



JÖNKÖPING UNIVERSITY

*School of Education and
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Perceptions and Experiences of Social Participation in Physical Activities Among Youths with Physical Disabilities in Greece.

A qualitative Empirical Study

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Two year master thesis 15 credits
Interventions in Childhood

Spring Semester 2021

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ABSTRACT

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Main title: Perceptions and experiences of social participation in physical activities among youths with physical disabilities in Greece.

Subtitle: An empirical study

Pages: 39

How youths' with physical disabilities experience social participation in physical activities is a subject that has not been extensively researched in Greece. Asking youths can give a deeper insight of their perceptions related to their social participation and how their contexts contribute to that. The family Participation Related Construct (fPRC) framework was used under the umbrella of the Systems Theory to guide the whole procedure of this study. A qualitative approach was conducted by five in-depth interviews with Greek youths (mean age 23) with physical disabilities using online video-call applications. A deductive content analysis was applied for this study, including four themes: *1) the construct of participation in the context of physical activity, 2) Intrinsic factors that influence social participation, 3) Intrinsic factors that are influenced by social participation, and 4) extrinsic factors that influence social participation.* Results showed that youths overall described their social participation as a sense of belongingness and social connection with others. They perceived that attending the physical activities that were meaningful to them strongly influenced their social involvement. They also described that social participation in those specific contexts increased their self-confidence. Admittedly, family and activities were contextual aspects that positively influenced youths' social participation. Results also showed the negative influence of the environment, such as the accessibility, state support and the COVID-19 pandemic, either directly or indirectly influenced youths' social participation. Findings of this study support the need for future practical interventions in the Greek community, considering all aspects of the fPRC framework. Finally, collecting a broader number of perspectives will benefit the presented topic in order to create a more holistic view of what needs to be done to bring balance into the system.

Keywords:

Youths, social participation, physical activity, family Participation Related Construct framework, Greece

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Acknowledgements

Firstly, I would like to thank my supervisor, Ms Elaine Mc Hugh, for her valuable support during the whole period of conducting my empirical study. Her ideas and extensive knowledge in research effectively contributed to my insightful reflection and implementation of this paper.

I would also like to thank all professors of the program “Interventions in Childhood” at Jönköping University to fulfill of my studies through the past two years, and for our meaningful discussions that will follow me in my future career as an occupational therapist.

Lastly, I would like to thank my family, boyfriend and friends for showing me their trust, love and support to complete my studies in Sweden.

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Introduction

Nowadays, a fundamental aspect that can positively contribute to people's quality of life, consists of their involvement in physical activities that correspond with their skills and interests, and promotes their enjoyment (World Health Organization [WHO], 2018). Participation in any physical activity is an occupation that positively contributes on both people with or without disabilities to their psychological and physiological health (Maher, Williams, Olds & Lane, 2007). Participation of children and youth with disabilities in those activities has been a subject of recent research as studies are increasingly beginning to focus on youths' voices, while considering the barriers and facilitators of their participation (Wright, Roberts, Bowman & Crettenden, 2019). Physical activity is of utmost importance for the health, social and emotional wellbeing of young people with disabilities and as our society constantly changes over time, it is worth researching in order to stay updated (Maher et al., 2007; Wright et al., 2019).

Although, the World Health Organization (WHO, 2015) and United Nations of Convention on the Rights of Persons with Disabilities (UNCRPD, 2006) support the rights of people with disabilities to fully participate in physical activities that are meaningful to them, it has been found that youths with physical disabilities in particular are still restricted (Engel-Yeger et al., 2009; Nyquist, Jahnsen, Moser & Ullenhag, 2020; Palisano et al., 2009; Shikako-Thomas et al., 2013). As a consequence, they are often deprived from participating in their preferred physical activities and, if they do, they may feel socially excluded, even if the activity is extremely important to them. Participation in physical activities, especially social participation during the transition from childhood to adulthood, is crucial for youths with physical disabilities. During this transition, they experience physical and personal changes, which can further influence their social participation in those activities (Telama, 2009). This is an issue that can be addressed if the community offers different opportunities to be involved in, to be connected with others, and have the accessibility and availability of different resources in order to participate regardless of one's disability.

Youths' social participation in their preferred activities offers their interaction with others within a specific context that can provide meaning and purpose in their everyday lives (Palisano et al., 2009). The social participation concept is an element under the umbrella of the term participation, and their difference is characterized in levels of the persons' involvement in the society (Levasseur, Richard, Gauvin & Raymond, 2010; Piškur, et al., 2014). It is greatly supported that participation in out-of-school activities such as the aforementioned physical ones, show positive results on youths' physical, psychological but also social domains. Creating friendships and socializing with others in those contexts have a significant contribution in youths' meaningful engagement and enjoyment (Willis et al., 2017). Youths' active involvement in those contexts is a central aspect of social participation and includes their social inclusion, the right to experience engagement, as well as the society's responsibility to provide the appropriate conditions for that (Piškur, et al., 2014). Formulating social networks and the sense of belongingness in the context of the youths' preferred activities can positively contribute to their mental and physical health (Palisano et al., 2009; Specht, King, Brown & Foris, 2002).

Considering all the above, it is important to listen to the perspectives and experiences of youths with physical disabilities. Furthermore, cultural aspects are likely to impact on youths' experiences, meaning that it is important to understand youths' experiences in context. Furthermore, although studies have been published regarding the participation of youths with physical disabilities in physical activities, less has been found regarding youths' perspective and experiences of their social participation (Bedell et al., 2013; Jespersen et al., 2019; Kanagasabai, Mulligan, Hale & Mirfin-Veitch, 2018). In particular, no literature was found regarding this subject in Greece. Social participation among members of an activity prerequisites the youths' attendance and by extension, involvement in that situation, providing them the experience of interaction and social connection in the context (Piškur, et al., 2014). Youths are in that stage of their lives that changes and experiences play a vital role to how they perceive their involvement in the community (Telama, 2009). The use of a Systems' Theory perspective can potentially give beneficial insights into people's participation through the ongoing interaction among their systems (Imms et al., 2016; Nyquist et al., 2020). The family Participation Related Construct (fPRC) framework can provide a guide both in research and in practice to understand in-depth the

concept of participation and the personal and external factors that are related to it (Imms et al., 2016).

Background and theoretical framework

Defining disability & the human rights of people with disabilities

The World Health Organization (WHO) defines the word “disability” as “an umbrella term for impairments, activity limitations and participation restrictions, denoting the negative aspects of the interaction between an individual (with a health condition) and that individual’s contextual (environmental and personal) factors” (WHO, 2015, p. 1). In the International Classification of Functioning, Disability and Health, Children and Youth version (ICF-CY), disability is characterized by the combination of a person’s health condition and the relation between their intrinsic and extrinsic factors (WHO, 2007). It is widely known that people with disabilities experience less participation in their preferred activities than those of typical development (Anaby et al., 2014). Both intrinsic and extrinsic factors can negatively contribute, affecting their participation in the three domains of self-care, productivity and leisure activities (Anaby et al., 2013; Bult et al., 2011; Engel-Yeger et al., 2009; Law et al., 2006; Lindsay, 2016).

Based on this definition, the Convention on the Rights of Persons with Disabilities (CRPD) and the action plan support that people with disabilities have equal rights with those typically developed, including their participation and inclusion in society (WHO, 2015). Articles 3, 9, 19 and 30 of the CRPD strongly support the inclusion and participation of people with disabilities in the community, experiencing enjoyment and at the same time the community itself to support and create an available and accessible environment with equal opportunities for all (UN, 2006). An additional right underlines the freedom of all individuals to develop their physical, psychological and social well-being in the context of physical activities and have the immediate support from those contexts as well as from the government. It is of utmost importance for all stakeholders including the national and local authorities, to take their responsibilities for providing and supporting the physical activity contexts (UNESCO, 2015). Lastly, the adequate facilities, equipment and safe environment are fundamental aspects that should also be considered for meeting the needs of all

participants in physical activities without any discrimination of age, gender, culture or disability (UNESCO, 2015).

Physical disability & Physical activity

A remarkable question that can be derived is how can overall health and well-being be achieved if the youths' participation in meaningful activities is lacking? Community participation of youths' with disabilities is directly affected by the immediate physical and social environment, and further negatively influences their positive development into adulthood (Bedell et al., 2013; Bedell, Cohn & Dumas, 2005; Bedell & Dumas, 2004). Participation in physical activity is one of these fundamental aspects that directly contribute to a person's well-being (Wright et al., 2019). WHO defined physical activity as "any bodily movement produced by skeletal muscles that requires energy expenditure" (WHO, 2020). Furthermore, the term physical disability is categorized into musculoskeletal disability and neuromuscular disability that results in physical functioning limitations due to muscular or bone deformities or, due to degeneration or disorder of the nervous system resulting in mild to severe levels of disability (Williams, 2019).

Current situation in the Greek community

In continuation of the above, in 1990, Greece signed the United Nations Convention on the Rights of the Child (UNCRC) and the UNCRPD for the protections of the rights of persons with disabilities in 2007 (European Parliament [EP], 2013). As participation is a right for every person, the Greek State has taken several steps to reduce the barriers for young people with disabilities, especially in sports, community life and recreational activities. For example, there are different organizations, including non-profit, that are trying to support young adults' rights. The Ministry of Education & Religious Affairs, Culture and Sports and the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks are trying to support the accessibility and availability of persons with disabilities focusing on their rights of participating in any activity they want (EP, 2013). Additionally, there is a program named "Sports for all" which is funded by the General Secretariat of Sports and cooperates with many different sport clubs in order to support people with disabilities, of all ages, to participate in sports and other physical activities (WHO, 2018).

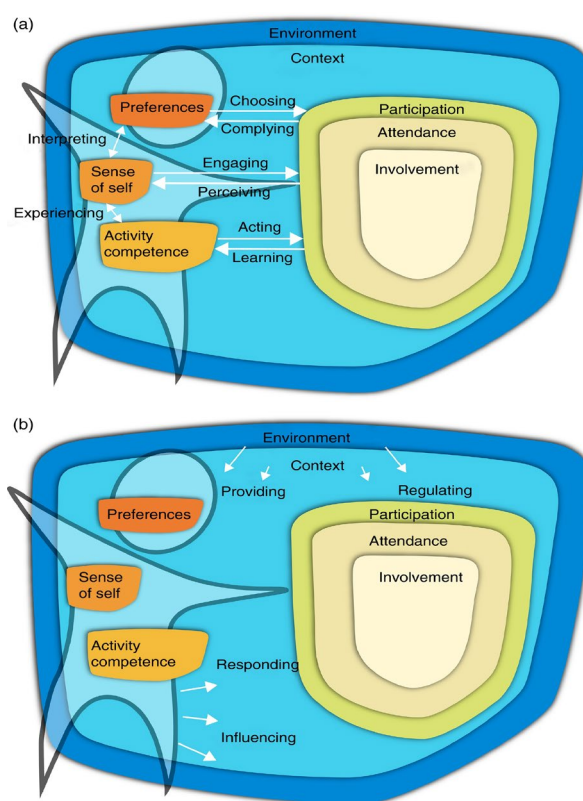
Despite this, there is evidence to suggest that there is still a big gap in the implementation of the UNCRC. Research from Greece shows that there is a positive view regarding the need for change but practically, the associations for the rights of people with disabilities act as a “miniature” of the prevailing social situation (Georgopoulos, 2001). The decisions that have been taken seem to be politically correct, but the preparation and social integration in the community is weak. In addition, the organizational operations focus more on the medical model of disability and rarely on the social inclusion of those people (Georgopoulos, 2001). However, the National Confederation of Persons with Disabilities (E.S.AmeA) aims to promote the policies that can contribute to the participation in social and cultural life by highlighting the socio-political dimensions (E.S.AmeA, 2008).

Participation: Family Participation Related Construct (fPRC) framework

As participation is the main pillar of this study, it is important that it is clearly defined. In the ICF-CY, the WHO defines participation as a person’s “involvement in a life situation” (WHO, 2015, p. 9). This framework consists of six domains emphasizing on the relationship between them. The domains include the person’s present health condition, environmental and personal factors, body structure and functions, activity performance and participation (WHO, 2015). In 2016, Imms and colleagues argued that the domains “participation” and “activity” do not provide enough information regarding the processes that define these constructs and the transactions between the six domains. Consequently, they proposed the fPRC framework to describe important aspects of a person’s participation (Figure 1). Within the framework, participation is characterized

Figure 1

fPRC framework presenting (a) the person-focused process and (b) the environment focused process.



Imms et al., 2016, p. 19.

by two essential components: attendance (being there) and involvement - “the experience of participation while attending” (Imms et al., 2016, p. 20). The quality of life of children and youth with physical disabilities is directly associated with their involvement in meaningful and purposeful activities and their social integration in the community (Law, 2002). Engagement, motivation, and social connection with others are experiences that can potentially arise when youths with disabilities are involved in meaningful activities of their preference (Imms et al., 2016). According to the authors of the framework, the aspect of involvement has to be considered in relation to the context that the person is engaged in order to measure their participation (Imms et al., 2016). Physical activities, such as sports, constitute a big part of the social environment, which is particularly important to facilitate participation (Law, 2002). Participation and environmental factors are interconnected and can affect youths’ attendance and involvement in physical activities (Bedell & Dumas, 2004).

In the fPRC framework, besides the attendance and involvement, emphasis is also given on the intrinsic and extrinsic factors that can influence and be influenced by activity participation. The term “intrinsic factors” consist of three elements: activity competence, sense of self and preferences. Activity competence includes cognitive, physical and affective skills and abilities that can be measured by the person’s capacity, capability and preference. Sense of self is referred to the self-efficacy (the exact estimation of an individual’s belief in his/her capacity), self-esteem (positive or negative orientation toward oneself), self-confidence (the individual’s trust and belief on his/her abilities and capacities) and satisfaction, facilitating the person’s participation and vice versa. Additionally, the provision of opportunities to people with disabilities to experience meaningful and valuable activities is a central aspect of increasing their preferences (Imms et al., 2015; Imms et al., 2016). Alongside the intrinsic factors, the person’s environment (physical or social), as an external factor, and its context (place, activity, people and objects), can significantly influence and be influenced by activity participation. As participation can only be occur within a wider contextualized range, external factors play a crucial role to its operation. Consequently, as people and their surrounding contexts alter over time, changes can also be found in both people and the environment (Imms et al., 2016).

Social Participation

Recently, the concept of social participation has become one of the core

principles in European policy reports (European Commission, 2010). Interaction with other people is an important factor, starting early in life, in order to develop social skills (Law, 2002). As many original definitions have been given for the term “social participation”, Piškur and her colleagues stated that “the overall definitions mostly focused on the person’s (who) involvement (how) in activities that provided interaction (what) with other (with whom) in society or the community (where)” (Piškur, et al., 2014, p. 213). Taking into consideration the study of Piškur and colleagues (2014), it is important to distinguish the difference between the terms participation and social participation. Authors concluded that literature discusses the term social participation into three pillars: 1) consumer participation (including concepts of social inclusion, active involvement, the right of experiencing self-determined modes of engagement), 2) social activity (being involved in activities including social elements) and 3) levels of involvement in society (passive to very active involvement where social participation being either a subjective or objective outcome). In the concept of social participation, emphasis is given on the interconnection between the persons’ engagement in the society and the society providing opportunities for social engagement. Therefore, the persons’ social participation and engagement are covered under the term participation (Levasseur et al., 2010; Piškur, et al., 2014).

The social connection between people can lead to a social attachment, an aspect that resurfaces multiple positive emotions to those involved (Jespersen et al., 2019). As a consequence, a meaningful engagement among individuals can create close social relations that can further enhance their social participation and maintain those relations that have been established (Jespersen et al., 2019; Wiegerink et al., 2006). Physical access to the physical activities being placed in different environments of the community is one of the most fundamental aspects that prerequisite for youths’ social participation (Jespersen et al., 2019). It is a place where they can develop their social networks, outside the home environment, and further enhance their adult roles, a factor that contributes to youths’ development (Kang et al., 2010).

All the above aspects are directly intertwined to the different concepts of the fPRC framework as the term “social participation” is covered under the umbrella of

“participation”. Indicatively, in all mentioned aspects, the two essential components of attendance and involvement are presented through a more specialized view of the youth’s social engagement and involvement in contexts of physical activity. At the same time, social participation in those meaningful activities can increase the intrinsic factors, such as the sense of self, leading to further positive emotions (Jespersen et al., 2019). Lastly, Jespersen and colleagues (2019) supported the big influence of extrinsic factors as being a decisive element in people’s social participation in physical activities. Therefore, social participation can be identified as the different elements of the fPRC framework, maintaining its unique difference of giving more emphasis on the importance of people’s interaction with each other.

Systems theory

Systems Theory constitutes a cornerstone under which all of the above are included. The different elements into a system interact with each other in order to promote developmental change while they function (Borman & Granlund, 2007; Wach, 2000). This change can be observed in both each element itself but also in the relationship between them (Borman & Granlund, 2007). While participation emerges in the interaction between many different systems consisting of different elements, it is important for disability research to identify those intrinsic and extrinsic factors that influence and are influenced by the participation (Wach, 2000). However, in order to produce balance into the system, it is important to holistically apply changes in a way that both youths and their surrounding environment will benefit (Bornman & Granlund, 2007). As Maxwell, Alves and Granlund discussed (2012), the surrounding environment of a person can greatly affect participation. Authors have proposed five environmental dimensions (availability, accessibility, accommodability, acceptability and affordability) that can affect the surrounding systems of youths and further influence their participation in their preferred activities. Possible changes in those five factors should contribute to a more holistic approach where both people with disabilities and those of typical development can participate in an inclusive community.

General Systems Theory goes a step further by understanding the interconnections between the elements and their implications to the system. In the different contexts of physical activities, sometimes it is necessary for some elements to change and others to stay the same (Wach, 2000). In order to succeed in increasing

youths' participation, the system around each youth with disabilities has to effectively contribute. The use of the fPRC framework under the umbrella of Systems Theory contributes for further understanding all those factors that influence and are influenced by youths' social participation and how this can go a step further for maintaining those that effectively function, while also to produce change to those affecting a system's balance.

Research Gap

Considering all the above, participation and indicatively, social participation in physical activities is equally important for those with or without a disability. But how can research better understand youths' with physical disabilities social participation in those activities without considering their voices? Several studies support the need and importance of interviewing youths themselves in order to "bring in the surface" their point of view and experiences, a perspective that might not be collected otherwise (Bedell et al., 2013). A recent study (Nyquist et al., 2020) examined children with disabilities experiences of their participation in physical activities with the use of the fPRC framework. The authors concluded that it is essential to consider the system's theoretical perspective and all aspects that the fPRC presents, both in research and practice. Indicatively, distinguishing and categorizing those aspects that affect and are affected by the persons' participation can further produce change or maintenance on the desired outcomes. However, the authors studied children's participation during a specific rehabilitation program. As a result, there is a need to investigate further how participants with physical disabilities experience participation outside of a structured context - as citizens in the community.

Although many studies have been conducted focusing on youths' with physical disabilities participation in physical activities and the contribution of rehabilitation programs to enhance their participation, these youths still appear to have restricted social participation with others, especially those of typical development (Bedell et al., 2013). Another important aspect that the literature discusses is the access to the locations at which the activities occur, as it is prerequisite for social participation (Jespersen et al., 2019). Lastly, it is remarkable to examine how youths with physical disabilities experience the transition from childhood to adulthood concerning their social participation in those preferred physical activities. Studies support that it is widespread for people with disabilities to participate less in physical

activities, especially those experiencing challenges of transitioning from adolescence to adulthood due to the absence of school-based physical education and recreation programs (Block, Taliaferro & Moran, 2013; Rimmer et al., 2004). It is also crucial to identify those extrinsic factors, both contextual and environmental, that affect their participation, focusing on their previous training, support from the environment, and the available programs (Block et al., 2013).

Overall, there is limited research regarding the social participation in physical activities from this specific target group and it is remarkable to be studied. A qualitative study focusing on their voices and at the same time be guided by a strong conceptual framework as the fPRC, can go a step further and investigate youths' experiences in-depth, highlighting the less researched aspects of participation in physical activity addressed above. Additionally, as it was mentioned, there are several barriers that still exist regarding the Greek community for physical activities (EP, 2013) and there is a need to further investigate how youths actually perceive and experience them. Categorizing the results of this study into the aspects of the fPRC framework can contribute to a better understanding of who, how, where and what affects their social participation. This study will also present how the community includes them and provides opportunities for them and what has contributed to get where they are now.

Aim and research questions

This qualitative study aims to investigate the perceptions and experiences of youths with physical disabilities regarding their social participation in physical activities in the Greek community.

1. What are youths with physical disabilities' perceptions and experiences of social involvement when attending physical activities?
2. What are youths with physical disabilities' perceptions and experiences of their activity competence, sense of self and preferences regarding their social participation in physical activities?
3. What are youths with physical disabilities' perceptions and experiences regarding the influence of their context and environment for their social participation in physical activities?

Method

A qualitative research approach was the most appropriate design to be applied to explore the perspectives and experiences of youths with physical disabilities. To accomplish that, individual online in-depth interviews were conducted in order to examine those experiences and a further deductive content analysis led to the procedure of combining and analyzing data into the fPRC framework.

Participants

A purposive sampling strategy was chosen for this study to examine the phenomenon of social participation in physical activities. Knowledgeable and experienced youths diagnosed with physical disabilities were purposefully selected to share their unique perspectives on a certain phenomenon (Robinson, 2014). The inclusion and exclusion criteria presented in the table below (table 1) played the main role in the sampling selection for the particular categories that have to be included in the study (Robinson, 2014).

Table 1

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> • Youth, aged between 18-25 • Diagnosed with physical disability • Attend in physical activity (individual and/or group) • All genders • Greek nationality • All levels of disability 	<ul style="list-style-type: none"> • Intellectual disability • Attending less than half of a year.

Several difficulties surfaced while recruiting the target population. One of the main difficulties was to find youths following the mentioned criteria either because they were not within the age limit or because they also showed intellectual deficits. Additionally, although one participant agreed to participate in the research, he ultimately declined to participate for personal reasons. As a result, five youths with physical disabilities, aged from 18-25 (mean age 23), participated in this study, with three males and two females. The request, inform and consent phases were conducted via email and if participants wanted further explanation, a further phone call was followed (The informed and consent form can be found in appendix 1). The sample

was heterogeneous based on the participants' level of disability in order to collect various perspectives of participants' experiences. Four out of five youths have been diagnosed with cerebral palsy and one with spinal cord injury, with the most common impairments being characterized as quadriplegia, spasticity and ataxia. For the current study, none of the youths had intellectual disability, so no alternative ways of interview conduction were used. In addition to this, all participants had to have attended at least half of a year of physical activity in order to be familiarized with the environment and the activity, answering the aim and research questions. Furthermore, the researcher tried to find a population who took part in a variety of different activity organizations. Two males attended Ping-Pong, one male participant attended polo and marathons and the two females of the study attended dance lessons. Pseudonyms replaced their original names to avoid the youths' recognition. Lastly, all participants have completed or are still attending therapeutic sessions, including physiotherapy, occupational therapy and speech-language therapy.

Data collection

The data were collected via semi-structured online interviews in order to give space to the participants to explain their experiences, perceptions and possible feelings of their experiences. As the sample was small, this kind of approach went deeper on the participants' experiences regarding their social participation. The author of this study conducted all five online interviews using an interview guide based on a theoretical protocol (fPRC) as mentioned in the background. Beforehand, the researcher piloted the interview to a typically developed youth, as it was difficult to find a youth with physical disability meeting all the aforementioned criteria. For the online implementation, interviews were conducted with the use of face-time applications (Skype and Viber) in order to have eye contact with the participants. The duration lasted approximately forty minutes each, while the researcher audio recorded them during the whole process for further analysis. *Table 2* below presents some of the interview guide's questions, while in appendix 2, the whole interview guide can also be found.

Table 2

Interview guide: Main questions	
1.	What kind of physical activity/activities are you attending?
2.	How often do you attend this activity?

-
3. With whom do you interact with in this activity?
 4. Do you feel involved when you are attending this activity?
 5. Do you think that your physical abilities and skills affect your social participation at this activity, and why?
 6. Did you ever have communication problems (for any reason) with any of the members in this activity that could affect your social participation?
 7. How could you describe your collaboration/relationship with the team or other individuals in this activity?
 8. How do people working there make you feel in this activity?
 9. What kind of support do you have from your family to attend and participate in any physical activity?
 10. Would you like to have additional support either from people there or from the physical environment (such as equipment) that you don't currently have?
 11. Is social participation important for you, especially for the physical activity/ies that you are attending?
-

Data analysis

The data analysis was based on Graneheim and Lundman's (2004) guidelines for qualitative content analysis and was consistent with a structured deductive approach. The reasons for the choice of a deductive content analysis were based on identifying and making replicable and valid inferences from in-depth interview data in specific contexts and how these correspond to the different aspects of a theoretical framework (Elo & Kyngäs, 2007). The structured deductive approach gave the advantage of formulating the research questions, data collection design and analysis, with theory being the starting point and data being categorized in its different aspects. The aim was to attain a description of a phenomenon through existing theory and come to a certain conclusion based on the new data (Kyngäs & Kaakinen, 2020). To accomplish that, a specific procedure was followed with three main phases: preparation, organization and the report of results (Elo et al., 2014). The researcher built an analysis matrix, which is further presented in the results, and which was based on the theoretical structure of the fPRC framework, reflecting on the research questions of this study (Kyngäs & Kaakinen, 2020). Subsequently, the analysis was focused on manifesting content through applying accurately what the text says without interpreting its underlying meaning (Graneheim & Lundman, 2004).

Starting from the preparation, the researcher transcribed all interviews to the language of origin and sent them back to the participants to confirm the transcription. The next step of the preparation phase was to go through the data several times in

order to become familiar with them, as well as to select the unit of analysis based on the concepts of the fPRC framework. Subsequently, the researcher created a first analysis matrix with meaning units and condensed meaning units. The organizing phase consisted of three steps. Firstly, codes were created and placed into the analysis matrix based on the meaning units and condensed meaning units, highlighting those that could further be connected to the analysis process. An example of a meaning unit, a condensed meaning unit and a code is presented in *table 3* below.

Table 3

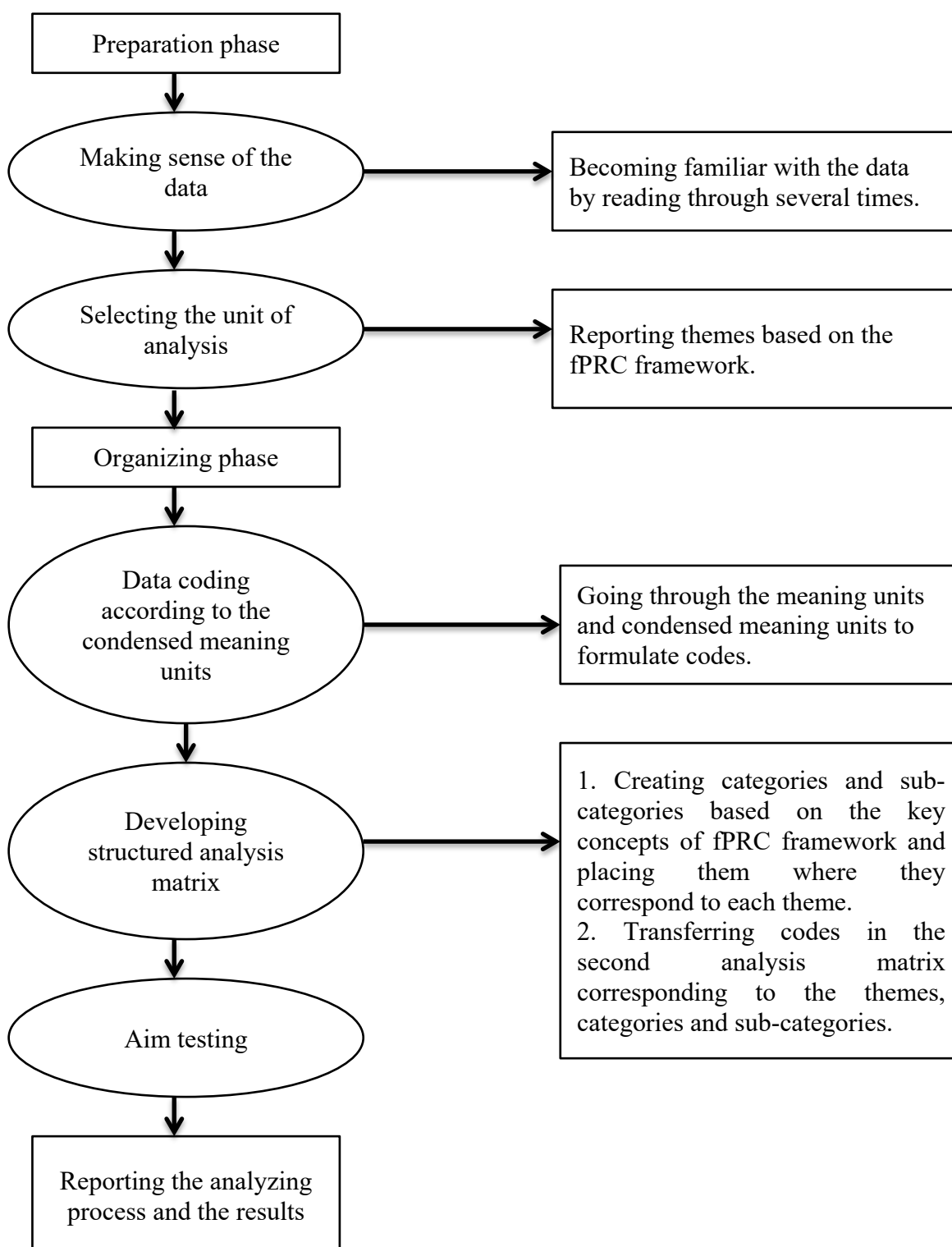
Meaning unit	Condensed meaning unit	Code
<i>"...we help each other! It is not that...because we don't have social relations outside this context...that we do not socially interact and help each other in the context! We are "pieces" of a puzzle...."</i>	No social relations outside of the activity context does not correlate of not feelings socially involved in the context	Feeling socially involved while attending

Following the deductive approach, a second structured analysis matrix was created. Predetermined themes based on the fPRC framework and the current topic were placed in the matrix (1. participation construct in physical activities, 2. intrinsic factors that influence social participation, 3. intrinsic factors that are influenced by social participation, 4. extrinsic factors that influence social participation). Afterwards, categories of the analysis were created based on the key concepts of the fPRC framework and were placed under the corresponding themes. At that point, an extra step followed, which consisted of creating sub-categories linked to the main categories. Subsequently, the codes were placed under the corresponding sub-categories and were grouped based on their meaning. A final formulation of the analysis matrix consisted of themes, categories, sub-categories and codes. The analytical procedure of the deductive approach is depicted in *figure 2* below. Finally, the researcher tested the analysis to verify whether it corresponded to the aim of the research and further reported the results.

Lastly, as the interviews were conducted in the native language of the participants and the researcher, the transcription, meaning units and condensed meaning units were in the Greek language in order to avoid barriers in the

trustworthiness of this procedure. Consequently, the researcher found it easier to follow the next steps of the procedure in the English language, which effectively contributed to the better understanding of the data by the supervisor. The participants' words as quoted by the researcher were also translated to English. For the trustworthiness of the translation, a researcher's colleague who was also Greek helped with this procedure.

Figure 2



Ethical considerations

In the current study, ethics have been considered during the whole process as they play a crucial role in the participants' vulnerability (Mukherji & Albon, 2018). The researcher approached the participants with respect and a positive attitude as co-researchers of the procedure (Coad et al., 2015). Another important aspect was the processes of request, inform and consent phases for ensuring that all participants were fully informed about the purpose and process of the research (Kumpunen, Shipway, Taylor, Aldiss & Gipson, 2012). The validity of the consent form before its application to the participants was also ensured. The researcher reflected on how explicitly the aim of the research is provided to the participants, the time and commitment that had to spend during the research period, whom the results will be visible for and the assurance of confidentiality (Hill, 2005). Considering the Article 12 of UNCRC, youths had the right to express their opinion about the decision that concerned them directly (Beazley, Bessell, Ennew & Waterson, 2009). Another important ethical aspect was the place of data collection. As data were gathered via face-time calls, participants were at their familiar environment – home, and more indicatively, in their room, which made them feel comfortable and reduced the possibility of power imbalance (Coad et al., 2015). Furthermore, participants were informed that they had right to drop out of the research at any point without any consequence or need to provide any explanation (Coad et al., 2015). All private information and recorded data were safely stored in a file of the researcher's drive and deleted at the end of the research procedure. Lastly, all participants were informed both verbally and in written form that they have the right to drop out at any time if they want.

Validity, Credibility and Trustworthiness

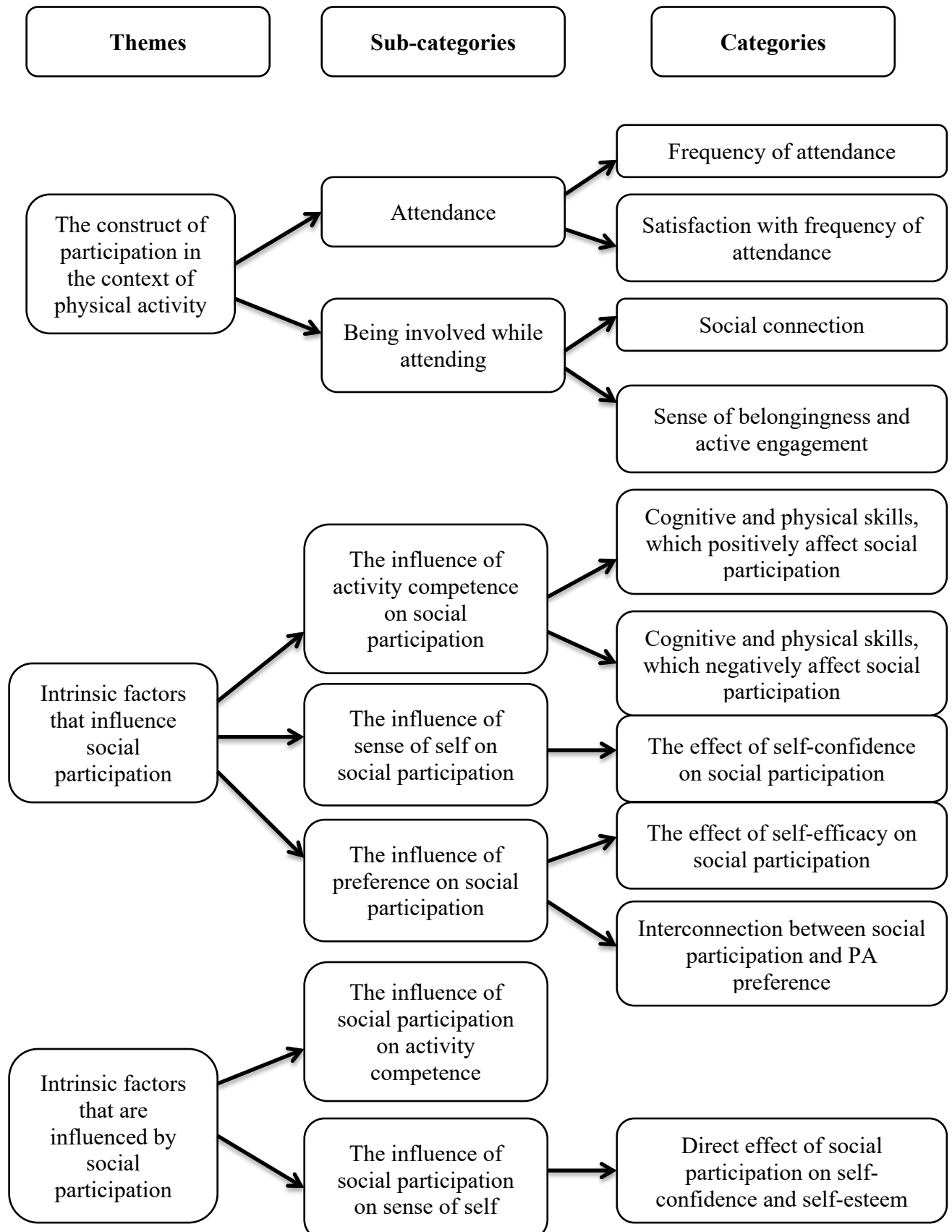
For this qualitative study, validity (accuracy of findings), credibility (data and analysis correspond to the indented focus) and trustworthiness (findings should be truly presented) were considered during the whole process (Creswell, 2014; Graneheim & Lundman, 2004; Torgè, 2018). The main researcher with one colleague tried to ensure the credibility of the study by transcribing the analysis' quotations from Greek to English as accurately as possible (Creswell, 2014). For credibility, the

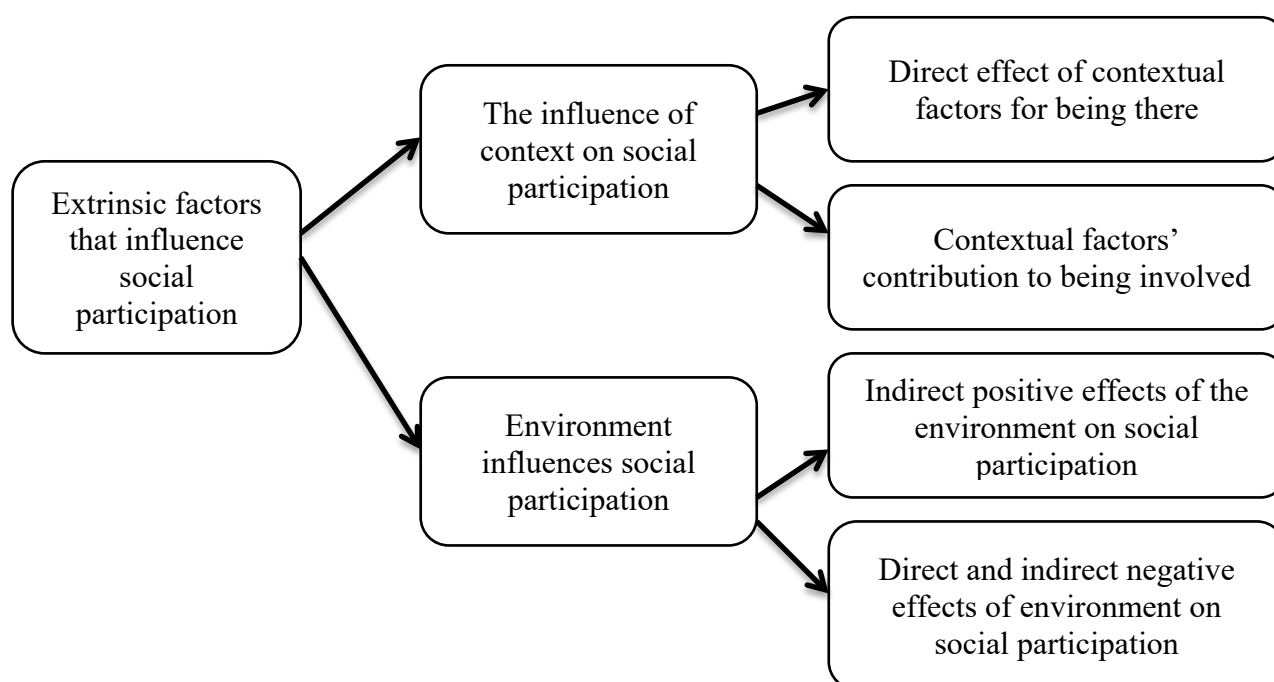
researcher also gave emphasis on the chosen meaning units for this content analysis (Graneheim & Lundman, 2004). Apart from this, a peer debriefing process took place by the supervisor of the researcher to also ensure the credibility (Creswell, 2014; Torgè, 2018). More precisely, the researcher showed and discussed the content analysis process, checking for biases during the process. While confirmability is ensured by the respondents' words and not caused by the researchers' bias (Torgè, 2018), in this study, the researcher and her colleague, who work collaboratively in order to ensure that they transferred the youths' words directly without any variation, are coming from the same country as the participants. The trustworthiness of the data analysis was also considered by the thick descriptions about the context of the interview and of the physical activity that the participants described their experiences. Lastly, in order to ensure the authenticity and trustworthiness of the collected data, the researcher gave to each participant the transcription of their interview in the Greek language in order to confirm that further analyzed data have not changed their meanings (Torgè, 2018).

Results

Following a deductive content analysis, the figure tree below (figure 3) depicts the four broad themes with their categories and sub-categories that emerged from the key concepts of the fPRC framework and are directly intertwined with the derived data. The first theme “*Participation construct in physical activities*” answers the first research question and corresponds to the youths' attendance and involvement. The second theme “*Intrinsic factors that influence social participation*” and the third one “*Intrinsic factors that are influenced by social participation*” answer the second research question. The main categories of those themes are referring to the activity competence, sense of self and preferences as presented in the framework, while the last theme “*Extrinsic factors that influence social participation*” corresponds to the third research question and the contextual and environmental factors that affect youths' social participation. No data referred to the extrinsic factors that are influenced by social participation, so no further theme was made in the analysis.

Figure 3





The construct of participation in the context of physical activity

The first research question aimed to identify youths' perceptions and experiences of their social involvement while attending a physical activity. This theme addressed how the participants experienced participation in physical activities. As in the fPRC framework, participation is measured by attendance and involvement, containing two categories: "Attendance" and "Being involved while attending".

Attendance

Frequency of attendance. *Table 4* below depicts the pseudonyms of the participants, the activity of their preference and the frequency of attendance. The results show that the participants attend a variety of different types of physical activities and that the frequency of attendance varied quite largely, from one to three times per week.

Table 4

Nickname	Activity	Frequency
John	Running marathons, polo	Marathons twice a month and polo twice a week
Kelly	Dancing	Once a week

Nick	Ping-Pong	Three times per week
Alice	Dancing	Once a week
Andy	Ping-Pong	Three to four times per week

Satisfaction with frequency of attendance. The majority (four out of five) of participants mentioned that they are not satisfied with the frequency of attendance. Some perceptions differed in reason, whereas some others had commonalities. More precisely, Alice and John mentioned that due to their busy schedule, it is difficult to participate more often in those activities, although they want to. On the contrary, Nick and Andy mentioned that their coaches are not paid, which results in them not attending as frequently as they want to. Nick said: *“I really want to attend more often.....and unfortunately my coaches are not paid for training us, they are coming voluntarily and they are coming on specific days and hours”*. Only Kelly stated that she was satisfied with the frequency of attendance as she explained that two hours of dancing are enough for her. Despite all opinions and perspectives, none of the participants claimed that frequency of attendance is a factor that hindered their social participation in those activities.

Being involved while attending

The next category was based on the second aspect of participation construct - involvement - and its importance while attending physical activities. Participants referred to different elements of involvement leading to the formulation of two sub-categories.

Social connection. Some participants reported the importance of socially being connected with others, especially those with disabilities. Two out of five participants (John and Andy) firmly stated the positive effects of that interaction. Andy discussed the benefits he perceived by interacting with other people who have similar deficits to his. He claimed that these people fulfilled some essential aspects that helped out of the activity’s context, e.g. everyday living, which the rehabilitation center did not cover. He said: *“Social participation at Ping-Pong covered some other aspects that the rehabilitation center did not do right...for example...the interaction with other people who also have a disability, helped me to learn some important tricks.....such as how to go to the toilet in an easier way...”*. Consequently, the social

interaction helped him gain knowledge and listen to different experiences from others, which further helped him live with his impairments.

Sense of belongingness and active engagement. The derived data showed that all participants felt involved while attending the activity, with most of them underlining the good relationships and collaboration they have established with the coaches/teachers and some of the other members participating in those activities. Mutual help and seeing themselves as part of a puzzle were examples that Andy and John gave for why they feel involved while attending their activities. The sense of belongingness and good cooperation among the activities' members contributed to all youths feeling involved by taking part in the activities. Nick shared that attending his current physical activity was his first experience of being engaged with other people that also have a disability. He mentioned:

“....it is a way to meet other people who are also disabled!.....I did not have friends who were also disabled.....it hadn't happened to be in a social environment with people with disabilities.....and I said to myself...Aah look! There are many of us here!!!”

Alice also said that after so many years dancing with her teacher, she feels like they are family. She also added that she feels confident dancing with him because they have established a good cooperation, knowing each other very well. Three out of five participants also gave emphasis on establishing not only a good relationship with the coaches/teacher, but also a good friendship, full of trust. One of those was John by commenting that: *“...the relationship - friendship that I have with the coach who forced me to start the activity, as I told you, is really important for me; it has established something important for me”*. Nick also mentioned: *“...for my coach, I think that I.....see her 90% as a friend and then as a coach. I see her as a person that I can also talk about my concerns...our relationship is really friendly...”*

Intrinsic factors that influence social participation

The next theme is based on the intrinsic factors that influence social participation, and as fPRC supports, it consists of activity competence, sense of self and preferences. For this reason, the following categories were created.

The influence of activity competence on social participation

Cognitive and physical skills which positively affect social participation. In all cases, when participants asked if their social participation is affected by their physical abilities and skills, they were unanimous in the view that it is not affected by those physical activities. All youths reported that they have good communication skills, with most of them claiming how sociable they are. John said that his social participation in marathons and polo is not affected due to his physical disability, because the first thing that concerns him is to have fun with others and socialize. He said: *“I am the person that first socializes with others by having fun with them and then I will think and deal with my performance in the activity”*.

Kelly and Alice also stated that this has an effect on socially being involved both during the activities but also in events that have been organized in areas out of the regular activities’ environment. Kelly stressed out: *“I like dancing at events because I am a social person and generally I can make friends...and I like to communicate and come in contact with people with or without disabilities”*. On the same wavelength, all participants mentioned that they socially interact with people with and/or without disabilities as their cognitive and physical skills do not affect them.

Cognitive and physical skills which negatively affect social participation. This sub-category was only discussed by one participant, and referred to the intellectual deficits of activity members. Kelly discussed that she did not perceive herself to have a problem when socially interacting with others but others’ intellectual disability in her environment could be a problem. She explained: *“With the other people...I have tried to have communication with them...but most of them except from the physical deficits...they also had autism and intellectual deficits...so I did not communicate with them”*.

The influence of sense of self on social participation

The effect of self-confidence on social participation. Limited data derived for this category as participants mostly referred to social participation being the factor influencing their sense of self. John specifically argued: *“I don’t allow my disability to affect my social participation”*. He also added that although he feels anxious before starting the activities, when he enters, he forgets everything and supports himself by

saying: “*You can do this! Let’s go*”. When Andy was also asked about his confidence while participating in his activity, he answered that he feels quite confident because he understood from the very beginning how to play Ping-Pong.

The effect of self-efficacy on social participation. Andy continued that, as he understood easily how to play Ping-Pong and has won many games, he could see future prospects for succeeding in international tournaments and in extensive interaction with other people. Another example, which is related to self-efficacy and social participation, is based on Nicks’ experience. Indicatively, he said “*when you know that you will lose, and the opponent plays easier so as not to make a fool out of you, it is more fun!*” by also supporting that he wanted to enjoy the game with him.

The influence of preference on social participation

Interconnection between social participation and physical activity preference. All participants, without any exception, mentioned that they are attending activities of their interest-preference and expressed their enthusiasm and benefits they receive by being part of those activities. Alice said: “*I love dancing...I am dancing, and I feel that I am in a magical world of dance! It is love, it is freedom, it is creation and a way to meet others*”. Another reported perspective came from John who attends two physical activities. He expressed his passion of playing polo and when there is a chance he always wants to play with others except from the regular hours. At the same time, choosing to take part in marathons gives him the opportunity for a global and pan-European connection with others, as he mentioned in the interview. Nick also supported that playing Ping-Pong is something “*magical*” for him, and it is a physical activity that he wants to participate in as often as he can in order to exercise and at the same time interact with his coaches and other Ping-Pong players. For Kelly, dancing was an activity that she wanted to participate in from a very young age, while also she added that she enjoys socially interacting with others, both typically developed and/or with disabilities in dance events. Only Andy had a different experience from others, as he was playing football for many years before an accident that led to his diagnosis of spinal cord injury. As a result, he had to choose among specific physical activities that he could attend based on his level of disability. Despite the limited amount of options, he expressed his passion for playing Ping-Pong, his ambitions towards this

physical activity and the importance of socially being connected with others both with disabilities and typically developed.

Intrinsic factors that are influenced by social participation

The third theme referred to those intrinsic factors that are influenced by youths' social participation in physical activities, and the categories of which it consists are based on two out of the three concepts that the fPRC supports. For some participants, socially participating with others in those preferred activities had a direct positive effect on their confidence, self-esteem, and capability as it can be seen below.

The influence of social participation on activity competence

This category does not include any sub-categories as only one code describes the influence of social participation on a participant's capability. More precisely, only Alice stressed the importance of socially interacting with others, as it is a factor that enhances her capability of expressing her opinions. She commented: *"Social participation is important for me because I can talk with others, express my opinions and make new friends"*.

The influence of social participation on sense of self

Direct effect of social participation on self-confidence and self-esteem. All participants, some more than others, mentioned the importance of socially participating with others as it has increased their self-confidence and self-esteem. Andy supported: *"Ping-Pong had helped me gain my confidence because I was not properly prepared when I left the hospital"*, while John noted: *"...it is a way of inclusion and running all together is really touching for me as a person with a disability...it is that aspect of self-esteem and self-confidence that "I can do it", and if I can succeed that with a disability, you can also do easily something that you like"*. Only Alice claimed that sometimes she feels less confident than in the past due to her high demands towards herself. She explained that she receives many rewards from people around her while participating, which sometimes make her feel that her effort and performance are not enough. She mentioned:

“I have less confidence than in the past because I have more demands from myself....It had happened once to a performance that I felt that everything went really bad although it didn’t actually...I just felt that I could do better although my dance teacher said that everything was ok”.

Extrinsic factors that influence social participation

The last theme consists of contextual and environmental factors that influence social participation, both directly and indirectly in those physical activities. Two categories make up this theme, with each of them including two sub-categories. The category of context was related to the people around the participants, while the category of environment was related to a broader social and physical structure in which participants live in.

The influence of context on social participation

Direct effect of contextual factors for being there. All participants emphasized how supportive their families are practically and psychologically, which allowed them to attend physical activities. None of the participants claimed that they had ever faced problems with their families’ support that further affected their social participation with others. As John said: *“I have excessive support from my family, and they completely trust me! They will not be the people who will be the catalyst in not doing something. The opposite! With their attitude towards me, they prove the opposite every day”.*

All participants mentioned financial and transportation support as having a positive effect on attending those physical activities of their preference and further socially participating with others. For families’ financial support, youths mainly referred to the equipment such as an appropriate wheelchair. In addition to this, in four out of five participants (John, Kelly, Alice, Nick), parents and/or external family members were those who prompted or influenced them to start attending those activities. At the same time, among those four, John’s therapeutic environment also had a positive contribution to start the physical activity as one of his therapists forced him to start attending polo.

Except for the positive influence, contextual factors also had a negative direct effect on youths' attendance. There were some negative comments from one participant about his experience in a rehabilitation center, which immediately connected to his attendance in physical activities after his accident. Indicatively, he stated that rehabilitation in Greece is not well organized, as his interventions did not include anything about his reintegration to sports, although this occupation is of the utmost importance for him. Another participant also compared his previous experience in another activity club to his current one, and how these two contexts differed on giving opportunities for social connection and interaction with others. More precisely, Nick claimed that at his previous club, he had never experienced going with his team to matches and played with other people, a fact that made him feel quite disappointed.

Contextual factors' contribution to being involved. A common view amongst participants was receiving positive attitudes from the different contexts around them for socially being involved. Positive vibes and rewards from others were some of the aspects that participants noted. As a result, they expressed the positive effects of socially being involved in their preferred activities. For example, Alice said: *"I feel involved because they like what I am doing, I feel involved because they show me their love!"* Nick and Andy also expressed their thankfulness towards their coaches as, although they are not paid, they care about them, making the training as high quality as possible and always making them feel welcomed and involved in those activities. The good relationship between youths-teachers/coaches has increased their confidence and in extension their social connection and engagement with them. In addition to this, Kelly reported how important it is for her that people in the activity's context make her feel involved by making her feel free to express herself while attending. Additionally, in Johns' case, a family member has the role of the assistant only for that activity, giving him the opportunity to run marathons with his wheelchair. As he stated, the result was to socially participate with people from all over the world. He said:

"Running marathons gives you the opportunity for global and pan-European connection with other people and it's not that competitive as other sports, as you decide to do that for the experience and to be connected with others. It also gives

you the opportunity to receive positive vides and rewards although you don't speak the same language as them”.

However, contextual factors had also a negative influence on involvement. A participant shared that it is essential for her to socially interact with others during the physical activity, but she did not yet have experience being part of a group. Although her dance teacher put her once with a group of typically developed youths and another time she danced with her sister in a show, she has not had any other experience since then. She explained that although the dance academy has tried to create a team for people with disabilities, they have not succeed yet. Another participant described a behavior of typically developed players towards him while playing Ping-Pong that further influenced their social connection. He stated:

“....When they play with me, they think that they have to play more easily and softly.....and this is a general reaction of the society.....because they are not familiar with interacting with people with disabilities as they do not see them outside...! As we said, because there are no appropriate conditions to go out...everyone is very cautious when they meet a disabled person...thinking not to do anything bad to him or her...while you can do whatever you have to do and if I have to stop or rest, I will communicate it! We all forget that the person can talk!! It is not that you will force him to do something that he or she doesn't want!”

Lastly, regarding the personal characteristics of participants, two perspectives were mentioned. Firstly, almost all participants mentioned that gender does not play a role in socially being involved in those activities compared to the past years. However, two of the three male participants noted that they hardly see females with disabilities participating in sports activities and consequently, they do not have experience in socially interacting with them.

Environment influences social participation

In the extrinsic factors, the environment also has both positive and negative effects on the participants' social participation, both directly and indirectly,

formulating two sub-categories: “**Indirect positive effect of the environment on social participation**” and “**Direct and indirect negative effect of the environment on social participation**”. The indirect positive effects are few and were not similar to all participants. A small number of participants, Kelly and Alice, indicated no need for environmental adaptation, while they also do not have a problem with accessibility in those activities. Two other participants (Nick and Andy) alluded to the importance of volunteer coaches’ participation in the activities or paying them a minimal amount of money, without which they would probably not have the opportunity to attend.

Regarding the direct negative environmental influences, all participants mentioned the effects that the COVID-19 pandemic brought to the surface for both attending physically and mentally in their preferred activities. Lockdown in Greece affected almost all participants’ attendance in their physical activities. Nick pointed out the strong negative physical and psychological effects that lockdown brought, as participating in his activity is the only thing that he enjoys. He emphasized how important it is for him to socially interact with other people with disabilities and coaches, and the situation affected him a lot by claiming, “.... *I mean...that’s why I’m getting crazy that I cannot go play Ping-Pong!*” On the same wavelength, another participant mentioned that lockdown has affected him by not allowing to participate in marathons and further by not being socially connected and related to others regardless of their ethnicity. Despite the fact that technology acts as a facilitator for keeping a social connection with others, most of the participants referred to missing the physical social interaction with the members of the activities.

Accessibility problems in Greece and the need for a more inclusive environment were also some of the direct environmental negative effects for youths’ social participation. John stated that the only thing that affects his communication with others is the accessibility to some marathons due to his wheelchair, which is not for such specifications. He also stated the importance of a more inclusive environment in marathons, regardless of disability, both for accessibility and acceptability. He gave an example of including electric wheelchairs in marathons in order to allow others to participate and be socially connected. However, he claimed that: “*I don’t want to be a person saying that my social life has been affected by the accessibilities because it hasn’t. However, this is a problem in Greece*”. Another participant mentioned that there are not many teams for people with disabilities in sports such as rugby, which is a sport that he would like to attend with his level of disability. When he was also

asked about accessibility, he referred to public transportation and extended to the city's structure that affects accessibility and social participation. Indicatively, he said:

“.... it's not my wheelchair's fault...it's not my fault that I find difficulties.... it's the fault of the conditions around me...because ok, I am quite sociable and quite adaptable as a person...I can make it through...but the purpose is not to have to exaggerate...to go beyond your potentials to cope with...”

Some participants, focusing more on state support, also mentioned the indirect negative environmental effects on their social participation. As mentioned before, two participants claimed that the state does not pay the coaches, and one of them also added that this affects him by not attending as often as he wants to. Additional financial support for both facilities and equipment was an important factor that Nick, John and Andy mentioned. Based on their experiences, they supported the need for a better and well-organized environment provided by the state for the quality of the activities. Lastly, as mentioned before, Andy referred to the public transportation and structure of the city and the importance of the state to give more attention to those factors so that all people can be easily connected to others regardless of disability.

Discussion

The current study included in-depth interviews with Greek youths' regarding their experiences and perspectives of social participation in physical activities of their preference. The whole analysis and presented results were led by a deductive approach, using the fPRC framework (Imms et al., 216) and its components for guidance the analysis. The application of this framework gave valuable insights to the presentation and understanding of the results, which can be used as a lead both in research and in practice. Findings indicated several factors that affect and are affected by social participation and were all categorized in the different aspects of the framework. Remarkable results showed that in all five cases, social involvement within the contexts was a strong advantage while attending their physical activities. Overall, participants had relatively positive experiences of social involvement as well as the environmental and personal recourses and supports, which facilitated this.

All participants expressed the good collaboration and relationship they have established, especially with the coaches/teachers of the activities, and the sense of belongingness to be of utmost importance for them. Social participation was described as valuable for various reasons. Self-confidence, self-esteem and self-efficacy were the most common intrinsic factors that were found in relation to affect or be affected by youths' social participation in physical activities. Up to date information was also given regarding the current situation in Greece, and how contextual and environmental factors still contribute both directly and indirectly on youths' social participation. The results strengthened previous assumptions about the importance of physical activities for youths with physical disabilities and shone light on the current situation through their unique experiences answering who, how, where and what positively and/or negatively affect their social participation. Considering the General Systems Theory perspective (Wach, 2000), some aspects were identified to produce imbalance into the system, especially from the side of the community, providing thoughtful insights for more holistic and appropriate changes in those elements that will benefit the whole system.

Social participation

According to the fPRC framework, involvement is an element embedded within attendance. In other words, attendance is necessary in order to achieve involvement; further involvement is integral to participation. The participants in this study discussed the importance of both aspects of participation. As attendance is measured by frequency and diversity of activities (Imms et al., 2016), almost all of the participants were dissatisfied with their frequency of attendance, but they unanimously agreed frequency of attendance was not correlated with their social participation. These perspectives are in line with those of previous studies as the experience of participation does not require extensive attendance at different activities in an everyday frequency, but is associated with how meaningful the participation is experienced to be (Granlund et al., 2012; Willis et al., 2017). However, it is notable to mention that this relation can be seen as a bidirectional process. More precisely, a frequent youths' attendance in a physical activity can lead to positive feelings of belongingness and the experience of having fun with others (Willis et al., 2017). Consequently, having fun with others can increase the meaningful social engagement

among participants in the physical activities and further positively influence their social participation (Willis et al., 2017).

Social connection and sense of belongingness were two of the strongest factors related to the youths' social involvement in their activities. All participants underlined that good relationships were an integral element of meaningful participation. These findings corroborate results of previous studies and literature, supporting the social component as a cornerstone of activities' participation meaning (Imms et al., 2016; Nyquist et al., 2020; Willis et al., 2017). Having a significant and valued role in the physical activity context has a strong association with social involvement and feeling of inclusion (Spencer-Cavalier & Watkinson, 2010). The participants' experience regarding their social participation with others that also had a disability, was found equally important, articulating their identity within a larger disability community. This union between those people is already supported by previous research and should be supported throughout the years (Goodwin et al., 2011; Goodwin & Staples, 2005; Goodwin, Krohn & Kuhnle, 2004). As one participant stated, it was the first time that he was socially connected with others having similar deficits leading to an automatic affiliation with others sharing valuable experiences on how to live with a disability in an environment outside the activity.

Intrinsic factors

Youths' physical activity preferences

The current study also supports previous evidence regarding the intrinsic factors influencing and influenced by social participation. The most observable finding in this study was that the youth participated in activities of their preference. Several studies indicate that if youths choose their recreational and leisure activities, their motivation and meaningful participation is enhanced (Imms et al., 2016; Powrie et al., 2015; Sansone & Thoman, 2006). In their study, Nyquist and colleagues (2020) discussed that the intrinsic factors of youths' preferences, enjoyment and sense of self, have a dynamic relationship and can strongly predict the persons' involvement in each activity. Consequently, being involved and experiencing positive engagement contributes to youths' wellbeing and social interaction and connectedness (Maher et al., 2007; Wright et al., 2019). As one participant strongly supported, choosing to attend in marathons gave him the opportunity for a pan-European connection with others without any discrimination of ethnicity, language or disability. Therefore, as

participants chose which physical activities they wanted to attend, there was a higher chance of this to be associated with their engagement and social involvement in those activities.

Activity competence

Activity competence and its contribution to youths' social participation is another essential aspect that needs to be discussed. All participants in this study believed that their cognitive and physical skills do not affect their social participation while attending their activities. Here it is particularly important to discuss the differences in the level of disability and how this can positively or negatively affect youths' social participation. In the current study, participants claimed that the level of disability did not affect their social participation. However, from the scope of one participant's view, the only thing that mentioned that affected her social interaction with another co-dancer was his intellectual disability. Here, it is noteworthy to discuss how the skills of people in the activity context can also influence the social participation of the participants in this study. A recent review examined exclusively people with intellectual disability in order to evaluate their social participation with others. This study supported that there is still limited research examining the social connection and inclusion of people with intellectual disability in physical activities (Thomson et al., 2020). Results showed limited socialization and social connection, including friendship, in the particular programs. Authors concluded that the social relationships and sense of belongingness should be further analyzed in those contexts for people with intellectual disability (Thomson et al., 2020), an aspect that similar findings showed the marginalization of those people in the social life of these activities in the current study.

Sense of self

Participants perceived their activity competence to be sufficient and all of them supported that their abilities did not affect their social participation, the possibility of enjoyment and willingness for engagement in the activities (Powrie et al., 2015). In turn, the positive experiences of attending and socially interacting with others, either typically developed or not, was a key factor that positively affected their self-confidence and self-esteem. A similar study supported the interconnection between activity competence and sense of self, underlining that "an appropriate activity competence reinforces a child's self-efficacy and sense of self to handle a

certain situation, which, in turn stimulates the child to seek for new available settings to participate” (Nyquist et al., 2020, p. 2507). Similarities have also been found in others studies (Kanagasabai et al., 2018; Shields & Sunnot, 2016; Wright et al., 2019) but no information was given on how the social interaction can reinforce the self-confidence of these populations. In the current study, the social interaction among participants and the people in the activities’ contexts played an essential role on positively affecting their self-confidence and self-esteem. On the other hand, the aspect of self-efficacy was that intrinsic factor affecting the social participation. Indicatively, results showed that a participant could easily estimate and recognize his abilities and skills, which consequently made him enjoy his social interaction with his opponent in the Ping-Pong game although he knew that he would lose. This result showed that self-efficacy, as a future directed perception, had an immediate effect on the participants’ social participation (Imms et al., 2016).

Extrinsic factors

Contextual factors

The different contexts around each participant also had both positive and negative effects on their social participation. As it was mentioned before, attending those activities is the primary factor for being socially involved in the activity contexts. All families of youths had the same attitude towards their children, supporting them for being there. In 2003, a study evaluating the parental influence of youths’ physical activity, stressed that encouraging their children had a strong positive influence on their self-efficacy and confidence to participate in the activities (Troost et al., 2003). As it was found in this study, psychological support from parents also had positive results of youths’ confidence, which consequently contributed for feeling that they can stand in those contexts and further socially connect with others.

From a young age, participants were fully supported by their parents both psychologically and practically (transportation and financial support). Similar findings were also supported by recent studies (Wright et al., 2019; Willis et al., 2017; Shields & Sunnot, 2016; Bloemen et al., 2015), underlining the effect of family’s support for attending preferred physical activities. In most of the cases in the current study, families were those who prompted participants to start a physical activity and that further helped them to socially connect with coaches/teachers and peers. However, not all families are as supportive as those in this current study, which could

act as a barrier to youths' attendance and social involvement. Additionally, young adults typically strive for their independence from their parents (Bloemen et al., 2015) and each society has a direct influence on that. Going through the 21st century and following the Greek Government Gazette (FEK 2998/B/20-7-2020), all people, regardless of disability, should be able to have access to any facility. Given the findings from the study, it would appear however, that more support is needed in order to allow young adults to gain access to physical activities without direct support from their families (ΥΠΕΝ/ΔΕΣΕΔΠ/65826/699/2020).

Another considerable finding was related to one participant's preparation from the rehabilitation center to his role as an athlete. Although the rehabilitation context has previously been shown to be responsible for the integration of a person to their everyday life and maintaining the occupational roles (Palisano et al., 2012), a youth's of this study experience referred to the opposite results. People in those contexts have to collaborate with each other and each community in order to support the participation in physical activities (Palisano et al., 2012). However, limiting this support, people with disabilities face difficulties integrating in those contexts, experiencing challenges in their social involvement as their self-confidence might be affected. Another essential result referred to the actual context of the physical activity depriving the social involvement of participants with others, typically developed or not. This is an aspect discussed in many systematic and scoping reviews supporting that the segregation of youths with physical disabilities to those non-disabled consists of a negative influence on attending and socially being involved with others (Anaby et al., 2013; Shikako-Thomas, Majnemer, Law & Lach, 2008).

However, one of the most fundamental findings of this study was the relationship between the people in the activity context and youths who participated in this study. The interconnection between each participant and their coaches/teachers was a strong element, leading to the creation of a strong relationship, and in some cases, friendship. Meaningful social interaction into a context has a strong influence on creating relationships of trust, friendships and social involvement while attending a physical activity (Anaby et al., 2013; Willis et al., 2017). This is a statement supported by all participants of this study; expressing their positive feelings of those relationships and underlining the importance of their social connection and relatedness. However, this is not always common in disability research. In the study of Shields and Synnot (2016), findings indicated that the societal attitude of staff

towards participants in physical activity contexts were described as negative due to a lack of experience and understanding of disability. Consequently, there was a negative effect on their social connection with others in the activities and social inclusion in a context without discriminations in disability. Similarly, results of this study referred to the negative attitudes of typically developed co-players towards a youth participant, behaving as if he should be passive or pitied for his disability. Negative attitudes can easily contribute and be considered as barriers to a person's social participation in physical activities (Anaby et al., 2013). However, in this case, although the participant recognized those attitudes, he chose not to pay further attention to those and not communicate it to them.

Environmental factors

One of the most fundamental factors regarding the influence of the environment to youths' social participation was the outburst of the virus COVID-19. Due to the pandemic of the virus, almost all physical activity centers, and particularly in Greece, were forced to close, resulting in people not participating in those activities. Results showed that the pandemic negatively affected the participants of this study both psychologically and physically as it was forbidden to attend the activities, causing the restriction in physical exercise as well as their psychological well-being. A sudden change into a specific system had immediate effect on youths' social participation in those activities as lockdown in Greece lasted for over 5 months aiming to reduce the spread of the virus. As physical activity's social environment is a facilitator to a person's mental health and wellbeing (Bize, Johnson & Plotnikoff, 2007; White et al., 2017), a recent study discussed how the enforcement of isolation from those activities increased the gap of physical and social connection between people with disabilities and others, resulting in anxiety and depressive effects (Kamyuka, Carlin, McPherson & Misener, 2020). Despite the use of social media as a tool for remaining socially connected with others, participants of this study expressed how they miss to physically and mentally "be there" and socially interact with others.

Besides the pandemic, youths also mentioned how the Greek environment negatively influences their accessibility in physical activities of their preference. Despite the Ministerial decision (ΥΠΕΝ/ΔΕΣΕΔΠ/65826/699/2020) supporting the accessibility of all in the different facilities of the community, participants gave several examples illustrating that this is not the case. Particularly, in some cases

participants mentioned that accessibility in different sport facilities and events restricted their participation either to themselves or to co-players affecting their social involvement with others outside of their main activity context. Similar studies support that accessibility is a determining prerequisite for social participation in physical activities especially for those who are wheelchair users (Jespersen, 2019). Accessibility and availability are some of the most common topics discussed in research about people with disabilities and their effects are well known on people's attendance in the activities of their preference (Anaby et al., 2013). Unfortunately, this has also an immediate consequence on youths' social connection and participation in the physical activities as this study supports.

In addition to the above, several indirect environmental negative effects shone light on how the Greek state still restricts their full participation and social connection with others in the specific contexts. The main barrier corresponded to the financial support of the Greek state, either to the physical activity contexts or to the broader community that further affects youths' social participation in those activities. Consequently, the main problems described by participants are, a lack of financial support for up-to-date equipment and facilities, lack of available sport activities based on disability levels, absence of accepting specific equipment for the activities and the inappropriate structure of the city. Maxwell, Alves and Granlund (2012) have discussed the civic rights movements and their correlation to the affordability of equal opportunities of participation for those with disabilities. The authors continued that the operationalization of accessibility and affordability is a difficult aspect. However, if the accessibility, acceptability, financial support in physical activity contexts and the appropriate structure of the city are not supported, the system is unbalanced. Consequently, there is an urgent need for the change of one element, in this case the environment, to effectively contribute to youths with physical disabilities participation (Wach, 2000). The important factor in those changes is the extended consideration of the Greek state to whether actions are done in an appropriate way leading to the desired outcome (Maxwell, Alves & Granlund, 2012). Social participation in those activities prerequisites those aspects and it is paramount to be considered.

Strengths and weaknesses of this study

A qualitative design using in-depth interviews with youths with physical disabilities in Greece was used to collect their perspectives and experiences of social

participation in the different physical activities that are attending. Asking youths themselves gave a deeper understanding of how they actually perceive their social interaction and connection with others, as it is a difficult topic to be addressed from others than those of directly being involved (Bedell et al., 2013). The in-depth semi-structured interviews gave the opportunity to the interviewer and interviewee to develop a potential increase of credibility to the data while participants had the allowance to give details of their experiences (Roller & Lavrakas, 2015). Consequently, the researcher could easily identify which of those aspects correspond to the elements of the fPRC framework and provide an in-depth presentation of the results under the lead of deductive approach.

A deductive content analysis, including the fPRC framework as a main pillar in this process, was essential in this study as it effectively contributed for categorizing and further understanding the different elements that affect and are affected by youths' social participation. This data analysis approach highlighted a phenomenon in those specific contexts of physical activities through the matching process of categorizing data to the different aspects of the theoretical framework (Elo & Kyngäs, 2007; Kyngäs & Kaakinen, 2019). As mentioned in the methodology of this study, trustworthiness and credibility of the data analysis was ensured through a peer debriefing process (Creswell, 2014; Torgé, 2018). Additionally, the member checking process had a positive influence on the trustworthiness of this process as participants received the transcription by email of their interview to ensure the interpretation of their words (Torgé, 2018). Lastly, as the interviews were conducted in Greek, it was possible for the researcher to miss some of the participants' meaning during the transition from Greek to English. For that reason, the researcher collaborated with a Greek colleague in this process in order to ensure the credibility of the study (Creswell, 2014).

Living through the pandemic of 2021, online interviews was a valuable tool in nowadays life as it provides a synchronous experience of hearing and, at the same time, seeing participants (Bertrand & Bourdeau, 2010). Technology gave the opportunity for this study to be conducted online with the use of video-call interviews avoiding physical contact between the researcher and the participants. However, ethical issues remained alike face-to-face interviews with the only difference that the whole procedure was conducted online. Participants automatically experience a more convenient condition (Janghorban, Roudsari & Taghipour, 2014). All participants were

familiar with the use of online applications for the conduction of the interviews, so no difficulties were faced in this process. Additionally, Internet connection worked as a facilitator in the whole process as no problems were defined during the interviews. Online interviews also have the advantage of no cost as well as the convenience of youths to participate in their familiar environment, feeling secure and not be exposed to someone that meet for the first time as well as the safety of dropping in any time with a click of a button (Krouwel, Jolly & Greenfield, 2019).

Despite the strengths of this study, several limitations also have to be considered. The small number of participants affects the generalizability of the results (Torgé, 2018), as is not a representative target group for the rest of people with physical disabilities, leading to a selection bias in the sample. Additionally, the specifications of youth participants correspond to a specific group of people who have extensive support from their surrounding environment, providing therapies and financial support from a young age. Additionally, to the support, none of them had intellectual deficits leading to a limited target population representing youths with disabilities. Consequently, although the current study presents meaningful insights to the specific topic, there is limited information from other youths who might not have such a supportive environment, limited therapies and possible comorbid intellectual deficits.

Future research and practical implications

Results of this empirical study address the need for future research but also practical implications to the Greek community. Further research of a broader Greek population will provide greater insight of how youths with physical disabilities experience social participation in physical activities. The use of the fPRC framework under the umbrella of the Systems Theory can be used as a facilitator of deeper understanding and categorizing the different aspects that affect and are affected by social participation and will lead to the configuration of an effective plan for change. Alongside the future research, there is a need from the Greek state of taking the reins of this change by supporting the physical activities, especially in those contexts that people with physical disabilities face problems in accessibility, availability and adaptability, leading to their social interaction restrictions with others. The support of youths is of utmost importance for their transition to the adulthood life, as feeling

independent, they can attend the activities of their preference without restrictions and socially interact with others without being dependent on their families.

Conclusion

The present empirical study aimed to examine Greek youths' perceptions and experiences of their social participation while attending physical activities by conducting in-depth interviews with them. Social participation and attendance in physical activities are two fundamental aspects that directly affect youths' life. Therefore, further examining youths as citizens in the community –outside the structured context of rehabilitation- was very important. The whole empirical study emphasized on structuring the process under the Systems Theory and fPRC framework for a better understanding of the topic. A qualitative approach with a deductive content analysis laid the groundwork for the derived data.

Results demonstrated a holistic view of the different aspects fPRC supports, sense of belongingness and social connection being the most common findings. Youths attending activities of their preference was another essential finding as it directly affected their willingness to attend and to get involved with others, socially. Regarding their sense of self, there was an increase in self-confidence for some participants, as they were socially interacting with others, while self-efficacy was an intrinsic factor contributing to the participants' social participation. Contextual and environmental factors were those that had mainly negative effects on youths' social participation although their families and the staff of the physical activities were particularly supportive. Subsequently, the outburst of COVID-19, the lack of accessible community in the physical activities' contexts and structure of the city, as well as the lack of financial support from the Greek state leading to their parental dependence, are the environmental aspects that still restrict and affect youths' social participation with others. An unbalanced system leads to an unbalanced full social participation of youths with physical disabilities in physical activities and a practical change needs to promptly be addressed by the Greek community.

References

- Anaby, D., Hand, C., Bradley, L., DiRezze, B., Forhan, M., DiGiacomo, A., & Law, M. (2013). The effect of the environment on participation of children and youth with disabilities: a scoping review. *Disability and rehabilitation*, 35(19), 1589–1598. <https://doi.org/10.3109/09638288.2012.748840>
- Anaby, D., Law, M., Coster, W., Bedell, G., Khetani, M., Avery, L., & Teplicky, R. (2014). The Mediating Role of the Environment in Explaining Participation of Children and Youth With and Without Disabilities Across Home, School, and Community. *Archives Of Physical Medicine And Rehabilitation*, 95(5), 908-917. <https://doi.org/10.1016/j.apmr.2014.01.005>
- Beazley, H., Bessell, S., Ennew, J., & Waterson, R. (2009). The right to be properly researched: research with children in a messy, real world. *Children's Geographies* 7(4), 365-378. <https://doi.org/10.1080/14733280903234428>
- Bedell, G. M., & Dumas, H. M. (2004). Social participation of children and youth with acquired brain injuries discharged from inpatient rehabilitation: a follow-up study. *Brain injury*, 18(1), 65–82. <https://doi-org.proxy.library.ju.se/10.1080/0269905031000110517>
- Bedell, G. M., Cohn, E. S., & Dumas, H. M. (2005). Exploring parents' use of strategies to promote social participation of school-age children with acquired brain injuries. *The American journal of occupational therapy : official publication of the American Occupational Therapy Association*, 59(3), 273–284. <https://doi-org.proxy.library.ju.se/10.5014/ajot.59.3.273>
- Bedell, G., Coster, W., Law, M., Liljenquist, K., Kao, Y. C., Teplicky, R., Anaby, D., & Khetani, M. A. (2013). Community participation, supports, and barriers of school-age children with and without disabilities. *Archives of physical medicine and rehabilitation*, 94(2), 315–323. <https://doi.org/10.1016/j.apmr.2012.09.024>

- Bertrand, C. & Bourdeau, L. (2010). Research interviews by Skype: A new data collection method. *Proceedings from the 9th European Conference on Research Methods*, 1-11. https://www.researchgate.net/publication/256117370_Bertrand_C_Bourdeau_L_2010_Research_interviews_by_Skype_A_new_data_collection_method_In_J_Esteves_Ed_Proceedings_from_the_9th_European_Conference_on_Research_Methods_pp_70-79_Spain_IE_Business_School/link/00463521d569d741ff000000/download
- Bize, R., Johnson, J. A., & Plotnikoff, R. C. (2007). Physical activity level and health-related quality of life in the general adult population: a systematic review. *Preventive medicine*, 45(6), 401–415. <https://doi.org/10.1016/j.ypmed.2007.07.017>
- Block, M. E., Taliaferro, A., & Moran, T. (2013). Physical activity and youth with disabilities: barriers and supports. *The Prevention Researcher*, 20(2), 18-20. <https://go.gale.com/ps/anonymous?id=GALE%7CA330251258&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=10864385&p=HRCA&sw=w>
- Bloemen, M. A., Backx, F. J., Takken, T., Wittink, H., Benner, J., Mollema, J., & de Groot, J. F. (2015). Factors associated with physical activity in children and adolescents with a physical disability: a systematic review. *Developmental medicine and child neurology*, 57(2), 137–148. <https://doi.org/10.1111/dmcn.12624>
- Bornman, J., & Granlund, M. (2007). Facilitating change in early childhood intervention by using principles from systems theory: An interventionist's perspective. *South African Journal of Occupational Therapy*, 37(3), 4-7. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.895.2475&rep=rep1&type=pdf>
- Bult, M. K., Verschuren, O., Jongmans, M. J., Lindeman, E., & Ketelaar, M. (2011). What influences participation in leisure activities of children and youth with physical disabilities? A systematic review. *Research in developmental disabilities*, 32(5), 1521–1529. <https://doi.org/10.1016/j.ridd.2011.01.045>
- Coad, J., Gibson, F., Horstman, M., Milnes, L., Randall, D., & Carter, B. (2015). Be my guest! Challenges and practical solutions of undertaking interviews with children in the home setting. *Journal of Health care* 19(4): 432-43. <https://doi.org/10.1177%2F1367493514527653>
- Creswell, J. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE.
- Elo, S., & Kyngäs, H. (2007). The qualitative content analysis process. *Journal of advanced nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Engel-Yeger, B., Jarus, T., Anaby, D., & Law, M. (2009). Differences in patterns of participation between youths with cerebral palsy and typically developing peers. *The American journal of occupational*

therapy : official publication of the American Occupational Therapy Association, 63(1), 96–104.
<https://doi.org/10.5014/ajot.63.1.96>

European Commission. (2010). *Europe 2020: A strategy for smart, sustainable and inclusive growth*. European Commission

<https://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>

European Parliament. (2013). Country Report on Greece for the Study on Member States' Policies for Children with Disabilities. Retrived from: http://publications.europa.eu/resource/cellar/c88b39e0-f270-439a-9c56-fe2bb51416b6.0001.02/DOC_1

Georgopoulos, X. (2001, June 24). Disability: The issue is social and political. *ELEFTHEROTIPIA*.
<https://docplayer.gr/3145134-Anapiria-to-zitima-einai-koinoniko-kai-politiko.html>

Goodwin, D. L., Lieberman, L. J., Johnston, K., & Leo, J. (2011). Connecting through summer camp: Youth with visual impairments find a sense of community. *Adapted physical activity quarterly : APAQ*, 28(1), 40–55. <https://doi.org/10.1123/apaq.28.1.40>

Goodwin, D., & Staples, K. (2005). The Meaning of Summer Camp Experiences to Youths with Disabilities. *Adapted Physical Activity Quarterly*, 22(2), 160-178.
<https://doi.org/10.1123/apaq.22.2.160>

Goodwin, D., Krohn, J., & Kuhnle, A. (2004). Beyond the Wheelchair: The Experience of Dance. *Adapted Physical Activity Quarterly*, 21(3), 229-247. <https://doi.org/10.1123/apaq.21.3.229>

Graneheim, U., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112.
<https://doi.org/10.1016/j.nedt.2003.10.001>

Granlund, M., Arvidsson, P., Niiä, A., Björck-Åkesson, E., Simeonsson, R., Maxwell, G., Adolfsson, M., Eriksson-Augustine, L., & Pless, M. (2012). Differentiating activity and participation of children and youth with disability in Sweden: a third qualifier in the International Classification of Functioning, Disability, and Health for Children and Youth?. *American journal of physical medicine & rehabilitation*, 91(13 Suppl 1), S84–S96. <https://doi.org/10.1097/PHM.0b013e31823d5376>

Hill, M. (2005). Ethical considerations in Researching Children's experiences. In S. Greene & D. Hogan, *Researching Children's Experience: Approaches and Methods* (pp. 61-86). London: SAGE.

Imms, C., Adair, B., Keen, D., Ullenhag, A., Rosenbaum, P., & Granlund, M. (2015). 'Participation': a systematic review of language, definitions, and constructs used in intervention research with children with disabilities. *Developmental Medicine & Child Neurology*, 58(1), 29-38.

<https://doi.org/10.1111/dmcn.12932>

- Imms, C., Granlund, M., Wilson, P., Steenbergen, B., Rosenbaum, P., & Gordon, A. (2016). Participation, both a means and an end: a conceptual analysis of processes and outcomes in childhood disability. *Developmental Medicine & Child Neurology*, 59(1), 16-25. <https://doi.org/10.1111/dmcn.13237>
- Imms, C., Reilly, S., Carlin, J., & Dodd, K. (2008). Diversity of participation in children with cerebral palsy. *Developmental medicine and child neurology*, 50(5), 363–369. <https://doi.org/10.1111/j.1469-8749.2008.02051.x>
- Janghorban, R., Latifnejad Roudsari, R., & Taghipour, A. (2014). Skype interviewing: the new generation of online synchronous interview in qualitative research. *International journal of qualitative studies on health and well-being*, 9, 24152. <https://doi.org/10.3402/qhw.v9.24152>
- Jespersen, L. N., Michelsen, S. I., Tjørnhøj-Thomsen, T., Svensson, M. K., Holstein, B. E., & Due, P. (2019). Living with a disability: a qualitative study of associations between social relations, social participation and quality of life. *Disability and rehabilitation*, 41(11), 1275–1286. <https://doi.org/10.1080/09638288.2018.1424949>
- Kamyuka, D., Carlin, L., McPherson, G., & Misener, L. (2020). Access to Physical Activity and Sport and the Effects of Isolation and Cordon Sanitaire During COVID-19 for People With Disabilities in Scotland and Canada. *Frontiers in sports and active living*, 2, 594501. <https://doi.org/10.3389/fspor.2020.594501>
- Kanagasabai, P. S., Mulligan, H., Hale, L. A., & Mirfin-Veitch, B. (2018). "I do like the activities which I can do..." Leisure participation experiences of children with movement impairments. *Disability and rehabilitation*, 40(14), 1630–1638. <https://doi.org/10.1080/09638288.2017.1303093>
- Kang, L. J., Palisano, R. J., Orlin, M. N., Chiarello, L. A., King, G. A., & Polansky, M. (2010). Determinants of social participation--with friends and others who are not family members--for youths with cerebral palsy. *Physical therapy*, 90(12), 1743–1757. <https://doi.org/10.2522/ptj.20100048>
- Krouwel, M., Jolly, K., & Greenfield, S. (2019). Comparing Skype (video calling) and in-person qualitative interview modes in a study of people with irritable bowel syndrome - an exploratory comparative analysis. *BMC medical research methodology*, 19(1), 219. <https://doi.org/10.1186/s12874-019-0867-9>
- Kumpunen, S., Shipway, L., Taylor, R.M., Aldiss, S., & Gibson, F. (2012). Practical approaches to seeking assent from children. *Nurse Research* 19(2): 23-7. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.7748%2Fnr2012.01.19.2.23.c8905>

- Kyngäs, H. & Kaakinen, P. (2020). Deductive Content Analysis. In Kyngäs, H., Mikkonen, K. & Kääriäinen, M. (Eds.), *The Application of Content Analysis in Nursing Science Research*. (pp.23-30). Springer
- Law M. (2002). Participation in the occupations of everyday life. *The American journal of occupational therapy : official publication of the American Occupational Therapy Association*, 56(6), 640–649. <https://doi-org.proxy.library.ju.se/10.5014/ajot.56.6.640>
- Law, M., King, G., King, S., Kertoy, M., Hurley, P., & Rosenbaum, P. et al. (2006). Patterns of participation in recreational and leisure activities among children with complex physical disabilities. *Developmental Medicine & Child Neurology*, 48(05), 337. <http://proxy.library.ju.se/login?url=https://search-proquest-com.proxy.library.ju.se/docview/195594630?accountid=11754>
- Levasseur, M., Richard, L., Gauvin, L., & Raymond, E. (2010). Inventory and analysis of definitions of social participation found in the aging literature: proposed taxonomy of social activities. *Social science & medicine (1982)*, 71(12), 2141–2149. <https://doi.org/10.1016/j.socscimed.2010.09.041>
- Lindsay S. (2016). Child and youth experiences and perspectives of cerebral palsy: a qualitative systematic review. *Child: care, health and development*, 42(2), 153–175. <https://doi.org/10.1111/cch.12309>
- Maher, C. A., Williams, M. T., Olds, T., & Lane, A. E. (2007). Physical and sedentary activity in adolescents with cerebral palsy. *Developmental medicine and child neurology*, 49(6), 450–457. <https://doi.org/10.1111/j.1469-8749.2007.00450.x>
- Maxwell, G., Alves, I., & Granlund, M. (2012). Participation and environmental aspects in education and the ICF and the ICF-CY: findings from a systematic literature review. *Developmental neurorehabilitation*, 15(1), 63–78. <https://doi-org.proxy.library.ju.se/10.3109/17518423.2011.633108>
- Ministerial Decision YIEN/ΔΕΣΕΔΠ/65826/699/2020 (2020, July 20). Technical instructions for the adaptation of existing buildings and infrastructure for their accessibility to persons with disabilities according to the applicable law.
- Mukherji, P., & Albon, D. (2018). *Research methods in early childhood*. Los Angeles, Calif.: SAGE.
- National Confederation of People with Disabilities (ESAmA). (2008). Designing a Disability Policy. <https://www.openbook.gr/sxediazontas-politiki-se-themata-anapirias-egxeiridio-ekpaideyti/>
- Nyquist, A., Jahnsen, R., Moser, T., & Ullenhag, A. (2019). The coolest I know – a qualitative study exploring the participation experiences of children with disabilities in an adapted physical activities program. *Disability And Rehabilitation*, 42(17), 2501-2509. <https://doi.org/10.1080/09638288.2019.1573937>

- Palisano, R. J., Chiarello, L. A., King, G. A., Novak, I., Stoner, T., & Fiss, A. (2012). Participation-based therapy for children with physical disabilities. *Disability and rehabilitation*, 34(12), 1041–1052. <https://doi.org/10.3109/09638288.2011.628740>
- Palisano, R., Kang, L., Chiarello, L., Orlin, M., Oeffinger, D., & Maggs, J. (2009). Social and Community Participation of Children and Youth With Cerebral Palsy Is Associated With Age and Gross Motor Function Classification. *Physical Therapy*, 89(12), 1304–1314. <https://doi.org/10.2522/ptj.20090162>
- Piškur, B., Daniëls, R., Jongmans, M. J., Ketelaar, M., Smeets, R. J., Norton, M., & Beurskens, A. J. (2014). Participation and social participation: are they distinct concepts?. *Clinical rehabilitation*, 28(3), 211–220. <https://doi.org/10.1177/0269215513499029>
- Powrie, B., Kolehmainen, N., Turpin, M., Ziviani, J., & Copley, J. (2015). The meaning of leisure for children and young people with physical disabilities: a systematic evidence synthesis. *Developmental medicine and child neurology*, 57(11), 993–1010. <https://doi.org/10.1111/dmcn.12788>
- Rimmer, J. H., Riley, B., Wang, E., Rauworth, A., & Jurkowski, J. (2004). Physical activity participation among persons with disabilities: barriers and facilitators. *American journal of preventive medicine*, 26(5), 419–425. <https://doi.org/10.1016/j.amepre.2004.02.002>
- Robinson, O. (2013). Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide. *Qualitative Research In Psychology*, 11(1), 25–41. <https://doi.org/10.1080/14780887.2013.801543>
- Sansone, C., & Thoman, D. B. (2006). Maintaining activity engagement: individual differences in the process of self-regulating motivation. *Journal of personality*, 74(6), 1697–1720. <https://doi.org/10.1111/j.1467-6494.2006.00425.x>
- Shields, N., & Synnot, A. (2016). Perceived barriers and facilitators to participation in physical activity for children with disability: a qualitative study. *BMC pediatrics*, 16, 9. <https://doi.org/10.1186/s12887-016-0544-7>
- Shikako-Thomas, K., Majnemer, A., Law, M., & Lach, L. (2008). Determinants of participation in leisure activities in children and youth with cerebral palsy: systematic review. *Physical & occupational therapy in pediatrics*, 28(2), 155–169. <https://doi.org/10.1080/01942630802031834>
- Shikako-Thomas, K., Shevell, M., Schmitz, N., Lach, L., Law, M., Poulin, C., Majnemer, A., & QUALA Group (2013). Determinants of participation in leisure activities among adolescents with cerebral palsy. *Research in developmental disabilities*, 34(9), 2621–2634. <https://doi.org/10.1016/j.ridd.2013.05.013>

- Specht, J., King, G., Brown, E., & Foris, C. (2002). The importance of leisure in the lives of persons with congenital physical disabilities. *The American journal of occupational therapy : official publication of the American Occupational Therapy Association*, 56(4), 436–445. <https://doi.org/10.5014/ajot.56.4.436>
- Specht, J., King, G., Brown, E., & Foris, C. (2002). The importance of leisure in the lives of persons with congenital physical disabilities. *The American journal of occupational therapy : official publication of the American Occupational Therapy Association*, 56(4), 436–445. <https://doi.org/10.5014/ajot.56.4.436>
- Spencer-Cavaliere, N., & Watkinson, E. J. (2010). Inclusion understood from the perspectives of children with disability. *Adapted physical activity quarterly : APAQ*, 27(4), 275–293. <https://doi.org/10.1123/apaq.27.4.275>
- Telama R. (2009). Tracking of physical activity from childhood to adulthood: a review. *Obesity facts*, 2(3), 187–195. <https://doi.org/10.1159/00022244>
- Thomson, A., Bridges, S., Corrins, B., Pham, J., White, C., & Buchanan, A. (2020). The impact of physical activity and sport programs on community participation for people with intellectual disability: A systematic review. *Journal Of Intellectual & Developmental Disability*, 1-11. <https://doi.org/10.3109/13668250.2020.1717070>
- Torgé, J. (2018). *Qualitative research—Validity, credibility and trustworthiness- Streamed Lecture*. JU Play - Jönköping University. https://play.ju.se/media/Qualitative+research+validity%2C+credibility+and+trustworthiness/0_t8t078gi
- Trost, S. G., Sallis, J. F., Pate, R. R., Freedson, P. S., Taylor, W. C., & Dowda, M. (2003). Evaluating a model of parental influence on youth physical activity. *American journal of preventive medicine*, 25(4), 277–282. [https://doi.org/10.1016/s0749-3797\(03\)00217-4](https://doi.org/10.1016/s0749-3797(03)00217-4)
- United Nations (2006). *Conventions on the rights of persons with disabilities*. Retrieved 2021/01/05, from https://www.un.org/disabilities/documents/convention/convention_accessible_pdf.pdf
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2015). International Chapter of Physical Education, Physical Activity and Sport. http://portal.unesco.org/en/ev.php-URL_ID=13150&URL_DO=DO_TOPIC&URL_SECTION=201.html

- Wachs, T. D. (2000). Integrating multiple influences, midlevel processes, and systems. In *Necessary but not sufficient: The respective roles of single and multiple influences on individual development* (pp. 261-315): American Psychological Association.
- White, R. L., Babic, M. J., Parker, P. D., Lubans, D. R., Astell-Burt, T., & Lonsdale, C. (2017). Domain-Specific Physical Activity and Mental Health: A Meta-analysis. *American journal of preventive medicine*, 52(5), 653–666. <https://doi.org/10.1016/j.amepre.2016.12.008>
- Williams, A. (2019). *Physical Disability and Rehabilitation Sourcebook* (1st ed.). Omnigraphics.
- Willis, C., Girdler, S., Thompson, M., Rosenberg, M., Reid, S., & Elliott, C. (2017). Elements contributing to meaningful participation for children and youth with disabilities: a scoping review. *Disability and rehabilitation*, 39(17), 1771–1784. <https://doi.org/10.1080/09638288.2016.1207716>
- World Health Organization. (2007). *International Classification of Functioning, Disability and Health Children & Youth Version*. World Health Organization.
- World Health Organization. (2015). WHO global disability action plan 2014-2021. Retrived from <https://www.who.int/disabilities/actionplan/en/>
- World Health Organization. (2018). Greece – Physical activity factsheet (2018). Retrived from <https://www.euro.who.int/en/health-topics/disease-prevention/physical-activity/data-and-statistics/physical-activity-fact-sheets/physical-activity-country-factsheets/greece>
- World Health Organization. (2020). Physical Activity. Retrived from <https://www.who.int/en/news-room/fact-sheets/detail/physical-activity>
- Wright, A., Roberts, R., Bowman, G., & Crettenden, A. (2019). Barriers and facilitators to physical activity participation for children with physical disability: comparing and contrasting the views of children, young people, and their clinicians. *Disability and rehabilitation*, 41(13), 1499–1507. <https://doi.org/10.1080/09638288.2018.1432702>

Appendix 1



Informed Consent form

Empirical study by a Master Student of Jönköping University

Program: Interventions in Childhood

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As part of the second-year master thesis, I am inviting you to participate in this empirical study with the title: “*Perceptions and Experiences of Social Participation in Physical Activities Among Youths with Physical Disabilities in Greece*”. The current study will be conducted by me –Aikaterini Araniti- under the supervision of Ms.

Elaine Mc Hugh. I am kindly requesting you to read the following information sheet and you can freely choose to consent to participate or not in this study. At the end of this sheet, you can find the consent form in which you will sign if you agree to participate or not.

*For any further information and clarification before signing you can contact me by email or phone.

What is the study about?

This study investigates youths' (ages 18-25) with physical disabilities stories of experiences regarding their social participation in physical activities in Greece. Youths' experiences will also be compared, by finding differences and similarities, with their health care professionals' perceptions of their social participation in those physical activities.

What will be asked you to do?

You will be asked to do an online interview, 30-45 minutes in duration. Interviews will be conducted online via face-time applications (Skype and Zoom) due to the current circumstances. During the interview, it is advised that you are at home, in your office, or in any other quiet space where you are unlikely to be disturbed by other people. Your participation in the study is voluntary and you can drop out at any stage of the process (before, during or after the interview) without any consequence. You can also decline to answer questions if you wish.

Objectives

Youth participants:

- Will reflect on and share stories - experiences and feelings regarding your participation in the physical activity that you are attending.
- Will share possible past experiences and compare them with the most current ones regarding your social participation and come to a conclusion of how satisfied you are.

Potential risks

There are few risks for youths participating in this study's project. There is no possibility for either physical or psychological risk participating in this process, as the aim is to collect experiences and perspectives from that specific group of people. During the interview process, participants will also be at their familiar place, either home or office, without coming in contact with any other person rather than the researcher. Further, it has to be notably mentioned that no sensitive data will be collected for this study, avoiding possible causes of psychological distress. However, participants need to know that during the interview it will be discussed possible feelings of exclusion, which may bring negative feelings. For that reason, the researcher ensures that each participant can decline to answer any question he/she wants.

Benefits

Participants will have the opportunity to reflect on and share their experiences of attending structured physical activities of their preference. In research, it is crucial to consider people's with disabilities voices of how they experience a situation rather than only from others around them.

Confidentiality of the study

Names and any other personal information of all participants will not be kept on any document. During the process, only coded documents will be analyzed with code key be kept separate from documents. A pseudonym will be used to protect participants' identity in citations. The names of areas of the physical activities that youth attend will not also be provided for not finding personal information. As interviews will be conducted online and it is not allowed to record them through the applications, recordings will be conducted and kept in the phone of the researcher and will further be saved in a document with only password entrance. All recorded data will be further deleted at the end of the research process. Lastly, before the analysis of the data, all participants will read the transcripts of their interview in order to confirm that the researcher transcribed accurately their voices and, if needed, to change those that possibly deviate.

Consent form

By my signature below, I,...(name)...., agree to participate in this empirical study “.....” with the use of interviews as a data collection method.

In agreeing to participate in this study, I understand and agree to the following:

1. That Aikaterini Araniti will be leading this project.
2. That Aikaterini Araniti will collect data by audiotaping our online interview.
3. That Aikaterini Araniti will transcribe and analyzing the data, keeping all personal information anonymously and further destroy the audiotape and any other note regarding the interview to ensure confidentiality.
4. That I will receive my interview transcription to ensure that there are no misunderstandings or falsification of what I have said.
5. That Aikaterini Araniti will reflect and analyze my experiences/perceptions/thoughts regarding the social participation in structured physical activities.
6. My participation in the study is voluntary and, I can revoke my permission and leave from this process at any time for any reason.

 Signature of study participant

 Date

 Signature of student researcher

 Date

Appendix 2

Interview Guide
<p>Introduction-warm up</p> <p>Demographics</p> <ul style="list-style-type: none"> • Age • Studies-Education • Work • Diagnosis <p>A. What kind of physical activity do you participate in?</p> <p>B. Where does this activity take place?</p> <p>C. Is it privately owned or public?</p> <p>D. For how long do you participate in this activity?</p> <p>E. Who or what prompted you to start this activity and why?</p> <p>Research question 1: What are the youths' with physical disabilities perceptions and experiences of social involvement when attending physical activities?</p> <p>1.1. How often do you attend this activity?</p> <p>1.2. What is your general impression attending this activity?</p> <p>1.3. Are you satisfied with the time spending in this activity?</p> <p>1.3.1. Yes. Why?</p>

1.3.2. No. Why?

1.3.3. How do you think that you could change that?

1.4. With whom do you interact with in this activity?

1.4.1. Do you have assistance performing this activity? (e.g. therapist)

1.4.2. Would you like to describe me your relationship with these people?

1.5. Do you feel involved when you are attending this activity?

1.5.1. Who or what contributes to feel involved/not feeling involved?

1.6. How important is this activity for you?

1.6.1. Why it is important?

1.6.2. How much effort do you put at this activity?

1.7. Do you have feelings of joy and/or fulfillment when you are participating in this activity?

1.7.1. What contributes for these feelings?

1.8. Would you like to participate in any other physical activity?

1.8.1. If YES: which one?

1.8.2. Why you don't attend?

Research question 2: What are the youths' with physical disabilities perceptions and experiences of their activity competence, sense of self and preferences regarding their social participation in physical activities?

2.1. Do you think your physical abilities and skills affect your social participation at this activity and why?

2.2. Can you give me an example when you felt this?

2.3. Did you ever have communication problems (for any reason) with any of the members in this activity that could affect your social participation?

2.4. How confident do you feel while participating in this activity now?

2.4.1. Does someone makes you feel confident/not feeling confident?

2.4.2. Is there any difference from past experiences?

2.5. How satisfied are you with your performance in this activity now?

2.5.1. What makes you feel satisfied/not satisfied with your performance?

2.5.2. Is there any difference from past experiences?

2.5.3. If yes, what has been changed?

2.6. Would you like something from the place of the activity to look different?

2.6.1. What is that?

2.7. As getting older, do you believe that age plays a vital role on your social participation in this activity?

2.7.1. If yes, can you give me an example?

2.7.2. If not, what do you think is that to prevent it?

2.8. What is your opinion about sex regarding the social participation in this activity? -

Does it play a role in how a person socially participates in this activity?

2.8.1. Do you have any example or experience about that?

2.9. What makes this activity special for you?

3. Research question 3: What are the youths' with physical disabilities perceptions and experiences regarding the influence of their context and environment for their social participation in physical activities?

Regarding the environment of the activity...

3.1. Is there any extra tool or equipment that helps in the accessibility and your participation in this activity?

3.2. Would you like to have additional support either from people there or from the physical environment (such as equipment) that you don't currently have?

3.3. How would you describe your collaboration/relationship with the team or other individuals in the activity?

3.3.1. Can you give me some examples?

3.4. How people working there make you feel in this activity?

3.4.1. Can you explain some of your experiences?

3.5. Do you interact with people at your age?

3.6. Have you come closer with any of the other youths in this context?

3.6.1. If yes, do you have contact with him/her in your daily life?

3.6.2. If no, do you want so?

3.6.3. If you want, what is the barrier?

3.7. Have youth in this context make you feel involved while attending this activity?

3.7.1. Can you also give me some examples of your experiences?

3.8. Do you participate in any other physical activity either with your family or with your friends?

3.9. What kind of support do you have from your family to attend and participate in any physical activity?

3.10. And lastly, is it social participation important for you, especially for the physical activities/activity that you are attending?