



PROMOTE PARTICIPATION IN PHYSICAL ACTIVITY IN SITUATION OF VISUAL IMPAIRMENT

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INTRODUCTION

Physical activity and sport are internationally recognized as fundamental and universal rights (UNESCO, 2015). Physical activity plays a fundamental role in physical and psychological health and quality of life. According to the World Health Organization Guidelines on Physical Activity and Sedentary Behavior (2020), **increased sedentary behavior in children and adolescents is associated with adverse health outcomes**, such as increased adiposity, worsening cardiometabolic health, physical fitness, and prosocial behavior, as well as reduced sleep duration. Research has identified multiple barriers facing young people with visual impairment (YVI) and found that this population participates in significantly fewer physical activities than their sighted peers (Lieberman et al. 2025). Conversely, **if YVI participate in physical activity**, they are more likely to experience **better outcomes in terms of quality of life** (Caputo et al., 2022), **well-being**, and **satisfaction** (Meier et al., 2023).

AIM

- 👍 **Identify tool(s)** to assess YVI participation during and through physical/sporting activities;
- 👍 **Link this participation to teacher training** on the specific topic.

DISCUSSION

First, there is **little research** on the educational inclusion of people with visual impairment, particularly in physical and sporting activities (PA) (Rodriguez et al., 2022). Furthermore, risks such as **isolation and exclusion in PA** can arise from **inadequate structuring** of the context and/or activities and from the **lack of teacher preparation** (Meier et al., 2023; Miyauchi, 2020; Lieberman et al., 2006; Haeghele, Porretta, 2015). Finally, failure to participate in the PA may be related to **the absence of a support figure** (ISTAT, 2025).

METHOD LITERATURE REVIEW

National and international sources relating to the definitions of visual impairment and its different types, epidemiological data and the impact of visual impairment on people's lives, and **historical source** and national and international **regulations** relating to YVI for school inclusion.

Institutional internet websites

(e.g.) WHO, Gazzetta Ufficiale, ISTAT, European Agency for Special Needs and Inclusive Education, UICI journal.



Scientific articles aimed at deepening the state of the art on the factors that favor the participation of YVI in physical activities.

Academic sources

(e.g.) EBSCO, ERIC, Web of Science, SCOPUS.



PRELIMINARY RESULTS AND FUTURE DIRECTIONS

International scientific literature has identified some barriers that hinder school inclusion in situations of visual impairment::

- 🔍 **lack of training and professional preparation** of teachers to adapt programs and lessons in the physical education field;
- 🔍 **lack of adequate products/tools/furniture/materials** (Rodriguez et al., 2022; Caron et al., 2024).

The **systematic review conducted** during the doctoral program was based on the following questions: *What effective facilitators and/or strategies make physical activity/sports accessible for children/youths with visual impairments? What skills must teachers and/or instructors possess to make physical activity inclusive?* The review led to identification of an interesting instrument, namely the Physical Activity Barriers Questionnaire for Youth with Visual Impairment, a psychometric instrument developed and validated by Professor Lieberman and her research group (Armstrong et al., 2018, 2020, 2022; Cain et al. 2023; Lieberman et al. 2025). To further our research, we are **translating the questionnaire into Italian** to explore the barriers to physical activity encountered by young people with visual impairment in Italy. We are also **developing a questionnaire for teachers** to explore their experiences and expertise regarding visual impairment and adapted physical activity.

REFERENCES

- Alcaraz-Rodríguez, V., Medina-Rebollo, D., Muñoz-Llerena, A., & Fernández-Gavira, J. (2022). *Influence of Physical Activity and Sport on the Inclusion of People with Visual Impairment: A Systematic Review*. International Journal of Environmental Research and Public Health. 19(443). <https://doi.org/10.3390/ijerph19010443>
- ISTAT. Istituto Nazionale di Statistica. <https://www.istat.it/it/>
- Lieberman, L. J., Perreault, M., & Beach, P. (2025). *Barriers to Physical Activity for Children and Youths With Visual Impairments*. Journal of Visual Impairment & Blindness, 1-10, DOI: 10.1177/0145482X251371677
- Miyauchi, H. (2020) *A Systematic Review on Inclusive Education of Students with Visual Impairment*. Education Sciences, 10(11), 346, <https://doi.org/10.3390/educsci10110346>
- WHO. World Health Organization. <https://www.who.int/>
- UNESCO (2015). International Charter of Physical Education, Physical Activity and Sport. Unesco. <https://unesdoc.unesco.org/ark:/48223/pf0000235409>



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