

## EMPOWERING, COMMUNICATION AND MOTIVATION FOR PEOPLE WITH INTELLECTUAL DISABILITY IN COLPBOL SPORT PRACTICE

Dumitru BARBU<sup>1</sup>, Mihai Răzvan Constantin BARBU<sup>1,2</sup>, Luminița BRABIESCU CĂLINESCU<sup>1,2</sup>, Germina COSMA<sup>1,2</sup>, Marian Alexandru COSMA<sup>1</sup>, Cătălin FORȚAN<sup>1</sup>, Mihaela ZĂVĂLEANU<sup>1,2</sup>

<sup>1</sup>Faculty of Physical Education and Sport, University of Craiova, Romania

<sup>2</sup>ALDO-CET, Romania

Correspondence addresse: [germina.cosma@edu.ucv.ro](mailto:germina.cosma@edu.ucv.ro)

<https://doi.org/10.52846/jskm/38.2021.1.1>

### Abstract

As people with intellectual disability (PwID) need more opportunities to participate in all society levels and sports, Adapted Physical Education can be a first step to help them integrate among the members of society. Empowering in real the PwID for sports activities is not a new idea and adapted sports are now played in order to support them to keep active and healthy. The trainer may face several situations when he/she starts the training or playing a sport (such as Colpbol) with PwID; especially if the trainer lacks adequate knowledge of the particular challenges PwID may face. Moreover, if the communication is not adapted to the needs of PwID, the training process can be hard for all and even frustrating and, consequently, the person's motivation level to continue practicing will decrease. Both, the trainer and PwID need adapted tools based on respect and skills, in order to obtain inclusion, empowerment, quality of life, health, and happiness. This paper presents the importance of the project that implements for the first time in Romania the sport of Colpbol for people with intellectual disabilities and emphasizes the role of physical activities in the process of inclusion.

**Keywords:** *intellectual disabilities, empowering, Colpbol, sport.*

### Introduction

Disability is a sum of impairments and lack of environment adaptation that are commonly known as barriers in achieving different fully potentials during lifetime. According to WHO the intellectual disability defines a significantly reduced ability to understand new or complex information and to learn and apply new skills (impaired intelligence). The change occurs in an individual who has not reached adulthood and will influence his/her development; the person with intellectual disability will have a reduced ability to cope independently or will have an impaired social functioning.

There are available more models to classify the disability context. Those models are designed in order to find the correct approach and asses all the PwID needs and necessary resources. Even distinction between terms used and classification are available. Each one tried to develop treatment solutions for their

special needs; also, many steps have already been achieved in the lives of PwID as comparing decades ago. Since 2013 it has been stipulated that the biggest benefit is the awareness of the multidimension of the disability considered "biologic and social". (Anastasiou & Kauffman, 2013).

In this recognition of the process, the PwID have to cope to overpass the stereotypes, sometimes misconceptions, misbelieves or misunderstandings that make their presence in social active life even harder.

It is true that PwID need more external support to perform some activities or to complete some tasks. But this doesn't mean that they miss all the abilities (as some people still believe). They can have even a harder life then regular people because they have more needs than the others and their needs are not completely covered in every corner of the world.

But, more than classification, the PwID needs to live their lives along their families and friends, the action that everyone defines today as integration.

Many people consider sports as "*a vehicle for change*" and it can have this value in disability area as well. If a PwID doesn't have the skills to perform in scientific or artistic domains, he/she is able to do well in sports domain and to build self confidence, self awareness, appreciation of people (especially for those involved in a team sport). So, sports can be a valuable tool to enhance the voices of PwID and help them become visible in our society, which is a great step for integration.

We consider sports as a first valuable step because it is well-known that sports exercises and activities, as well as motion define the human health status and ensure the prophylaxis.

'Empowerment' is difficult to be translated in Romanian by using just a word. As a concept it represents the will of all parents who have children with intellectual disabilities when they face this diagnostic for their child and when they feel the perspective of future life being hopeless.

Out of a desire to explain this concept and understand its application to PwID related to sports practice, we find out that there are not many literature resources using the concept related to sports practice (not Paralympic Games or Special Olympic area) but the idea is not new (for example Pensgaard & Sorensen, 2002, Cattaneo & Chapman, 2010, Giri, A. et al. 2021).

This model of empowering can be described like a process of learning and awareness through exposure to new challenging situations for the mental and physical resources of a person with disabilities so that he/she can demonstrate his/her own abilities.

The notion of empowerment is more realistic today because the amount of new data and those involved in this field change the optics from "*not capable of*" to "*they have the abilities to*". In order to have this effect, the new challenging trigger (in this case, we propose the sport of COLPBOL) should meet certain characteristics so as to bring as many benefits as possible to PwID. Also, when used

outside the psychology or social work domain, empowering actions can be based on and follow a practical application solution that we will obtain through the results of this project.

PwID do not need to "use the playing field to advocate" as Kaufman, Peter & Wolff (2010) presented in their article, but they can use playing field to empower and applied equality. Many scientists present the fact that in human history the sports have had many positive influences beside the health benefits, use as leisure activity or means of human development. Also, sports activities help the individual to form identity and find social and moral support, according to Bhan, et al (2020). Moreover, sports practice can reduce the probability of violent behaviour and aggressivity (Matjasko et al., 2019) as an important vector of socialization and social participation (Gorn & Goldstein, 1993) by prevent bullying and fighting (Matjasko, 2019).

Sports has been compared with voluntary work by Chinman & Linney (1998) and according to them the person practising sports shows a confident and forceful "role in controlling one's resources in the community".

The approach to disability by Social Model of Disability is different from other models like the Medical or Charitable one, but it seems that it is "socially constructed" as Barbara Lisicki, a disability activist said in 2013. According to United Nations (UN) web page "15% of the world's population, or one billion people, are persons with disabilities" (UN Disability Inclusion Strategy, 2021); that's why it's important that the rights of people with disabilities are respected and the inclusion must be promoted through all means. Goering, (2015) reviews the social model of disability and underlines that especially the professionals have to learn and study more about all the facts concerning people with disabilities.

United Nations Secretary-General António Guterres stipulated in May 2020 that "We have a unique opportunity to design and implement more inclusive and accessible societies". In June 2021 was published a UN

"Disability-inclusive communications guidelines" in order to advocate communication and action throughout the professionals in the field. Marks (1997) underlines that the disability should always be understood in the social context of the person. In recent years, the concept of ethics has changed slightly and little by little a new perspective has emerged, the one in which the positivism and the skills matter the most; this is the one we need to focus on and to develop. Beaudry (2016) launches an interesting idea that this work of conceptualization of the disability could be abandoned, and the main focus should be directioned on more specific issues. It is not a bad idea, the disability as medical issue that requires treatment can be understood mainly like a disadvantage (Beaudry, 2016) and this will not help the person to develop, this cannot open new possibilities for the concerned persons.

García et al., (2020), notice the increase of the visibility of the PwID in the society, which for the authors is a "remarkable milestone on the road to full inclusion".

According to the philosopher, theologian and humanitarian Jean Vanier, the inclusive model for the people with disability is based on the "*feeling of belonging*". Thompson, (2016) explains this concept and underlines the fact that this adjustment for the social model theory must be changed along with the human action linked to disability, policies and actions.

It is somehow difficult to provide a supportive context without strategies and constructed solutions that adapt and promote what is observed to be successful. This current of "*rethinking disability*" by readjust the general theories and models can help to develop new strategies that will empower and build new bridges in order to find new solutions to participate and develop inclusion policies. Maybe throughout new opportunities to raise inclusion strategies, as Jean Vanier said, the PwID can teach us "becoming human".

Focusing on solutions, the European project 623073-EPP-1-2020-ES-SPO-SCP, known as "*IMPLEMENTATION OF COLPBOL SPORT AT EUROPEAN LEVEL AS A TOOL TO*

*IMPROVE THE QUALITY OF LIFE OF PERSONS WITH INTELLECTUAL DISABILITIES*" has the mainly specific objectives (according to the Consortium EuColpbol):

- "Development and transfer of adapted guidelines aimed at PwID to motivate and teach them to practice COLPBOL".
- "Development and transfer of a TRAINING PACKAGE aimed at Sports professionals with technical instructions to optimize the practice of COLPBOL involving PwID in sport contexts" .
- "Development and transfer of a TRAINING PACKAGE aimed at Supports of PwID (Disability Professionals, Relatives, etc) with technical instructions to optimize the practice of COLPBOL involving PwID in occupational and leisure contexts".
- "Creation and consolidation of local networks to promote collaboration between sports organizations and the field of intellectual disability to promote the implementation of COLPBOL".
- "Creation of a European network of entities committed to COLPBOL".
- "Development of an e-Platform that facilitates and multiplies access to project resources and acts as a point of contact and a driving force for COLPBOL, including an e-Training Platform, for enhancing the training of PWID, COLPBOL and Sports Professionals and Supports".
- "Development of dissemination actions, including conferences, seminars, meetings, events and awareness actions that support previous activities".

Europe Colpbol, an European Consortium consisting of the following organizations: Copava and Asociacio Esportiva Colpbol (Spain), ALDO-CET and University of Craiova (Romania), EDRA and The National and Kapodistrian University of Athens (Greece), Kaunas University of Applied Sciences (Lithuania) and CSI (Cyprus), will be a complementary and innovative training project, based on the this innovative and different approaches: "transferring the

application of a new inclusive sport modality from Spain to other EU countries" and also by "development of innovative and specific guidelines for the different stakeholders involved in the successful implementation of Colpbol (PwID, Sports Professionals and Supports of PwID) within a Quality of Life approach".

We believe that a sport with simple rules like COLPBOL can be a useful tool to improve Quality of Life in the future for People with Intellectual Disabilities by empowering them and give them the opportunity to be equal to mentally competent people.

### **Colpbol history and characteristics**

Not many activities can be considered inclusive for all, and especially for PwID that can share the pleasure of being involved in doing something successfully like a mentally competent person. The Special Olympic approach proposes sports activities that offer the people with disabilities the opportunity to demonstrate skills and talents by participating in a competitive game along the others with the same skills.

And the families and friends of PwID can enjoy the challenge of a common pleasant activity with all the quantifiable and non-quantifiable benefits of this situation and especially doing something together.

COLPBOL was defined by his inventor, Bendicho (2010) as a "*collective invasion sport played by two mixed teams of 7 players in a clearly defined space, whose purpose is to introduce a ball into the opponent's goal through hitting it with the hand.*" This sport was implemented for the first time in 1997, in Valencia (Spain) within the area of Physical Education in Primary and Secondary School. This dynamic and recreational sport extends to local and regional competitions. It seems like an activity able to solve an issue that can be defined like inclusion and should be founded on so many variables like: build collective spirit, coeducation and gender equality, overcome stereotypes developed by the other sport, by connecting so various participants (age, sex, skills, schooling) giving them potentially the same chances to

score and enjoy the emotions that team success can give.

The inventor Juan jo Bendicho was able to propose Colpbol shares technical gestures with the Valencian ball (**Valencian pilota**) with unknown origins, a game who is still practised in this Spanish region. At the regional level, the Valencian Community develops the "Trobades de Colpbol", competitions between schools from different municipalities. As the number of participants have increased, in 2017, the first Colpbol National Championship in Spain was held.

According to the inventor, Bendicho (2015), Colpbol was born as a response to a need detected from the practice and from the known fact that classic team sports traditionally used in school presented great difficulties at the educational level. Also, at that recreation level classic team sports are marked by an exaggerate competitive spirit or by an exaggerate technical nature that can lead to elitist and segregating for the non-fit ones that can benefit in so many levels by the beneficial results of sport practice.

The rules of the game are simple, it is played on a court of 20 x 40 m, with 2 gates of 2 m high x 3 m wide, any ball with a circumference of between 65 and 72 cm can be used. The equipment needed is simple, similar to volleyball or basketball. The team should have between 7 and 12 mix players (7 on the court and 5 substitutes) that will play 2 halves of 12 to 25 minutes (according to players' age) with a 10 -minute-break They should hit the ball only with the open hand when it is in the air or on the ground. Hitting with the legs or feet entails sanction for the player.

Colpbol is an invasion sport, but the ball cannot be caught or kept, it cannot be hit two times consecutively; after hitting the ball, it is passed to someone else from the team, which will develop the team adhesion. Additionally the great mobility of the ball makes all members equally important for the team. The athletes will learn by practising this game that team scoring is based on their cooperation or common work. The sport is described also like a "socializing agent" with a great load of associated socio-affective benefits, which are

manifested in the high degree of involvement of all in the goals. (Colpbol oficial page 2021).

The integration is built on several levels starting from a global idea that sports can be for all, PwID and families and fiends, the sport court can be a place where everyone can find an activity to help the team to practise and keep motivated, to bond better.

In theory, everyone knows the effects of practising a sport, and it is the same with Colpbol. This project will demonstrate that the expectations from the theory will be materialized in the court area.

COLPBOL has already proved to increase motivation in Primary Education (Hernández Martínez et al., 2019). Also, it can be a fine tool to improve quality of life of PwID by the simplicity of technique and playing rules and with beneficial results in the wellbeing dimension and their social inclusion.

Hernández Martínez et al. proved that Colpbol practice is greatly asociated with the degree and type of motivation for the Primary Education scholar due to the novel stimuli that this sport brings in the court. Their paper proves that novelty perception increases the motivation degree and enjoyment that finally will increase the participations' physical activity level (Hernández Martínez A. and al. 2019).

### **Sports and activities participation**

The main goal of the supportive strategy for PwID is to obtain a maximum quality of life. There are 4 well known health strategies that are used in rehabilitation of PwID: prevention, cure, rehabilitation and supportive mesure.

A 2019 article reviewed a scientific study about the participation in team sport as a health-promoting activity. The authors (Andersen et al., 2019) found many positive results demonstrated in 17 studies they analised and their conclusion was that "*team sport could be more efficient in promoting health and ensuring exercise participation and continuation than individual sport*".

Ken Black announced in 1996 the first version of the "*Inclusion Spectrum Theory*". It takes an activity-oriented approach to

increasing inclusion. It was a matter of considering sport differently through methods that would help sports practitioners to find a balance between the activities offered and the individual needs and desires of people with all abilities implicated in physical activity. (Kiuppis, 2018).

Later, Ken Black and Pam Stevenson redeveloped the theory into a more practical tool to be applied by sport practitioners and it is found suitable for PwID to enhance participation, achieve a good motivation to be active, self empowered and happy (Kiuppis, 2018).

Willis et al (2018) research started from the lack of scientific data on the physical activity interventios for disabled children and youth and the fact that participation may be a mechanism to promote some effects after physical activity participation.

Çelenk (2021) conclusion regarding sport practice and skills of disabled people is that "Individuals or institutions dealing with the education of persons with disabilities should add sports activities to their curriculum or practices". Other researchers used dance as a tool to improve the general fitness level for PwID (Cosma et al., 2017). So, sports activities are a valuable tool to be used to develop skills according to Perkins & Noam (2007).

Recent studies, (McGarty & Melville, 2018, Hansen et al., 2021, Apelmo, 2021) consider the research about sports or physical education among PwID is still scarce. Hansen et al. (2021) underline that it is important to have more consistent data regarding the influence of sport or physical activities on young PwID. We consider it important that this kind of data were available for all population of PwID.

### **Parents and care givers involved in sports participation of people with intellectual disabilities**

Meaningful and appropriate Physical Education needs to involve collaborative decision-making among teachers, families, and PwID and it should offer options and a variety of opportunities. A key is the notion of choice; it is crucial that individuals have

not only a variety of choices, but that emphasis is placed on seeing individuals with disabilities as active agents who have abilities and who can afford to choose the opportunity. Parents should offer children, youngsters and adults with intellectual disabilities the best opportunities to develop individually and athletically.

The motivation level, enforced by the fun of the whole experience and the importance of being active rather than winning or losing is a lesson that begins to be learnt in the family. Putting the PwID athletes in the best position for them in order to learn new and valuable life skills through sports is a part of the parents' role. Influenced by the parents' education this lesson for PwID is important especially at the young age.

#### **Trainer knowledge regarding communication with people with intellectual disabilities**

Some studies have revealed that communication with PwID is still an important issue for the quality of life (García et al., 2020) as it can influence the mortality rate (Nylander et al., 2014) and in sport participation the communication disorders is translated in lack of adherence on long term. It can represent one of the principal barriers that decrease sports activities for PwID. Smith et al (2020) study presents the communication difficulties in adults with ID; they suggest that an increased interaction should be about the "communication opportunities, needs and barriers".

People with intellectual disabilities have different communication abilities, using a range of different styles as a group as well as on an individual basis. They may use speech, augmentative and alternative communication strategies, or visual or behavioural cues to indicate their needs or feelings.

The professional involved in sports domain - the trainer has to be fully adapted and masters the proper knowledge for working with PwID. The approach of athletes with ID has to be individualised in order to include and empower all those involved, so that everyone can use own skills and feel useful to the team,

thus motivate them to participate in a long term.

From our experience of working with PwID (adults with Down syndrome) just the fact that the trainers know the participants' names and have a friendly approach increase their motivation to participate and to express their skills.

We also recommend trainers to know the anamnesis (cardiovascular, neurologic or musculaskeletal), the limitations and especially the abilities, eventually the sports practised and the level of performance or the current level of activity of each PwID.

It is known that PwID have different communication skills. Thus, the communication style of the trainer has to be adapted on scientific knowledge basis. Being a key factor in the adherence and satisfaction, the trainer should know the communication peculiarities. In order to find a common language, the trainer can spend some time with ice-breaking activities or games in team, outside the playing court.

This project aims to provide guidelines and rules to diminish the communication barriers between the trainer and PwID in sports practice. The intellectual outputs are designed to support the trainer approach towards these special people and to facilitate the communication with them. They are going to be valuable tools for those involved in this project, as well as for those who are looking for guidelines when train PwID.

#### **Motivation to practice sports in people with intellectual disabilities**

The changes during the last two years at global level have had a social impact, especially on the level of activity. Sports activities have been severely affected as well, especially for people with disabilities, as the European Parliamentary Research Service underlined by the voice of Ivana Katsarova (Katsarova I. 2021). Being a vulnerable segment of population the best way to reduce risks was to limit the outdoor activities. On the one hand, returning to sports activities can be difficult and fearful but, on the other hand, it can be motivated by other factors such as

being with friends and feeling free to express abilities.

Motivation can be defined as the force that energizes and determines human behavior (Roberts & Treasure, 2001).

Research has shown that children and adolescents with ID "rarely reach the recommended dose of daily physical activity, i.e., strength and balance activities  $\geq 2$  days per week, within 150 min of moderate-intensity activity spread across  $\geq 3$  days per week (WHO, 2018)."

Trainers should know that peoples with disabilities pursue their own and personal goals like everybody else by *intrinsic* or *extrinsic* motivation. And the interest to sports practice is rising if the trainer helps PwID to find the pleasure of being on court.

Studies reported that extrinsic motivation is especially critical during the early period of physical activity implementation, whereas intrinsic motives are the key for the maintenance of program adherence (Walker, 2008, Ryan et al., 2015).

Chin et al., (2021) mention the fact that researchers have tried to develop assessment tools to quantify and determine a person's motivation in the fields of sports and exercise. Individualised scales or assessments methods are useful to understand the nature of one's motivation and behaviour.

The intrinsic motivation can be developed through sports practice and physical activity and this behaviour will be a skill that can help PwID in their lives. (Wehmeyer, 2001).

The 2017 article of Clancy et al. (2017) analyse each one of this, presenting the strengths/limitations points to evaluate the motivation. The article is a good instrument "in selecting the most appropriate instrument to measure motivation in sport". (Clancy et al., 2017).

Hutzler et al. (2013) study try to determine the source of motivation for young adults wID participation in organised competitions (like Special Olympics) and they conclude the differences as compared to the typically athletes from the same age group. This aspect of motivation should be well thought-out when a training and competition programme is implemented, that is why motivation

through communication and approach is important for PwID.

Other studies correlate the symptoms, for example anxiety and physical activity in order to determine the improvements and well-being of adults with intellectual disability. (Carmeli, 2009). People with ID need to experience the feeling of support, need to sense patience and a predictable structure during project involvement. (Sommerstad, 2021).

Hansen et al (2021) state that "The voice of people with ID deserves to be listened to by the education system, the sports associations, the politicians and the society as a whole." Hansen et al (2021) "research has raised their voice and identified the need for increased knowledge for a more inclusive world." Needless to say, more work like this must be done in the future.

Therefore, the adapted guidelines for the trainers, explaining the motivation and communication issues of the PwID are important in order to empower the PwID. Improvements of well-being and in the quality of life is well known associated with a consequent higher motivational status.

The motivation to perform or practising sport in the long term is very important and based on the self-motivation inspired by the trainer's work during and after the training.

### Conclusions

No matter the types of activities, improvements in the quality of life of athletes can be noticed but in practice the long-term adherence is the key factor. To promote equality and inclusion, this proposed sports, called Colpbol is especially designed in simple rules (the player touches the ball just one time, with the open hand and then the ball is passed to someone else from the team). On the court both PwID and regular people can be equally present, even from different group age. And it is important that a simple sports with a motivational approach is available to everyone.

Certain studies in PwID area try to to find out the reality on the ground in terms of motivation to participate.

Colpbol can be an opportunity to interact with others. In any sport field everyone just tries to be their best version and Colpbol represents a great opportunity to make possible the inclusion and presence of PwID in a sports activity.

In life, the sports skills can be learned through the models offered by parents, and the active lifestyles of parents and caregivers can play an important role in empowering PwID and in achieving the goals of sports as they can play it together. The idea to see the sports as a lifestyle is a lesson taught by parents and developed by trainers. The empowering process can be easily strengthened on the Colpbol field and through related activities as PwID can practice sports together with their parents or caregivers.

Developing a tight cooperation between entities in the field of Sports and Disability is important for incorporating both points of view and for creating a multiplier effect at local and EU level.

The EU-COLPBOL Consortium develops Guidelines and Training Packages in the framework of this project. Though, these can be updated in accordance with any national criteria, positioning of PwID and their involvement in sports activities, starting point of inclusive sports, competences of sports and disability professionals, involvement of relatives and so on.

EU-COLPBOL delivers outputs applicable to almost any European reality, due to the exchange of experiences and assessment by experts and users coming from different countries with specific cultures, technological and socio-economic levels.

To be accessible especially for PwID, the sports should have adaptive features because variables such as playing materials or game time, required facilities and spaces to play can be adapted to the characteristics of the participants (Hernández Martínez and al. 2019) for examples the PwID. To be attractive especially to PwID the sports should have simple rules. Colpbol can be the answer for PwID.

Being an adapted alternative, this empowering game will still promote cooperation, respect as well as inclusion and

it will break the rooted stereotypes by promoting potentials and enrich the existence of PwID in a healthy and wellbeing manner.

In COLPBOL the lack of high-performance sport initiation and the behaviour models are not promoted by the trainer, but solidarity, respect and motor creativity in different court situations are always required and developed by the game. Promoting potential is not an easy task for PwID professionals and families that live in societies with unconstructive stereotypes that can become overwhelming, even for the sports professionals that do not always have the tools to propose and implement a sports activity for PwID. The project will also offer useful tools (like manuals) with lots of suggestions and knowledge that can be helpful for those trainers that never worked with PwID.

This is the foundation of Colpbol; the achievement in a sport practice without distorting the elements that give to the sports its essence and its great force and attractiveness, especially amongst PwID athletes that define it as follows: a playful component, a physical-motor activity, a competition, a regulation, the ability to develop new competences and to maintain motor skills, increase self-confidence and self-respect and live happily, despite all the facts.

**Data Availability.** *The article is a review article that does not rely on empirical research.*

**Acknowledgement.** *All authors equally contributed to the design and writing the article manuscript. This article was developed in the framework of the Erasmus + „EU-COLPBOL” - Implementation of COLPBOL sport at european level as a tool to improve the quality-of-life persons with intellectual disabilities, nr. 623073-EPP-1-2020-1-ES-SPO-SCP, implemented in Romania by University of Craiova and ALDO-CET.*

#### References

- Anastasiou, D. & Kauffman, J. M. (2013). The social model of disability: dichotomy between impairment and disability. *The Journal of medicine and philosophy*, 38(4), 441–459. <https://doi.org/10.1093/jmp/jht026>
- Andersen, M. H., Ottesen, L., & Thing, L. F. (2019). The social and psychological health outcomes of team sport participation in adults: An integrative review of research. *Scandinavian journal of public*

- health, 47(8), 832–850. <https://doi.org/10.1177/1403494818791405>
- Apelmo, E. (2021). What is the problem? Dis/ability in Swedish physical education teacher education syllabi. *Sport, Education and Society*, 1-14.
- Beaudry J. S. (2016). Beyond (Models of) Disability?. *The Journal of Medicine and Philosophy*, 41(2), 210–228. <https://doi.org/10.1093/jmp/jhv063>
- Bendicho, J. (2010). *Colpbol: Un deporte integrador e igualitario*. Carena.
- Bendicho, J. (2015). El Colpbol: Deporte educativo y instrumento de recreación para el siglo XXI.; en <http://quadernsanimacio.net> ; nº 21, enero de 2015; ISSN: 1698-4404 [http://quadernsanimacio.net/ANTERIORES/veintiu no/index\\_htm\\_files/Article\\_Colpbol.pdf](http://quadernsanimacio.net/ANTERIORES/veintiu no/index_htm_files/Article_Colpbol.pdf)
- Bhan, N., Bhadra, K., Rao, N., Yore, J., & Raj, A. (2020). Sport as a vehicle of change for livelihoods, social participation, and marital health for the youth: Findings from a prospective cohort in Bihar, India. *EClinicalMedicine*, 20, 100302. <https://doi.org/10.1016/j.eclinm.2020.100302>
- Carmeli, E. (2009). Physical exercises can reduce anxiety and improve quality of life among adults with intellectual disability : original research article. *International Sportmed Journal*, 10, 77-85
- Cattaneo, L. B., & Chapman, A. R. (2010). The process of empowerment: A model for use in research and practice. *American Psychologist*, 65(7), 646–659. <https://doi.org/10.1037/a0018854>
- Çelenk, Ç. (2021). Motivation Affects Sports and Life Skills in Physical Disabled People. *Propósitos y Representaciones*. 9. DOI: 10.20511/pyr2021.v9nSPE3.1161.
- Chin, N. S., Liew, G. C., Kueh, Y. C., Hashim, H. A., Tee, V., & Kuan, G. (2021). Cross-Cultural Adaptation and Validation of the Malay Version of Sports Motivation Scale-II. *International journal of environmental research and public health*, 18(21), 11694. <https://doi.org/10.3390/ijerph182111694>
- Chinman, M. J., & Linney, J. A. (1998). Toward a model of adolescent empowerment: Theoretical and empirical evidence. *Journal of Primary Prevention*, 18(4), 393-413.
- Clancy, R. B., Herring, M. P., & Campbell, M. J. (2017). Motivation Measures in Sport: A Critical Review and Bibliometric Analysis. *Frontiers in psychology*, 8, 348. <https://doi.org/10.3389/fpsyg.2017.00348>
- Colpbol oficial page - Pagina oficial Colpbol. <http://www.colpbol.es/>
- Cosma, G., Dragomir, M., Nanu, M.C., Brabiescu-Călinescu, L., Cosma, A. (2017). The influence of the dance for people with Down syndrome. *Bulletin of the Transilvania University of Brasov. Series IX: Sciences of Human Kinetics*:10(59): 83-88.
- Eu-Colpbol. (2021). <https://europe-colpbol.eu/>
- García, J. C., Díez, E., Wojcik, D. Z., & Santamaría, M. (2020). Communication Support Needs in Adults with Intellectual Disabilities and Its Relation to Quality of Life. *International journal of environmental research and public health*, 17(20), 7370. <https://doi.org/10.3390/ijerph17207370>
- Giri, A., Aylott, J., Giri, P., Ferguson-Wormley, S., & Evans, J. (2021). Lived experience and the social model of disability: Conflicted and inter-dependent ambitions for employment of people with a learning disability and their family carers. *British Journal of Learning Disabilities*. Advance online publication. <https://doi.org/10.1111/bld.12378>
- Goering S. (2015). Rethinking disability: the social model of disability and chronic disease. *Current reviews in musculoskeletal medicine*, 8(2), 134–138. <https://doi.org/10.1007/s12178-015-9273-z>
- Gorn, E. J., & Goldstein, W. (1993). *A brief history of American sports*. New York: Hill and Wang.
- Hansen E., Nordén H. & Lund Ohlsson M. (2021) Adolescents with intellectual disability (ID) and their perceptions of, and motivation for, physical activity and organised sports, *Sport, Education and Society*,doi: 10.1080/13573322.2021.1969909
- Hernández Martínez, A., Martínez Urbanos, I., & Carrión Olivares, S. (2019). El Colpbol como un medio para incrementar la motivación en Educación Primaria (The Colpbol as a means to increase motivation in Primary Education). *Retos*, 36, 348-353. <https://doi.org/10.47197/retos.v36i36.70396>
- Hutzler, Y., Oz, M., & Barak, S. (2013). Goal perspectives and sport participation motivation of Special Olympians and typically developing athletes. *Research in developmental disabilities*, 34(7), 2149–2160. <https://doi.org/10.1016/j.ridd.2013.03.019>
- Katsarova I. (2021) Creating opportunities for disabled persons in sport European Parliamentary Research Service [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/679096/EPRS\\_BRI\(2021\)679096\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/679096/EPRS_BRI(2021)679096_EN.pdf)
- Kaufman, P. & Wolff, E. (2010). Playing and Protesting: Sport as a Vehicle for Social Change. *Journal of Sport and Social* : XX. 34. 1-22. 10.1177/0193723509360218.
- Kiuppis, F. (2018). Inclusion in sport: Disability and participation. *Sport in Society*, 21(1), 4-21.
- Lisicki B. (2013). [https://www.un.org/sites/un2.un.org/files/un\\_disability-inclusive\\_communication\\_guidelines.pdf](https://www.un.org/sites/un2.un.org/files/un_disability-inclusive_communication_guidelines.pdf)
- Marks D. (1997). Models of disability. *Disability and rehabilitation*, 19(3), 85–91. <https://doi.org/10.3109/09638289709166831>
- Matjasko, J. L., Holland, K. M., Holt, M. K., Espelage, D. L., & Koenig, B. W. (2019). All Things in Moderation? Threshold Effects in Adolescent Extracurricular Participation Intensity and Behavioral Problems. *The Journal of school health*, 89(2), 79–87. <https://doi.org/10.1111/josh.12715>
- McGarty, A. M., & Melville, C. A. (2018). Parental perceptions of facilitators and barriers to physical activity for children with intellectual disabilities: A mixed methods systematic review. *Research in*

- developmental disabilities*, 73, 40–57.  
<https://doi.org/10.1016/j.ridd.2017.12.007>
- Nylander, L., Fernell, E., & Björkman, M. (2014). Vuxna med utvecklingsstörning en eftersatt grupp i sjukvården [Adults with intellectual disability, a neglected group in health care]. *Lakartidningen*, 111(39), 1648–1650.
- Pensgaard, A. M., & Sorensen, M. (2002). Empowerment through the sport context: A model to guide research for individuals with disability. *Adapted Physical Activity Quarterly*, 19(1), 48–67.
- Perkins, D. F., Noam, G. G. (2007). Characteristics of sports-based youth development programs. *New directions for youth development*, (115), 75–9
- Roberts, G. C., & Treasure, D. (2012). *Advances in motivation in sport and exercise*. Human Kinetics.
- Ryan, R., Frederik, C., Lepes, D., Rubio, N., & Kennon, S. (2015). *Intrinsic motivation and exercise adherence*. Verkkodokumentti.
- Smith, M., Manduchi, B., Burke, É., Carroll, R., McCallion, P., & McCarron, M. (2020). Communication difficulties in adults with Intellectual Disability: Results from a national cross-sectional study. *Research in developmental disabilities*, 97, 103557.  
<https://doi.org/10.1016/j.ridd.2019.103557>
- Sommerstad, H. S., Kildahl, A. N., Munkhaugen, E. K., Karlsen, K., & Bakken, T. L. (2021). Experiences of ward atmosphere in inpatients with intellectual disability and mental illness: clinical implications for mental health nursing. *International journal of developmental disabilities*, 67(5), 339–348.  
<https://doi.org/10.1080/20473869.2021.1900507>
- Thompson, L. S. C. A. (2016). Moving beyond the limits of disability inclusion: using the concept of belonging through friendship to improve the outcome of the social model of disability. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 10(5), 1432-1435.
- United Nations (UN).  
<https://www.un.org/en/content/disabilitystrategy/>
- Walker, B. (2008). Intrinsic motivation and self-determination in exercise and sport. *The Sport Psychologist*, 22(1), 134-135.
- Wehmeyer, M. L. (2001). Self-determination and mental retardation: Assembling the puzzle pieces. In H. N. Switzky (Ed.), *Personality and motivational differences in persons with mental retardation* (pp. 147–198). Lawrence Erlbaum Associates Publishers.
- WHO Definition: intellectual disability Retrive from <https://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/news/news/2010/15/childrens-right-to-family-life/definition-intellectual-disability>
- WHO, ACTIVE. (2018). a technical package for increasing physical activity. Geneva: World Health Organization. Licence: CC BY-NC -SA 3.0 IGO
- WHO, *Global Action Plan for physical activity 2018-2030*. Resolution WHA71.6. Geneva.
- Willis, C. E., Reid, S., Elliott, C., Rosenberg, M., Nyquist, A., Jahnsen, R., & Girdler, S. (2018). A realist evaluation of a physical activity participation intervention for children and youth with disabilities: what works, for whom, in what circumstances, and how?. *BMC pediatrics*, 18(1), 113. <https://doi.org/10.1186/s12887-018-1089-8>