# Usefulness of Image Theater Workshops for Exploring Dilemmas in Diabetes Self-Management Among Adolescents

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#### Abstract

Diabetes treatment involves a demanding self-management regime that is particularly challenging to adolescents. There is a need for qualitative research into the specific contexts in which adolescents attempt to balance self-management demands with the needs and desires of adolescent life. This study investigates the usefulness of image theater, a participatory form of theater using the body as an expressive tool, to articulate these dilemmas in daily life contexts. We performed a qualitative analysis of two image theater workshops with 12- to 18-year-old adolescents living with diabetes. Our results show three areas of application: (a) unraveling the contextual complexity of lived experience, (b) the articulation of implicit understandings and underlying motives, and (c) the playful exploration of new behavior. We conclude that image theater is a promising method, especially with respect to the opportunities of a more contextual and action-oriented understanding of the trade-offs made in self-management provide for diabetes education and counseling.

#### Keywords

image theater, participatory methods, lived experience, diabetes, self-management

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# Introduction

Type 1 diabetes is a chronic autoimmune disease, characterized by the inability of the body to produce the hormone insulin, which results in abnormal blood glucose levels. Treatment of type 1 diabetes requires an intensive and challenging self-management regime, involving the daily administration of insulin by means of injections or pump therapy, frequent testing of blood glucose values, monitoring of food intake, and regular physical exercise (Glasgow et al., 1999).

Adolescents with diabetes show poorer self-management behavior (Anderson, Auslander, Jung, Miller, & Santiago, 1990) and poorer metabolic control (Kovacs, Kass, Schnell, Goldston, & Marsh, 1989; Morris et al., 1997) compared with children and adults. Generally, this is associated with the characteristic developments of the teenage years (Peters, Nawijn, & van Kesteren, 2014). Adolescents become less dependent of their parents. Friends become more important. The responsibility for their treatment gradually moves to the adolescents themselves (Burroughs, Harris, Pontious, & Santiago, 1997; Holmbeck, 2002). At the same time, many physical, psychological, and cognitive changes take place. According to a Dutch study by De Wit et al. (2008), these changes often lead to erratic meal and exercise patterns, poor compliance to treatment regimes, and risky behavior. These effects are associated with the adolescents' focus on the fulfillment of psychosocial needs rather than avoiding health risks at the long term. The demands of self-management, De Wit et al. argue, easily interfere with normal routines and friendships, compromising emotional and social well-being. Also, other studies suggest that adolescents particularly experience difficulties in the integration of diabetes treatment into their lives (Court, Cameron, Berg-Kelly, & Swift,

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The major challenge for health care professionals is to help adolescents to further improve self-management without reducing subjective well-being. Although adolescent diabetes is a widely studied phenomenon, much less is known about the perspectives of the ones living with diabetes themselves (Dickinson & O'Reilly, 2004). Also, Spencer, Cooper, and Milton (2010) have claimed that there is a need for more qualitative research to explore the experiences of adolescents living with diabetes. According to a review by Taylor, Gibson, and Franck (2008), the lived experience of people with chronic illnesses in general is an underresearched area. Taylor et al. discerned a number of qualitative studies into adolescents' diabetes experience that primarily used interviews, and sometimes focus groups, as a data collection method. These studies show that adolescents have to manage the different demands of their diabetes within various social spheres, representing other, potentially conflicting needs and desires such as leisure, family, and friendships (Spencer et al., 2010). More qualitative research is needed focusing on the daily life contexts in which adolescents have to make decisions between various conflicting needs and desires. This will enable a better understanding of what it is like to live with diabetes and the complex challenges of self-management.

## Image Theater

Image theater is a participatory form of theater that was first developed by the Brazilian theater practitioner Augusto Boal (1979, 2002) to enable people to find new ways to express themselves, come to understand social reality in a different way, and acquire the capacity for change. Image theater is an action-centered method using the human body as an expressive tool to create still images that represent a wide repertoire of feelings, ideas, and attitudes toward real-life situations (Cohen-Cruz & Schutzman, 2002). These images represent the different meanings that participants attribute to a complex situation, offering a range of opportunities to be discussed and explored further. We expected image theater to be a suitable method to investigate the lived experience of adolescents with diabetes because it enables its participants to simulate the real-life complexity of their daily life context and engage in an in-depth inquiry of their problems collectively in an alternative language that mobilizes their own lived experience. Complex issues involve many different, entangled and often unarticulated aspects that can be difficult to talk about. Self-management of diabetes, in the context of adolescent life, certainly presents such a complex challenge (see Spencer et al., 2010). We supposed image theater would provide a safe and free environment where the participants would be encouraged to find their own voice, use an alternative and accessible language to tell their stories, and discuss complicated issues (see Spratt, Houston, & Magill, 2000).

Apart from a few examples focusing on health promotion and intervention, the application of image theater in health research has not yet been reported. The major aim of our study was to explore the possible contribution of image theater techniques to the understanding of the lived experience of adolescents with a chronic illness, in this case diabetes.

# Method

## The Happy Balance Project

We organized image theater workshops as part of the Happy Balance project. The goal of this research project was to gain insight into how adolescents living with diabetes achieve a balance between leading a happy life and performing adequate self-management. Whereas much research into adolescents with chronic illnesses is dominated by a focus on pathology and the problems experienced, this research project deliberately took a more positive perspective, focusing on the articulation and exploration of strategies that contribute to the adolescents' capacity to adequately manage diabetes treatment and lead a good and happy life. Therefore, the project explored the challenges of self-management with adolescents that were already taking good care of their diabetes (see below for recruitment strategies). The Happy Balance project consisted of a series of online focus group discussions, followed by a full day of workshops comprising a photovoice workshop and the image theater workshop reported here. In the online focus groups, the adolescents engaged in a joint investigation of the relationship between a good and happy life and self-management. The photovoice session was used to validate and enrich the outcomes of the focus group discussions. The image theater session was meant to explore the strategies that participants would normally employ to restore the balance between a good and happy life and adequate self-management in specific situations. This article specifically addresses the image theater sessions.

## Ethical Considerations

The Happy Balance study was performed in accordance with ethical standards. In accordance with Dutch law, parental approval was obtained for adolescents below age 18, by having parents send a signed permission slip. Of course, also the adolescents themselves were asked for consent. Ethics approval was obtained from the Commission for Medical Ethics of the Leiden University Medical Center (LUMC). Written and verbal information about the study was given to participants and their parents at successive phases of the project, including contact information of a member of the research team, should they need further explanations. For every new project phase (online questionnaire, online focus groups, theater workshops, analysis, and reporting), participants were informed of their right to discontinue participation and asked to take part in the new phase again. Only the conversations that took place during the workshop process itself were coded for analysis. On the workshop days, ongoing consent was achieved by asking permission for videotaping and analyzing the workshops, being transparent about the workshop procedures, emphasizing that participants could take a break or stop to take care of their diabetes or for any other reason, and checking the feelings of the participants several times during workshop.

## **Process and Procedure**

The study was carried out by the Netherlands Organisation for Applied Scientific Research (TNO), assisted by two authors (F.K. and S.S.). The study was guided by a multidisciplinary advisory board consisting of a pediatrician, diabetes nurse, psychologist, and social worker. With the help of diabetes treatment centers, the research team purposely selected participants aged 12 to 18 years who reported to "take good care of their diabetes and feel to have a good life," had been diagnosed with type 1 diabetes more than a year ago, and did not have a high risk level of glycemic control, defined as HbA1c < 8.5 in accordance with the project advisory board. The HbA1c measure indicates the average plasma glucose concentration over the past 3 months, and the optimal value is <7.5 (Rewers et al., 2007). Treatment centers recruited selected adolescents and their parents through recruitment letters and an online questionnaire. After permission, the research team followed up by telephone and email. Adolescents received a gift certificate of 15 euros for the online focus groups and another gift certificate of 30 euros for the workshops. The online questionnaire was used for obtaining informed consent, demographic, diabetes, and health information. All adolescents who had signed up fulfilled the criteria.

To create homogeneous groups, two separate workshops, for a younger (12–14 years) and older (15–18 years) age group, were organized at a local workshop space in the center of the Netherlands on separate days. The workshop rooms were ensured to be spacious, relaxed, and quiet to promote open exchange. The image theater workshop lasted 3 hours. The participants were given plenty of time to drink, eat, rest, and take care of their diabetes whenever they needed to. The workshops were facilitated by F.K., who at that time had more than 5 years of experience in facilitating dialogue through interactive theater. S.S., who had facilitated the earlier online focus groups, was present at the workshops as an observer. A camerawoman recorded the sessions on videotape.

#### Participants

Of the 27 adolescents who participated in the online focus groups, 15 were willing to participate in the workshops. Due to practical reasons, such as other activities and dependence on parents to get to the venue, only 10 girls and one boy

participated in the two workshops. One of the workshop groups consisted of three girls, the other workshop group consisted of seven girls and a boy. The mean age of participants for both workshops together was 14.09 years (SD = 1.51 years). Ten participants were of Dutch descent, and one did not answer this question. All participants were in secondary school, with four of them in a low level (preparatory vocational education), five in a high level (preuniversity), and two in levels in between. Five participants had been diagnosed with diabetes between 1 and 5 years ago, the others more than 5 years ago.

An online questionnaire was used prior to the workshops to check the self-reported levels of "good care" and "happy life," obtaining quantifiable information about self-reported happiness (0 = low, 10 = high), subjective health (0 = low, 10)= high), and self-management (1 = low, 5 = high) scales in addition to information about the time since diagnosis, treatment method (insulin injections or pump), frequency of selfmanagement activities in the past 1 to 2 months, number of days missing school or work in the past month because of the diabetes, and number of times coming into the clinic. The mean report marks for happiness were 8.36 (SD = 0.92) for today and 7.64 (SD = 1.21) for past month. The average selfmanagement score was 4.47 (SD = 0.27). The mean subjective health score was 7.00 (SD = 1.41). The online questionnaire confirmed that we attracted the intended selective group of participants-adolescents who report adequate self-management and happiness.

# Image Theater Workshop Method

Image theater is one of the main theatrical techniques that Boal developed as the Theater of the Oppressed (TO). It comprises a collection of games and techniques that emphasizes physical dialogue, the use of imagination, and the nonverbal expression of ideas (Boal, 2002). In a series of physical exercises, the body is used to create still images that help the participants explore the nature and dynamics of social situations from their own experience. The exercises are performed in small groups without words. Participants individually or collectively sculpt their bodies to express their feelings, ideas, and attitudes. The resulting freeze-frame representations signify the different meanings participants attribute to a specific situation, offering a range of opportunities to explore the participants' narratives of social relationships and issues. Images are interpreted collectively through discussions facilitated by a group facilitator. The facilitator plays a crucial role in shaping the discussions that take place, probing the participants to explain the constructed images to each other, but especially to animate the images by adding text and movement, enabling them to investigate their stories and discover deeper layers in the complex situations of their everyday lives (Diamond, 2007; Dwyer, 2004; Perry, 2012).

Boal (1979) distinguished four key stages in the making of image theater that are vital to create an environment in

#### Table 1. The Image Theater Workshop Procedure Explained.

#### Stage 1: Knowing the body: physical mobilization

The first stage aimed to create awareness and mobilization of the body. The workshop started with two exercises that turned the attention of the participants to the physical environment and their own body. The "walk & stop" exercise asked the participants to walk around, experience the room, and all stop at the same time; let only one person walk, only two/three persons walk, and so forth. The push/pull exercise formed pairs who were asked to complete different positions, in which they had to make contact with a specific body part and push as hard as they could without losing balance. The group was side coached to experience the work that had to be done to keep their bodies in balance.

#### Stage 2: Making the body expressive

The second stage explored the power of the body to express feelings, ideas, and attitudes. Two exercises were used. The "complete the image" exercise was used to help participants recognize body positions as theatrical images that convey a story. Two volunteers would shake hands and freeze. The facilitator would ask the other participants what kind of story they saw. Then, one volunteer would step out, leaving an incomplete image. A next volunteer would step in and randomly complete the image to make a different story. This sequence was repeated in silence. The second exercise, "sculpting bodies," allowed the participants to express an idea using another person's body. Pairs were formed, one participant being the sculptor, whereas the other functioned as "intelligent clay." The sculptors were asked to sculpt the other participant into a statue representing their interpretation of random suggestions. The participants were asked to reflect on the images that were formed.

#### Stage 3: Theater as a language: constructing the images

The third stage allowed the participants to use play and theatrical images as an instrument to express what they experience, believe, and think about specific situations. At this stage, the workshop moved toward the subject of diabetes. The first exercise was "times of the day." The participants spread across the room as the facilitator randomly called out different times of the day (10:00h, 15:00h, 17:00h, or specific moments such as "Christmas dinner"). The participants were asked to show in a statue what they would normally do at that time of the day. The exercise was repeated two times, respectively, focusing on what the participants would ideally do and what would be a feasible thing to do. In the second exercise, "image of a situation," participants worked together in groups of three or four. Each of the participants was asked to make an image of a typical situation in which he or she would lose the balance between adequate self-management and happiness. The participants were side coached to make the physical representations as detailed as possible, expressing the relative positions of the persons involved, facial expressions, and emotions. All images that were constructed by the participants were explored and discussed together, preferably through playing with the image by adding text and movement. Collective interpretation reveals, as Boal called it, the multiple truth of an image. At all instances, the participants were asked to share their stories.

#### Stage 4: Theater as a discourse: exploring the images

In the final stage, "theater as a discourse," the participants were challenged to discuss their lived experience of the balance between adequate self-management and happiness together. The participants were encouraged to have the discussion almost without words, through the construction, and what Boal called the "dynamisation" of images (bringing the images to life by giving the characters text or movement or start playing out a scene). First, the participants were asked which of the previously constructed images of misbalance they recognized most. Because of time constraints, only two images could be elaborated. Subsequently, the selected images of misbalance were playfully explored further in a series of exercises. The first step was to create a counterimage expressing the ideal situation. The counterimage was developed by the original "author" of the image, but discussed and altered by the other participants to come to a group interpretation of what would be the ideal situation. The next step was to explore the various ways in which the images of misbalance could be transformed into the ideal images, using different dynamization techniques, such as adding text or movement. This final stage aimed at the in-depth exploration of the strategies the adolescents would or could employ to restore the balance between happiness and adequate self-management.

which the participants feel able and free to explore their experiences, identities, and the systems that affect them. Also, the image theater workshop reported here was designed following these stages. Many of the exercises we used have been applied extensively in different TO applications (Boal, 2002; Diamond, 2007). Table 1 extensively shows the workshop procedure.

## Data Collection and Analysis

The sessions were recorded on video using a digital camera. The camerawoman moved freely but as uninvasively as possible through the workshop room to get all the constructed images and transitions, as well as the stories of the participants, on film. The use of image theater enabled the participants to explore their lived experience in a richer way, demonstrating aspects that would have been lost when we would have asked them to translate their experience into words directly. As the "Method" section described, the participants created images of their lived experience that they could then explore together in both words and action. The workshop facilitator continuously asked the participants to exchange their ideas and concerns. It was those stories that we used as the unit of analysis, because they contained the explanations of what the participants recognized, appreciated, or rejected about the images, which were themselves by principle—ambiguous. The participants' stories were transcribed verbatim. During the coding process, the stories were checked with the video material of the constructed images and transitions to refine their meaning. The transcripts were analyzed using a standard qualitative analysis procedure (Miles & Huberman, 1994). Coding was an open, inductive process because we were particularly interested in the contextual aspects of the lived experience as perceived and appreciated by the adolescents themselves. Initial coding was performed by F.K. In the first phase, transcripts were broken down in separate text fragments that were each coded with a characteristic label. In the second phase, these codes were discussed with S.S. multiple times, revised by F.K., and ordered into a preliminary collection of inductive themes and subthemes. In the third phase, the codes were discussed with the entire project team and refined again. The iterative process of reading, coding, comparison, and reflection finally lead to the emergence of an original coding system describing the adolescents' lived experience.

## Results

We found that the use of image theater to investigate the adolescents' experience of living with diabetes had not only distinct benefits but also a range of challenges, which will be discussed here.

#### The Story of Living With Diabetes

The participants were asked to make an image of a typical situation in which they lost the balance between adequate self-management and happiness. Three major issues were shared: self-management in a social context, self-management as a learning process, and communication about the disease and self-management to others. The largest group of images revolved around conflicts between social activities and adequate self-management. The images displayed situations in which the adolescents experienced the consequences of poor adherence and resulting blood glucose fluctuations. Some participants indicated that they would tend to forget about diabetes management when they became fully absorbed in social activities. Examples of these situations were sports, shopping, going to the movies or parties. One of the participants, for example, composed a situation in which she had fainted during a hockey match. In her image, she was lying on the ground, stretched out. Her teammates were showing shocked faces. The club's physician ran toward the scene with some sugar. "I am the keeper of a hockey team. I had a hypo during a game, but I didn't do anything about it. I just wanted to continue playing. I guess it was just my inaction that led to this."

Other participants indicated that they were actually very aware of the possibly conflicting desires to take care of the diabetes appropriately and have fun with friends. For example, one girl constructed an image that portrayed her friends joyfully trying on clothes whereas some meters apart she sat down on a chair measuring her blood glucose, her face turned away looking sad. Another major theme that resulted from the workshops related to the family learning process of finding out how to deal with self-management adequately. Participants constructed images of situations in which they or their parents misjudged the circumstances, which led to inadequate treatment. One boy made an image of himself lying in a hospital bed, his caring parents besides him, while doctors were treating him. Other images showed less severe situations in which inadequate treatment led to tiredness and feelings of discomfort.

I was just having a flu, but ultimately it is the diabetes why I ended up in the hospital. When you are ill, you are less sensitive to insulin and you have to do more. The doctors were really angry with my parents because they had not taken action right away. It had been going on for the entire day, but my parents did not know . . . that they had to take action.

Most participants recognized this story. The adolescents indicated that they and their family had been facing problems in self-management due to a lack of knowledge and experience, especially in the first years after diagnosis. Indeed, they agreed that living with diabetes is a learning process of finding out what does and does not work in every situation.

The third major issue we encountered during the workshops concerned communication, especially the issue of disclosure of the disease to friends, classmates, and strangers. Taking care of insulin treatment is usually done in public, for others to see. Many of the participants indicated that classmates, friends, and even strangers generally ask them a lot of questions, often out of ignorance, curiosity, or concern. For some of the participants, it felt like they had to justify themselves over and over again.

When I say I have diabetes there are people that ask, "Should you eat sugar or not?" I respond with, "Sometimes I do, sometimes I don't." Then they go like, "huh, when do you have to and when not." And then you have to explain everything again.

# Unraveling the Contextual Complexity of Lived Experience

The use of image theater techniques provided the opportunity to investigate the contextual aspects of the lived situations in which a participant's experience becomes meaningful. Take, for example, the image of the girl shopping on a school trip. In the freeze frame she produced, she had stopped walking; her face showed she realized that she was not feeling well. Two of her friends were impatiently waiting, carrying shopping bags in each arm, while another friend had stopped to offer her something to eat. The image shows the complexity of the decision this girl has to make: her own competing desires wanting to continue shopping, be like her friends, and at the same time care for her disease. In her environment, there is not only peer pressure to continue the shopping activity but also a friend supporting her need for self-care. The entanglement of emotional and relational aspects adds to the complexity of the situation for the protagonist. What image theater can contribute to the research of illness experience is the power to unravel this contextual complexity.

The displayed situation enabled participants to discuss the contextual aspects in more depth, assisted by the facilitator. For example, one other girl produced an image of a situation in which she misinterpreted her blood glucose levels. Also, her story concerned a decision that she often had to make: take part in social activities like her peers or adjust to the diabetes. The way the group of participants, together with the facilitator, handled her story illustrates the possibilities image theater has to offer to the collective exploration and interpretation of lived experience. The girl was sitting in her room with a friend. They were about to leave the house when she did not feel well and decided to measure her blood glucose levels.

We wanted to go to the movies, only I had a high blood sugar. There are two possibilities then, either the device got loose or you are too high because you did not bolus [extra dose of insulin] enough. I had to make a choice: stay home to check whether it was the device or just go. We went anyway. But, it turned out to be the device. When I got back, my sugar was way too high again.

The image showed how the social setting influenced her interpretation of the measurements. She explained that in situations such as these, it was hard to make a choice. At such a moment, in an image theater workshop, the facilitator can use a variety of animation techniques that helps not only the "author" of the image but also the other participants, to investigate the situation in more depth and articulate their ideas and concerns about it. Encouraged by the facilitator, the group discussed which influencing factors were present. The group concluded that these factors entailed the pressure of the friend who really wanted to go out, the girl's internal desire to be "normal" and have fun with her friend, and the girl's internal desire to take care of her diabetes. Invited by the facilitator, the girl decided to visualize her second internal desire in the person of her mother, who is usually the one who reminds her to take good care of self-management. Then, the girl started to animate the image by adding onesentence expressions to the participants who were representing the three different desires or concerns. When the facilitator asked her to play around with the different voices, raising them and silencing them, the girl realized that her own voice, representing the desire to be normal and go out, was the most influential.

## Articulating Underlying Motives: The Need to Fit In

As the exercise described above demonstrated, the images served as a starting point for the group to discuss the underlying motives and beliefs that would explain the in-depth structure of the issues and conflicts they were confronted with on a daily basis. We did notice that the in-depth exploration of images is a process that needs to be facilitated. The workshop facilitator was clearly needed to help the participants to see the deeper complexity of the images by continuously encouraging them to keep working on it and asking questions of clarification.

The most common concern of the adolescents that was discussed was the desire to be normal, like the others. We found that this underlying desire had different implications for the various participants. Some participants, for example, even forget about their disease while having fun with their friends. "I just don't realize that . . . The weather is beautiful and everybody is enjoying the sun. I wasn't thinking about it. Whereas normally, I do keep an eye on it."

Others, on the contrary, become increasingly self-conscious because of their desire to blend in like the others. "This happens regularly when I go shopping... Of course, it is fun to go shopping, but it's pretty annoying that you always know it will happen at some point."

#### Playful Exploration of Possible Worlds

Image theater is performative. In the image theater workshops, the lived experience of the adolescents is not only reconstructed, but the adolescents are also invited to rethink their experience, articulate and challenge it, and experiment with new ideas in the collective activity of making and animating images. This became evident in the way the group worked with the abovementioned image that one girl constructed about shopping with her friends. She sat down on a chair measuring her blood glucose, her face turned away sad, while her friends continued trying on clothes. After the image was carefully explored and fine-tuned with the group, the author of the image was asked to create an image of how this situation would ideally look like. The girl started to change the image by putting herself next to her friends, joyfully trying on clothes.

For me, it would be the best not to stand out and just join in. Just play along and think, "when we leave the shop, I will get something to eat." Usually, you know whether you are too low or not. Delaying it [the self-management], that is what I would want to do most.

Interestingly, when she changed position in the image, she realized that this would not be the ideal situation for her after all because she would then not be taking care of her health.

For my diabetes, this would not be the best situation. In principle, you have to take action right away. The ideal situation is not what I personally favor . . . take responsibility and give yourself a shot.

The facilitator asked the group whether it would be possible to unite these contrasting needs. Is it possible to blend in and continue social activities and, at the same time, take care of your health? Together, the group constructed an ideal image in which one of the friends had moved over to the girl sitting down measuring her blood glucose while the other two friends continued trying on clothes. As the author of the image said,

For me this is ok. That there is somebody else here asking how I am doing . . . not that everyone would have to leave their stuff for me . . . I would be the "fun spoiler."

By adding text and movement, the group continued to explore different ways by which the ideal situation could be reached, starting from the image of misbalance. The group came up with different strategies. For example, they tried out what would happen if she would ask a friend to join her on the spot or if she would ask a friend to support her before going shopping. Interestingly, also the author of the image recognized these as viable options, whereas she thought she should solve the issue herself at first.

When it is about my illness, I am like, "I will do it by myself." I do like it when somebody comes asking how I am doing, but I am not like, "Hey, come and watch me." But now I see somebody else do it, I see it is actually quite normal to call out to someone.

#### Making Implicit Understandings Explicit

Through participating in the workshops, the adolescents became more aware of their own implicit beliefs and understandings. The recognition of implicit beliefs and understandings was largely achieved through observing others act in relation to the images the adolescents had constructed themselves. For instance, the girl in the above example became aware of her belief that diabetes obstructed having fun together when one of the participants showed the possibility of asking a friend to help her. This process, by which the participants developed a richer understanding of themselves in a social context, has eloquently been described by Boal (1995): "Theatre—or theatricality—is this capacity, this human property which allows man to observe himself in action, in activity" (p. 13). The theater allows him to be the "subject (the one who observes) of another subject (the one who acts)." It allows him to imagine variations of his actions, to study alternatives. Constructing the complexity of the images was a process of discovery. During the process of making, discussing, and adapting the images, the participants together discovered the different meanings of the situations they experienced themselves. For instance, it was very important to the girl who produced the image of shopping with diabetes to just take part in the activities of her friends. In the process of working with the image, she discovered that taking care of her diabetes was also something that mattered to her in these kinds of situations.

## Discussion

# Working With the Body to Construct Images

Image theater intends to provide an alternative language that is accessible to everyone and can open a dialogue without the politics of words. The image returns to the situation as it was experienced and shows it like it is. Participants are invited not to negotiate the precise meaning of each image, but to respond to it more intuitively. Even while we used the stories that participants used to explain the images and transitions as a primary data source, the participants constructed the images using a much more embodied repertoire. The participants' only resources were their interpretations, their bodies, and their interactions with others (Linds et al., 2013). We experienced that the first two stages of the workshop program were crucial to build confidence in the nonverbal expression of ideas and the use of physical posture to compose images. At the start, there was some embarrassment and shyness. After a while, this was replaced by enthusiasm and enjoyment. The exercises we used took away embarrassment by gently pushing the participants outside their comfort zone and making them experience together that it is safe to show yourself. In a group evaluation afterward, most of the participants indicated they liked this new way of expressing themselves and stated it was fun to do.

During our workshops, we observed that the principle of the image as a language is indeed powerful. Because the images constructed by the participants were multidimensional and open to interpretation, other participants could easily recognize aspects of their own situation in the images and add something to it. Also, according to Perry (2012), it is through the images that participants recognize themselves in the stories of others and are able to write themselves into it by adding characters, text, or movement. Visualization of the participant stories brings elements of their lived experience into the conversation, which otherwise might not have been discussed. Furthermore, working with the image on the workshop floor helped participants to focus their collective interaction on a specific situation and issue. The richness of the image allowed the participants together with the facilitator to focus on very specific contextual aspects of the lived experience of the participants and explore them in more detail. The simple fact that the situation is reconstructed in the workshop room makes it possible to study it, challenge it, and articulate it. Through collective interpretation of the images, the meaning of various aspects of the participants' lived experience was transformed and reinvented.

# Understanding the Context of Action

Lived experience is by definition social and context dependent (Van Manen, 1990). The image theater workshops provided a rich understanding of such daily situations in the lives of the adolescents in which they encounter conflicts resorting to different values, needs, and desires. The question for these adolescents is not how to deal with self-management, but how to deal with the trade-offs between self-management and the needs and desires of normal adolescent life. This broader setting of the self-management question is captured by the image theater workshops. The exercises yield very detailed information about these trade-offs and the values at stake, offering an in-depth understanding of the contextual aspects in which the experience of these situations becomes meaningful. These contextual aspects provide the points of departure for the development of interventions that aim to improve the balance between self-management and happiness. Indeed, as Peters et al. (2014) argued, "to improve self-management and quality of life of adolescents with diabetes, diabetes education needs to pay attention to the social context in which self-management and disease adaptation take place" (p. 7).

A related advantage of image theater is the link to concrete behavior in lived situations. Group-based qualitative methods usually do take into account the notion that the meaning of values, needs, and desires is actively negotiated and constructed during the course of conversation. Image theater adds the dimension of the concrete context of action, addressing the notion that these values, needs, and desires are also situationally constructed. This implies not only a better understanding of the relationship between thoughts and action, both for the researchers and the participants, but also an opportunity to start building capacity for change. In other words, participants become aware of their implicit understandings, of ways to look at the situation differently, and of alternative strategies to improve their situation. These two interrelated features, contextual understanding linked to action, may prove a significant contribution to the practice of diabetes education and counseling. For example, Sadler, Wolfe, and McKevitt (2014) showed that lay people's understanding of self-management reflects more psychological and social aspects compared with the predominantly biomedical understanding of health professionals. More attention to these different understandings may help to grasp (and improve) how self-management is practiced.

#### Image Theater as an Intervention Method

As the above example illustrates, image theater is not just performative in the sense that its participants coconstruct new ideas, it also has the capacity to change their views and provide them with new insights, skills, and alternative courses of action. Ultimately, Boal (2002) envisioned the participants of image theater as active performers in the rehearsal for personal and social change. One of the examples we observed during the workshops was the image of the girl who recognized that taking care of your diabetes is not the same as spoiling the fun. The image enabled her to look at her own situation differently and to experience that her negative thoughts about self-management did not need to be true. This opened new behavioral opportunities for her. Although several authors have published about the use of the arsenal of TO in many different contexts, such as health promotion, community participation, and health education (see, for example, Francis, 2010; Linds et al., 2013), more research is needed to gain an understanding of the empowering effects of image theater as a driver for personal change.

## Limitations, Strengths, and Validity

It was difficult to recruit a sufficient number of participants together on one workshop day, mainly due to the relatively small number of adolescents at the start of the study and to competition with other activities, such as sports and social activities. During the phase of recruitment and organization, project staff tried to overcome other potential barriers to participation, such as distance, travel cost, and transportation. The two workshops that we organized differed with respect to age, size, and gender balance. Age did not affect the ability to take part in the workshop. Group size did. In the small group, each of the three participants got more opportunity to explore her ideas, which was, at the same time, more exhausting. The large group benefited from the opportunities of social interaction to produce a variety of ideas, but had more difficulty to stay focused. Only one male and 10 female adolescents participated in the workshops. This may have made it more difficult for the male participant to express himself. Also, as some studies have reported gender differences in the management of diabetes, this could be problematic for the application of this kind of workshop methodology (see Williams, 1999).

At the same time, most themes conveyed by the images resonate with other qualitative studies. Taylor et al. (2008), for example, reported that being normal and getting on with life is a frequently reported aspect of living with a chronic illness. This includes forgetting the illness and seeing oneself as being like healthy peers. These findings are similar to what we have observed in our workshops. Taylor et al. also report the importance of family, particularly parents. In our study, the role of the parents was dominantly positive, which could have been due to the selected population. Similar to the studies reviewed by Taylor et al., our findings demonstrate that a trustworthy and communicative relationship with the parents is important. Our findings also show similarities with a review of qualitative studies of type 1 diabetes in adolescence (Spencer et al., 2010). For example, Spencer et al. highlighted the learning process that was required to achieve adequate self-management, including the development of new family routines and new ways to deal with conflicts introduced by the disease. A positive effect of this learning process is that it produces, as Spencer et al. argue, a sense of the family working together. Our participants reported similar processes, for example, in their stories about how the family learnt to deal with crisis situations. The abovementioned similarities indicate that the situations described in the image theater workshops generally fit into this range of issues. It was, however, not the intention of this qualitative study to produce generalizable claims. For that purpose, or at least to represent the diversity of issues involved, more workshops with a better balanced distribution of participants would need to be organized. We specifically aimed to explore the usefulness of image theater to produce in-depth and contextual understanding of the complex challenges of selfmanagement. For this purpose, it is important that the discussed issues are recognizable in the literature and the indepth understanding is indeed produced. We will return to that question later in the discussion.

We applied several strategies to increase the validity of our findings. The iterative development of a coding system in separate phases increased the rigor of our interpretations. Using the combination of visual images and verbal stories, we tried to stay close to the expressions of the participants about concrete situations they experienced in their life. Both coders were intimately familiar with the entire data set, because they were both present during the workshops. Member checking was only performed during the workshops as the facilitator constantly checked whether interpretations of the constructed images were shared among the participants in addition to checking his own understanding of the participants' interpretations. Intermediate results were not checked with participants. The end report was sent to the participants for comments and feedback.

# Conclusion

Image theater is an open and flexible method that seems to work optimal with groups of five to eight preferably mixed participants to balance different needs. It offers an alternative language to deal with complex, unarticulated issues in the lived experience of a chronic disease. It produces a contextual and action-oriented understanding of the trade-offs adolescents living with diabetes face with respect to the complex challenges of self-management. This provides points of action for diabetes education and counseling. Furthermore, image theater itself may be used as an intervention method, offering a simulated social context for the rehearsal of personal change.

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#### References

- Anderson, B. J., Auslander, W. F., Jung, K. C., Miller, J. P., & Santiago, J. V. (1990). Assessing family sharing of diabetes responsibilities. *Journal of Pediatric Psychology*, 15, 477–492.
- Boal, A. (1979). *Theatre of the oppressed*. New York: Urizen Books.
- Boal, A. (1995). *The rainbow of desire: The Boal method of theatre and therapy* (Reprinted ed.). London: Routledge.
- Boal, A. (2002). *Games for actors and non-actors*. London: Routledge.
- Burroughs, T. E., Harris, M. A., Pontious, S. L., & Santiago, J. V. (1997). Research on social support in adolescents with IDDM: A critical review. *The Diabetes Educator*, 23, 438–448.
- Cohen-Cruz, J., & Schutzman, M. (Eds.). (2002). *Playing Boal: Theatre, Therapy, Activism.* New York: Routledge.
- Court, J. M., Cameron, F. J., Berg-Kelly, K., & Swift, P. G. (2009). Diabetes in adolescence. *Pediatric Diabetes*, 10, 185–194.
- De Wit, M., Delemarre-van de Waal, H. A., Bokma, J. A., Haasnoot, K., Houdijk, M. C., Gemke, R. J., & Snoek, F. J. (2008). Monitoring and discussing health-related quality of life in adolescents with type 1 diabetes improve psychosocial well-being: A randomized controlled trial. *Diabetes Care*, 31, 1521–1526.
- Diamond, D. (2007). Theatre for living: The art and science of community-based dialogue. Bloomington, IN: Trafford Publishing.
- Dickinson, J. K., & O'Reilly, M. M. (2004). The lived experience of adolescent females with type 1 diabetes. *The Diabetes Educator*, 30, 99–107.
- Dwyer, P. (2004). Augusto Boal and the woman in Lima: A poetic encounter. New Theatre Quarterly, 20, 155–163.
- Francis, D. A. (2010). "Sex is not something we talk about, it's something we do": Using drama to engage youth in sexuality, relationship and HIV education. *Critical Arts: A Journal of South-North Cultural and Media Studies*, 24, 228–244.
- Glasgow, R. E., Fisher, E. B., Anderson, B. J., LaGreca, A., Marrero, D., Johnson, S. B., . . . Cox, D. J. (1999). Behavioral science in diabetes: Contributions and opportunities. *Diabetes Care*, 22, 832–843.
- Helgeson, V. S., & Novak, S. A. (2007). Illness centrality and wellbeing among male and female early adolescents with diabetes. *Journal of Pediatric Psychology*, 32, 260–272.
- Holmbeck, G. N. (2002). A developmental perspective on adolescent health and illness: An introduction to the special issues. *Journal of Pediatric Psychology*, 27, 409–416.
- Kovacs, M., Kass, R. E., Schnell, T. M., Goldston, D., & Marsh, J. (1989). Family functioning and metabolic control of schoolaged children with IDDM. *Diabetes Care*, 12, 409–414.
- Linds, W., Ritenburg, H., Goulet, L., Episkenew, J. A., Schmidt, K., Ribeiro, N., & Whiteman, A. (2013). Layering theatre's potential for change: Drama, education, and community in Aboriginal health research. *Canadian Theatre Review*, 154, 37–43.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: SAGE.
- Morris, A. D., Boyle, D. I. R., McMahon, A. D., Greene, S. A., MacDonald, T. M., & Newton, R. W. (1997). Adherence to

insulin treatment, glycaemic control, and ketoacidosis in insulin-dependent diabetes mellitus. *The Lancet*, *350*, 1505–1510.

- Perry, A. J. (2012). A silent revolution: "Image theatre" as a system of decolonisation. *Research in Drama Education: The Journal of Applied Theatre and Performance*, *17*, 103–119.
- Peters, L. W. H., Nawijn, L., & van Kesteren, N. (2014). How adolescents with diabetes experience social support from friends: Two qualitative studies. *Scientifica*, 2014, Article 415849.
- Rewers, M., Pihoker, C., Donaghue, K., Hanas, R., Swift, P., & Klingensmith, G. J. (2007). Assessment and monitoring of glycaemic control in children and adolescents with diabetes. *Pediatric Diabetes*, 8, 408–418.
- Sadler, E., Wolfe, C. D., & McKevitt, C. (2014). Lay and health care professional understandings of self-management: A systematic review and narrative synthesis. SAGE Open Medicine, 2, Article 2050312114544493.
- Spencer, J., Cooper, H., & Milton, B. (2010). Qualitative studies of type 1 diabetes in adolescence: A systematic literature review. *Pediatric Diabetes*, 11, 364–375.
- Spratt, T., Houston, S., & Magill, T. (2000). Imaging the future: Theatre and change within the child protection system. *Child* & *Family Social Work*, *5*, 117–128.
- Suris, J. C., Michaud, P. A., & Viner, R. (2004). The adolescent with a chronic condition. Part I: Developmental issues. *Archives of Disease in Childhood*, 89, 938–942.

- Taylor, R. M., Gibson, F., & Franck, L. S. (2008). The experience of living with a chronic illness during adolescence: A critical review of the literature. *Journal of Clinical Nursing*, 17, 3083–3091.
- Van Manen, M. (1990). Researching lived experience: Human science for an action sensitive pedagogy. Albany: State University of New York Press.
- Williams, C. (1999). Gender, adolescence and the management of diabetes. *Journal of Advanced Nursing*, 30, 1160–1166.

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