaining weight. She sometimes expressed concern about gaining weight. This satisfies criteria B

Yumi denied that, as we suggested, her abnormal thinness would be received badly by her classmates. Yumi thought that she could be more active if she was lean than if she was fat. This point satisfies criteria C.

Yumi's amenorrhea lasted for more than 6 month, satisfying criteria D.

Yumi's symptoms satisfied all of the criteria for anorexia nervosa as set out in DSM-IV. Based on information obtained from the patient herself, her mother and her family doctor, Yumi only restricted her eating and did not regularly engage in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

We diagnosed Yumi as having anorexia nervosa with Restricting Type.

Unfortunately Yumi developed a stress-induced gastric ulcer following admission and failed to see any improvement in her condition nor did she put on any weight. Yumi is an only child and lives with her parents. Her father is a successful businessman, keen on sports and other social activities. Yumi's mother is a sophisticated woman from a well-to-do family, and in contrast to her husband, she has devoted herself exclusively to the family home. In the course of her counseling, it became clear to us that Yumi was conservative, her character being very similar to that of her mother. Yumi's junior high school is old fashioned in that it adheres to high educational standards across the board-academic, artistic, athletic, and extra-curricular activities. Students are expected to work hard in every class, irrespective of whether the subject relates to the high school

Table 1 Diagnostic criteria for 307.1 Anorexia Nervosa

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- A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).
- B. Intense fear of gaining weight or becoming fat, even though underweight.
- C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.
- D. In postmenarchal females, amenorrhea ie, the absence of at least three consecutive cycles. (A woman is considered to have amenorrhea if her periods occur only following hormone, e.g., estrogen administration.)

Specify type:

Restricting Type: during the current episode of anorexia nervosa, the person has not regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

Binge-Eating/Purging Type: during the current episode of anorexia nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

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entrance examinations or not. Furthermore, teachers encourage social interaction like spending time with friends and also encourage students to compete in events like music contests and in extra-curricular activities such as volunteer work. As a first grader Yumi had no trouble coping with the demands of her schoolwork, however, her relationships with her classmates began to deteriorate halfway through her first year. Yumi soon found herself isolated during class and began to skip school. Without regard for Yumi's particular circumstances, the homeroom teacher simply labeled Yumi as a "poor little girl" in need of special care and assigned classmates the task of helping her. These decisions bred resentment in Yumi and pushed her further into isolation. The pressure of being so isolated in a school where social interaction was particularly emphasized triggered Yumi's anorexia nervosa. Typically girls of Yumi's age have no problem expressing their opinions in class, however Yumi found it difficult to do so. Furthermore, Yumi could best be described as a quiet, shy student, making her an easy target for bullies.

In Yumi's class there were a number of cliques, however Yumi did not belong to any of them. Yumi told us that she put pressure on herself to excel in every subject and she was worn out by the constant pressure and by the feeling that there was no end in sight to her social problems.

In our first meeting with Yumi we noted that she was a high achiever who pushes herself to excel in

every facet of school life. She has, in fact, achieved excellent results in every field except that of social relationships, because she has no friends and leads an isolated existence. This failure to succeed socially is made worse by the fact that her school places a great deal of emphasis on being well-rounded. Yumi is caught between the pressure she exerts on herself and the pressure of school expectations. Her solution to the problem - she stopped eating.

Yumi's anorexia nervosa began with her feeling a sense of isolation at school. Initially Yumi's mother was not concerned about Yumi's lack of eating. When Yumi lost so much weight that she appeared sick, and refused to go to school, her mother consulted one doctor after another. We felt that Yumi's mother's personality traits such as her stubborn nature and lack of adaptability may have influenced Yumi's anorexia nervosa. However, we did not raise the issue for fear that it would lead Yumi's mother to start 'doctor shopping'.

2.3. Role-play therapy

Over a period of 9 months a clinical psychologist, a pediatric psychiatrist and a counselor (non-clinical psychologist) provided weekly 50 minute long role-play treatments for Yumi.

Details of the role-play therapy

- (1) Yumi's favorite music, a piece called 'Kaze no Oka', composed by Jyo Hisaishi and

performed in concert with piano, flute and violin, was played during each session.

- (2) Acting out scenes from the children's animation, *Kiki's Delivery Service*, in English.
- (3) Watching the Japanese language version of KDS to confirm Yumi's understanding of the story.
- (4) The use of approximately three pages of script (out of a total of 96 pages) per role-play session.

Yumi always played the role of Kiki. We discussed what unspoken thoughts each animated character might have had in each scene. The clinical psychologist explained to Yumi the troubles that Kiki faced and how Kiki solved them by herself, which played an important role in improving in Yumi's psychological growth and development.

Beginning with the 12th role-play session (after 3 months), Yumi began to appear comfortable and began acting congenially with the members of therapy group.

On the 36th role-play session (after 6 months), Yumi was able to understand how Kiki established her identity (represented by magical flying) following the peer-counseling scene in Ursula's cottage. Yumi gradually began to express her identity and sense of community based on discussion of Kiki's development. Yumi realized that her talent – in KDS, Ursula says that God gives everyone a gift – was skill in English and piano. Yumi began to stop worrying about the relationships with her friends which had triggered anorexia nervosa, and her condition began to improve.

Out of all the subjects she studies at school Yumi likes English and Music the most, and does well in both.

She began playing the piano at a very young age and has won numerous piano recitals. As an elementary school student she was strongly motivated to learn English, and even during times when she was absent from school as a result of bullying, she continued studying English at home on her own. She was particularly motivated to learn English in the month she spent in the US during the summer of her first year at junior high school. Yumi's strong desire to do well in English and Music was the only thing that sustained her during the critical stages of her anorexia.

Yumi is also a big fan of the Miyazaki Hayao animated film *Kiki's Delivery Service*, so we provided a copy of the DVD for her to watch. We

also obtained the soundtrack from a music shop and encouraged Yumi to play along on the piano while we supported on violin and percussion. Yumi and three therapists took part in the role-play program.

In our role-play, Yumi always played the part of Kiki. First we watched the DVD chapter by chapter in Japanese to ensure we all understood the story. Then we set the DVD soundtrack to English and the subtitles to Japanese. We made use of the subtitles to assist in the comprehension of some of the English, which, being spoken at natural speed, was occasionally difficult to follow.

With the video playing on a screen in the background we read from the script and acted out the scenes from the movie. Yumi, whose isolation from classmates left her without a strong sense of self, found that playing as part of our small ensemble helped her re-establish an identity for herself. During our music therapy class Yumi found herself gradually opening up to us. At the end of KDS, Kiki writes, "There are still some times when I feel a little homesick, but all in all I sure love this city!" Yumi had the same feelings about her music therapy class.

Yumi's mother attended every role-play session and was initially suspicious of the therapy. Eventually Yumi's mother recognized the effectiveness of the role-play treatment which had ameliorated Yumi's anorexia nervosa. Despite this there was no apparent change in Yumi's mother's character.

Yumi went back to school and began preparing for the university entrance examinations.

3. Discussion

Previous studies reported that patients with anorexia nervosa typically lack a sense of autonomy, selfhood, and sympathy for others (Sagawa, et al., 2002, Kobayashi, et al., 2003, Garfinkel, 1995).

We designed a psychotherapeutic role-play program utilizing the DVD of KDS and copies of the movie script. The purpose of the role-play therapy was to allow Yumi, by acting out the role of Kiki, to find her own way of dealing with her problems. We had three reasons for using KDS as part of Yumi's treatment.

The first reason is that the main theme of KDS focuses on establishing one's identity, or sense of self, while overcoming the many obstacles encountered in the transition from childhood, through

adolescence, and into adulthood. In addition, the multilingual features of DVD meant that Yumi was able to watch the movie in both English and Japanese, and with either English or Japanese subtitles, thus enabling her to improve her English listening and reading skills even while she was absent from school. KDS became the focal point of Yumi's study of English. Yumi went so far as to obtain an English copy of the script via the internet and taught herself to recite lines spoken by the characters, with particular focus on the heroine, Kiki.

We created a script by watching the DVD and transcribing the dialog. We supplemented this with reference to the DVD subtitles and unofficial scripts found on the web (<http://www.nausicaa.net/miyazaki/kiki/script.html>).

In one scene from the movie Ursula the painter talks to Kiki about the importance of discovering one's own style, and how each person has to do this to make use of the talents they are born with. Yumi, her confidence dented by bullying, found that rather than try to be good at everything, her talents lay in language and music, and by focusing on these talents she improved them and regained confidence in herself. In a way, her struggle mimicked that of the character Kiki.

The second reason for using KDS was that the movie showed how even a single talent (in Kiki's case, flying), if properly used, could allow someone to overcome obstacles and make a living in a strange new city. KDS showed Yumi that rather than trying to master every subject it was better to focus on one area and do it extremely well. The third reason for using KDS is that it has an excellent soundtrack and we made use of it as part of our music therapy.

Through the mechanism of practicing English via acting out scenes from a movie we were able to have Yumi carry out role-plays which she, and the therapists, might have otherwise been shy about doing.

We hypothesized that through acting out role-plays based on the KDS scripts the patient would develop a proper sense of identity and learn how to better relate to others. There were three specific scenes we thought appropriate for the aims of the role-play:

- (1) When Kiki's mother Kokiri says, just prior to her daughter's departure:
"Kiki, don't worry so much about your appearance. What's important is the 'inner soul'. And don't forget to always smile".

- (2) When Kiki arrives in the big city and receives a cold welcome from most people, the baker's wife Osono takes a shine to her and says:
"It's a big town, and there are all kinds of people. But me, I like you".

- (3) The scene where Kiki, having lost the power of flight, arrives at Ursula's cottage and listens to the young painter talk about the importance of finding one's own path in life:
"It's nice to be a witch, isn't it? I like the idea - to be a witch, to be an artist, to be a baker...It's an energy bestowed by the gods or someone, right? Though thanks to it, we do have to suffer at times..."

Through the role-play Yumi came to understand the following three points:

- (1) The world is filled with different people, with different ways of thinking,
- (2) We encounter a lot of problems in adolescence and have to resolve them on our own, and
- (3) We are all blessed with certain talents at birth, and our job is to make use of those talents, and through effort, enable them to blossom.

Our role-play gave Yumi a way to realize it was perfectly all right to focus on her talents, and showed her she didn't have to be the best at every subject in school. Inoue, et al., (1986) suggested that the task of gender identity acquisition in developmental process has much to do with the onset of anorexia nervosa. In assisting Yumi to come to terms with how she sees herself, not only were we able to foster in her a high level of motivation, we also saw an increase in her level of English proficiency, and taken together these results exceeded our expectations. Because one's gender role is decided by society and culture, social and cultural backgrounds must be taken into account when considering any recent increase in the incidence of anorexia nervosa (Inoue, et al., 1986). We are in the process of developing further therapeutic approaches incorporating movie scripts for the purpose of treating anorexia nervosa.

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