The Impact of Dance on the Development of Coping Mechanisms for Narcolepsy: A Narrative Analysis

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THE IMPACT OF DANCE ON THE DEVELOPMENT OF COPING MECHANISMS FOR NARCOLEPSY: A NARRATIVE ANALYSIS

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Abstract

The purpose of this study was to highlight the experiences of dance as an approach to give optimism in reducing the difficulties of narcoleptic patients that stem close to normal social functioning, and to explore the consequences of dance on narcoleptic patients in physiological, environmental and interpersonal aspects. A semi-structured interview was conducted to 3 selected narcoleptics, age ranging from 30 to 45 years, with at least 6 months of dance experience, using a purposive sampling procedure. Thematic analysis enabled the identification of key components of the impacts of dance and its coping mechanisms as the generated themes from the two research questions to include; 1) Dance as a form of Expression, Being Mindful, Decreased Symptoms, Self-achievement, Self-Enjoyment, Satisfaction level, Self-contentment, Stress-release and Balance of health, 2) Flexibility in Dance Style, Wider perspective in Dance Style, Social Functioning, Attention Skills, Emotion Management, Positive mind-set, Time management, and Intra-Familial relation. The finding from the two research questions was identified across the generated themes. The findings were expected to increase awareness among people in the issue of narcolepsy and its consequences for the purpose of mental health and well-being to promote a healthy lifestyle and better quality of life. Research Implications for the improvement of narcoleptics were also discussed for the purpose of module developments and interventions.

Keywords: Coping Mechanism; Dance; Mental Health; Narcolepsy; Physiological.
A. Introduction

Narcolepsy is a rare chronic neurological disorder that affects the sleep-wake cycle of individuals suffering from this condition (Inocente et al., 2014). Narcolepsy is a complex disorder as it coincides with numerous other psychological and physiological problems. Secondary to Type 1 Narcolepsy Disorder is cataplexy, which is the experience of short-term muscle weakness when individuals project emotions such as laughter or anger (Inocente et al., 2014). According to a study in 2014, only 22% of sleep specialists could name all five major symptoms of Narcolepsy, as a result, the majority of people go undiagnosed for 3 to 25 years and the misdiagnoses include epilepsy, depression, and schizophrenia (Rosenberg & Kim, 2014). Hence, this provides evidence that there has not been much awareness and exposure for this rare condition, especially in regards to visible identification, making it an “invisible illness” even to the majority of sleep experts. People suffering from rare conditions are at risk of experiencing poor quality of life (Culbertson & Bruck, 2005). Narcoleptic patients according to a study, experience a higher rate of driving accidents, greater unemployment, lower job satisfaction, and lower educational outcomes than their non-narcoleptic counterparts due to the challenges brought in their condition (Culbertson & Bruck, 2005).

However, numerous researches have shown that dance improves the quality of life of the narcoleptics with changes both physiological and psychological. Dance has been suggested to strengthen the bodily connection, increase psychological well-being and improve poor body image and physical perception on the self (Duberg et al., 2016). Dance interventions focus on enhancing the enjoyment, autonomy, confidence and social affiliation, which can have a great impact on social functioning for narcoleptic patients. It is also linked to increased awareness of emotional processing and a higher ability to interpret the emotions of others (Duberg et al., 2016). Overall, dance is a non-traditional method of therapy that serves as the coping mechanism to deal with daily issues among the narcoleptics.
Narcolepsy, a disabling disorder that affects 1 of 2000 people in the United States and approximately 3 million people globally, is characterized by excessive daytime sleepiness (EDS) and recurrent devastating urges to sleep or involuntary daytime lapses into sleep (Ruoff & Black, 2014). Narcolepsy is linked to various mental illnesses such as depression, anxiety, stress and most prominently decreased quality of life (DQL). Due to the increasing numbers of news and articles surrounding the difficulties of Narcoleptic patients to find proper work opportunities, narcolepsy has also been related as a form of disability, contributing to the stigma that narcoleptic patients are unable to hold down jobs, relationships and other daily activities.

Narcolepsy is the second leading cause of excessive daytime sleepiness after obstructive sleep apnoea. It is also stated that Narcolepsy is an “invisible illness” which is due to the low awareness of the condition. Only 25% of people in the United States are diagnosed with treatment and 60% of patients are misdiagnosed (Narcolepsy Fast Facts, 2013). The reason for narcoleptic patients to collapse easily into the daytime sleepiness is due to the time when the patient especially participates in mundane activities such as talking or driving. Hence, the dance which can be regarded as a form of exercise helps narcolepsy patients be more active with the benefits of improving the vicious circle of physiological, physical and psychological balance in the realization and performance of dance activity.

This research would provide an insight into the challenges experienced by the narcoleptics in their struggle to balance their life and to achieve their normal functioning. Coping mechanisms are highly needed by narcoleptic patients when living with adversities, facing problems with their professional occupations or even having difficulties in their daily routines. Psycho-educational coping mechanisms could be beneficial resources for the narcoleptics to start their functioning life from the self-awareness phase to the implementation of a personal coping mechanism. This study would contribute greatly to practitioners and counselors to comprehend a more in-depth perspective on the realities
and methods for coping with narcolepsy. It can serve as a guide for families of narcolepsy patients as well as the general public in order to raise awareness of this rare condition. It can be a foundation for young scholars interested in dance or in narcolepsy and would like to extend further on the contributions of this research. Lastly, it can be used to further research developments and treatments on narcolepsy for the more this condition is understood, the more advancement can be set forward to tackle its setbacks.

B. Method

1. Research Design

The current research used a qualitative method to analyze the narrative reality of the lived-experiences of the narcoleptics. The qualitative approach was used to unravel the gaps that quantitative study will overlook such as realistically detailed experiences that have not been much encountered in the previous studies. The narrative analysis used in the research involves deriving the significant aspects of the stories obtainable by respondents by taking into account the context of each case and their different experiences. Accordingly, narrative analysis is the amendment of the original data by the researcher (McAlpine, 2016).

2. Research Sample

The sample of the current research was the three narcoleptic patients living with either Type 1 or Type 2 narcolepsy (also known previously as Narcolepsy with Cataplexy). The age of the sample was from 35-47 years. One subject was excluded from the study due to her health conditions which did not allow for the interview to be continued. Hence, only two subjects were used for the purpose of this study. According to Patton (2002) two participants are the minimum requirement of the narrative analysis, therefore, the study conducted a semi-structured interview for only these two samples by using a purposive sampling technique. This technique helps to identify the similar characters of the intended sample with the referral. The subject referred the researcher to other subjects that deemed suitable for the study adhering strictly to the criteria and the
reason for the referral is due to the difficulty in obtaining participants for the study. The first participant was a 47-year-old female from the United States of America, diagnosed at the age of 44 with Type 1 narcolepsy. The second participant was a 37-year-old female from the United Kingdom, diagnosed at the age of 12 with Type 1 narcolepsy. Both participants have been involving in different types and stages of dancing experience since the age of 3. The participants were diagnosed to develop narcolepsy and the experience in dancing was at least 6 months. Participants were not selected based on their existing illnesses and had little or no dance background. A global-scale sample selection was considered in the current study, due to the rareness of the condition to occur among the dancers in Malaysia in accordance with the report of the National Organization for Rare Diseases (NORD, 2017) and sensitive data selection process. Therefore, participants of this research were selected based on the researcher’s own experience of selecting, referred by some dance professionals.

3. Research Procedure

The participants live abroad and due to the time differences and convenience of electronic communication, phone conversations were highly considered to conduct. Each participant was sent an email separately with their consent to answer semi-structured (open-ended) questions regarding their lives as narcoleptic dancers. In order to avoid difficulty in their answers, a time frame of 3 weeks was provided to each participant to answer the questions carefully and to write their inner thoughts as accurately as they deemed fit and in order to study the participants extensively. Following the phone conversations, verification of answers was then sent back to the participants through email and once the response was gained, coding was developed which addressed further into their lives respectively.

4. Data Analysis

Thematic analysis is the process of analyzing the insight expression of the participants for identifying the coding of open and axial. It marginally organizes and defines the data set in rich detail descriptions in order to understand the results of research to readers (Braun & Clark, 2006). The thematic analysis is set out in step by step process as follows: It begins with the
(i) familiarization of data – where the researcher comprehensively looks into the depth of the data by reading and re-reading and ensuring there are patterns that connect to the topic of the study, (ii) Transcription of data – as stated by Braun and Clark (2006), a fundamental part about transcribing is to make sure the information needed is used from verbal account, and in a way, which stays genuine to the original data required, (iii) generating initial codes – by deriving the initial codes from a basis of open and axial coding methods, (iv) searching for themes – amongst an array of themes, the most relevant and prevalent themes are selected through this process, then (v) reviewing themes – ensuring the themes selected are cross referenced and intended accurately, (vi) defining and naming themes – when redefining the themes, it is crucial that they are succinct and instantaneously gives the reader a sense of what the theme is about (Braun & Clark, 2006), and (vii) producing the report – then instills the validity of such themes that are presented in the study.

C. Finding and Discussion

1. Impact of Dance in the Life of Narcoleptics

The current study aimed at finding narcoleptics’ perception of the impact of dance on the development of their coping mechanism. The study developed a systematic analysis of the main ideas from research question one and research question two with the development of themes both from open and axial coding procedures. There were eight themes generated through axial coding for research questions one; the perception of narcoleptic patients on the impact of dance as stated in table 1.

Table 1.
Themes Generated from Research Question One

| Sample Expression                                                                 | Main Idea                      | Themes Generated                          | Findings                  |
|----------------------------------------------------------------------------------|--------------------------------|-------------------------------------------|---------------------------|
| Dance is my means of expression.                                                 | Expression & Creativity        | **Primary Cognitive Appraisal:**          | Being                     |
| I fell in love with it and I knew I wanted to be on stage but I also enjoyed the creative aspect, not just performing other people’s | Personal Expression & creativity | 1. Stress determination                   |                          |
|                                                                                 |                                 | 2. Harm/loss, a threat, or a              |                          |
choreographies, but being able to create my own pieces or interpret things from my personal perspective.

I try to meditate and move in a dance way daily for myself at the start of the day....I use it as much as I use my words to think through tough decisions, work out a situation with others and simply to relax.

Though I did not sleep for long periods of time I felt I had adequate sleep to endure through the days to follow. Over time I think that the less I danced, the fatigue and drowsy moments became more evident.

Teaching dance became an enjoyable means of earning a living. I came alive on stage. I never performed with fatigue. It seemed that I could muster energy from the process no matter how tired I was.

I fell in love with it and I knew I wanted to be on stage.....being able to create my own pieces or interpret things from my personal perspective.

Dance provides some vague normality in my life.

| Motivational aspects of stress and the varying emotions that are associated with the experience of stress |
|---|
| 3. | Mindful challenge event |

| Relaxation during the move | Decreased Symptoms |
|---|---|
| Less problem of sleep and stress with dance | Self-achievement |
| Earning a living | Satisfaction level |
| Enjoy and no fatigue | |
| Self-ability in creating and interpreting perspectives | Self-contentment |
| Life normality | Confidence and contentment |
| wit dance Stress-performance release | |
variation of movement

Though I did not sleep for long periods of time I felt I had adequate sleep to endure through the days to follow. Over time I think that the less I danced, the fatigue and drowsy moments became more evident.

With less dance in my life I have been told by friends that I seemed to have heightened emotions, meaning they were amplified beyond what was called for in the situation.

Noted: Themes generated from Open and Axial Coding

Dance as a form of Expression

Under this theme, both respondents reported that they felt the dance was a means of expression. Through creating and music interpretation, they can communicate feelings to their audience. It seemed to even lessen their challenges that come with being narcoleptic. The research was consistent with previous research “dance as emotional expression” as the central aspect of the dance experience was how different dance choreographies enabled affirmation of different kinds of emotions. Current research indicated that the ability to express emotions through dance movements, instead of words, facilitated acceptance and justification of those emotions. Numerous other researches highlighted further on the significant synchronization of rhythmic experience of dance controls thought flow and performances, thus balancing the expression of emotion (Anne, Margareta & Helena, 2016; Duberg, Moller & Sunvisson, 2016).

Being Mindful

Both participants in the current research experienced a moment of mindfulness. The participants explained that when dancing, the existence of other things in mind was invisible, thus creating a pure move and
mindfulness moment when the thought and feeling were purely persistent. Thus, dance can be used as a form of meditation when negative thoughts come into distract focus and attention on the positive outlook on life. Previous researches showed that challenging to handle internal and external pressure and often felt susceptible to the influence of the media were the uneliminated and on-going dilemmas among narcolepsy patients (Innocente et al., 2014; Jennum et al., 2016). Nonetheless, other researches indicated dance intervention as a desirable time out (Anne, et al., 2016), which emphasized on mind-stimulating activities that helped in identifying coping strategies used to combat cognitive changes after diagnosis and treatment (Von, et al., 2013).

**Decreased Symptoms**

Both participants felt that, whether directly or indirectly, dance helped in reducing the problems of narcolepsy per se. Dance is both a challenge and a form of therapeutic coping in order for the narcoleptics to stay functioning. Accordingly, dance is a self-care intervention that showed a post-recovery mechanism in reducing stress and attentional fatigue (Von et al., 2013), which eventually depleting the symptoms of narcolepsy.

**Self-Achievement**

Numerous researches stated that dance helps to provide a means for creating social relationships, reducing daily burdens, flexibility and overall this helped in improving quality of life which is one of the prominent problems in having narcolepsy (Bradt, et al., 2011; Duberg, et al., 2016; Xu et al., 2016). Current research indicated the significant impact of dance on their self-achievement reported by the participants, not only to uplift their performance but also to improve self-determination, thus leads to increasing self-satisfaction in their level of dance.

**Self-Enjoyment**

The current research also indicated that the impact of dance, experienced by narcoleptics, was to produce a degree of enjoyment in different styles. It creates the intention of engaging more into a different level
of capacity when one level is completed. The mastery of certain levels provides a collaboration of individual satisfaction and enjoyment for further process of self-evaluation in each style and category of dance. As indicated by Duberg, et al. (2016) that dance interventions for narcolepsy decrease patterns of sleep disturbances with different movement focus in different styles.

**Satisfaction level**

Duberg, et al. (2016) also stated on the importance of satisfaction level through which bodily connection is strengthened to increase psychological well-being and to improve poor body image and physical perception on the self. The current research revealed the impact of danced perceived by the Narcoleptics to bring more satisfaction in their life and to fulfill their curiosity in each level of performance. This is the concept of their ability in creating and interpreting perspectives from different ways of rhythms and dance performances.

**Self-Contentment**

The current research also indicated self-contentment as another impact of dance for the Narcoleptics in which confidence and contentment with dance performance increase balance in narcoleptic’s psychological and mental preparedness. Self-contentment is the element of increased satisfaction in life to be positively oriented when leaving with stress-related problems. Duberg, et al. (2016) emphasized on this linkage in which the focus of dance interventions is on enhancing enjoyment, autonomy, confidence and social affiliation, which can have great impact on social functioning for narcoleptic patients which is also linked to increased awareness of emotional processing and a higher ability to interpret the emotions of others (Duberg, et al., 2016).

**Stress-release**

During the primary appraisal, the event or situation can be categorized as irrelevant, beneficial, or stressful. If the event is appraised as stressful, the event is then evaluated as either a harm/loss, a threat, or a challenge (Cordon, 1997). However, learning different styles of dance with
focus and concentration helps improve the person’s neural communication network to deliberately produce the greater balance of hormonal regulation in the body by which sensory and motor neurons could function the brain activities for the stress release as the outcome. Lazarus (19846) argued that people cannot assess the origins of stress by looking solely at the nature of the environmental event, rather stress is a process that involves the interaction of the individual with the environment. Therefore, having dance performances alleviates the activation of neurons and the communication in the neurotransmitters to improve perception towards the surrounding in a better way. The results, thoughts help to perceive positive outcomes of the behaviors within the environment, understanding that through dance, individuals have many contributions in increasing internal and external circumstances to their advantage (Duberg et al., 2016).

**Balance of health**

Dance has been suggested to strengthen the bodily connection, increase psychological well-being and improve poor body image and physical perception on the self (Duberg et al., 2016). Dance interventions focus on enhancing the enjoyment, autonomy, confidence and social affiliation, which can have a great impact on social functioning for narcoleptic patients. It is also linked to increased awareness of emotional processing and a higher ability to interpret the emotions of others (Duberg et al., 2016).

2. **Different Dance Styles and Development of Coping Skills**

Furthermore, the current research generated six themes from its research question two; the perception of narcoleptics of the different dancing styles on the development of coping mechanisms. The summary of themes and sample expression with the main ideas for intervention development is stated in table 2.

To investigate the perception of the different dancing styles and the experiences faced by narcoleptic patients. The participants had feelings of social acceptance due to their preference for dance style. They experienced joyfulness in their respective dance style due to its positive effects and their engagement towards that style. Hence, it developed
attention skills as well as positive coping strategies to forgo their challenges whether directly or indirectly.

Table 2.
Themes Generated from Research Question Two

| Sample Expression | Main Idea | Themes Generated | Findings |
|-------------------|-----------|------------------|----------|
| My passion is Tribal Style Belly Dance. Firstly because of the aesthetic... I relate to this style because it seems to attract outsiders, people that don’t fit into the image often associated with other styles of Belly Dance... | Artistic movement for physical balance Dance | Flexibility in Wider perspective Dance Style | **Secondary Cognitive Appraisal;** 1. assessment of the event as a threat or a challenge 2. Evaluating his or her coping resources and options. 3. Match situation's demands and one's resources to cope with it. |
| I am able to embrace my quirky side and feel accepted in the community. When I was heavily involved in dancing I may have been more sociable, level headed and enjoyed life | changing people’s mind-set | improved community acceptance increased self-pleasure in community | Attention Focus on each style Skills Improve attention in life Daily practice for more Focus and concentration | Emotion Regulation |  |
| They are the styles that are expressive and not as controlled. There is some room for individuality and variation of movement. In class as a student I worked hard daily to get the steps right. My concentration levels are heightened, and my effort is great. | | | Time management |  |
I think that I was emotionally more stable. I think that dance regulated the negative effects of narcolepsy. I believe this aspect of the dance is very helpful in keeping me engaged. It seemed that I could muster energy from the process no matter how tired I was. Dance styles make my thoughts clear, with no stress, allow me to engage with a positive mind in my family relation.

Noted: Themes generated from Open and Axial Coding

Wider perspective in Dance Style

Accordingly, the perspectives of the narcoleptics toward the achievement and goal-target orientation increasingly expanded due to the ability to perform in different capacities of dance. The motivation of performing better dances is improved as the internal force to deliberately involve in more attention and attraction of other people for an improved attitude and personal control (Bradt, et al., 2011). Narcoleptics might develop self-regulation to monitor and control their performance, thus increasing positive orientation towards life. Therefore, their quality of life will be gained through the functionalized ability and potential to perform, hence improving personal well-beings in the balance of psychological, physical and mental health.

Social Function

Both participants had two separate preferences of dance styles, the first was having more association with high-intensive dance style while
the latter was low-intensive. Hence, this brought about social acceptance to improve their internal as well as external circumstances. Support from previous research on cancer patients indicated that dance, or in other words movement therapy, had a large beneficial effect on participants’ quality of life (QOL) (Bradt, et al., 2011). The result was consistent from the previous research on supportive togetherness in social ability (Anne, Margareta & Helena, 2016). Although social insecurity was perceived as a social dilemma among narcoleptics, togetherness and the permissive atmosphere contributed to a rapidly developing feeling of acceptance and friendly inclusion (Anne, et al., 2016). Further, dance contributes to the greater impact on social functioning among narcoleptic patients (Duberg et al., 2016) in which the interventions focus on enhancing enjoyment, autonomy, confidence, and social affiliation, which is also linked to increased awareness of emotional processing and a higher ability to interpret the emotions of others (Duberg et al., 2016).

Self-Enjoyment

The results of the current study revealed that the respective dance styles allowed participants to have a sense of enjoyment by being more positive, sociable, and engaging with like-minded individuals. Negative thoughts of self-doubt or incompetence were increasingly replaced with feelings of accomplishment, having fun, and being in control (Anne, et al., 2016). The feeling of accomplishment is in line with the experience of achieving targeted objectives and elevates self-efficacy (Lazarus, 1968). The experience of self-achievement is perceived to reach the level of self-actualization when accomplishment is set in the goal-targeted orientation mechanism (Bandura, 1986).

Attention Skills

The current research also found that participants through their respective dance styles experienced a heightened level of concentration. Accordingly, the participants experience a detail expression of the eye movement and feeling of connection with other dancers through mutual collaboration and cooperative performance. Such movement also
contributes to increasing the concentration in the activity. Previous Research indicated the increased attention skills through dance for the narcoleptics with the connection of body and psychological well-being that eventually improve poor body image and physical perception for the self (Duberg et al., 2016). Such a mechanism helps increase narcoleptic dilemma in their sleep-wake cycles.

**Emotion Regulation**

Emotional regulation is a mechanism to deliberately control and monitor one’s ability in focusing on certain tasks. The current research found that narcoleptics perceived their movements in dance sharpened their attention and focus which help increase their recovery in excessive daytime sleepless (ESDS) (Ruoff & Black, 2014). Such a mechanism lead in reducing the stress and attentional fatigue, not only for the narcoleptics but also for many people in controlling their sleep patterns (Von, et al., 2013). The dancers were believed to have developed strategic regulation of their emotions to control. Through the transcribed coding, emotional regulation is one method to develop recovery from the traumatized or stressful experience. Dance interventions focus on enhancing the enjoyment, autonomy, confidence and social affiliation, which can have a great impact on social functioning for narcoleptic patients. It is also linked to increased awareness of emotional processing and a higher ability to interpret the emotions of others (Duberg et al., 2016).

**Positive Mind-set**

During a primary appraisal, the event or situation can be categorized as irrelevant, beneficial, or stressful. If the event is appraised as stressful, the event is then evaluated as either a harm/loss, a threat, or a challenge (Cordon, 1997). However, learning different styles of dance with focus and concentration helps improve the person’s neural communication network to deliberately produce a greater balance of hormonal regulation in the body by which sensory and motor neurons could function the brain activities for the stress release as the outcome. Compared to negative coping strategies for the narcoleptic to stay awake
due to consuming caffeine which impacts in self-harming tendency or abuse. Experiencing different types of dance allows the narcoleptics to be a way of psychological degradation. A positive mindset is to decrease the negative symptoms of narcolepsy without intentional harmful effects on both psychological and physical dimensions. Previous research can support that those who engaged in dance therapy showed significant improvement in negative symptoms of schizophrenia (Ren & Xia, 2013).

**Time Management**

Duberg and colleagues (2016) also highlighted the great impact of dance interventions to develop coping mechanisms in many aspects of narcoleptics’ life such as in their focus on enhancing enjoyment, autonomy, confidence and social affiliation. Such a method eventually increased awareness of emotional processing and a higher ability to interpret the emotions of others (Duberg et al., 2016). The current research thus found that the narcoleptics perceived of their balance of health through time management. It was found that functionalized capacity in social and family interaction as well as in their higher ability for emotion regulation help improve the management of time among the narcoleptics. Time management is also highly considered as the technique to develop and maintain self-discipline, thus increase self-awareness in the management of other needs of life.

**Intra-Familial Relation**

When one’s facing stress, their thoughts and cognitive ability are determined by a primary appraisal with adaptability and motivational principles to appraise stressful conditions. Primary appraisal is one’s perception of the significance of a situation (Lazarus & Folkman, 1984). Family is the source of stress released (Anne, et al., 2016) in which each member could be the energy of positive interaction to create the relationship within the family for any emerging stress-related problems. In all age groups of the condition, narcolepsy pungently accompanies significant indispositions such as mortality, social stigma, educational and professional problems, lower quality of life, and it may also have a
substantial socioeconomic impact on the lives of patients suffering from this condition (Jennum et al., 2016). Dance has been suggested to strengthen the bodily connection, increase psychological well-being and improve poor body image and physical perception on the self (Duberg et al., 2016).

D. Conclusion

The findings of the current research may help develop community support programs such as community services, a community center for narcoleptics’ special needs, etc. It can also be a form of information to implement in training programs in rehabilitation centers or equivalent in order to provide a better and individualized program. The results of the present study can contribute to future researches on special educational needs for narcoleptics, creating modules in dance centers with different styles of the current research findings for the narcoleptic patients. Such mechanisms might enhance research developments in a more patient perspective viewpoint. The findings of this research might be used for the modules of motivation development by the professionals and the narcoleptics. Modules could be used and developed a new set of motivation plans or strategies for the narcoleptics. Additionally, findings might be utilized as references for further researches with different needs and analyses of narcolepsy and other variables to study.

The participants in this research were all female dancers indicating the research’s sample was limited to the female-only and the results might seemingly overestimate the dance performance and coping mechanisms of female patients as compared to their male counterparts. Therefore, for future researches, gender differences in determining dance performance and coping strategies among people with narcolepsy should be considered. Further, the limitations of the research would be in regards to the fact that this research is on improving the quality of life instead of providing information on a full recovery from the condition. Furthermore, the patients were of a certain age group and culture as well as the number of subjects limited further exploration into the findings. Difficulty in acquiring an accurate sample, due to narcolepsy’s rare condition, basically
in terms of accurate proof of diagnosis instead of just verbal affirmation, can affect the accuracy of the data collection. This limitation was due to the lack of resources in order to expand this research further.

The current study further proposed the development of a systematic strategy as a module to represent the techniques and recovery for people with narcolepsy based on the findings of the current research. It is pertinent to improvise the methods and techniques used for narcoleptics. Further researches need to consider more empirical evidence such as conducting a method using quantitative nature with experimental design on the effects of dance on narcolepsy patients. Using a longitudinal study in order to gather data for longer periods is also recommended to be conducted by future researches. Moreover, larger participants from different genders, geographic backgrounds and age groups would provide more investigation of cultural variations for future researches.

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