

MOLDOVA STATE UNIVERSITY

**Presented as manuscript
CZU: 376:796(043.3)**

SHAMA EINAS

**DEVELOPING POSITIVE ATTITUDES OF PHYSICAL
EDUCATION TEACHERS TOWARDS INCLUSION
OF CHILDREN WITH DISABILITIES**

Specialty 531.01 – General Theory of Education

PhD thesis in Education Sciences

Author:



SHAMA Einas

Scientific advisor:



BODRUG-LUNGU Valentina,
PhD, University Professor

CHISINAU, 2024

UNIVERSITATEA DE STAT DIN MOLDOVA

Cu titlul de manuscris

C.Z.U.: 376:796(043.3)

SHAMA EINAS

**DEZVOLTAREA ATITUDINII POZITIVE FAȚĂ
DE INCLUZIUNEA COPIILOR CU DIZABILITĂȚI
LA PROFESORII DE EDUCAȚIE FIZICĂ**

Specialitatea 531.01 – Teoria generală a educației

Teză de doctor în științe ale educației

Autor:



SHAMA Einas

Conducător științific:



BODRUG-LUNGU Valentina,
doctor în științe pedagogice,
profesor universitar

CHISINAU, 2024

© SHAMA EINAS, 2024

TABLE OF CONTENTS

ANNOTATION	6
ADNOTARE	7
LIST OF TABLES	8
LIST OF FIGURES	9
ACRONYMS	10
INTRODUCTION	11
1. THEORETICAL LANDMARKS REGARDING ATTITUDES IN RELATION WITH SOCIAL INTEGRATION AND INCLUSION IN EDUCATION	22
1.1. Concept and dimensions of teachers' attitudes towards inclusion	22
1.2. Social integration and inclusion: definitions, evolution of terms, legal framework.....	33
1.3. Inclusion in the education; connections between inclusion and physical education.....	42
1.4. Overview of inclusion of students with disabilities in Israel and in Moldova. International practices.	54
1.5. Conclusions on Chapter 1.....	65
2. THE METHODOLOGICAL FRAMEWORK OF DEVELOPING PHYSICAL EDUCATION TEACHERS' POSITIVE ATTITUDES TOWARDS INCLUSION OF STUDENTS WITH DISABILITIES	67
2.1. The Concept of developing physical education teachers' positive attitudes towards the inclusion of students with disabilities.	67
2.2. Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities	81
2.3. Conclusions on Chapter 2.....	91
3. THE EXPERIMENTAL FRAMEWORK FOR THE DEVELOPMENT OF THE PHYSICAL EDUCATION TEACHERS' POSITIVE ATTITUDES TOWARDS INCLUSION OF STUDENTS WITH DISABILITIES	93
3.1. Diagnosis of physical education teachers' attitudes towards the inclusion of students with disabilities in physical education activities.	93
3.2. The Formative program "Sport is for everyone".....	106
3.3. Conclusions on Chapter 3.	131
CONCLUSIONS AND RECOMMENDATIONS	134
BIBLIOGRAPHY	140
APPENDICES	161
Appendix 1. Timeline of inclusive education events and documents	161
Appendix 2. The situation with social inclusion versus exclusion in MENA region	164

Appendix 3. The Attitudes towards including students with a disability	167
Appendix 4. Demographic Questions	168
Appendix 5. Semi-structured interview	169
Appendix 6. Tables and Data Processing- Population characteristics	170
DECLARATION ON PERSONAL RESPONSABILITY	209
CURRICULUM VITAE	210

ANNOTATION

SHAMA Einas, *Developing of positive attitudes of physical education teachers towards inclusion of children with disabilities*, PhD in education sciences, Chisinau, 2024

Thesis structure: Annotations, Acronyms, Introduction, 3 chapters, 160 pages of basic text, 20 tables, 21 figures, conclusions and recommendations, bibliography (208 titles), 6 appendices. The obtained results are published in 9 scientific publications.

Key-words: positive attitudes, physical education, inclusion, students with disabilities, integration, inclusive education, motivations, social stereotype, children with special needs.

The Field of Research: General Theory of Education.

The Goal of the research: consists of elaboration and validation of the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities in physical education activities to make their education more efficient.

The research objectives: to explore the concept and dimensions of teachers' attitudes to inclusion; to analyze the evolution and elucidate the concepts of inclusion in education system and connections between inclusion and physical education (PE); to elaborate a theoretical and praxiological framework of including students with disabilities in PE lessons together with nondisabled students; to examine the complexity of correlations between the PE teachers' attitudes and variables of: participation in an academic course, work experience with students with disabilities, gender; to validate the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities in PE activities to make their education more efficient.

Scientific novelty and originality of the research: the concepts of inclusion, inclusive school environment, and positive attitudes of physical education teachers were updated; contributing to changing the traditional paradigm that sport is an unimportant topic for students with disabilities to approach it as a key element of inclusion in PE lessons; the *Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities* in physical education activities to make their education more efficient was validated.

The scientific results obtained in the research: identification and validation of the theoretical and methodological landmarks of the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities in physical education activities, based on the Formative program "Sport is for everyone", which contributed to changing the attitude towards students' disability as a problem to approach it as a challenge (opportunity) in the involvement in PE activities; improving the desire of students with disabilities to participate in PE activities together with non-disabled.

The theoretical significance of the research: the contribution to the development of the concepts and theories of inclusion in relation to PE; identification of factors and indicators of inclusive education in relation with PE; contributions to the theory of education by exploring the concept of inclusive physical education based on social, pedagogical and psychological foundations.

The practical value of the research: the strategies, principles and methods of increasing the PE teachers' positive attitudes and improving inclusion process may serve as incentive for reviewing education policies of fighting rejection towards students with disabilities; the components of the Pedagogical Model, based on formative program "Sport is for everyone", can be applied in developing a plan for increasing inclusion of disabled students in all PE class in the schools of Arab sector Israel.

Implementation of the scientific results: through practical activities with teachers and students from 120 elementary schools in Northern Israel.

ADNOTARE

SHAMA Einas, *Dezvoltarea atitudinii pozitive față de incluziunea copiilor cu dizabilități la profesorii de educație fizică, teză de doctor în științe ale educației, Chișinău, 2024*

Structura tezei: Adnotări, acronime, introducere, 3 capitole, 160 pagini text de bază, 20 tabele, 21 figuri, concluzii și recomandări, bibliografie (208 titluri), 6 anexe. Rezultatele obținute sunt reflectate în 9 publicații științifice.

Cuvinte cheie: atitudini pozitive, educație fizică, incluziune, elevi cu dizabilități, integrare, educație incluzivă, motivații, stereotip social, copii cu nevoi speciale.

Domeniul cercetării: Teoria generală a educației.

Scopul cercetării: constă în elaborarea și validarea Modelului pedagogic pentru dezvoltarea atitudinilor pozitive ale profesorilor de educație fizică față de incluziunea elevilor cu dizabilități în activități de educație fizică pentru eficientizarea educației acestora.

Obiectivele cercetării: explorarea conceptului și dimensiunilor atitudinilor profesorilor față de incluziune; analiza evoluției și elucidarea conceptelor de incluziune în sistemul de învățământ și conexiunilor dintre incluziune și educația fizică (EF); elaborarea cadrului teoretic și praxiologic de includere a elevilor cu dizabilități în lecțiile de EF împreună cu elevii fără dizabilități; examinarea complexității corelațiilor dintre atitudinile profesorilor de EF și variabilele: participarea la un curs academic, experiența de lucru cu studenți cu dizabilități, genul; validarea Modelului pedagogic pentru dezvoltarea atitudinilor pozitive ale profesorilor de EF față de incluziunea elevilor cu dizabilități în activitățile de EF pentru a le eficientiza educația.

Noutatea științifică și originalitatea cercetării: au fost actualizate conceptele de incluziune, mediu școlar incluziv, atitudini pozitive ale profesorilor de educație fizică; a contribuit la schimbarea paradigmei tradiționale conform căreia sportul este un subiect neimportant pentru elevii cu dizabilități, pentru a-l aborda ca element cheie de includere în lecțiile de educație fizică; a fost validat *Modelul pedagogic pentru dezvoltarea atitudinilor pozitive ale profesorilor de educație fizică față de incluziunea elevilor cu dizabilități în activitățile de educație fizică* pentru eficientizarea educației acestora.

Rezultatele științifice obținute în cercetare: identificarea și validarea reperelor teoretice și metodologice ale Modelului Pedagogic pentru dezvoltarea atitudinilor pozitive ale profesorilor de educație fizică față de incluziunea elevilor cu dizabilități în activitățile de educație fizică, pe baza programului formativ „Sportul este pentru toți”, care a contribuit la schimbarea atitudinii față de dizabilitatea elevilor ca problemă spre abordarea ca o provocare (oportunitate) în implicarea în activitățile de EF; îmbunătățirea motivației elevilor cu dizabilități de a participa la activități de EF împreună cu persoanele fără dizabilități.

Semnificația teoretică a cercetării: contribuția la dezvoltarea conceptelor și teoriilor incluziunii în raport cu EF; identificarea factorilor și indicatorilor educației incluzive în relație cu EF; contribuții la teoria educației prin explorarea conceptului de educație fizică incluzivă bazată pe fundamente sociale, pedagogice și psihologice.

Valoarea practică a cercetării: strategiile, principiile și metodele de creștere a atitudinilor pozitive ale profesorilor de educație fizică și de îmbunătățire a procesului de incluziune pot servi drept stimulent pentru revizuirea politicilor educaționale de combatere a respingerii față de elevii cu dizabilități; componentele Modelului pedagogic, în baza programului formativ „Sportul este pentru toți”, pot fi aplicate în elaborarea unui plan de sporire a incluziunii elevilor cu dizabilități în toate clasele de educație fizică în școlile din sectorul arab Israel.

Implementarea rezultatelor științifice: prin activități practice cu profesori și elevi din 120 de școli elementare din nordul Israelului.

LIST OF TABLES

Table 1.1. Number of Pupils with Disabilities in Education System (2017-2022)	58
Table 1.2. Parents' Choice of Education Settings, (2021-2022)	59
Table 3.1 Relationships between Subscales and participants' age	98
Table 3.2 Means and standard deviations (SD) of questionnaire scores across gender	98
Table 3.3. Means, standard deviations (SD) and t-test results of questionnaire scores across teachers attending training courses in integrating students with disability	100
Table 3.4. Means, standard deviations (SD) and t-test results of questionnaire scores across teachers having experience in integrating students with ID	100
Table 3.5. Means, standard deviations (SD) and t-test results of questionnaire scores across teachers having experience in integrating students with PD	100
Table 3.6. Means, standard deviations (SD) and t-test results across teachers having experience in integrating students with PD	101
Table 3.7. The inter-dependent design of responsibility distribution based on the Pedagogical Model for the development of the PE teachers' positive attitudes	107
Table 3.8. Professional development workshop topics and schedule	112
Table 3.9. Professional development workshop with visual impairments students	114
Table 3.10. Professional development workshop with intellectual disabled children	115
Table 3.11. Means&standard deviations of questionnaire scores across two groups before Intervention	118
Table 3.12. Comparative statistical differences of questionnaire scores of males and females across two groups before the intervention	119
Table 3.13. Comparative statistical differences of questionnaire scores of experienced and inexperienced teachers across two groups before the intervention	120
Table 3.14. Means&standard deviations of questionnaire scores across two groups after the Intervention	122
Table 3.15. Comparative statistical differences of questionnaire scores of males and females across two groups after the intervention	123
Table 3.16. Comparative statistical differences of questionnaire scores of experienced and inexperienced teachers across two groups after the intervention	124
Table 3.17. Results of PE teacher's adaptive activities – pre and post tests	129
Table 3.18. The Matrix of indicators of the positive attitude of PE teachers in the vision of students with disabilities	130

LIST OF FIGURES

Figure 1.1. Updated Model of Planned Behavior (TPB) (based on Icek Ajzen, 2006	30
Figure 1.2. Kolb's cycle of experiential learning	31
Figure 2.1. Successful Inclusion points	68
Figure 2.2. Percentage distribution of predicted skill acquisition across different mobility categories, and participation expectations	76
Figure 2.3. The connection between PE teachers' attitudes and psycho-pedagogical strategies	83
Figure 2.4 Diagnostic Model for Changing Stigmatized Attitudes: Challenges vs. Goals and Practical Steps	84
Figure 2.5. Teacher's new promoting role as a mediator/ model in the integrative process of students with disabilities	85
Figure 2.6. Barriers for Teachers' attitudes	86
Figure 2.7. Attitude Modification	86
Figure 2.8 The Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disability	90
Figure 3.1 Factors/ reasons that cause students to leave the lesson	97
Figure 3.2. Attitudes of participants with different teaching experience towards students with different disabilities	99
Figure 3.3. Average values (means) of attitudes in PE teachers in control and experimental groups before the intervention	118
Figure 3.4. Average values (means) of attitudes in PE teachers separately by gender in control and experimental groups before the intervention	120
Figure 3.5. Average values (means) of attitudes in PE teachers separately by experience in control and experimental groups before the intervention	121
Figure 3.6. Average values (means) of attitudes in PE teachers in control and experimental groups after the intervention	122
Figure 3.7. Average values (means) of attitudes in PE teachers separately by gender in control and experimental groups after the intervention	124
Figure 3.8. Average values (means) of attitudes in PE teachers separately by experience in control and experimental groups after the intervention	125
Figure 3.9. The comparative results on attitude trends in PE teachers in control and experimental groups before and after experimental intervention	126
Figure 3.10. The comparative results on attitude trends in PE teachers by gender in control and experimental groups before and after experimental intervention	127
Figure 3.11. The comparative results on attitude trends in PE teachers by experience in control and experimental groups before and after experimental intervention	128

ACRONYMS

APE	Adapted Physical Education
ATIQE	Attitude Questionnaire
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CFI	Comparative fit index
CV (R²)	Coefficient of variation
EASIE	European Agency for Special Needs and Inclusive Education
IE	Inclusive Education
M	Mean (AVERAGE)
MDGs	Millennium Development Goals
NFI	Normated fit index
OECD	Organization for Economic Cooperation and Development
PE	Physical Education
PAPETSD	Positive Attitude of Physical Education Teachers towards Students with Disabilities
RFI	Relative fit index
RMSEA	Root Mean Square Error of Approximation
SDGs	Sustainable Development Goals
SD	Standard deviation
SEN	Special Needs Education
SEM	Structural Equation Modeling
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Fund for Children
UNRISD	United Nations Research Institute for Social Development
UNCRPD	UN Convention on the Rights of Persons with Disabilities

INTRODUCTION

Relevance of the research theme

According to UNICEF' data (2018), across Europe and Central Asia, children with disabilities are particularly vulnerable to stigma and discrimination, and are often segregated. Approximately 5.1 million children with disabilities in the region face multiple rights violations, from lack of early detection or diagnosis of disabilities to exclusion from education and participation in their communities [56].

Over the years disability policy developed from elementary care at institutions to education for children with disabilities and rehabilitation for persons who became disabled during adult life. After the Second World War the concepts of integration and normalization were introduced, which reflected a growing awareness of the capabilities of persons with disabilities.

Over the years, the problems of people with disabilities, but especially the rights of people with disabilities, have always been at the center of attention of the United Nations and other international organizations. Different authors and documents proposed different terms / definitions in order to identify and design the specificity of phenomenon of education of children and students with disabilities. The most relevant terms used in relation with the phenomenon of disability are the following: inclusion/ social inclusion, integration/social integration, special needs, special education, inclusion culture, education for all and others.

International human rights agreements, covenants, and legislation, stipulate definitions of inclusion that elucidate issues of equity, access, opportunities and rights. Inclusion is based on the concept of social justice, which aims at the right of all children to equal access to all educational opportunities, regardless of disability [126].

Within the educational system, the concept of the rights of people with disabilities has evolved from education with special needs to inclusive education. The effective inclusion of students with disabilities in mainstream schools is a social issue that has continuously concerned education systems around the world for more than four decades. We would like to stress attention on new accent: more often inclusive education is connected to equitable quality education, that involve more sensitive and responsible strategies and actions.

The Salamanca Statement (UNESCO, 1994) highlights the need to provide education for all children in an inclusive school [162]. As a result, several countries have proposed the implementation of inclusive schools.

Consequently, in Israel and particularly in the Arab sector, education policy makers have affirmed a commitment to reducing the numbers of pupils educated in special segregated schools and to moving more of these pupils into the mainstream of education. According to official statistics, the number of students with disabilities in Education System in Israel increased from 164,190 (2017) to 172,796 (in 2022) [95, p.51].

Although the important integration issue had become imperative within the mainstream school challenging the education system to address it, children with disabilities must still face impeding barriers which are directly related to their disability but not less to the stigmatic attitudes of their new surroundings, including teachers, which should assume the responsibility to integrate them. The barriers of participation in physical activity or the exclusion of children from it are the practical outcome of physical education teachers' lack of coping resources and pedagogical strategies in dealing with the inclusion problem, although they may have the awareness and the will to do so.

Considering the above mentioned realities within the context of the contemporary dynamic socially oriented perspective at the turn of the millennium and the new consequent policies of the educational system to integrate children with disabilities in the regular system, it has become urgent not only to opt for inclusion but also to facilitate the complex process of putting into practice the social integrative approach for the benefit of both regular pupils and pupils with disabilities. However, at this crucial crossroad when the direction of inclusion is dictated by most education policy makers, the implementation of relevant strategies are still unclear to the system, namely to the physical education teachers themselves. At the implementation level, the inclusive education movement, although widely recognized, faces various transitional and strategic issues, including stigmatizing attitudes and a shortage of experienced physical education teachers. At the implemental level, the inclusion education stream although highly recognized faces various transitional and strategic problems, including stigmatic attitudes and insufficiently experienced physical education teachers. Based on my personal experience as a teacher/trainer, we note the importance of developing a positive attitude of PE teachers towards children with disabilities. Being aware of the students with disabilities rights to be an integral part of school and be included as far as possible in different school activities, careful attention should be devoted to the required strategic steps since only a careful professional implementation of the inclusion policy, can ensure its success [2; 7; 8; 15; 125].

The description of the situation in the research domain

Reiterating that the adoption of the UN Convention on the Rights of Persons with Disabilities (2006) has spurred research and policy development, we note that the issue of stigmatizing attitudes towards children with disabilities has been addressed in several current field studies [181]. We find existing studies in the field mostly focusing on peers' attitude, respectively the attitude of ordinary students without disabilities towards their peer students with disabilities: Downs, P.& Williams, T. [57]; Florian V. [70]; Kowalski, E.M.&Rizzo, T.L.[103]; Tripp, A., Frence, R. &Sherrill, C.[159].

Other studies explored the parents' attitude such: Boukhari, H. [41]; Leyser Y, Kirk R.[110]. Several studies have provided evidence that negative attitudes of teachers towards students with disabilities are a major barrier to student learning: Hutzler Y., Daniel-Shama E.[90]; Wehbi, S.[171]; Weisel A, Dror O.[172]; Peters, Susan J. [188].

At the same time, the attitudes of teachers towards inclusion of students with disabilities in the context of physical education are less researched. According to these realities which are also confirmed by our experience, we note that physical education lessons can constitute an adequate "container of coping" with inclusion problems effectively; students with disabilities want to be a part of society instead of the default traditional option of feeling lonely and rejected. For this reason, teachers have to prepare themselves to contain, include and practically accept all students in their lessons, and also to be competent in preparing their regular students to understand how to include their different colleagues as equal pals.

Since teacher's present role has changed from that of merely conveying knowledge or constituting the exclusive source of knowledge to a most challenging role of being rather a guide or facilitator for seeking for relevant information and ways of self-development new ways of forming demanding unfamiliar competences must be found. It must be mentioned that students with disabilities who enter the regular system as it has justly been decided by educational policy makers are often not only unprepared for the challenging process of integration but they are also still at risk with their characteristic emotional and learning difficulties, having experienced failures during their years in elementary and middle schools, unsurprisingly holding low self-images and as a result find it hard to integrate in the regular high schools.

The vital part of *teachers' attitudes to inclusion* in the context of different educational domains is addressed by: Aloia G.E. et al. [20]; Avramidis E, Norwich B. [24]; de Boer, A. et al. [40]; Bender W.N. et al. [34]; Savolainen H, [145]; Sharma, U., et al. [147]; Tsakiridou H., Polyzopoulou K. [157],

Vaz, Sharmila et al. [168]; Walker, Th. [170] etc.

In the Republic of Moldova, Bucun, N., Vrabie, S. [2]; Lupușor M-R. [8]; Malcoci, L., Chistruga-Sinchevic I. [9]; Racu A. et al [10; 11] explored the subject of *teachers' attitudes to inclusion*. Callo, T. [3]; Panico V., [10] proposed the paradigm of attitude relevant to our research.

The *context of physical education* was analyzed by Block H.C. et al. [26-39]; Bekiari A.& Sakelariou K. [33]; Forlin, C. et al. [73-75]; Hutzler, Y. [87; 88]; Hodge, S.R., et al. [83-85]; Kudlacek, M. et al. [104-106]; Lieberman, L.J., [111]; Mangope B., et al. [113]; Morely et al. [119]; Rizzo T.L.& Vispoel W.P. [137] etc.

Some researchers explored the teachers' attitudes towards disable children/ students based on the experience *in Israel*: Florian V. [69; 70], Avissar, G. [23]; Feigin, N., Talmor, R.&Erlich, I. (focused on PE teachers) [67]; Gompel, T. [80]; Lifshitz, H. , Glaubman, R. & Issawi, R. [112]; Weisel A, Dror O. [172]; Daniel-Shama E. [48-53; 90].

Different aspects of *motivation of youth to participate in sports and physical activities* have been addressed by Faison-Hodge, J., & Porretta, D.L. [65]; Blindle, E.M.,&McCallister, S.G. [35]; Ruviv & Ledor [143], Corbin, C. [46], Downs, P. et al. [57; 58]; Gao, C.B. et al. [77]; Xiang, P., &Lee, A.M [175]; Nicholls, J.G [121]; Goodwin, D.L.& Watkinson, E.J. [79]; Hutzler, Y., et al. [87-89] (some authors identified prominent stimuli such as: the individual's personal interest in the activity, encouragement received from parents, benefits of the activity, the social pressure amongst a certain age group, the need for companionship, the need for status and social recognition, the need for specialization and achievement, the need to develop fitness', the need for risks, financial reward, and particularly the conduct of trainer-teacher and his/her approach to student boys/girls).

The *re-framing of the subject* of physical education with *an emphasis on health and a physically active lifestyle* rather than more competition has been addressed by Corbin, C.B. [46] and named as: "*new physical education*". Antonovsky A. (1987) [apud 188] addresses the integration of a salutogenic paradigm, proposing the central coherent construct as a way of supporting the theoretical platform of health promotion activities, instead of the traditional medical pathology-based paradigm. Similarly, Lahad et al. [108] in its multi-dimensional model BASIC PH, emphasizes the need to address coping and the unharmed resilience of children with disabilities in order to be able to handle them properly and to fully integrate them.

It was important for the exchange of information and experience in this research to get acquainted with the work of Moldovan researchers dedicated to the topic of inclusive education: Cara,

A. [4], Racu, A. et al. [7; 11; 12], Bucun, N., Paladi, O., Rusnac, V., Vrabie, S. [1; 2], Balan V., Bortă L., Botnari V., Bulat G., Eftodi A., Gînu D., Lisnic E., Petrov E., Prițcan V., Șevciuc M., Velișco N. [5]; Rusnac V. [13] and others. Adoption of a comprehensive legal framework such: Strategy on social inclusion of persons with disabilities (2010-2013); Law on social inclusion of persons with disabilities (2013); The Program on Development of Inclusive Education in the Republic of Moldova for 2011–2020 years; Education Code of the Republic of Moldova (2014) etc. has stimulated research in the field, but has also embarked upon the reform of inclusive education.

Broadly stated, researchers have acknowledged that marginalization and exclusion of children and youth with disabilities needs to be conceived of more broadly than the current focus on indicators of poverty and on the excluded individual. It has become obvious that addressing marginalization and exclusion of children and youth with disabilities requires an explicit public policy that supports new innovative approaches aimed at reducing and eventually eliminating structural barriers as well as societal attitudes underlying cultural traditions.

Despite the adoption of several documents in the field, there are various debates regarding the use of the words ‘special education needs’ and ‘inclusion’ and ‘disabilities’. These interpretations often reflect fundamental attitudes towards or understanding of disability and SEN. At the European level, official policy statements have only relatively recently referred to ‘inclusion’ and ‘inclusive education’, rather than ‘integration’ and ‘special educational needs’. Use of terms reflect particular models or approaches to understanding disability, particularly medical as opposed to social models of disability [154, p.22].

Considering the specifics of physical education, in this paper we will use the term ‘students with disability’, which correlates with the term ‘special education needs’ (SEN).

So, the premises and the contradictions which have been mentioned above served as the basis for the formulation of **the research problem**: how to improve the physical education teachers' attitudes regarding the inclusion of students with disabilities into physical education activities, to make their education more efficient, given that PE in the Arab sector is non-inclusive?

The object of research: The process of developing positive attitudes of physical education teachers towards the inclusion of students with disabilities.

The Goal of the research consists of elaboration, implementation and validation of the Pedagogical Model for the development of the PE teachers' positive attitudes towards inclusion of students with disabilities in physical education activities to make their education more efficient.

Research hypothesis: the process of developing positive attitudes of physical education (PE) teachers towards students with disabilities will be more efficient if we:

- establish the epistemological and methodological context of PE teacher training, based on correlations between the attitudes and the variables: participation in an academic course, experience in integrating students with disabilities, gender, years of work experience (in teaching)
- explore the predictive factors of PE teachers' attitudes towards inclusion of students with disabilities
- adapt PE curriculum and activities serving specific needs of students with disabilities
- motivate students with disabilities to participate in physical education lessons together with non-disabled students
- elaboration, implementation and validation of the Pedagogical Model for the development of the physical education teachers' positive attitudes towards the inclusion of students with disabilities.

The research objectives:

1. To explore the concept and dimensions of teachers' attitudes to inclusion.
2. To analyze the evolution and elucidate the concepts of inclusion in education system and connections between inclusion and physical education.
3. To offer a theoretical and praxiological framework for including students with disabilities in PE lessons together with non-disabled students.
4. To examine the complexity of correlations between the physical education teachers' attitudes and variables of: participation in an academic course, experience in integrating students with disabilities, gender, years of work experience (in teaching).
5. To validate the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities in the physical education activities/lessons to make their education more efficient.

Synthesis of the research methodology and justification of the chosen research methods.

The current research is based on the analysis of several concepts, theories, documents in the field of pedagogy, psychology, special pedagogy, sociology dedicated to inclusion, attitudes, physical education of students with disabilities.

As specific epistemological benchmarks served: the concepts of *inclusive education*, *the rights of persons with disabilities* (based on international standards: Convention on the Rights of Persons with Disabilities [166]; Convention on the Rights of the Child [165]The SALAMANCA Statement and Framework for Action on Special Needs Education [162]); *physical education adaptation*: Watson, S. [196], Reid, G. [132]; *ideas on attitudes' developing* by Allport G. [19], Bandura A. [29], Block M. et al.[37; 38]etc., approaches regarding *PE teachers' attitudes to inclusion*/students with disabilities proposed by Hutzler Y. [87; 90]; Obrusnikova I. [123]; Morley D. et al.[119]; Mangope B. et al. [113]; the concept of Corbin C."*new physical education*"[46], the Antonovsky's A. *salutogenic paradigm* [187], Kolb's D. *theory of experiential learning* [102], the theory of *Planned Behavior* by Ajzen I. [17; 186] etc.

The theoretical and methodological aspects of the research base upon the following approaches:

a. *The socio-cultural perspective*; we found Sanderson's socio-cultural perspective definition [143, p.129] as - "describing people's behavior and mental processes as shaped in part by their social and/ or cultural contact, including race, gender, and nationality", most suitable to serve our research.

Another distinctive phenomenon on the complex subject of inter-personal perception which is at the core of the current research is the phenomenon creating the *social stereotype*. Sometimes, within interpersonal impression, on the basis of characteristics that characterize a person, the impression is more than a conclusion of the given features, then a primary datum may serve as a milestone for organizing the impression [16].

b. *The classical social cognitive concepts* [30] of Bandura's reciprocal determinism led us in elaborating the training program for PE teachers who had to cope with the inclusion challenges in their classes. In this context we determined the correlation between the self-efficacy [26; 27; 28] of the PE teacher and the concrete perspective of integration of students with disabilities in physical education classes.

c. We also explored the main principles of *Social Pedagogy*, based on *humanistic values that stress human dignity, mutual respect, trust, unconditional appreciation, and equality* [189].

The research methodology included several methods: *theoretical methods*: synthesis, generalization, classification, systematization, comparison, modeling, surveys; *empiric methods*: observation, testing, questionnaires, conversations, ascertaining, formative and control experiments, *statistical methods*: Cronbach's alpha, students' t test for independent samples, students' t test for a

single sample, two way analysis of variance, one way analysis of variance etc.

The scientific originality and novelty of the research: examines the change trends in the attitudes of physical education teachers toward the inclusion of students with disabilities in their regular lessons on a historical & conceptual level; the concepts of inclusion, inclusive school environment, positive attitudes of physical education teachers were updated; contributed to changing the traditional paradigm that sport is an unimportant topic for students with disabilities to approach it as a key element of inclusion in PE lessons; establishes the indicators for evaluating the physical education teachers' attitudes toward the inclusion of children with disabilities in physical education activities; validates the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities in PE activities, based on the programme "Sport is for everyone".

The main scientific results obtained in the research consist in the identification and validation of the theoretical and methodological components of the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities in PE activities/lessons in the schools in Arab sector of Israel, the implementation of which contributed to decreasing the teachers stereotypes, changing the attitude towards students with disabilities: from approaching them as a problem to approaching them as an opportunity; ensuring the decrease of the negative impact to disabled students, enhancing their participation in PE together with nondisabled students and inclusion for personal development, and creating an inclusive environment.

The theoretical significance of the research: the contribution to the development of the concepts and theories of inclusion in relation to PE; identification of factors and indicators of inclusive education in relation with PE; contributions to the theory of education by exploring the concept of inclusive PE based on social, pedagogical and psychological foundations; contribution to changing the traditional paradigm that sport is an unimportant topic for students with disabilities to approach it as a key element for the implementation of inclusion in PE lessons; analysis of various PE teacher's attitudes programs, systems and alternative facilities for disabled students to reduce the risk of its rejection. Research contributes to the enrichment of the theoretical knowledge regarding the inclusive PE in the schools in Arab sector of Israel with an emphasis on: the concepts of inclusion in education system in correlation with teachers' attitude towards disabled children inclusion; the complexity of correlations between the attitudes of PE teachers and between the variables of: participation in an academic course, experience in integrating disabled students, gender, years of work experience.

The praxiological value of the research is strengthened by:

- the Formative program “*Sport is for everyone*” that can serve as an example of good practice for PE attitude and the attempt to increase the inclusion process towards students with disabilities at school, through activities similar to those promoted under the program, can help improve their performance of those students and their participation in the activities, and thus can reduce rejection phenomenon rate among students with disabilities from Israeli Arab sector;
- the strategies, principles and methods of increasing positive PE attitude and increasing inclusion process, valued in the experiment, may serve as incentive for reviewing education policies of fighting rejection towards students with disabilities at ministerial, school and community levels;
- the activities from the Pedagogical Model for the development the PE teachers’ positive attitudes can be applied in developing plans for increasing the inclusion of students with disabilities in all PE classes at all the schools of Israel, in partnership with school, community and family;
- the research contributed significantly to the methodological framework of the process of developing the teachers’s positive attitudes towards the disabled students inclusion in PE.

Volume and structure of the thesis: the content of the thesis includes 160 pages of basic text, including annotations in Romanian, Russian and English, three chapters, conclusions and recommendations, 21 figures and 20 tables, bibliography of 208 titles and 6 appendices.

Key-words: positive attitudes, physical education, inclusion, students with disabilities, integration, inclusive education, motivations, social stereotype, children with special needs.

The Summary of thesis:

In the **Introduction** is presented the actuality, importance and relevance of the subject of the research, described the research field and the research topic, based on the identification of the contradictions, its premises and its effects on the education system and the physical education in the Arab society. It presents the goal and objectives of the research, the experimental dimensions of the positive attitudes of the physical education teachers, the scientific approval of the research results.

The first chapter entitled “*Theoretical landmarks regarding attitudes in relation with social integration and inclusion in education*” includes in its first part, the concept and dimensions of teachers’ attitudes towards inclusion. Also, the Models guiding attitudes and behaviors toward persons with disability, including the Learning style & Experiential learning Theory (David Kolb), Theory of planned behavior, others are described. The second part of this chapter, focuses on the development of social integration and inclusion in the world (definitions, evolution of terms, legal framework); the

development from special education to social integration and inclusion. The third part of the chapter includes analysis of inclusion in the education, different approaches of inclusion in the education. The definitions on inclusive education and inclusive culture were reinforced, the exhaustive definition of inclusive education was proposed; connections between inclusion and physical education was explored. The fourth part reflected the legal aspects of integrating students with disabilities in Israel and in Moldova, that created premises for current research.

The second chapter entitled *“The methodological framework of developing physical education teachers’ positive attitudes towards inclusion of students with disabilities”* focuses, in its first part, on the concept of developing physical education teachers’ positive attitudes towards the inclusion of students with disabilities. Based on international standards and literature review, we deduced the importance of educational strategies focused on improving the PE teachers' attitudes regarding the inclusion of students with disabilities into PE lessons / sport activities, taking into account the specific needs of girls and boys, but also the sociocultural and family context etc. Our Concept of developing of physical education teachers’ positive attitudes towards the inclusion of students with disabilities includes the following components: analysis of physical education sector in Israel in relation with inclusion; Physical Education Adaptations for Students with Disabilities; overview of Socio-cultural determinants of teachers’ attitudes towards the disabled students.

The second part presented the Pedagogical Model for the development of the PE teachers’ positive attitudes towards the students with disability to increase inclusion of students with disability together with nondisabled students in PE activities.

The third chapter entitled *„The experimental framework for the development of positive attitudes of physical education teachers towards the inclusion of students with disabilities”* presents, in its first part, diagnosis of physical education teachers' attitudes towards the inclusion of students with disabilities in physical education activities. The second part of the chapter presents the Formative program “Sport is for everyone” (design, implementation). The main findings are reflected, including connection between background variables and correlation between components of Pedagogical Model centered on developing the PE Teachers’ positive attitudes towards students with disabilities. The results of Validation of physical education teachers' attitudes towards the inclusion of students with disabilities are presented. The relationships established among the different components of Pedagogical Model, validated during the implementation, positively influenced the intervention and the formative process as a whole.

The Chapter **General Conclusions and Recommendations** contains the synthesis of the main ideas, the scientific and experimental results of the investigation, the recommendations and the openings of the possible research perspectives. This research is a valuable scientific-methodological tool for PE teaching staff, school managers, special inclusion personel in their educational and managerial activity, also for parents and community representatives.

1. THEORETICAL LANDMARKS REGARDING ATTITUDES IN RELATION WITH SOCIAL INTEGRATION AND INCLUSION IN EDUCATION

1.1. Concept and dimensions of teachers' attitudes on inclusion

The attitude construct is one of the most-explored constructs in social psychology, and it has had a significant impact on the social sciences.

According to the Allport' definition: "Attitude is a Mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1935 [19]).

Later, Krech and Crutchfield (1948) wrote, "An attitude can be defined as an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world" [apud 190]. These definitions emphasized the enduring nature of attitudes and their close relationship to individuals' behavior. Some sociologists (e.g., Fuson, 1942) and psychologists (e.g., Campbell, 1950) even defined attitudes simply in terms of the probability that a person will show a specified behavior in a specified situation [apud 191].

Most current researchers use the term to refer to a valenced evaluation of something, be it a person, object, concept, event, action, etc. (i.e., the attitude object). Most theorists consider attitudes to be relatively enduring (i.e., they are typically not transitory like phenomena such as mood states); however, the extent to which they are stable and enduring would be expected to fall on a continuum, and is determined by factors such as variations in cognitive structure [174; 169]. Furthermore, many contemporary researchers suggest that a distinction can be made between attitudes that are deliberative and within an individual's control, and those that are nondeliberative and automatic (i.e., explicit versus implicit attitudes). Much of the research on attitudes has focused on issues such as the structure and function of attitudes, how they influence behavior and judgment, how they can be changed, and even whether we need them and if they exist at all. [191; 183]

The subject of attitudes is studied extensively. At the same time, a growing body of literature suggests that attitudes may be much less enduring and stable than has traditionally been assumed. Instead, we may expect a close relationship between attitudes and behavior only under some specific, and relatively narrow, conditions (Bohner & Schwarz, 180) [190].

According to Schwarz and Bohner [190], attitudes are a hypothetical construct, invented by researchers to account for a body of phenomena. We cannot observe attitudes directly but infer them

from individuals' self-reports and behavior. In this sense, the processes underlying self-reports of attitudes are extremely important for approaches regarding the nature of attitudes.

Schwarz and Bohner [190] noted that behavioral decisions are not always based on specific information about the attitude object, e.g. on individuating information about the specific person we encounter. For example, being under cognitive load (e.g., Macrae, Milnae, & Bodenhausen, 1994) or being in a good mood increase reliance on pre-existing knowledge structures at the expense of reliance on individuating information. Hence, it may expect that individuals' behavior towards an exemplar is more consistent with their attitude judgment about the category when they are in a good mood or under cognitive load because information about the exemplar is less likely to enter the decision process.

Some authors mentioned that the attitude judgment is based on respondents' mood at the time of judgment (Schwarz & Clore, 1988 [apud 190]). In this case, we may be hard put to detect any attitude-behavior consistency unless respondents happen to be in the same mood in the behavioral situation and the behavior is inconsequential, thus rendering one's apparent affective response sufficient for a decision. Moreover, any other difference in processing motivation at the time of judgment and behavior is similarly likely to decrease the attitude-behavior relationship.

According to Millar and Tesser (1992) [117], we engage in some behaviors for their instrumental value in reaching a goal and in other behaviors for the pleasures they provide. If so, attitude judgments should be a better predictor of instrumental behaviors when the judgment is based on a consideration of the behavior's instrumental implications rather than hedonic implications. But attitude judgments based on our hedonic assessments of the behavior should be an excellent predictor for consummatory behaviors, i.e., behaviors we engage in for enjoyment.

Numerous studies have shown that attitude-behavior consistency is higher when the individual has direct behavioral experience with the attitude object (Fazio & Zanna, 1981[64]). This desideratum served us as an important landmark in this research.

At the same time, attitude-behavior consistency is likely to be higher when individuals take the context in which the behavior is to be performed into account when they form an attitude judgment. In most cases, however, attitude judgments are assessed without mentally instantiating the context in which the attitude object may be encountered, resulting in low attitude-behavior consistency [190].

Researcher Callo (2014) [3] mentioned the configuration of two schools of thought:

The three-factor approach, which argues that an attitude is:

- 1) A positive, negative or mixed emotional reaction, in which our emotions, feelings and moods towards a certain object are found;
- 2) A behavioral disposition or, in other words, the tendency to act in a certain way towards the object;
- 3) A cognitive reaction, insofar as the evaluation of the object is based on certain opinions, representations and memories.

The one-sided approach, which is based on the fact that often our thoughts and feelings are not correlated with each other and does not always guide our behavior. For this reason, the proponents of this orientation prefer to treat the three components separately, understanding by attitude only the affective component [3].

An attitude can be as a positive or negative evaluation of people, objects, events, activities, and ideas. It could be concrete, abstract or just about anything in your environment, but there is a debate about precise definitions.

Researchers described the position as the tendency and/or preparedness to evaluate the object or the object's icon in a certain way. Looking for any position consisting of three components: cognitive, emotional, and behavioral, when the ratio between the three components can vary in degrees and intensities [110].

The Conscious-Cognitive dimension: Refers to personal knowledge - Believes a person has on an object or situation and gives the person a dimension of understanding. This component answers the questions correctly - not true, true - false, preferably - not desirable.

The subject's attitude towards something can be constructed with the help of comparative information. These are objective data, beliefs for informational purposes within the attitude [3, p.42].

The Emotional dimension: it is represented by emotions, feelings, sensations of pleasure or displeasure that do not always have a basis. People often have emotional relationships with the first object of value. Some people or situations make us react positively (pleasantly), others worry us, triggering negative reactions. Favorable or unfavorable manifestations must be decoded within the culture to which they belong, the system of norms and values shared by that group. [3]. Refers to the emotional evaluation of the facts resulting from a particular object.

The Behavioral (or intentional) dimension: it is represented by desire and will in connection with the attitudinal object; the intention to bring him closer, to reject him, etc. We consider both the behavioral action and the predispositions for action. Attitude always has an anticipatory function, announcing the needles will follow. In this way, attitudes facilitate integration into social life, allowing for early adjustments of interpersonal behaviors.

Refers to the tendency for behavior and the behavior itself to the object. This component is affected and stimulated by the cognitive element and emotional element. (How much knowledge is there? Is there misleading knowledge? Whether the object arouses feelings of anxiety, or hate, etc.). This component answers the question of how a person behaves toward the object.

It may be added that each social attitude belongs to one of the following three motivational elements:

- Attitude as examining reality - a search for meaning and the need to acquire knowledge about the external world consistently.
- Attitude as the need to avoid social desirability and social rejection.
- Attitude as a defense of self - protection against internal conflicts.

In the context of the present research we consider opportune the point of view of the researcher Callo as that the attitude represents the fundamental component of the character, this being a psychic, synthetic construction that brings together intellectual, affective and volitional elements [3].

Attitude is the result of the teacher's interaction with the world. The attitude reflects the way in which the previous experience is accumulated, preserved and organized, when the teacher approaches a new situation. Attitude appears as a link between his dominant internal psychological state and the multitude of situations to which he relates in the context of his social and professional life (adapted after Callo [3]).

Specifically, this approach has served as a benchmark in exploring the attitude of physical education teachers towards students with disabilities. Having the general attitude towards students as people able to do sports / physical education, complemented by stereotypes / stigmas towards people with disabilities, they often find it difficult to overcome working with children with disabilities. This situation hinders the efficiency of the educational process.

Many studies have shown that although there is great progress and increase tolerance of the person with disability in the advanced countries like the United States and Israel, there are still negative attitudes towards disability almost in every society [94; 95; 193; 111]. Accordingly, Flishkes

points (1993) [apud 111] to the fact that the status of Israeli society towards people with disabilities is largely negative, alienating and hostile. According to her, this is reflected in detachment and avoidance associated with them, unwillingness to treat them, understand and employ them.

Many studies showing that the reasons for negative attitudes towards people with a disability relate to a sense of alienation and lack of similarity between the exceptional human and the non-exceptional one [112; 113].

The experience in educating children with SEN brings a change in attitude. In the view of some experts, the attitudes of pre-service teachers towards inclusive education are a significant predictor for the future implementation of inclusive education (Sze, 2009 [155]), but also an effective method of improving attitudes towards inclusive education (Forlin et al. [74; 75]).

Some researchers disagree that attitudes towards inclusive education are improved through training. Hastings and Oakford (2003) considered that training was not a significant factor in changing attitudes towards inclusive education, but specified the determining impact of types of disability on attitudes, with less inclusive attitudes towards children with behavioral and emotional difficulties than those with learning disabilities [apud 169].

At the same time, Forlin and Chambers (2011) found that, while attitudes towards inclusive education were improved through training and knowledge, the concerns of pre-service teachers and perceived stress regarding practical inclusive education was not improved. [apud 169].

Forlin, Keen, and Barrett (2008) [75] examined teacher concerns on inclusion of students with intellectual disabilities in regular settings. Malcoci and Sinkevici (2015) [9] ascertain that although the vast majority of teachers believe that inclusive education is a good practice, still a good part that consider that mainstream school is not for all children with disabilities. Thus, the integration into the community school of children with physical disabilities, with language disabilities, with learning disabilities is accepted and less or no - inclusion of children with mental disabilities and those with emotional-affective and behavioral disorders.

Studies show that the attitude towards inclusion of teachers from schools who have worked with children with SEN is different from that of their colleagues who have not worked with children with [4; 113]. When teachers have many contacts with disabled persons, their attitudes and ability to teach disabled children are influenced (Smith, Price and Marsh 1986) [apud 98].

Several student and teacher related variables have been significantly and consistently linked with specific teacher attitudes toward inclusion (Avramidis, 2002) [24]. Research on teacher

variables has revealed that attitudes were related to self-perceptions of competence, educational preparation, and experience in teaching students with disabilities (Kuyini & Mangope, 2011) [apud 113]. Specifically, teachers' attitudes toward inclusion were more likely to be favourable if they perceived themselves as better teachers (Dart, 2007; Mangope, 2002) had greater education preparation (Kuyini & Mangope, 2011), and had more years of experience in teaching children with disabilities (Mukhopadhyay, 2009; Kuyini & Dessai, 2005) [apud 113].

The role of teachers' attitudes in the success or failure of inclusive schools is evident in Dart, (2007) and Kuyini and Mangope, (2011) Mittler, (2003), who noted negative attitudes of teachers as the major obstacle to the progress of inclusive education globally [apud 113]. The majority of these studies in physical education have also assumed that a positive attitude towards inclusion was necessary for the successful inclusion of children with disabilities into physical education (Loreman, Forlin, & Sharma, 2007)[apud 169]. These studies have examined the relationship between different types of attitudes and variables such as teacher age (Mdikana, Ntshagangase, & Mayekiso, 2007), gender (Sharma & Desai, 2002), teaching experience (Marston & Leslie, 1983), educational preparation (Mangope, Koyabe, & Mukhopadhyay, 2012), perceived teaching competence (Mukhopadhyay, Molosiwa, & Moswela, 2009) [apud 113], and type and severity of student disability (Rizzo & Vispoel, 1992) [137].

To have successful inclusion, teachers must receive adequate training Bender, Vail & Scott, 1995).[34] Several authors mentioned that if teachers have more knowledge about inclusive education and how their learning needs can be met, they may have less negative attitudes towards the mainstream (Soho, Katims and Wilkins 1997) [apud 98]. The researchers (Yıkımsı, Şahbaz and Peker 1997; Sarı 2007) [apud 98] discovered that if teachers had information about inclusive education, their attitudes for inclusion altered from negative to positive.

According to Bender et al., (1995) [34] study, there is a positive correlation between the attitude of teachers and with the number of courses taken in teaching disabled children.

We agree with de Boer, that attitudes are influenced by information and knowledge about disability and by teachers' skills in working with children with disabilities in mainstream schools (de Boer et al., 2011) [40]. The specially trained teacher tends to have a more favorable attitude towards the inclusion of students with special needs than their non-professionally qualified teachers.

Florian, Young and Rouse (2010) argue that a fairer and more equitable approach to meeting the needs of all learners can be supported by training newly qualified teachers to focus on the quality

pathway of what is generally available. [apud 169].

Attitudes towards disability reflect beliefs about disabled people and, as such, guide behavior towards disabled people [8]. Teachers' attitudes towards inclusion often depend both on the confrontations between their professional commitment and doubts about their competencies, but also on how the educational system is prepared to support them [96; 97].

Previous research has considered a generalized perception of competence related to teaching PE to students with special needs, proposing that higher perceptions of competence are related to positive attitudes towards including children with special needs in PE.

Physical educators' positive beliefs are crucial for ensuring meaningful learning experiences of students with disabilities included in general physical education. Numerous teacher-related and student-related variables may influence physical educators' beliefs about teaching children with disabilities in general physical education (Obrusnikova, 2016 [123]).

Teachers in positions are largely a reflection of public opinion, so it is interesting to know the processes taking place in this area over recent years. In a survey on public opinion in the country on public attitudes towards people with disabilities, researcher's concluded that even when attitudes are apparently positive, there is still often a significant gap between what people point out as you need, and reports, "hand on heart" about their behavior. Unfortunately, the 1998 survey did not expect any change for the better in relation to the survey of 1993 which followed the framework incorporating a middle school for seven months, and reported obstacles to integration without sufficient training and support resources. Qualitative research conducted with focus on groups of teachers in the United States, found negative attitudes and resistance to mainstreamed integration of children with special needs. Class size, lack of resources and training were major sources of teacher-worry [142].

Several studies have been conducted in the country in recent years on the subject of teacher's position. Shechtman (1991) examined perceptions of the difficulties and advantages of the integration among the 202 teachers, and found a mixture between perception of democracy supporting integration (75% -87% agreement) and the will to turn exceptional children to special frames (80% agreement) and concern of overload imposed on the teacher dealing with the integration (75% agreement) [148].

Personal belief and especially personal approach of the integration as a challenge was the most powerful motivation for integrating activities [149], a similar picture was still observed, indicating a general readiness for integration by emphasizing difficulties in integration, especially due to the need for changes in teaching practices in the classroom.

This indicates that the basic right to change specified by the principle of inclusion, is not yet accepted by most teachers, through the process of personal growth, incorporating not just the integrated but also the integrator [149], [141]. One of the arguments that teachers and administrators raise is the lack of specific training specific for integration. Thus, the effect of the introductory courses in special education had been examined as part of the general program at teacher training college, the attitudes of students.

The study by Margalit presents clear-cut findings of higher frequency of social isolation among children without special needs [114]. Despite writing special curriculum appropriate for special needs, their assimilation into integration frameworks is still a little misleading and also lacking proven and acceptable programs to change attitudes among teachers, students and other socialization agents in the educational system. Lack of resources of environmental support makes it difficult to acquire appropriate life skills and creating a connection and inter-personal relations for students with special needs.

At the same time, Weisel A, Dror O. (2006) determined that self-efficacy was the single most important factor affecting teachers' attitudes. School climate included six factors: supportive leadership; teachers' autonomy; prestige of the teaching profession; renovations; teachers' collaboration; and workload [172, p.7] Examination of the intercorrelations among these factors and with attitudes revealed that those teachers who perceived their school as having supportive leadership, encouraged renovations and collaboration but did not threaten teachers' autonomy, tended to express more positive attitudes towards inclusion [174].

Teachers' attitudes toward their students are often associated with teachers' differential expectations of students and their performance [131]. *Social cognitive theories* can explain the link between attitudes and behavior. In this regard, interest presents the distinction between implicit and explicit attitudes. Thus, implicit attitudes are automatically activated when the attitude object is present and guide automatic behavior. And, explicit attitudes infer reflection, thus affecting controlled behavior. Because teachers are often forced to act immediately in situations that do not allow for careful reflection due to time constraints, teachers' implicit attitudes toward different groups of students with common characteristics, such as gender and/or disability, can be particularly important when analyzing the behavior of teachers in relation to the educational needs of students.

Also of interest is the *Functional Theory of Attitudes*, developed by Daniel Katz in 1960, who made connections between attitudes and motives. Katz (1971) believed that the reason behind a person

holding any kind of attitude is due to the functions that the attitude fulfills for the individual. For example, expressing one's values, maximizing rewards, expressing knowledge, and acting as a defense mechanism [101].

The *Theory of Planned Behavior* (Ajzen, 1985) provides a conceptual framework for understanding the relationship between attitude and behavior [17]. It is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980) and point to the importance of considering attitudes, subjective norm, perceived behavioral control and behavioral intention to predict a certain behavior [186] (figure 1.1).

Theory of planned behavior

According to this theory, it is possible to understand the relationship between attitudes and behavior, so then we accept the assumption that people are decent creatures that may result from their actions considerate, so only the position cannot be used to guide behavior [186]. The premise of this theory, is that the main factor influencing the actual behavior is the intention to do it. Intentions indicate the degree of effort people are willing to invest to do something. The more serious intent is shown, the more likely the success. That is, the more positive the attitude is, the subjective norm is also more.

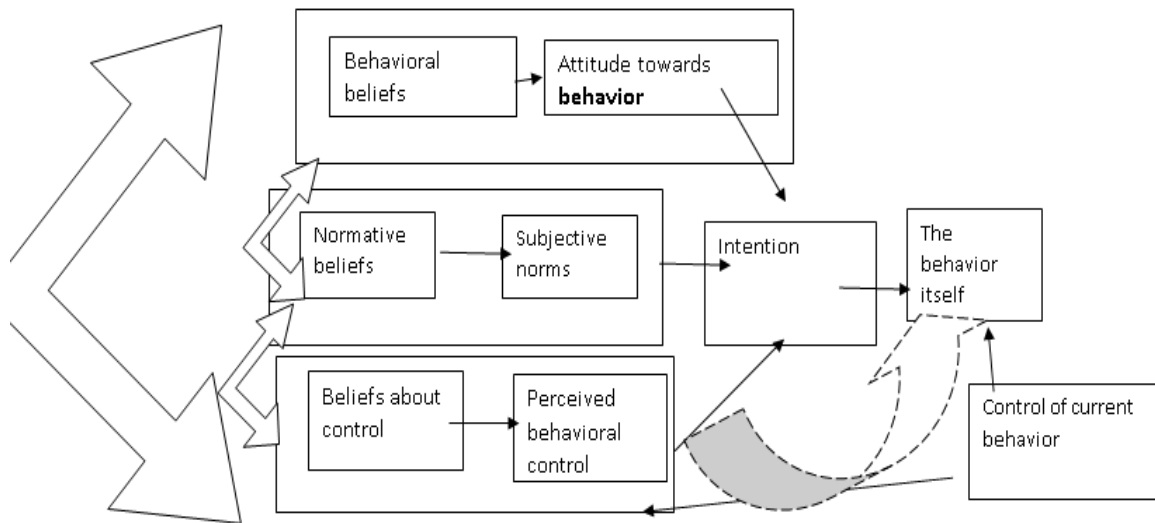


Fig.1.1. Aputed Model of Planned Behavior (TPB) (based on Icek Ajzen, 2006) [18]

Furthermore, this theory claims that the attitude, positive or negative, is one of the factors that affect the person's intentions. Second factor affecting their intention is subjective norm - meaning social causes social stress perception as to the performance or non-performance of the behavior (how

would it look, how it will be evaluated?). The third factor is the perception of control behavior referring to the extent to which the behavior in question seems easy or difficult. [18] In combination, the attitude towards the behavior, subjective norm, and perception of behavioral control, lead to the formation of behavioral intention (figure 1.1.). As a general rule, the more favourable attitude and subjective norm and the greater the perceived control, the stronger should be the person's intention to perform the behaviour in question [186].

The theory assumes that behavior is an indirect result of information or beliefs relevant to the behavior. Position is a positive evaluation, negative or mixed object, expressing some degree of power.

Learning style & Experiential learning Theory- David Kolb

The experiential learning theory sought to emphasize experience as a major component of how we learn. It might seem obvious to us now that how we learn is connected to our experience of learning, but other theories around learning at that time emphasized how the brain processed information (cognitive) or focused on mainly repetitive actions (behavioral). Both cognitive and behavioral theories didn't take into account how our experiences make us unique, subjective learners.

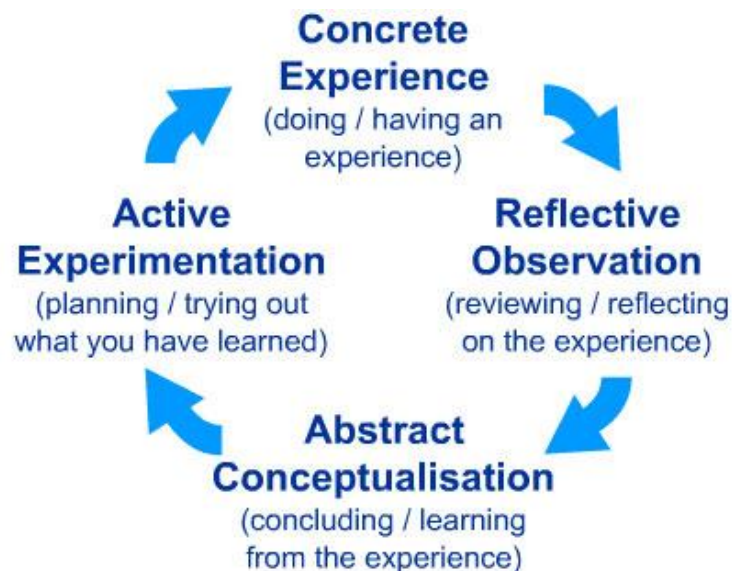


Fig.1.2. Kolb's cycle of experiential learning

Kolb's Experiential Learning Theory presents a cycle of four stages (figure 1.2.) [102]:

- First, the *learner has a concrete experience*, where he or she is faced with new situation or a retread of a similar prior experience.
- In the second stage, the *learner undergoes a reflective observation*, where he or she situates the

new experience within his or her prior knowledge. This is where I think about how driving connects to what I already know. I can think back to my previous experience driving many years before, but also my understanding of the rules of the road and how cars work that I've carried with me most of my life: what a stop sign means, what a red light means, how to roll down the windows in a car, etc.

- In third stage is abstract conceptualization, where the *learner's reflections* lead to a new understanding or the broadening of his or her current understanding. My abstract conceptualization of driving expanded as soon as I started driving again. I analyzed my experience while it was happening and broadened my ideas while driving: Slow down before turning; don't forget to look for cyclists.
- Finally, the fourth stage, *active experimentation*, is when the learner takes his or her newly found or expanded knowledge and puts it to the test in other situations. This is when I took my expanded abstract conceptualization from driving to the supermarket and applied it on the return trip. (Or, as with the case of slowing down before turns, I applied that understanding to the very next turn I took.) The active experimentation phase leads to more concrete experience, which starts the cycle of learning all over again.

Kolb saw these four stages as interconnected, with each one leading to the next, and posited that we can enter the learning cycle at any stage. [102].

Based on several research, it has been outlined that it is more efficient to form positive attitudes in teachers at the initial training stage. At the same time, taking into consideration the social transformation and educational challenges and trends, professional ongoing education, dedicated to teaching PE to students with special needs, is needed.

We conclude that the attitude of the teacher can be considered as one of the significant variables in the education of students with disabilities. Correlating the definitions expressed by various authors, we contributed to the explanation of the term of teacher's attitude in the context of inclusive education, proposing an exhaustive definition: *the positive attitude is larger than inclusive attitude towards students with disability, including friendly approach and respect, support/ encourage, empathy, oriented to individual needs and preferences of the disable students, without any limitations.*

In order to understand the context of the teachers' attitudes towards the students with disabilities the analysis of social integration and inclusion is presented below.

1.2. Social integration and inclusion: definitions, evolution of terms, legal framework

Over time, strategic approaches on disability have changed from basic care provided in institutions towards rethinking education for disabled children and recovery for people who became disabled during adult life. Especially after the Second World War the understanding of the capabilities of people with disabilities received reconsideration and the concepts of integration and normalization were introduced.

In the 1960s, people with disabilities organizations introduced a new concept of disability. *That new concept indicated the close connection between the limitation experienced by individuals with disabilities, the design and structure of their environments and the attitude of the general population* [180]. In the developing countries the issue of disability also started to receive growing attention. In many of those countries, the number of people with disabilities was estimated to be very high. Also, in most countries, these people were extremely poor.

The United Nations and other international organizations were concerned and had paid growing attention to the rights of people with disabilities.

The International Bill of Human Rights, comprising the Universal Declaration of Human Rights (1948), the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, the Convention on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination against Women, as well as the World Programme of Action concerning Disabled Persons and other documents, constitute the political instruments, but also moral foundation for the future national policies in the field.

One of the most important document was the World Programme of Action concerning Disabled Persons, adopted by the General Assembly by its resolution 37/52 of 3 December 1982, that raised attention to the issue of the right of people with disabilities and requested the same opportunities for them as other citizens, alongside improvements in living conditions and their integration in the economic and social life. There also, *for the first time, handicap was defined as a function of the relationship between persons with disabilities and their environment.*[181] Document offered the definition of equalization of opportunities.

United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities, A/RES/48/96, United Nations Resolution adopted by the General Assembly at its 48th session on 20 December 1993 highlighted that through education and rehabilitation, persons with disabilities become more active. At the same time, these people can be considered a driving force in

the further development of policy and practices on disability [178]. We would like to mention that the document has valuable contribution to understand the sense of the two terms “disability” and “handicap”, that should be explored in the context of modern disability history. The Standard Rules explained the three pillars as prevention, rehabilitation and equalization of opportunities of persons with disabilities. Recalling the role of education, in circumstance where the general school system does not yet effectively meet the needs of all persons with disabilities, *special education may be considered*, which should be aimed at supporting students to pass education in the general school system.

Thus, the general strategy from special education to inclusion of student in the general school system was highlighted. Despite of the fact that “inclusive education” is not used, all proposed terms as “to accommodate educational provisions for persons with disabilities in the mainstream”, “gradual integration of special education services into mainstream education” reflect the inclusion idea.

According to Salamanca Statement and Framework for Action on Special Needs Education (1994): Every person with a disability has a right to express their wishes with regard to their education, as far as this can be ascertain [162].

We noted that the phrase "Society for all", which makes the transition from integration to the social inclusion of people with disabilities, was first defined in the Madrid Declaration adopted by the European Congress of People with Disabilities in 2003 [63].

Convention on the Rights of Persons with Disabilities (2006): recognizing that disability is an evolving concept and results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others. According to convention, children with disabilities should have full enjoyment of all human rights and fundamental freedoms on an equal basis with other children [166].

Convention on the Rights of the Child (1989) prohibits discrimination on the basis of disability and requires special measures to ensure the rights of children with disabilities [165]. We would like recalling the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1990), which provides for some protective measures against disability, also the provisions in the Convention on the Elimination of All Forms of Discrimination against Women to ensure the rights of girls and women with disabilities.

Also, we consider that should be take into consideration the Declaration on the Rights of Disabled Persons, the Declaration on the Rights of Mentally Retarded Persons, the Declaration on

Social Progress and Development, the Principles for the Protection of Persons with Mental Illness and for the Improvement of Mental Health Care and other relevant instruments adopted by the General Assembly.

In the context of involvement of persons with disabilities in education system, the Dakar Framework for Action Education for All should be mentioned: “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”[47, p. 22]. Thus, the express connection between inclusive education and education for all was mentioned.

Also, the global education agenda (Education 2030), as part of the 17 UN Sustainable Development Goals (SDGs), should be considered. People with disabilities were not included in the Millennium Development Goals (MDGs) and subsequently omitted from many projects and funding. However, the 2030 Agenda is inclusive of persons with disabilities. Disability is referenced in many parts of the SDGs. Specifically, this is envisaged in the parts related to education, inequality, growth and employment, accessibility of human settlements, as well as data collection and monitoring of the SDGs. For example, Goal 4 on inclusive and equitable quality education and promotion of life-long learning opportunities for all focuses on eliminating gender disparities in education and ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities [197]. In addition, it calls for building and upgrading education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

We would like to stress attention on new accent inclusive education is more often connected to equitable quality education, that involves more sensitive and responsible strategies and actions [78].

In the Appendix 1. we prepared the timeline of most important events and documents that can be considered as contributing to inclusive education conceptualization.

National legislation should acknowledge the principle of equal opportunities for children, youth and adults with disabilities in primary, secondary and tertiary education carried out in integrated settings. We support the idea that parallel and complementary legislative measures should be adopted in the fields of health, social welfare, vocational training and employment in order to support and offer more efficiency to educational legal framework [165].

Recognizing that the adoption of many international instruments represent important steps in recognition and institutionalization of the human rights of disabled persons, the most important challenge remain its practical and concret implementation.

Different authors and documents proposed different terms/ definitions in order to identify and design the specificity of phenomenon of education of children and students with disabilities. The most relevant terms used in relation with phenomenon of disability are the following: inclusion/ social inclusion, integration / social integration, special needs, special education, inclusion culture, education for all and others [47; 133; 134; 135; 152; 160; 154; 165; 166].

International human rights agreements, covenants, and other legal documents, provide definitions of inclusion that focus on equity, access, opportunity and rights.

In the last three decades, social policy has been marked by the tendency to promote integration and participation and to combat exclusion. Inclusion and participation are essential for human dignity and the enjoyment and exercise of human rights [164].

As we mentioned above, "Agenda 2030" reflects the interest of persons with disability. Including persons with disabilities among vulnerable people means that whenever 'vulnerable' is referenced throughout the Agenda (18 times), these provisions directly apply to persons with disabilities. At the same time, the representatives of Civil society organizations/ disability movement prefers the term "at risk" rather than "vulnerable," but "vulnerable" is more broadly accepted by governments at the UN. Due to the political sensitivity of the Agenda 2030 negotiations it was not possible to change this term.

According to UNRISD, Social integration is a complex idea, which means different things to different people. To some, it is a positive goal, implying equal opportunities and rights for all human beings. In this case, becoming more integrated implies improving life chances. To others, however, increasing integration may conjure up the image of an unwanted imposition of conformity. Social Integration is recognized as an inclusionary goal, implying equal opportunities and rights for all human beings [156]; the opposite of social integration is exclusion.

Social integration can be defined as the process of promoting the values, relations and institutions that enable all people to participate in social, economic and political life on the basis of equality of rights and opportunity, equity and dignity (Ferguson, 2008 [205]. Thus, we can mention that term of social integration is more extended/ large than inclusive education.

There are many approach on "*inclusive culture*": in workplace, in education [180; 184]. For example, an inclusive culture involves the full and successful integration of diverse people into a workplace or industry. While an inclusive culture certainly encompasses a commitment to workplace diversity, it is not limited simply to basic representation; it indicates a climate in which respect, equity

and positive recognition of differences are all cultivated and the social and institutional response to disability poses no barrier to a positive employment experience [184]. We consider the mentioned above sintagma relevant to education system too.

One of the most heralded concepts in disability advocacy and cultures in the last decade is the concept of “universal design”. Universal design refers to the construction of structures, spaces, services, communications and resources that are organically accessible to a range of people [184] with and without disabilities, without further need for modification or accommodation. Accommodation arrangements remains a needed element of most contemporary institutions, while forward-thinking strategies to disability inclusion requires sites and resources that expect no accommodation to be fully usable and sensitive to people with disabilities [185].

Some authors (Steven Schulman) see inclusive culture as company’s culture of acceptance and inclusion [180].

In relation with education of pupils, students with disabilities, *inclusive culture of school as the school’ s culture of tolerance, acceptance and inclusive relationships between students, teachers, parents.*

In order to address many barriers in exercise of human rights by persons with disabilities, this world takes a *social exclusion approach* to marginalization of people with disabilities.

“Discrimination on the basis of disability” means any distinction, exclusion or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field. It includes all forms of discrimination, including denial of reasonable accommodation [166]. At the same time, “Reasonable accommodation” means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms.

“Social exclusion sidelines certain population groups, it restricts excluded groups” economic mobility and prevents them from receiving the social rights and protections meant to be extended to all citizens [109].

Social Exclusion as a discourse and framework for policy analysis originated in Europe, but has been applied in developing countries, including Middle Eastern countries. The following lists the

characteristics of social exclusion [apud 188]:

- Social exclusion is a process, not just a condition that is the outcome of a process.
- Social exclusion is multidimensional, so policies to address it need to be comprehensive, multi-pronged, tailored to individual sets of needs, and ‘joined-up’ across agencies.
- Mechanisms of social exclusion carry a cumulative disadvantage, or the accumulation of multiple dimensions of disadvantage.
- Primary indicators of social exclusion go beyond material and economic dimensions to include exclusion from social relations, social support, and civic engagement.
- Social exclusion is a situated, socially embedded concept that differs across national and cultural contexts, as well as across regional and local conditions.
- The risk of exclusion may be based upon personal characteristics that include health, disability, gender, age, place of birth, language, religion, sect, and spatial distances. Ineligibility for services due to citizenship status, gender prohibitions, and social isolation also carry risks of exclusion.
- In contrast to the focus on distribution of resources inherent in poverty and inequality, social exclusion focuses on social relationships involving two parties: excluders and excluded.

Much of the literature on exclusion focuses on the excluded. Social exclusion literature focuses on relations between included and excluded groups, such as unfavorable public attitudes, segregation of minority groups and harassment of women.

These indicators of social exclusion and their associated problems interact and result in a cumulative effect. For example, cultural norms influence the gendering of marginalization. For girls with disabilities, especially in the MENA region, this interaction constitutes a double jeopardy in terms of access to education and quality of life [188]. The economic status of individual families influences the choices parents make regarding whether or not to send their children to school, and this choice often interacts with cultural norms and gender. The resulting lack of education influences individuals’ health and well-being, leading to a higher probability of becoming disabled.

Finally, there is a circular relation between poverty, disability, and education. World Bank studies, as reported by Yeo indicate that half a billion disabled people are “indisputably amongst the poorest of the poor and are estimated to comprise 15-20% of the poorest in developing countries”. [apud 176]. In addition to significant financial costs associated with impairments, disabled people are frequently dragged further and further into poverty as a result of exclusion from mainstream social,

economic and political opportunities throughout their lives [177; 174; 197; 161].

Indicators of marginalization for people with disabilities

Physical activity of young people is an important criterion in defining health. Participating in sports maintains a healthy body, and is also a social tool that can be used to connect different people. Physical activity develops social communication skills, so it is important to understand the factors that drive participation in sports, and to understand the purpose of each person to his participation in physical activity [96; 97; 149; 195].

Poverty and disability. In the literature on marginalization of particular subgroups, marginalization is generally conceived as an economic problem quantitatively related to indexes of poverty [188; 177]. This conception focuses the problem on need, rather than on the causes of poverty and the obstacles faced. The absence of causal analyses treats poverty like a weather forecast; something to record as a fact beyond anybody's influence. If we fail to ask why people are poor (or disabled) we cannot tackle poverty when it results from denial of human rights [159].

It is widely recognized that poverty and lack of education go hand in hand, and thus lock disabled people into a chronic cycle [177]. More precisely, exclusion from education manifests itself through poor relationships, limited social contacts, poor health, and self-esteem. As a result, opportunities for income generation are further reduced, leading to chronic poverty, further exclusion and greater risks of illness, injury and impairment. As a result, opportunities for income generation are significantly reduced, leading to chronic poverty, greater exclusion and greater risks of illness, injury and impairment [188].

Concepts of deprivation underlay poverty as an index of marginalization; i.e., social and physical isolation, powerlessness and lack of voice, low social status, and physical weakness. Physical isolation often manifests itself by geography; e.g., rural areas where access to health and social services may be weak or nonexistent. Physical isolation may also occur within families, as in the decision to constrain disabled children, girls, and mothers to home life, preventing them from attending school.

Education and disability. Disability does not inevitably lead to poverty. It is at the point of discrimination that the cycle could be broken. When disabled people are denied educational opportunities, then it is the lack of education, and not their disabilities that limits them. To address discrimination, a UNICEF and UNESCO documents challenged all 189 signatory governments to the UN Convention on the Rights of the child to take all measures to ensure the full and equal enjoyment

of all human rights and fundamental freedoms, including equal access to health, education and recreational services by children with SEN /disabilities; to ensure the recognition of their dignity, to promote their self-reliance, and to facilitate their active participation within the community [apud 160-166; 188].

Minority status and disability. Marginalization due to minority status often emerges in “heterogeneous, stratified societies that encompass a variety of ethnic groups, languages and customs or other factors such as disability. However, the minority status alone does not inevitably lead to marginalization” [100; 86; 92]. It is diversity accompanied by derogation and discrimination that leads to exclusion. The main drive is the existence of subgroups within countries, accompanied by social stratification and cultural norms. Heterogeneity within country may not only reflect a composition of traditional groups, but also voluntary migration and involuntary resettlement. In a ranking of ethnic fractionalization, Jordan and Syria received a ranking of medium in relation to other developing countries and transition economies. Among minority populations, rates of disability tend to be higher than the general population, due to higher rates of poverty, malnutrition, violence, and lack of access to basic services. Two of the largest minority groups in Jordan, Syria and Lebanon are Bedouins and Palestinians [apud 21; 92; 188].

There are several million Palestinian refugees living in Lebanon, Syria, Jordan, the West Bank and the Gaza Strip with many of them living in camps. Jordan’s ranking as a medium country in terms of ethnic fractionalization may well reflect the fact that 32.8% of the total population constitutes Palestinian refugees. “The attitude of each host country to these camps is that they are temporary, pending a solution to the Israel and Palestine conflict. The camps have always been perceived by the host governments in each country as centres of actual or potential unrest as the refugees find themselves discriminated against in jobs, status, nationality, and opportunity” [apud 188].

Attempts to estimate the number of children and youth with disabilities in Palestinian camps have been hampered by the reluctance of leaders in these camps to acknowledge that disability is even a problem. However, the United Nations Relief and Works Agency (UNRWA) provides some data relevant to disabilities. The UNRWA provides a significant level of emergency humanitarian assistance, medical care services, health protection and promotion, disease prevention and control. The UNRWA provides school programmes for approximately 68% (Jordan), 81% (Lebanon) and 76% (Syria) of all enrolled children at the primary level. UNRWA provides reconstruction and barrier-free environments for children and youth with disabilities [188; 164]. However, these schools and

programmes reach a small number of school-age children. The International Disability Alliance, of which the Arab Organization of Disabled People is a Declaration urges countries to pay special attention to disabled refugees [apud 21]. The Dubai Declaration urges countries to pay special attention to persons with disabilities and to include them in the forefront of all relief efforts, in particular their right to education [59].

Bedouin-Arabs are another significant sub-group in the MENA region. Bedouin-Arab is a general name for all nomadic groups in this region. For Bedouins, “the term refers to a lifestyle and value system, as well as to social status and organization. Although they are Moslems, Bedouin-Arabs differ from other Arab populations because they live in deserts. Heterogeneous groups of Bedouins reside in Egypt, Israel, Jordan, Saudi Arabia, and Syria. Providing education and basic services for children of Bedouins is challenging. No estimates were found in the review of the literature on the numbers of Bedouin children served or their disability status. However, due to their nomadic culture and other factors, it may be assumed that this population remains underserved [apud 21; 92; 110; 188].

Cultural norms and disability. Cultural links to disability constitute a critical influence on marginalization. Culturally embedded attitudes render the severity of an impairment inconsequential compared to the social consequences of disablement [apud 86; 92]. In a traditional Muslim household, a girl child with a slight disfigurement may be fully functional, but considered impure and unfit for marriage, making education unnecessary in the eyes of her parents. By contrast, a boy with a more severe impairment within the same household might be sent to school and given supports that greatly diminishes the influence of the impairment. In a Lebanese cultural context, “the birth of a disabled child is seen by many as not only a misfortune, but as shameful and embarrassing. The husband ‘s family is likely to blame the misfortune on the mother and is likely to consign his or her mother to a lifetime of misery [92; 41]. Essentially, “cross-cultural differences in the interpretation of disability show that the lives of people with disabilities are made more difficult not so much by their specific impairment as by the way society interprets and reacts to disability” [apud 144; 136].

Gender and disability. Disabled women and girls access to education “is affected not only by their gender and disability, but also their type of disability, the socio-economic status of their family, their race/ethnicity, whether they live in an urban or rural area and a host of other factors” [apud 92]. Researchers report that, worldwide, 70% of the 60 million girls not in primary school come from excluded groups, including those with disabilities [apud 100]. Children and youth with disabilities experience marginalization differently according to gender; i.e., physical, social and psychological

factors have a strong gender dimension [apud 21; 92; 100; 110; 188]. In patriarchal societies of the MENA region, decisions of whether or not to send a child to school are typically made by the father. When resources within families are scarce, decisions favor the boys over the girls, including children with disabilities. While the MENA region as a whole has made great strides in increasing female literacy since 2000, girls and women still lag behind boys and men in illiteracy rates by a considerable margin [apud 100; 164].

According to Salamanca Statement, the *community-based rehabilitation* represents a specific approach within community development aimed at the rehabilitation, equalization of opportunities and social integration of all persons with disabilities. [162]. In order to ensure better implementation of this concept, it should be realized through the combined efforts of people with disabilities themselves, their families and communities, but also the appropriate education, health, welfare services and employment and others.

Conclusion: the change in philosophy and vision regarding the different and special requirements of individuals has led to significant changes in educational policy as well. Under the pressure of the new approaches, terms like handicapped/uneducable and correctional education were replaced by the term ‘child with special educational needs’. These changes are based on the transition from the medical approach to the special needs of the individual to the social one.

1.3. Inclusion in the education, connections between inclusion and physical education

As recent as a hundred years ago, children with disabilities received little, if any, formal education. During the middle to late 19th century, in the USA, special schools for those with disabilities continued to be created in the early 1900s, in line with the tradition of segregating students. Although these schools claimed to provide education for children, they were residential institutions as their primary role. Even in 1918, as states began establishing a nationwide public school system, children with disabilities were not usually included.

At the same time, between 1850 and 1950, special classes with people trained to care for individuals with disabilities began to develop as teachers noted differences among students. However, during these times, in USA, many parents of children with developmental disabilities began attending schools and programs. These developments were sporadic; however, they had a positive impact on the approach to teaching such children. Attitudes had changed in the 1920s and educators could see the significance of education and community involvement for people with disabilities. Nonetheless,

children continued being placed in institutions because parents thought that these types of facilities could offer the only educational prospect fit for their child. Special education usually could be found only in large American cities.

Thus, the effective inclusion of students with disabilities in mainstream schools represents a social problem that has and continues to preoccupy education systems around the world for several decades.

Inclusive education is, nevertheless, a contentious term that lacks a tight conceptual focus, which may contribute to its misconception and confused practice.

The Salamanca Statement highlights the need to provide education for all children in an inclusive school [162]. Also, the document established that regular schools with such types of inclusive practices are the most effective methods of creating welcoming communities, preventing discriminatory attitudes and thus creating an inclusive society to achieve education for all. Furthermore, they provide an effective education to most of children and enhance the efficacy and cost-effectiveness of the whole system of education.

We mention that the Salamanca Statement specify the approach of *inclusive schooling* and the development of *special needs education* as an integral part of all education programmes[162]. According to mentioned above document: *Schools need to identify ways of effectively educating all children, and prevent exclusion of children that have serious disabilities or are disadvantaged. Children and youth with special educational needs require inclusion in the educational settings similar to the majority of children. This has laid the foundation for the concept of the inclusive school* [162].

At the same time, inclusive schooling is considered as the most effective means for building solidarity between children with SEN and their peers [162].

According to the Convention on the Rights of Persons with Disabilities, Article 24 Education, States Parties recognize the right of persons with disabilities to education. In realizing this right, States Parties shall ensure that: (a) Persons with disabilities are not excluded from the general education system on the basis of disability....; (b) Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities ...; (e) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion [166].

Convention states the States Parties responsibility to take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in sign language and/or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative&alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities [166].

Convention highlighted the importance to ensure access for people with disabilities to general tertiary education, vocational training, adult education and lifelong learning without prejudice and on an equal basis with others. States Parties are required to provide reasonable accommodation to people with disabilities.

As a result, the implementation of inclusive schools has been a goal in many countries. We support the idea that inclusion is based on the concept of social justice. In this regard, all students are entitled to equal access to all educational opportunities, irrespective of disability [160].

International human rights agreements, covenants, and other legal documents, offer definitions of inclusion with different focus on equity, access, opportunity and rights. These features are interpreted into practice with definitions that conceptualize inclusion education into two broad categories:

1. based on key features and
2. the removal of that which excludes and marginalizes [84].

Inclusive education requires a more defined conceptual focus that can help overcome the misinterpretations and confusing practices that may occur.

The definitions assume a set of common elements that are static in principle, but in daily practice, they are continuously influenced by different factors, such as the change/transformation of educational practices, the political, economic, and socio-cultural context, and the current situation in the community.

Integrated education and community-based rehabilitation represent complementary and mutually supportive approaches to serving children and other person with special needs. Both are based upon the principles of inclusion, integration and participation, and represent well-tested and cost-effective approaches to promoting equality of access for those with special educational needs as part of a nationwide strategy aimed at achieving education for all [170].

The difference between integrated and inclusive education relates to access and quality. “Save the Children” notes that integrated education tends to focus more on children with disabilities

attending school whereas inclusive education focuses more on ensuring children with disabilities are learning [182]. At the same time, inclusive education is largely about changing school rules and culture, policies and practices so that they are sensitive to the diversity of students in their community. This means that all children, including disabled children, have access to schooling within their own community and are provided with adequate learning possibilities to achieve their full potential [182]. Thus, it is crucial that parents, children, school staff and communities will change their attitudes and understanding of why inclusion matters. School can play essential role to support this efforts.

Today the demographic profile of students in the schools is more complex than ever before. The idea of the regular classroom as offering the best opportunity for learning, and therefore the one to which all students are entitled, is supported by research [118; 119; 107; 93; 80; 78] that suggests that students who do not have access to this environment, and those who are excluded from it, are disadvantaged not only in their immediate educational opportunities but long into adult life. This disadvantage is particularly acute for students with disabilities. From school year 2009–10 through 2020–21, the number of students ages 3–21 who received special education services under IDEA increased from 6.5 million, or 13 percent of total public school enrollment, to 7.2 million, or 15 percent of total public school enrollment [120].

Inclusion is an important aspect in the education system. It promotes self-determination and participation of individuals with disabilities as any other minority in the community [77]. In addition, while some authors question full inclusion, most would agree that the principle of inclusion and appropriate placement within an inclusion delivery system should be seen considered as a right of children with disabilities. Several United Nations policies affirm the right of all children, including those with a disability, to be valued equally, treated with respect, provided with equal opportunities within the mainstream system, and experience full and effective participation and inclusion in society [78].

We can mention that during the last years the definition of inclusive education was explored by different authors and institutions.

The Newfoundland and Labrador Department of Education and Early Childhood Development (Canada) defines inclusive education as a philosophy that promotes [182]:

- the right of all students to attend school with their peers, and to receive appropriate and quality programming;

- a continuum of supports and services in the most appropriate setting (large group, small group, individualized) respecting the dignity of the child;
- a welcoming school culture where all members of the school community feel they belong, realize their potential, and contribute to the school's life;
- a school community which celebrates diversity; and offers a safe school environment.

These principles apply to all members of the school community regardless of economic status, gender, racial or religious background, sexual orientation, academic ability or other facet of diversity [182]. The proposed definition is large. The shift towards inclusive education involves a reorientation of how individuals perceive the learning environment. The classroom is approached as a diverse setting, with a variety of students with individual learning styles, abilities, experiences, and unique backgrounds. Also, an inclusive classroom is oriented not only respects existing differences but explore/embraces it.

Designed as part of the Education for All paradigm, inclusive education is an approach that requires all children to have equal opportunities to attend the same school and learn with their fellows regardless of their intellectual or physical abilities, their cultural, social, ethnic, racial, religious affiliation [183; 161].

According to UNESCO, inclusive education is a process that involves the transformation of schools and other centres of learning to cater for all children – including boys and girls, students from ethnic and linguistic minorities, rural populations, those affected by HIV and AIDS, and those with disabilities and difficulties in learning and to provide learning opportunities for all youth and adults as well. This is intended to eliminate the exclusion that is a consequence of negative attitudes and lack of response to diversity of race, economic status, social class, ethnicity, language, religion, gender, sexual orientation and ability [160].

Very often, the *concept of inclusive education* is normally associated with including children with special needs in the classroom environment. In practice, the scope of inclusive education is that children are included in ALL elements of the learning environment irrespective of any aspect of diversity. Such inclusive education involves much more than just the placement of the child in the school. It includes all students and involves parents and various parts of the school environment: culture, rules and traditions.

From our point of view, *from a broad perspective the inclusive education represents a comprehensive socio-educational process to ensure “de facto” the disable students' rights to*

education, involving students, parents and community with a major goal: future social integration of disable persons and creation of an inclusive environment at community level and whole society. From a narrow perspective the inclusive education is focused on the learning environment: taking into consideration their diversity, their performance must be related to their different capacities, content must be linked to life, the educational strategies must be differentiated, with final goal to increase students' learning motivation and progress and creation of school inclusive culture.

Based on practical experience, some author promote creation an *inclusive school culture* - as an opportunity to teach students about the value and essence of inclusion starting at school, which lays the foundations for their development as future citizens [174; 51; 25]. In this sense, they will learn inclusive behaviors that, in the end, can contribute to the development of inclusive relationships at all levels, the formation of truly inclusive communities. At the same time, in this context the school offers parents opportunities to learn together with their children about inclusion, acceptance, non-discrimination and community spirit.

According International Standard Classification of Education (ISCED 2011), Special needs education is oriented to facilitate the learning of children, students and other individuals who, for various reasons, require additional support and adaptive pedagogical methods to participate in educational process. Reasons may include (but are not limited to) disadvantages in physical, behavioural, intellectual, emotional and social capacities [99].

At the same time, special attention should be focus on physical education.

Theoretical approach on physical education and inclusion

Teachers as well researchers of Physical Education (PE) report that there is a decrease in participation in physical activities in schools within the frame of PE classes with age growth [apud 90; 104]. The participation of children in sports in general, and in competitive sports in particular, is a social phenomenon. It seems that the number of children participating in sport activities is growing every year, mainly among 12-13 year-olds. Nonetheless, starting from this age upwards, that is, till graduating from secondary school, the number of participants decreases significantly, whether in Israel or other parts of the Western world [apud 112].

Inclusion focuses on the need for schools to adapt in order to meet the needs of all children, and not children having to change to meet the requirements of the school. This reform in the school system requires a new and different school culture, a culture whereby teachers have to change their beliefs, attitudes and behaviour towards students with diverse needs [apud 103].

Researchers and psychologists in sports sought psychological theories and approaches to explain the persistence of exercise. They found that there is a connection between the goals, beliefs, predictions and success and participation in physical education [78; 67; 49].

Behavior of participants on exercise depends on their orientation about the goals of the activity. They observed three types of goal orientation:

1. Task orientation – appears in the investment of effort in performing the activity - task, while ignoring the results of the competition.
2. Ego-oriented – self-orientation-appears when the purpose of the activity is to demonstrate the ability and make most of it will be higher than others (i.e., to win the competition).
3. Orientation for evaluation and social acceptance - appears when the purpose of the activity is to achieve a positive evaluation from others and be acceptable.

The study findings report that, over time, the children were self- oriented and found a positive relationship between achievement goals and the subjective value of students. Most students reported that the rate of physical education is interesting, useful, and important [54; 60].

The philosophical perception set at the basis of the integration concept is that the child with special needs has equal rights like a child who is not disabled; thus his basic right is to study together with students of the same age group in the same educational system.

Participation of individuals with disabilities in physical activity has a tradition of over 50 years. Following Pollaway, Smith, Patton,&Smith (1996), Reid has suggested four paradigms or approaches depicting the historical development of educational and physical activity practice related to individuals with disability throughout the last century. According to Reid's analysis, the first half of the 20th century followed a facility –based paradigm, where individuals with disabilities were mostly institutionalized [132]. Starting with the early 1950s, the service based approach in physical education appeared, known as adapted physical education, whose main goal was to provide services to “students with disabilities who may not safely or successfully engage in unrestricted participation in the vigorous activities of the general physical education program” [86]. With this approach, students with disabilities were still treated in exclusive setting and programs. A major breakthrough toward integrated participation came in the late 1970s, when legislation promoting placement of students with disabilities in general education settings was adopted [87].

Nirje (1969) appears to be among the first scholars challenging the separation model of specialized education systems for children with mental and physical disabilities [122]. He named this

concept the normalization principle, inspiring Wolfensberger (1972) and others to launch considerable changes in the educational support systems, moving toward practices labeled “mainstreaming”, “integration”, and finally “inclusion” [apud 122]. Stainback and Stainback (1996) have defined inclusion as a cohesive sense of community, acceptance of differences and responsiveness to individual needs [156]. The fundamental principle of inclusion is the valuing of diversity in the human community [90]. For some authors, inclusion is viewed as a normal imperative consisting of a non-categorical, almost limitless inclusion of children of all abilities [4; 5; 6; 11]. With this in mind inclusion becomes more than simply placing children with and without disabilities together. It means allocating services, changing attitudes, and developing a sense of responsibility, suggesting that instead of getting a child with a disability ready for the regular class, the regular class gets ready for this child [15], [78], [125].

The significance of segregating the disabled child from other children of his age, and the difficulties that may occur as a result of this segregation are described in literature through different views. The segregation of the child with special needs from the rest of the society, segregating people with special needs in various fields of life, is a discrimination targeting to make life easier for people who do not have special needs, as society prefers to press the weak away. Therefore, the arguments according to which the exceptional child needs a special learning environment can only refer to discrimination more than consideration.

Referring children with special needs to special education moves the burden of therapeutic responsibility from the regular, normative school to the disabled individual and the dealing staff, and thus releases the regular educational system from the responsibility of educating these children and dealing with their problems. It is true that there are exceptional children who need more teaching and more time for learning, yet, principally, the exceptional child needs teaching that is different in essence from the teaching given to the regular child. According to this approach, teachers of special education are educators who have special skills and not teachers of special children.

Although inclusion has never been legally mandated in the USA, and schools are responsible only for providing the Least Restrictive Environment (LRE) as defined by Individuals with Disabilities Educational Act (IDEA), the American Alliance of Health Physical Education Recreation and Dance (AAHPERD) has developed a position statement on inclusion and physical education (AAHPERD, 1995). This statement provides gold standards for inclusion practices in American schools, suggesting a variety of placements and supportive modalities (assistant teacher, co-teaching,

teacher-aid, peer tutoring) that need to be developed and used in order to account for LRE [apud 53; 130].

Following the USA [66; 70; 173], an increasing number of countries, including Australia [55; 85; 97], Canada [91], Czech Republic [105], Greece [157] and Israel [49; 80; 93; 94; 95; 194]; Great Britain [25; 189] and others, have adopted legal administrative, and practice related changes whose aim is the participation of children with disabilities in general education systems.

Out of this perspective viewing the exceptional children as an integral part of the regular society, two models have been constructed which complement each other, and their goal is to reach actual integration of the exceptional child into the society: the Behavioral Model, which advocates normalization; and the Educational-Humanist Model.

Inclusion is an important aspect in the education system. It promotes self-determination and participation of individuals with disabilities as any other minority in the community [90]. In addition, while some authors question full inclusion, most would agree that the principle of inclusion and appropriate placement within an inclusion delivery system should be seen considered as a right of children with disabilities. Several UN policies affirm the right of all children, including those with a disability, to be valued equally, treated with respect, provided with equal opportunities within the mainstream system, and experience full and effective participation and inclusion in society [47; 62; 81; 160; 161; 162; 163; 165; 166].

Despite the adoption of several documents in the field, there are various debates regarding the use of the words ‘special needs’ and ‘inclusion’. At the European level, official policy statements have only relatively recently referred to ‘inclusion’ and ‘inclusive education’, rather than ‘integration’ and ‘special educational needs’ [154, p.22].

According to European Agency (2016), in all countries, learners with SEN “include those learners identified as having disabilities, and additional support and resources are allocated accordingly. However, for most countries, the ‘label’ of special needs also includes other groups of learners” [154, p.23].

In the context of present research, we adhere to definition proposed by OECD “Students with special needs” are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged [146, p.22].

Physical activity of young people is an important criterion in defining health. Participating in sports maintains a healthy body, and is also a social tool that can be used to connect different people.

Physical activity develops social communication skills, so it is important to understand the factors that drive participation in sports, and to understand the purpose of each person to his participation in physical activity [88; 89].

Physical education classes in school, especially in junior high and high schools, are included in the category of classes that many students seek to avoid participating in. Physical Education is an integral part of the curriculum and education in the school because physical activity is an important factor in child development, not only in physical but also the psychological and social aspects [105].

However, it was found that physical education is one of the subjects that many students are not motivated to attend, and they often evade it. Physical education teachers and researchers in the field report a significant decrease in the rates of participation in physical education classes by adolescents. At the same time, physical education of students with disabilities represents one of the big challenge for the students and for the educational system too [159; 174].

Including students with disabilities in regular education is very meaningful and is not an easy task. How solid is the argument of integrating students with disabilities in physical education classes which is a task even more difficult. To succeed to integrate students with disabilities in any program of education should increase the motivating factors, which is an approach that many theories of psychology have addressed. Motivation is defined as the aspirations, needs and interest stimulate the organism pushing and targeted it for a specific purpose. There is an extensive system of internal and external motivations triggers, directed, and organize individual behavior.

From our point of view, apprown from a conceptual perspective, *inclusive physical education is based on social, pedagogical and psychological fundamentals* [48]. The social fundamentals aim at the dynamic balance between personality and school/ society; integration of the individual with disability into education system and then into society (including the legal framework, norms, traditions, community's culture/ inclusive culture). The pedagogical fundamentals refer to the theories of education and learning, including specific concept on inclusive education; general and specific principles of education. The psychological fundamentals relate to theories of personality development; to the theory of early intervention in child development; to the theories of evaluating the psychic structures of personality (self-esteem, survival capacities etc.).

Research findings also report that there are seven values inherent in sport; the sport has to teach us the value of cooperation, sport is a tool for good health, makes better citizens, teaches us the competition, helping people to move forward and achieve social status, enhances the self-restraint,

and teaches us how to get ahead in life and become more successful.

People who have a high value target orientation can take up the sport as a tool which can be applied to the positive values at sport, and those who have high value orientation ego may perceive the sport as a negative value [107].

The three types of orientations is very significant for the planning of lessons. That is, if you can know what the orientation or goal of that child in PE lessons, we can determine the positions of the two sides, whether it is a student-student relationship or the image of an older person. These factors are motivational factors or suppress participation/non-participation of students with special needs in PE lessons. According to achievement goal theorists, dispositional achievement goals and perceptions of the motivational climate have been found to interact and affect patterns of motivated behaviors.

Generally, achievement goals reflect how individuals evaluate their personal competence in achievement settings and are either self-referent or other-referent, thus formulating two distinct goal states of involvement [108, 109].

The fundamental rights of children with developmental disabilities to obtain an education was the first concern in community mobilization in the 1950s. At the time, it was commonly believed that children with developmental disabilities did not have abilities to learn. This was among reasons why the government accepted no concern regarding their education. Parents of children with developmental disabilities, realizing the potential of their children to learn and grow, reacted by setting their own schools in church basements and private homes.

Government slowly assumed responsibility for funding parent-run schools and agreed that funding and public schooling should be available to children with disabilities. The first educational programs developed by school boards were segregated. Nonetheless, this successfully laid the groundwork for parents and other interested stakeholders to request the inclusion of children in general education classes. The movement to inclusive education grew in the late 1980s. Nowadays, however, low funding for public education represents a risk to loose the gains that have been made in inclusive education [175].

Therefore, for the implementation of the concept of inclusive education, pupils and students should be looked at as they are, are different, their performances must be related to their different capacities, the content must be life-related, the educational strategies used must be differentiated, and the assessment must be formative, which will highlight students' progress.

Although the important integration issue had become imperatory within the mainstream school challenging the education system to address it, children with disabilities must still face impeding barriers which are directly related to their disability but not less to the stigmatic attitudes of their new surroundings, including teachers, which should assume the responsibility to integrate them. The barriers of participation in physical activity or the exclusion of children from it are the practical outcome of physical education teachers' lack of coping resources and pedagogical strategies in dealing with the inclusion problem, although they may have the awareness and the will to do so.

Considering the above mentioned realities within the context of the contemporary dynamic socially oriented perspective at the turn of the millennium and the new consequent policies of the educational system to integrate children with disabilities in the regular system, it has become urgent not only to opt for inclusion but also to facilitate the complex process of putting into practice the social integrative approach for the benefit of both regular pupils and pupils with disabilities. However, at this crucial crossroad when the direction of inclusion is dictated by most education policy makers, the implementation relevant strategies are still unclear to the system, namely to the physical education teachers themselves.

At the implementation level, the inclusion education stream although highly recognized faces various transitional and strategic problems, including stigmatic attitudes and insufficient of unexperienced physical education teachers. Being aware of the students with disabilities rights to be an integral part of school and be included as far as possible in various school activities, careful attention should be devoted to the required strategic steps since only a cautious professional implementation of the inclusion policy, can ensure its wishful success [5; 6; 7, 11; 22; 36; 42; 51; 56].

Inclusive education is often associated with students with disabilities or "special educational needs." In fact, according to the concept of "school for all", inclusion refers to the school education of all children and young people.

We conclude that the concept of inclusive education emerged as a response to traditional and outdated approaches, according to which certain categories of children were excluded from mainstream schools because of disability, learning difficulties/problems, family vulnerability or other reasons. The concept of inclusion has its origins in the Universal Declaration of Human Rights (UN, 1948), which recognizes that all human beings are born free and equal in dignity and rights.

The situation regarding special needs education (SEN) or inclusive education is different from one country to another.

Consequently, **in Israel and particularly in the Arab sector** education policy makers have affirmed a commitment to reducing the numbers of pupils/students educated in segregated special schools and to moving more of these pupils/students into the mainstream of education [51; 53; 94].

1.4. Overview of inclusion of students with disabilities in Israel and in Moldova.

International practices

In the context of present research, the general overview of situation in MENA region (MENA region as containing 20 countries: Algeria, Bahrain, Egypt, Iraq, Iran, *Israel*, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen) represents the framework for understanding of socio-cultural context (Appendix 2).

Possible frameworks in different countries for children with special needs are different and varied. Some countries have chosen one of the common methods (frame of the special education framework in the special classes in regular schools and integration classrooms). Others have chosen to adopt some alternative frameworks and chose to help other mechanisms.

The Integration Frame:

- In Italy, as stated, the policy of inclusion is complete, with a special teacher for every four students with special needs. Inclusion is through cooperation between the homes - schools, social services assistance and medical services, recreation centers and sports and activities of private entities. Although there is an official policy of full inclusion and most students with special needs are enrolled in regular schools, there are also special schools for blind children and severe deaf.

Parallel Number of Frames:

- The integration of children with special needs in Austria is conducted in a number of ways: integrated classes where learners are normal children and children with special needs who receive full assistance of teacher, integrated classes where there is a smaller percentage of children with special needs only partial assistance of a teacher's helps, when most of the work related to special education rests on the shoulders of the regular teacher, special class in a regular school allowing to switch between regular class special classroom, depending on the suitability of the child's level for class.

- To encourage the integration framework, developed impelled support centers/regional (Matia). Every Matia gets a budget on population size, the number of students with disabilities and their deficient type area under its responsibility. These frames provide integrated services to students and educational institutions used to allow separation dependence that exists between the student's curriculum framework and a package of services provided(1996) [53]. In 2001, 67 Matias worked throughout the country (State Comptroller No. 52 in 2001).

Legislative aspects of integrating students with disabilities in Israel:

In Israel, the prohibition of discrimination against persons with disabilities is stipulated in the Law on the Equal Rights of Persons with Disabilities. The Equal Rights Law includes definition "person with disabilities" as a "person with a permanent or temporary physical, mental or intellectual including a cognitive-impairment, due to which her/his functioning is substantively restricted in one or more major spheres of life". On the basis of equality established under the Equal Rights Law, children with disabilities have the same rights as other children [93, p. 59].

Provision of education in Israel is governed by three major laws: Compulsory Education Law (1949), State Education Law (1953) and Special Education Law (1988). Israel ratified the 2006 Convention on the Rights of Persons with Disabilities (CRPD) in 2012 and amended the 1998 Special Education Law in 2002 to ensure the integration of pupils with disabilities into regular classrooms in compliance with its provisions.

According to legal provisions, regular schools are obliged to include pupils with disabilities in regular schools, with the help of assisting teachers (the ruling was specific to Down syndrome, but the implementation was for all children with disabilities). In 2018, Amendment 11 of the Special Education Law was adopted, allocating extra funds to special services for the education of children with disabilities in separate settings, contrary to the Ministry of Education's previous recommendation to establish a fund for the inclusive education of those children.

Special education in Israel is provided in special kindergartens, special schools and special (self-contained) classes within mainstream schools. IEPs for every child with disabilities, regardless of educational placement, are mandatory by the Special Education Law (1988).

Inclusion of students with disabilities in mainstream education in Israel has been practiced on a voluntary basis since the mid-1950s. It became mandatory in the mid-1990s following special education legislation which, in more ways than one, supported ongoing practices. It echoed commitments and concerns of legislators and educators worldwide as stated in the Circular of the

Director General of the Ministry of Education (58/9, May 1998) [apud 194].

By the school-year 1998/99 it became mandatory for all schools in Israel to include students with disabilities [194; 93]. Consequently, special education services are provided either in non-inclusive settings that are detached from the mainstream of education (i.e. a special kindergarten or a special school) or in self-contained special classes within mainstream schools. In addition, growing numbers of children are included in mainstream education where they receive individual assistance in the classroom or in a 'pull-out' programme. Children with SEN in Israel are defined in the following way: 'children with special needs that deemed eligible for additional educational services in regular educational institutions' (Special Education Law, Amend. No.7, 2002) [194].

Based on the definition of disability in the 1988 Special Education Law, amended in 2002, children have special education needs when a 'developmental impairment' limits their adaptive behavior. The law used the term 'exceptional children' in contrast with the term 'children with special educational needs'. The 2018 Special Education Law defines a child with special education needs in Israel as 'person of the ages 3-21, that has one of the disabilities listed, which limits his/her function in one of the function levels detailed.' [194]

As stated by the Israeli government (2013): 'Children with physical, mental, or learning disabilities are placed in appropriate frameworks according to the nature of their disability, to help them eventually achieve maximum integration into the social and vocational life of their community. Thus, some are taken care of in special settings, while others attend regular schools, where they may be assigned to self-contained groups or to mainstream classes with supplementary tutoring [194]. Learners with disabilities can attend regular class, special education class in a regular school or special education school.

Inclusion of students with disabilities (aged between 3 and 21) in regular education in Israel became mandatory in 2002 based on Special Education Law amendment that recommends integrating pupils with special needs into regular classrooms as much as possible to minimize segregation and exclusion. The 1988 Special Education Law provides for integration through teaching and systematic learning and treatment (e.g. physiotherapy, speech therapy, occupational therapy) to support becoming part of the society and being integrated into the world of work. A multidisciplinary team at special schools develops an individualized education plan that focuses on the characteristics of each child [93]. A 2018 amendment to the Special Education Law gave parents the right to choose the type of learning setting (regular class, special education class in a regular school or special education

school) for a student who is eligible for special education services and emphasized the mandate to include children with special education needs into general education [95].

At the same time, a 'plan for inclusion' aims to reduce the number of students in special classes and special schools and to increase the inclusion of children with special education needs in regular settings. This plan is guided by three main principles: differentiation in line with individual needs, placement in a regular educational facility and organizational flexibility in service delivery. In this regard, a gradual shift has occurred in school organization in Israel.

Inclusive classes have been implemented in which students spend their days partly in regular classes and partly in special classes. In some cases, students with and without special needs study together and are taught by both a regular and a special education teacher. Children with physical, mental, or learning disabilities are placed in appropriate frameworks according to the nature of their disability, to help them eventually achieve maximum integration into the social and vocational life of their community. Thus some are taken care of in special settings, while others attend regular schools, where they may be assigned to self-contained groups or to mainstream classes with supplementary tutoring.

In parallel, special support or resource centres have been established in each community to provide distinct educational services to the learners with special education needs in regular classrooms. These centres, called MATIA – Local Support and Resource Centers or LSRCs – bring the services into classrooms rather than removing children from the class to visit the centres. They also provide assessment, support, interventions and treatments by special education teachers, occupational therapists, physical therapists, communication clinicians, art/movement/dance therapists, etc., and they allocate resources according to specific local needs [194].

Responsibility for their wellbeing is shared by health-care personnel, psychologists, social workers, and special education professionals, as well as by the family and various community support groups. A committee constituted by law and appointed by the minister of education determines the eligibility of disabled children for special education programs and facilities, which are free from age 3 to 21.

Between 800,000 and 1 million people of maximum working age in Israel suffer from disabilities, the rate of people with disabilities in Israel being similar among men and women (2013). At the same time, the rate of disabled people is higher among Arabs (24%) than among Jews. The rate of those with severe disabilities is almost double in the Arab sector [204].

According to the statistical data, the gaps between women and men with disabilities are consistent with the prevalent social gaps between women and men in general. 21% of women with disabilities are in the work market (compared to 60% of men), 26% of women with disabilities have an academic education (compared to 16% of men with disabilities) [95, p.11].

Israel some 60,000 young people with disabilities aged 26-23, this group accounts for about 14% of all young people aged ones, they make up 38% of the young people who are not working and not studying. The number of children with disabilities aged 0 to 18 is estimated at approximately 220,000 children (8.5%), more than half from 220,000 children with disabilities have learning disabilities or behavioral disabilities [204].

About 182,000 children were recognized as having disabilities to institutions in the academic year (2011-2012) in the education system in Israel (pre-elementary, elementary and high schools). They accounted for - 9% of all students in the school system this year. Of them, 35,000 have learned Bbtisfr or genes of special education (19%), and 36,000 attended special classes (20%), and 112,000 were integrated into regular classes (61%) [204]. Only 10% of young people with disabilities receive vocational rehabilitation services or preparation for the job.

In 2015, 99,424 pupils with Disabilities Integrated into the General Education System by Education Level (Elementary, Inter-mediate and High School) [94, p.14].

Between 2017-2022 years the number of Pupils with Disabilities in Education System increased slowly, but irregular (table 1.1.)

Table 1.1. Number of Pupils with Disabilities in Education System (2017-2022) [95, p.51]

School year	Special Education Schools and pre-schools		Special Education Classes in General education	No. of pupils mainstreamed in General Education
	Kindergartens No. of pupils	Schools No. of pupils	No. of pupils	
2017-2018	21,383	27,768	46,678	164,190
2018-2019	22,738	29,235	46,224	176,560
2019-2020	24,026	30,592	47,227	181,133
2020-2021	23,953	31,410	49,763	182,119
2021-2022	25,441	32,496	54,406	172,796

Of interest is the parents' choice regarding the integration of children with disabilities either in special education or integration in general education. The table 1.2. reflects the numbers of students who have passed through the Eligibility Committee in the last two (2) years based on the parents' choice. The numbers reflect the choice of parents, some of whom are new to the system, as the

Committee meets once every three (3) years per student [95, p.51].

Table 1.2. Parents' Choice of Education Settings, (2021-2022) [95, p.51]

	Special Education	General Education
Total	43,637	29,087
Percentage	60%	40%

Education:

- People with disabilities have limited education level lower than that of the general population in Israel. 54% have no high school diploma, compared to 36% in the general population.
- Average years of schooling of Arabs with disabilities is 7.9 years, compared to 11 years on average among Arabs without disabilities and 12 years among Jews with disabilities.

Social participation and isolation:

- The high rate of people with disabilities (14%) live alone, compared to the general population (6%).
- People with disabilities spend less time in various activities: such as work and time away from home (5.9 hours per day on average) than people without disabilities (7.2 hours per day on average).
- The feeling of loneliness is accompanied by 48% of people with severe disabilities and 35% of those who defined mild disability. This compares with 20% of people without disabilities.
- People with disabilities feel that they are less involved in society than people without disabilities.

Attitudes towards people with disabilities:

- A negative attitude, stigmatization and prejudice undermine the kidney of people with disabilities in companionship in education, the workplace and the wider community.
- Because of the stigma, many people with disabilities prefer to hide their disability mostly people with mental disabilities and other disabilities that are not visible.
- 18% of respondents believe that people with disabilities are disturbing dangerous to society.

Acces to properties:

Most public discovers openness and willingness to live high in a person with a physical disability or rent an apartment (82%), however, the willingness to live in a person with a disability, mental, or autism or rent an apartment much lower 39%.

In 2006-2011 were opened 105 domestic foreign housing frames of the Ministry of Welfare for people with disabilities, about 20 of them active opposition expressed by residents and 3 additional facilities were not opened at all of its opposition to such.

- The issue of the integration of students with disabilities in regular educational institutions is about why we are faced initiative of the education system for many years. Special Education Law was enacted in 1988. This amendment deals with the integration of these students into regular education, as well as Israel's accession to the International Convention, the rights of the child, were an important step in the integration of students with disabilities in the education system. But despite this progress can not be an adequate solution to the problem accessibility of educational institutions.
- Issues of physical accessibility of educational institutions in 1995 came the opening of the Supreme Court determined: its license commitment for the production of effective and reasonable access to educational institutions ... without full access harmed his dignity, equal opportunity will be hurt and hurt his integration into society.
- In 2007, the Ministry of Finance Ministry of Education funds to carry out basic accessibility work and individual access to works budget base.
- Report Development Administration Department of Construction and budgeting of the Ministry of Education show that local authorities are taking advantage of a 20% permissions are they by the Ministry of Education for the performance of individual accessibility.
- Hydrogen works accessible on the school site is the responsibility of the Ministry of Education, and the necessary actions outside the school compound are the responsibility of local authorities, this fragmentation makes it difficult to work full accessibility of educational institutions.

There are several advantages for the opening of regional support centers:

- ✓ Ensure therapeutic support for students with severe disabilities, who are enrolled in regular education settings.
- ✓ Enable the regular education to receive the services of special education for students with various disabilities who are able to continue their education in the regular classroom and fit in academically and socially, thereby preventing the referral to placement committees and special education frameworks.
- ✓ Encourage settling systemic vision of ways to treat students with special needs who learn in regular education settings, with coordination between the different programs implemented in

the education system for this population.

- ✓ Foster cooperation between the regular education system and the special education system in terms of treating students who need special education services, who enrolled in regular education.
- ✓ Gradually bring balanced allocation of hours included in the integration in normal schools, according to uniform criteria.
- ✓ Gradual integration frameworks to encourage special education students enrolled in regular education.
- ✓ Allow maximum flexibility in utilization hours of an integration package according to the changing needs of students everywhere.
- ✓ Resource allocation system based primarily on the number of children with at school weighted with additional criteria (distance from the periphery, parents' education and socio-economic indices details). With the master plan applies beyond the package of services provided to child services from regional communities, the control of resources will not be school, but Central and local authority. Addition, the school receives additional resources to meet the needs of children screened in order to strengthen the regular educational system.

It should be mentioned that inclusion and integration, according to the 2019 voluntary national review on Implementation of the Sustainable Development Goals, are viewed as ‘the best way to advance special needs learners in regular education, while applying psycho-pedagogic principles suited to the needs of each student.’ Inclusion, which extends to ‘all student populations’, aims at advancing students in a heterogeneous class, ‘while expanding the ability to embrace them and provide a variety of solutions suited to each learner [193]. At the same time, according to the Report of Ministry of Justice (2022), there specify Equality and Non-Discrimination of Minorities PWD in Arab Society, highlighting that Commission's website, which includes extensive information on rights and resources for PWD, was translated into Arabic only in 2020 [95, p. 7].

Legislative aspects of integrating students with disabilities in Moldova

The ratification by the Republic of Moldova of the UN Convention on the Rights of the Child (1993) led to the recognition of the value given to the child, his need for protection, education and support, paved the way for important changes.

The ratification of the UN Convention on the Rights of Persons with Disabilities (2010) by the Republic of Moldova has spurred further changes in the education system, namely in the promotion

of inclusive education. Ratification of this document involved reforming the state's disability policy. As a result, the “Strategy for Social Inclusion of Persons with Disabilities” (2010-2013) and the “Development Program for Inclusive Education in the Republic of Moldova for 2011-2020” were approved, approved by the Government Decision of the Republic of Moldova no. 523 of 11.07.2011.

By Moldovan legal framework, there are no restrictions for persons with disabilities to attend to regular schools. During the last years, a number of legal documents were issued and approved by Moldovan Government that come to aid the inclusion of children with disabilities into regular schools:

- Education Code of the Republic of Moldova No. 152 dated July 17, 2014 / Chapter VI. Education for children and pupils with special educational needs. Inclusive education
- Strategy on social inclusion of persons with disabilities (2010-2013)
- Law on social inclusion of persons with disabilities (30.03.2013)
- The Consolidated Strategy for the Development of Education for 2011-2015, approved by the Government Decision no.523 of 11 July 2011 and the Consolidated Actions Plan for the education sector (2011-2015), approved by the Minister's Order Education no. 849 of 29 November 2010
- Program on Development of Inclusive Education in the Republic of Moldova for 2011–2020 years, approved by the Government Decision nr. 523 from 11.07.2011.
- The methodology of the complex and continuous evaluation of children with special educational needs.
- Ministry of Education Decree on approval of the model structure of the Guide on elaboration of the Individual Educational Plan (2011).
- Ministry Of Education Decree on implementation of the Methodological Guide on curricular adjustment and evaluation of the school progress within inclusive education context (2012).
- Ministry of Education Decree on final evaluation and certification of pupils with special educational needs included within general compulsory education (2012).
- Framework Regulation and Standards of Functioning of the Education General inclusive Unit.

The legal framework in the Republic of Moldova is in the line to international standards; the concept of inclusive education development endorsed and reflected in policy documents serves as a general framework for the inclusion of all children at high risk of exclusion; it is based on the principle of education for all, with the aim of capitalizing on the learning potential of each child. The Republic of Moldova created the mechanism to solve the cases of rejection of students with disabilities from

mainstream schools – The Council on the Prevention and Elimination of Discrimination and Ensuring Equality, an autonomous, unbiased and independent public authority (2013) and other (Box 1).

There is a political will related to inclusive practices, the active involvement of representatives of various international agencies, as well as non-governmental agencies in the implementation of inclusive education. In order to implement inclusive education, support services have been created at the national level, the Republican Center for Psychopedagogical Assistance (CRAP), at the district level the Psychopedagogical Assistance Service (SAP), at the institutional level (Resource Centers, interdisciplinary commissions) aimed inclusion of children with SEN in general schools. The support teacher is a new position that has been introduced in the Classifier of Occupations in the Republic of Moldova. There is an improvement in the attitudes of society members towards children with SEN. The attitude of colleagues towards children with SEN depends on their type of disability, they have a more understanding and protective attitude towards children with physical problems [4].

Box 1. Positive practices in Moldova: The Multidisciplinary Intra-school Commission [6]

The Multidisciplinary Intra-school Commission (MIC) is the institutional framework for action which provides access to education for children with special education needs (SENs), as well as psycho-pedagogical information support to Managerial staff, teachers, parents / guardian - all of them who are involved in the educational inclusion of children with SENs.

The Multidisciplinary Intra-school Commission*

- develops an annual activity plan;
- identifies children with SENs in the locality / school in collaboration with the social worker and the medical assistant (based on the criteria) and develops the list of children with SENs;
- performs initial assessment of children with SENs in the community;
- collaborates with the District/ Municipal Service of Psycho-pedagogical Assistance (SAP) which performs the complex/ multidisciplinary assessment of children with SENs;
- decide to creation of the teams focused on elaboration of Individualized Educational Plan (IEP/ PEI) for each child with SENs and them proposes for approval to the Teaching Council;
- assist IEP teams in developing, implementing, evaluating IEPs;
- guides and monitors the process of development, implementation, evaluation of IEP;
- appreciates the quality of the education and training process of children with SENs (assistance during the lessons and the extracurricular and community activities);
- provides support to teachers, parents and community members in educational inclusion of children with SENs;
- participates in school self-evaluation from an inclusive education perspective based on standards and provides suggestions for improvement;
- explores the successful inclusion practices and promotes current trends in the field of inclusive education.

But the most important challenge remain – the rezistance / non inclusive attitude at different levels (parents, non-disable students, teachers, managers, decision makers).

Significant gaps in the level of development of the competencies of the teachers who did not benefit from training in the field of inclusive education, compared to those of the teachers who attended training courses; the longer the training period, the more positive the attitude towards inclusion. Society/ community stereotypes and reluctant attitude towards human diversity. The attitude of colleagues towards children with SEN is less understanding and protective in the case of children with intellectual disabilities. There is also a certain reluctance to include children with visual and hearing impairments in education process.

Despite the arguments in favor of children with SEN, some teachers and managers mistakenly consider that inclusive education also has certain limitations: little attention is paid to other students, very high workload. Also, insufficiently developed infrastructure and inadequate endowment of general institutions for inclusive education can be mentioned [4].

Mainly, the barriers for inclusive education of persons with disabilities in Moldova are social: persistence of stereotypes, resistance from school management, school teachers, parents of nondisabled children. Also, there are financial barriers for inclusive education of persons with disabilities: there are no sufficient financial resources to adjusts to the needs of persons with disabilities, to give special training to teachers that would have to work with persons with disabilities.

Some parents fear that their children's education will suffer if a child with a disability is in the classroom with them. Although recent data show that the situation has improved, many parents and carers still believe that children with disabilities should stay at home without receiving an education, or be sent to a residential institution or a special school.

Children with mental disabilities are more stigmatized than those with physical disabilities. Due to the lack of support services and the reduced capacity of staff in regular educational institutions to care for children with disabilities, the inclusion of these children is slowed down. This is also why children with less obvious forms of disability or learning difficulties are left without the individual assistance they need to learn so that they can reach their full potential. Less than 20% of all parents believe that children with disabilities should attend general kindergarten with other children. (UNICEF Moldova, [192]).

We conclude: the experience of these countries confirm that the adoption of legal documents does not mean the automatic implementation. Creating the legal framework is only the first important

step, that should be enforced by implementation mechanism and relevant resources, mentioning the existence of both terms 'students with disabilities' and 'SEN' in the educational area of Israel and the Republic of Moldova. At the same time, in Israel the term 'disabilities' is used more frequently, while in Moldova - SEN. Despite various challenges, Israel accumulated some experience on the integration of students with disabilities into PE activities, that can be useful for education system in Moldova.

1.5. Conclusions on Chapter 1

The synthesis of the analyzed ideas confirms our conclusion that the teachers' attitude can be considered as one of the significant variables in the education of students with disabilities. The positive attitude of teachers can motivate disabled students to actively participate in PE activities. Currently, the process of including students with disabilities in PE together with non disabled students is considered a particularly important scientific problem, it can be recognized as a new direction of scientific research, being in direct relation with the change of the teacher's attitude.

1. Thus, in the first chapter the basic concepts were specified and described: attitudes, teacher's attitudes towards inclusion/students with disabilities, inclusive education, social integration and inclusion, special education needs, school' inclusive culture. Considering the specifics of physical education, in this paper we used the term 'students with disability', which correlates with the term 'special education needs' (SEN).

Correlating the definitions expressed by various authors and from various fields, we contributed to explanation of the term of teacher's attitude in the context of inclusive education, proposing exhaustive definition: *the positive attitude is largest than inclusive attitude towards students with disability, including friendly approach and respect, support/ encourage, empathy, oriented to individual needs and preferences of the disable students, without any limitations.*

2. Aiming at the relationship between the teacher's attitude and the inclusion of students with disabilities in PE activities, new opportunities are created to motivate students with disabilities to participate with non-disabled students in PE.
3. The analysis of international and national documents (Israel and Moldova) confirmed the existence of comprehensive legal framework on protection of human rights of children with disabilities. Based on the analysis of their structural elements, the theoretical tool was elaborated, structured in Appendix 1. Timeline of inclusive education events and documents, which will be the basis for the further elaboration of the Pedagogical Model. Also, the

importance to ensure real implementation of the legal documents, to ensure efficient inclusive education of disable students should be mentioned. The focus should be not only on protection but also on ensuring the attainment, self-realization of disable students.

4. We pointed out the priority of identifying or alternatively elaborating innovative effective interventions to suit the specific needs of students with disabilities in their new inclusive contexts and concentrate on programmes which besides reducing the high incidence of disability side effect implications, enable the social approach of accepting difference and practically fostering equality. To adequately apply inclusion principles, strategies to reduce exclusion incidence should be utilized in accordance with previously effective interventions and specific causes that have been identified.

2. THE METHODOLOGICAL FRAMEWORK OF DEVELOPING PHYSICAL EDUCATION TEACHERS' POSITIVE ATTITUDES TOWARDS INCLUSION OF STUDENTS WITH DISABILITIES

2.1. The Concept of developing physical education teachers' positive attitudes towards the inclusion of students with disabilities

Based on international standards and literature review, we deduced the importance of educational strategies focused on improving the PE teachers' attitudes regarding the inclusion of students with disabilities into PE lessons/ sport activities, taking into account the specific needs of girls and boys, but also the sociocultural and family context etc.

In order to ensure Successful Inclusion the following points to be considered in integrating children with special educational needs into inclusive schools (figure 2.1) [adapted based on 4; 96]:

- *Curriculum flexibility/ adapted curriculum* (to facilitate the free circulation of materials and equipment related to the needs of people with disabilities; to provide all children, including with special needs, with the same education, providing additional assistance and support to children requiring it; to use affordable technology when necessary to enhance success in communication, mobility and learning; to provide a continuum of support, within the school and extending, where necessary, to the provision of assistance from specialised support staff, with the focus on pupils' own experience etc.). In relation with PE curriculum should be adapted from minimal assistance in classrooms to additional learning support programs, based on special equipment and activities, with focus on students specific needs.
- *School management* (simplification/ flexibility of management procedures, redistribution of financial and educational resources, diversification of equipment and learning options, dialogue peer-to-peer, support for students facing difficulties and the development of partnerships with parents and the community). In relation with PE special equipment and educational resources should be ensured; peer-to-peer: students with disabilities and nondisabled students.
- *Teaching staff* (all teachers should be trained to exercise their knowledge and skills in adapting curricula and methodology to specific work with both - children and students with disability and peers; the skills should respond to special educational needs; to collaborate with others specialists and co-operate with parent; dialog with community etc.). Specifically, PE teachers need special formative programme how to involve in PE activities – disabled students with nondisabled peers.



Fig.2.1. Successful Inclusion points [adapted based on 4; 96]

- *Parents' involvement* (The both groups should be trained: parents of students with disabilities and parents of non disabled students. Parents of disabled students should be trained/ informed about specificity of special education needs of students; to support the disabled students' activities; to collaborate with teachers and community. Parents of nondisabled students should be informed about educational and social benefits of educational inclusion of students with disabilities on equal base with nondisabled students).
- *Community' involvement* (different components aimed at the school in the frame of community: culture, traditions, policies and practices, infrastructure should take into consideration the needs of disabled persons, especially students; creation of inclusive community culture; partnership: community-family-school).
- *Information and research* (special needs education should be integrated into the research and development programmes of research institutions, also into curriculum development centres, with focus on innovative teaching-learning strategies). In relation with PE, public awareness and focused research needed.

The figure (2.1.) can be updated based on experience/ specific context.

In the context mentioned above, our Concept of developing physical education teachers' positive attitudes towards the inclusion of students with disabilities contains the following components:

- analysis of physical education sector in Israel in relation with inclusion;
- adaptation of physical education (APE) for Students with Disabilities;
- overview of Socio-cultural determinants of teachers' attitudes towards the disabled students.

2.1.1. As important step and methodological tool we would like to propose the analysis of physical education sector in Israel.

The physical activity of youth is a significant criterion in defining health. Participating in sports helps to maintain a healthy body and is a social tool that can be used to connect people and communities. Physical activity develops social communication skills; thus, it is essential to understand the factors that drive participation in sports, and to comprehend the purpose of each person engaging in physical activity [5; 104, p.48].

In Israel, physical education is taught from first grade through 12th grade and is considered a core subject in the education system, aiming to: offer students the opportunity to acquire motor skills and experience in various sports, increase students' physical activity and promote a healthy lifestyle along with education for moral-social behavior. In addition, there is a meaning to the enjoyment and challenges of physical activity as part of the school curriculum. This teaching copes with physical education for its diverse purposes in educational institutions during school hours, in school sports clubs, and in other initiatives and programs destined for all ages.

In the last decade, the Ministry of Health leads Efsharibari - The Israel National Program for Active & Healthy Living, in cooperation with the Ministries of Education and Culture and Sports, and promotes physical activity in Israel.

The professional literature reveals that as the students go up a grade, the physical activity wears off even more (children spend more hours looking at screens). Physical education classes in school, especially in junior high and high schools, are included in the category of classes that many students seek to avoid participating in. Plenty of studies show that the percentage of dropping out of physical education classes is increasing among the youth.

The recent Israel Physical Activity Report Card for Children and Adolescents (2022) mentioned that most of the children and youth in Israel do not participate in physical activity in accordance with international guidelines; only 32% reported performing moderate to vigorous physical activity for at least 60 minutes on average for 4 or more days a week and only about 9% reported daily physical activity for at least 60 minutes [208].

According to the studies conducted, one way to deal with this issue is through the principals' focus on promoting health in schools. Changes can occur through modifying health behaviors and physical activity in the school framework; adding another hour of physical activity in addition to the two hours set in the weekly schedule and in addition to an active break; organizing lectures for parents and students about the importance of physical activity.

The global studies on this subject emphasize that the school principal plays a key role in influencing the process of changing and recognizing right habits that can be combined with appropriate tools to build a program adapted to school with the intervention of teachers, parents and students together. In addition, the influence of physical activity is significant regarding one's self-image and social achievements.

According to official statistics, in 2020, people with disabilities accounted for 20% of the population in Israel (more than 1.5 million people); of those, about 326,000 children (accounted for 11% of all children in Israel) [199].

People with disabilities work less, earn less, are less educated and lonelier than people with no disabilities and this fact stands out in harm to their quality of life, as children of their age belong to the education system — after all, the Knesset approved the change of the special education law (2018), according to which the goals of the special education services are the following:

1. To promote and develop the learning, the skills and the abilities of the student with disabilities and his physical, intellectual, mental, social and behavioral functioning – to bestow upon him knowledge, proficiency, life skills and social skills.
2. To anchor the right of the student with disabilities to an equal and active participation in society – in all areas of life, as well as to provide an adequate response to his needs.

In comparison to other subjects taught in school, physical education classes facilitate the process of providing students with successful experiences relatively quickly and easily, thus leading to multiple positive reinforcements.

The findings indicate a considerable gap between the current and the desirable situations regarding the hours of physical activity per child, especially in institutions for children with physical disability (83%).

Moreover, studies reveal that there is a lack of appropriate facilities in vocational training (only 25% have a special training) and in budget (only 57% of the activities is financed by the Ministry of Education).

General Instructions on physical education

Director General's Circular in Physical Education copes with planning the physical education pedagogy and adapting it to the school population. In the instruction, various frameworks in which physical education is taught are brought up — in kindergarten, in regular classes, in sports classes and clubs, in an extended elective and more, providing detailed instructions for optimal utilization of the presence in school hours and individual hours dedicated to physical education and for conducting institutional sports events and numerous educational initiatives in the area of physical education.

The General Instructions stipulate the following strong points:

- The teaching of physical education in schools will be based on pedagogy planning which comprises all the lessons and events throughout the academic year. This planning will be determined by the physical education curricula published by the department for curriculum planning and development.
- In each school, a person in charge or a professional coordinator will be appointed to coordinate the institutional planning that will incorporate goals, objectives and anticipated achievements in physical education, as well as define the methods of measurement and evaluation of the extent of these achievements. The school principal will be in charge of the teaching plan.
- Before the start of each academic year, the P.E. teachers will submit to the principal a proposal for planning the teaching adjusted to the school's population and conditions. The planning will include goals and content for the entire school year and periodic planning for each class. The physical education events will be held according to the updated "Physical Education Events Regulations" published on the website of the Chief Inspector and the Commissioner of Physical Education [202].

Teachers who are interested in information regarding the events will contact the responsible district inspector of physical education.

- The security and safety instructions in physical education classes are given in the Circular Standing Instruction No. 0123 of 2019 section 9 "Ensuring the well-being of the students and their safety in physical education classes in the education system" [200].
- The P.E. teachers will ensure that students wear soft gymnastic shoes, suitable for the physical education classes. Students wearing commando shoes, hiking shoes and similar, which restrict free movement and may cause damages, will not be allowed to participate.

Physical Education Classes Held during the Summer Season

Dehydration and heat stroke are the main dangers in P.E. classes held during the summer. In order to avoid injuries, physical education classes in the summer, particularly in the extremely hot weather (30 degrees and above), will be held subject to the restrictions detailed below:

- a. These classes should be held in shaded places, where there are taps or other water arrangements nearby.
- b. The level of difficulty of the exercises should be conformed to the weather restrictions.
- c. Students should be encouraged to drink more liquids and wear appropriate clothing, including a head covering and a T-shirt, and apply radiation-filtering ointments to exposed body parts.
- d. It is desirable for physical education classes to take place after 12 o'clock in a sports hall or in another shaded place (mainly in May, June and September).

Physical Education Classes Held in the Winter Season:

The main dangers in the physical education classes that are held in winter are frostbite (hypothermia, which may develop from combination of low temperatures, wetness and wind) and exposure to illness factors as a result of the weakening of the body's defense mechanisms. In order to avoid these injuries, physical education classes during the winter, particularly in rainy and cold days, will be held subject to the detailed restrictions below:

- a. The lessons should be held in dry and windproof places.
- b. The level of difficulty of the exercises should be adjusted to the weather restrictions.
- c. The students' clothing should be suitable for the weather conditions.

Special note. *It is suggested that the lessons schedule of schools is built in such a way that will allow the optimal utilization of presence in school and individual hours for the following purposes:*

- a. providing a special response for children who have difficulty or excel in physical education
- b. working with a small group of students to train teams or to prepare for competitions
- c. activating the sports committees
- d. engaging the students in writing the school's sports newspaper and articles about sports on the school's website
- e. organizing an active break for sports activities
- f. holding staff meetings for physical education teachers to develop teaching plans and tests to monitor achievements.

The curriculum for the matriculation certificate in high school requires the selection of at least one increased subject at a five-point level. Physical Education is one of the options offered for selection in this framework. The expansion of the physical education subject combines both practical and theoretical subjects that include the sciences of physical education aimed at acquiring knowledge and understanding of the human body, the principles of movement and the role of sports in promoting health. The curriculum of physical education as an elective subject of 5 credits focuses on all students, in all sectors.

Physical Education should be an integral part of the curriculum and education in the school because physical activity is an essential factor in child development, not only in physical but also the psychological and social aspects. It is crucial to develop appropriate inclusive P.E. lessons that aim to engage students with disabilities and regular students on equal basis.

Investigating the students' achievements in classes can be carried out by the physical education teachers as part of the teaching, learning and assessment, based on the "Physical Education Letter" [201].

Physical Education in school should be combined with Physical Activity in Leisure Time (nonformal education). As a part of their job, the physical education teachers will locate students with suitable abilities and encourage them to participate in sports classes and sports activities that are popular and competitive, organized and independent, held in the school or outside in the afternoon, as well as in frameworks for nurturing excellence in the various sports. On this regard, it is recommended that the local authorities open community classes for remedial exercise and physical fitness, and that school principals and physical education teachers encourage students who need it to attend these classes.

The Israel Physical Activity Report Card for Children and Adolescents, 2022 [208], highly recommended to develop a response to promote physical activity among children with special needs, to develop of programs for physical activity among children and youth, focusing on children at risk and children with special needs.

Physical education Teachers training

At the beginning physical education teachers' training within the BA program namely in the 1-st and second year of study, there is not any specific component that refers to integration or inclusion of pupils with special needs. Actually the only element which deals with this subject is a statement that the idea of integration is important - without any translation into practical steps. In fact, only in

the special education major there is a practical refer to the challenge of inclusion unlike the situation in the other majors where the inclusion subject is completely ignored. The specializations for specific majors begins in the 3rd and 4th years of the training. In general in the main stream education we can find scarcely a mere reference to the very importance of integrating students with disabilities in but not any practical tools for implementing the integrative policy.

Therefore we may conclude according to the bleak situation within the training as well as that found on the spot-within the schools system, that my innovation in research may make a needed contribution in sustaining the significant inclusion subject adding tools and skills for integration from the very beginning of the track to physical education teachers so that they can attain professional self-confidence and be competent to successfully integrate students with disabilities

It is worth noting that even in the theoretical subjects there are no clear tools for the integration of students with disabilities. In fact, only in the main/core subjects/ such as mathematics, English, science and Arabic do we recognize that reference to the integration of students with disabilities is practically implemented in the field-so my study can be relevant for further implementation into the whole education system.

Moreover, according to OECD (2020) data, during 2013-2018, in Israel there no significant change in high level of need for professional development in teaching students with special needs [146, p.22].

In this regard, special attention in professional development of PE teachers should be focused on Physical Education Adaptations for Students with Disabilities.

2.1.2. Adaptation of Physical Education (APE) for Students with Disabilities

There is no doubt that physical education activities, must be made available to every child with a disability. Physical education for a special needs child can contribute to develop: fundamental motor skills and patterns; skills in aquatics and dance; individual and group games and sports (including intramural and lifetime sports) [196].

In order to realize the right to education, the PE teacher must ensure that students with disabilities receive sufficient training based on the general education curriculum together with their typical colleagues. Accordingly, physical education teachers must adapt instructional strategies and activity areas to meet students' needs, including on the basis of individual education plans.

Adaptation includes adjusting, modifying and changing the activity (in time, dynamics, format, or providing more rest time) in accordance with the needs of students with special needs. Adaptations

may also include adjusting, modifying several equipments: larger balls, bats, assists, using different body parts etc. Thus, PE teacher should think in terms of activity, time, equipment, boundaries, distance, type of assistance, resources, cooperation with specialized support staff etc.

Adaptations may include student expectations based on their needs and abilities. Respectively, the demand for performance and involvement must be adapted to the student's ability to participate.

Physical Education Adaptations (APE) represent a key component of Inclusive Physical Education and Physical Activity, which involves:

- Inclusion of the student with disabilities in regular physical education classes.
- Adjusting teaching strategies, equipment, environments, and assessments to meet the needs of all students.
- Supporting students with disabilities who want to participate in other physical activities before, during and after school.
- Encouraging students with disabilities to have the same roles and experiences as their peers without disabilities during physical education and other physical activities (adapted from [195]).

The major importance in this sense is that the students with disabilities benefits from physical education training by experiencing success. Furthermore, learning physical activities will prepare the foundation for physical activity throughout life.

As a modern field of study within the sport sciences, adapted physical activity (APA) has been defined as “research, theory and practice directed toward persons of all ages under-served by the general sport sciences, disadvantaged in resources, or lacking power to access equal physical activity opportunities rights”. [206] From an educational perspective, this means that students with all types of disabilities and within all types of educational settings should be served in a way that conforms to their human rights, suits their individual functions, and focuses on their educational needs [149; 195; 196; 198; 149].

The central term used within APA terminology is adaptation, referring to assessing and managing variables(related to the tasks, persons involved, and environment) to meet unique needs and achieve desired outcomes. Adaptation occurs as “an interactive and reciprocal process of change between the individual and environmental agents, who by means of their practice may facilitate or hinder this process. The aim of adaptation in APA is “to enhance physical activity goal achievement of individuals of all ages with movement limitations and/ or social restrictions”.

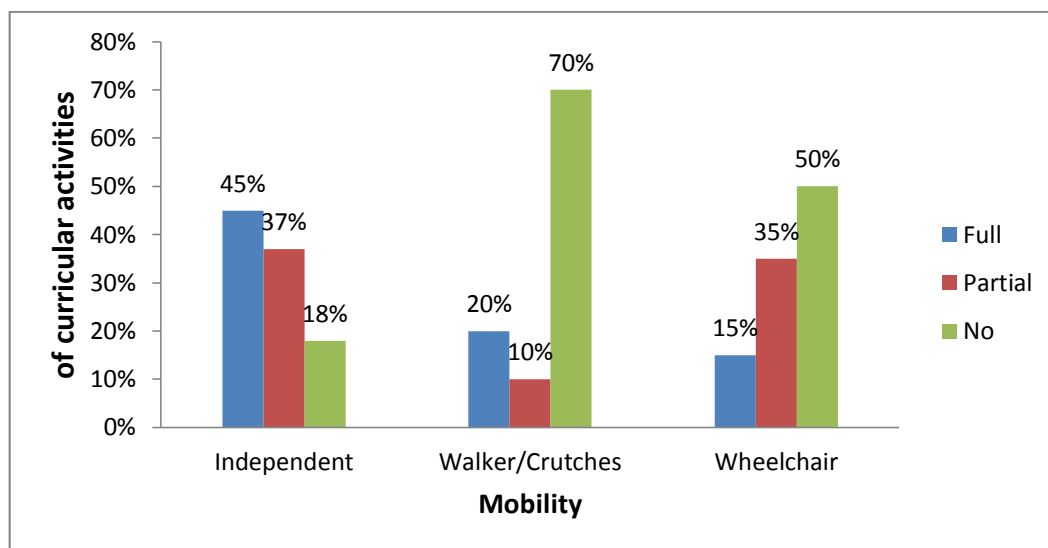


Fig.2.2. Percentage distribution of predicted skill acquisition across different mobility categories, and participation expectations

Figure 2.2., designed by us, reflects the percentage distribution of predicted skill acquisition across different mobility categories, and participation expectations: the high level of mobility demonstrated the independent students, walker/crutches – high level of immobility, wheelchair – low level of mobility. All aspects were taken into consideration by curricular activities.

Inclusion in PE- Teachers' Bias

One of the problems that is probably related to the development of negative attitudes is the lack of knowledge regarding adaptation strategies, permitting teachers to feel they are prepared and competent for appropriately including students' disabilities in general contexts of physical education activity and sports.

During the last decade several court cases in the U.S have been reported where decision makers have ignored the civil rights of the students with disability when refusing to include them as athletes or managers with an interscholastic competition framework.

Generally, there are two main programmatic approaches to increasing participation for students with disabilities in PE lessons. One approach is to provide services to those students individually and to separate them from the lesson. The second approach is to supply an alternative physical education program either within an existing school (school within a school) or in a separate facility (alternative school). Both these approaches provide a compromising solution for the inclusion of the student with disabilities and consequently students with disabilities might unpurposely feel a feeling of repression [109].

The experimental exploration of the Physical Education Adaptations for Students with Disabilities as basis of the Program “Sport is for everyone” is presented in para 3.2.

2.1.3. Socio-cultural determinants of teachers’ attitudes towards the disabled students

In this regard, we would like to reiterate the factors that determine the formation of positive or negative attitudes towards disabled people and, implicitly, towards disabled children, can be from at least three categories: factors related to the person expressing the opinion, the type of disability and the sociocultural context, at a given time [14, p. 246]. On the other hand, several authors reviewed a series of factors that can influence the formation of attitudes towards disabled people, among which we mention: age, gender, nationality, marital status, educational level, socio-economic level, residence in urban or rural environment, experience with people with disabilities, etc. In the frame of current research, several factors are explored.

The 2009 EFA Monitoring report [81] states: Among the most serious obstacles are negative attitudes towards the disabled, which affect both the school participation and the self-confidence of disabled children”. The Convention on the Rights of people with disabilities, passed in 2006, also emphasizes the problem of attitudinal barriers.

Despite the recognition that cultural barriers constitute one of the most serious obstacles and pressing issue to address, few recommendations exist that would provide specific strategies for addressing this barrier. Experiences in the MENA region provide a window for strategies to address attitudinal barriers that are specific and targeted: the family unit, the community, the service sector, and the government sector [apud 188].

Attitudes and the family

First, as Abu-Habib has pointed out, discrimination starts in the home with the family, programmes targeting the isolation of women in the home, and parenting information, especially for fathers, becomes critical [16].

Attitudes and Teachers- the service sector

Second, teachers are widely considered the most influential factor in successful achievement. Several studies have provided evidence that negative attitudes of teachers towards students with disabilities are a major barrier to student learning [4; 15; 37; 150]. To address negative attitudes, teacher training must include, not only effective instructional strategies geared to individual learners, but awareness and consciousness-raising concerning attitudes. The earlier in a child’s education that this can be accomplished, the better chance there is for long-term gains and success in school

achievement. Conversely, it is less likely that a child will be retained or will require special education services or placement.

Several countries in the MENA region now include special education training in degree programmes for teachers in mainstream classrooms. For example, the Ministry of Higher Education in Jordan has established several training programmes for undergraduate and graduate students to prepare them for teaching special education.

Although, not widespread, some innovative early childhood programmes have been developed that break new ground in tackling increased awareness.

The Portage Project is another innovative programme that has been adopted in several countries, most notably Jordan. Support for the project has been provided by the Arab Council for Childhood and Development with finance from the Arab Gulf Programmes for the Support of UN Development Organizations. The programme is a quality early intervention model designed to provide services to young children with disabilities from birth to six years of age in rural communities. Weekly home visits by home teachers train parents how to work successfully with their child to attain developmental milestones [164].

Attitudes and Society/Community

Third, societal attitudes must be addressed. One of the most powerful ways to accomplish a change in attitudes is through experience. The voices of disabled children and youth, and their direct participation in strategies to address attitudinal barriers become critical in this endeavour.

Attitudes and government policy-makers

Most MENA countries have enacted legislation in support of children and youth with disabilities. In 1993, Jordan government passed the Law for Welfare of Disabled People and established the National Council for the Welfare of Disabled People. The Lebanese government passes Law 220/2000 guaranteeing disabled persons' rights and the principle of inclusive education. In 2004, the Syrian government created a National Committee for integration and a Unit of Education Integration was established. Projects have focused on intensifying teacher training, and accessible school construction.

Attitudes of policy-makers at all levels of government must be addressed to ensure the presence of political will to translate legislative commitments into action. Inequalities in education are often more of a reflection of beliefs, than they are of level of resources. "That is, the ways in which resources are allocated reflect beliefs about the value of education for all children, and for particular children.

In recognising the importance of political will, Dr. Ali Saad, Director of the Syrian Ministry of Education of Education stated: “The political will of decision makers at the advanced level and the awareness of the moral, professional, economical, and social value of the integration projects, and persistent work to achieve their objectives... remains the most important factor of their success”[144]. Her Excellency, Mrs. Asma’a Al-Saad, spouse of H.E. Mr. President of Syria has personally supported the Syrian integration project for those with disabilities. She has provided the vision, and has followed the evaluation and continuous follow-up necessary for its success [apud 188].

Structural factors influencing the extent of exclusion or inclusion include decisions regarding government policies, resource allocation, multi-sector collaboration, institutional training of educational of educational personnel, design of programmes to integrate education of students with disabilities with their non-disabled peers. Three of these structural factors are highlighted that hold the best promise for the widest impact, considering the specific context of the MENA region. These three factors are ‘no-gap’ policies for integrating gender and disability development; addressing prevention through expansion of early childhood programmes; and building capacity of the infrastructure to support inclusion [apud 86].

Addressing gender and disability ‘no-gap’ policies in development

In the case of MENA, integrating gender and disability policies is especially salient, given the cultural context that has driven the two goals of gender equality and disability equality for these countries [41]. The MENA region has made a concerted effort to include girls in schooling, and to raise the literacy rate to parity with men and boys.[16]

That is, gender policies should always include a disability component, and vice versa. Finally, concurrent with the ‘no-gap’ policy, it may be necessary to establish affirmative action guidelines. Recent Lebanese legislation to ensure the rights of people with disabilities has included an affirmative action component for employment, requiring a 3% employment rate of people with disabilities.[188]

Addressing prevention through Early Childhood Programmes

Prevention is recognized as an important strategy in relation to children and youth with disabilities, as well as those at-risk for impairments. It is widely recognized that a significant amount of disability is preventable, often through relatively simple and low cost interventions such as immunization programmes and improved maternal care. Thus, an integrated approach to early childhood education is needed that links prevention and rehabilitation with empowerment strategies and changes in attitudes [151].

Addressing infra-structure

Most MENA countries, Syria, Jordan and Lebanon in particular, have inclusive education policies in place to re-address exclusion and support inclusion of children and youth with disabilities. However, the infra-structures and political /societal commitment needed for implementing these policies are critical.

Given the heterogeneous nature of MENA countries and the distinctive cultural contexts, specific strategies for building infra-structure will naturally vary. However, one general type of approach appears to be very promising. That is, a multi-sectorial approach between grassroots organizations of people with disabilities, NGOs and schools. This kind of approach aligns with the four basic premises for inclusion that accomplishes several simultaneous goals: 1. The direct participation of people with disabilities in development and implementation of initiatives; 2. Capacity – building of the public sector through partnerships; 3. Reduction of stereotypes and negative attitudes toward disabled people; 4. Focus on advocacy and community development as opposed to remedial approaches to service delivery.

We conclude the following:

Strategies and programmes must develop from the local/state/national contexts in which people with disabilities live, work, and go to school. It must be noted that strategies to address marginalization and social exclusion are multidimensional, relational, and context-specific processes.

Four basic premises for programmes and policies promoting inclusion [53, p.21-22]:

- Strategies, policies and programmes must rest on localized intervention sensitive to national, institutional and cultural contexts.
- Interventions must be cross-sectorial and comprehensive, transcending traditional bureaucratic approaches.
- Approaches to inclusion necessarily involve a long-term process of development through transitional stages.
- All activities undertaken must involve participation of the excluded in the development, implementation, and decision-making processes.

All mentioned above contribute to conceptualization of the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disability.

2.2. Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disability

Salamanca Statement (1994) highlighted importance to enhancing teacher education as regards provision for special educational needs [162].

Teacher education has a crucial role to play in ensuring that classroom teachers are prepared for the challenges of educating students with disabilities—who, contrary to some misconceptions, can achieve in inclusive classrooms.

Preparing general education teachers for the changing demographic profile of today's schools is receiving renewed attention both at home and abroad under pressure to perform well on international comparisons and compete in a global economy. To realize high expectations for all students, including students with disabilities, teachers must be prepared to work collaboratively to utilize specific, evidence-based teaching practices that both challenge and motivate all of their students [67; 71; 96].

All teachers should be trained/ prepared to act on the belief that all students, including students with disabilities, belong in general education classrooms. *We note the importance to help/to conduct teachers to understand their role in education and inclusive education, that inclusion of students with disabilities in the classroom is an opportunity, not a problem.*

Many different authors, researchers explored the professional and transversal competences of teachers. According to the European Qualifications Framework 'competence' means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development [135]. One of the important component is attitude.

During the analysis of specialized literature, we identify different terms of teachers' attitudes in relation with disabilities and PE: positive attitude, negative attitude, inclusive attitude, reserved attitudes. Thus, positive attitude towards the inclusion of children with disabilities in PE means acceptance of children with disabilities at physical education lessons. Negative attitude means non-acceptance of children with disabilities at physical education lessons or discriminatory approach/discriminatory attitude. Reserved attitude is skeptical approach, formally acceptance but in reality non-supporting attitude. Very often, inclusive attitude is understudied as positive attitude towards the inclusion of children with disabilities in PE. As it was mentioned above, from our point of view, *the positive attitude includes the aspect of promoting and encouraging (active support) of disabled students.*

As we can mention, "inclusive education" is anchored in the broad agenda of human rights, which has become a global issue influencing countries that are committed to democracy, such as Israel, including the Arab sector. At the same time, when it comes to the practical implications, it is more difficult to achieve, as many educators still have serious reservations about supporting the widespread placement of students with disabilities in their lessons in mainstream schools.

The existing research findings [111; 113; 115] that PE teachers might have negative attitudes toward inclusion itself and its challenges which are probably derived from their fear that they did not have adequate training and might be lacking the experience and knowledge to successfully include students with disabilities in the general school system. Some researchers argue that most PE teachers may have mixed feelings and express obvious reluctance to the practical inclusion claiming simultaneously that their general attitude toward inclusion is positive; teachers may also vary according to the type of disability, Obrusnikova (2008) [123]. The same author found that PE teachers' beliefs were favorable toward teaching children with specific learning disabilities and less favorable toward teaching children with emotional and behavioral disorders. Significant predictors of positive beliefs in Turkey study were: perceived competence, positive teaching experience with children with disabilities, and course work in APA. The results of this study emphasize the role of pre-service education in Turkey, which did not include coursework in APA before 2000. The lack of training may explain the difference in attitudes between teachers with up to 10 years in service and those who enrolled into service before the teacher preparation program in Turkey was changed.

Mentioning the merit of inclusive schools as they are capable of providing quality education to all children [125; 152], we would like to highlight that the creation of such schools is a crucial step in helping different categories of population to change discriminatory attitudes.

We consider that inclusive education is not only the process of quality education of all children with disabilities, but also together with regular children and students. Establishment of inclusive schools is a tool in developing an inclusive society.

From our point of view, *inclusive education should be the process of quality education of all children and students, together regular and with disabilities, that aims better exploring their potential, and offer opportunities to all for future inclusion and personal and professional development.* Inclusive education is a precondition in creating welcoming / "friendly" communities and establishing the inclusive society. At the same time, inclusive education can be a tool to change discriminatory attitudes but also, vice-verso – forming the inclusive attitude is a precondition in establishing the

inclusive education/ inclusive school.

Based on importance of special teachers' training on special needs education we would like to propose the following principles:

- *A human rights based approach*: treatment of all persons as human beings, despite of disabilities
- *A noncategorical approach*: states that all types of disability should be developed as a common core, overcoming further specialization in disability-specific domains (thus overcoming the traditional approach to disability as non-educable)
- *Complementarity and mobility*: specialized training in special needs education leading to additional qualifications should normally be integrated with or preceded by training and experience as a regular education teacher
- *A gender equality based approach*: equal treatment of girls and boys, prevention of sexual harassment and sexual abuse etc.

The principles we propose are in line with the Key Principles for Impact on Inclusive Education, set out in the UNESCO Guidelines for Inclusion in Education (2009)[160], which states that IE is a process of strengthening the capacity of the education system to reach all children. An inclusive education system can only be created if mainstream schools become more inclusive, in other words - when they become better at educating all children in the communities in which they are located.

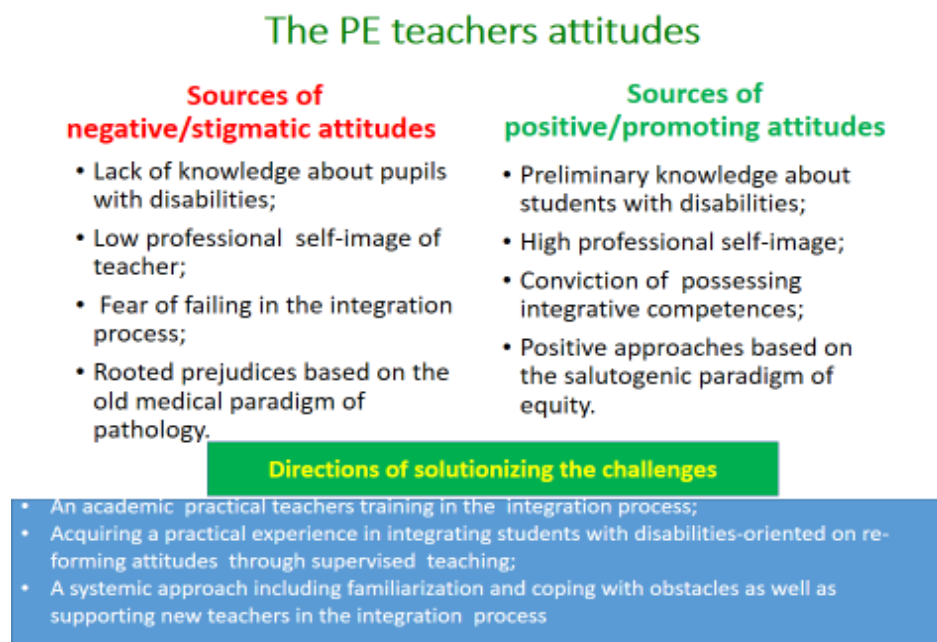


Fig.2.3. The connection between PE teachers' attitudes and psycho-pedagogical strategies

The current research is focused gradually on the specific factors connected to the implications of teachers having to cope with disability in a regular demanding setting, and the required methodology and finalities of developing adequate coping strategies.

The Figure 2.3., designed by us, represents the connection between PE teachers' attitudes and psycho-pedagogical strategies, based on identification of sources of negative/stigmatic attitudes and sources of positive/ promoting (inclusive) attitudes. As sources of stigmatic attitudes we can mention: lack of knowledge about pupils with disabilities; low professional self-image of teacher; fear of failing in the integration process; rooted prejudices based on the old medical paradigm of pathology. To transform negative/stigmatic attitudes into positive/ promoting (inclusive) attitudes, the following psycho-pedagogical strategies were proposed: organization of academic practical teachers training in the integration process; acquiring a practical experience in integrating students with disabilities – oriented on reforming attitudes through supervised teaching; a systemic approach including familiarization and coping with obstacles as well as supporting new teachers in the integration process.

Teachers' responsibility to integrate pupils with disabilities

So, the challenging pedagogic process of training physical education teachers inclusion strategies includes a flowing unit of the main components- goal, objectives, content, methodologies and finalities.

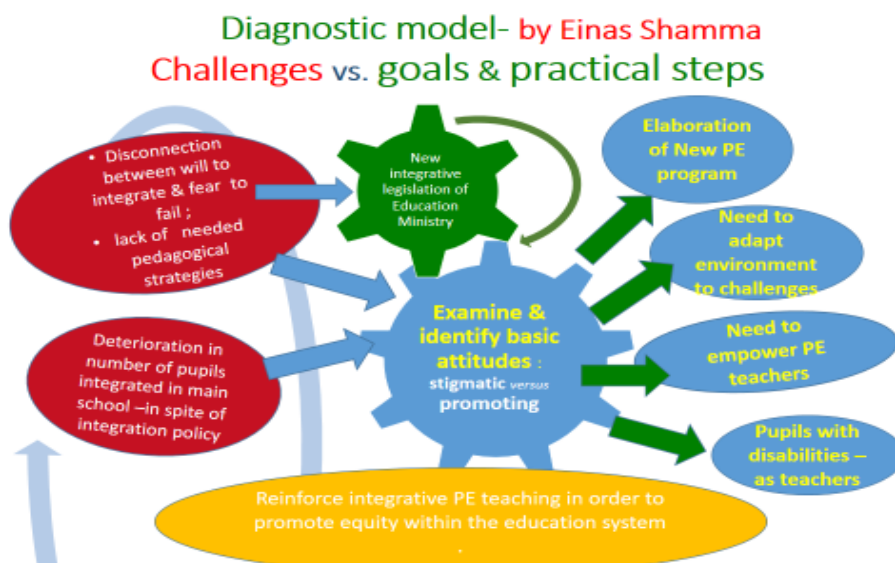


Fig.2.4 Diagnostic Model for Changing Stigmatized Attitudes: Challenges vs. Goals and Practical Steps

To decide on concrete steps to modify stigmatized attitudes of learners, this diagnostic model was drawn up (figure 2.4.), aiming at identifying the main type of attitudes, which would be its psycho-psychological aspects (Lahad, M.) [108], trying to define the directions of Pedagogical solution of the problematic situation that hinders the integration of students with disabilities. As challenges were identified the following: disconnection between will to integrate & fear to fail; lack of needed pedagogical strategies; deterioration in number of pupils integrated in main school – in spite of integration policy.

Diagnosing the present situation and the new challenges related to the vocational needs of the PE teacher who is required to de facto face the inclusion of disabled students (figure 2.5, designed by author).

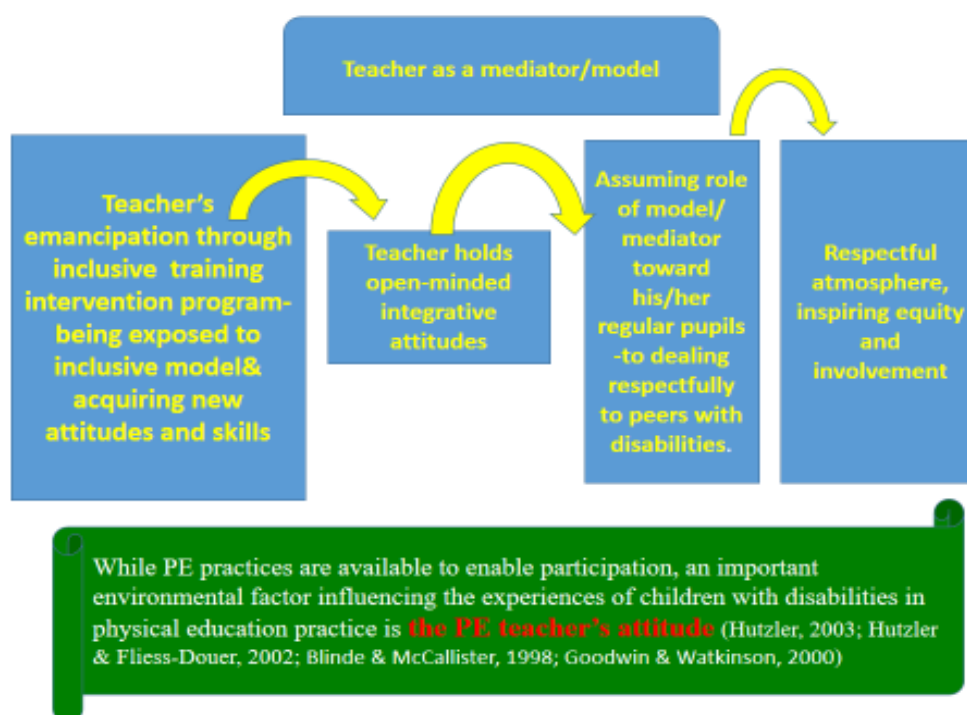


Fig.2.5. Teacher's new promoting role as a mediator/ model in the integrative process of students with disabilities

In order to ensure/ forming the positive attitude of PE teachers, the teacher's new promoting role as a mediator/ model in the integrative process of students with disabilities was proposed. Thus, the teacher as a mediator acquiring new attitudes and skills, holds open-minded integrative attitudes; dealing respectfully to peers/students with disabilities; creates a respectful atmosphere, inspiring equity and involvement.

Guided us through the development of the diagnostic model for modifying stigmatic attitudes - as a psycho-pedagogical means of improving the role of the PE learner in confronting it with the challenge/barriers of inclusion (figure 2.6, designed by author).

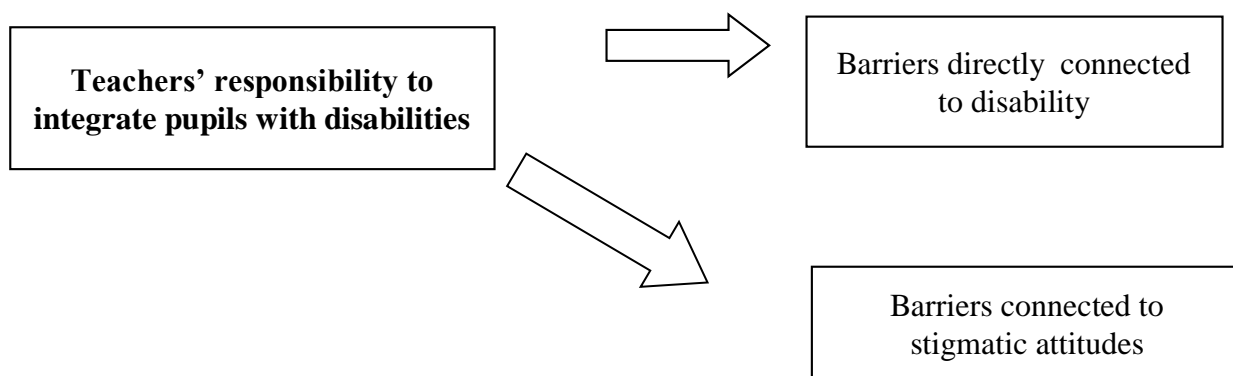


Fig.2.6. Barriers for Teachers' attitudes

The key paradigms behind the inclusion implementation within regular settings had been presented starting from the leading humanistic approach and addressing the social behavioral and the PE attitudes. Our reference frame is based on existing research, due to the stigmatic attitudes of their new surrounding, including teachers, which are supposed to assume the responsibility to integrate them [112].

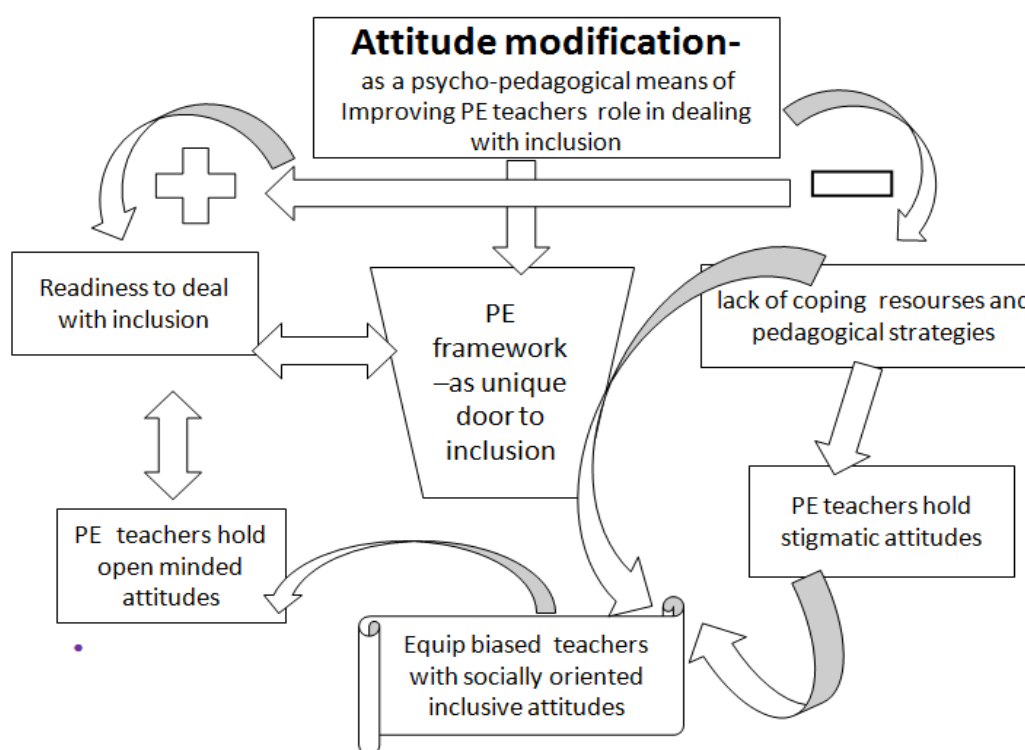


Fig.2.7. Attitude Modification

Therefore, it was hypothesized that the more advanced the stage in the teacher preparation process, and the more positive attitudes will be expected. This variable was considered a control variable for the attitudes (see figure 2.7, designed by author).

In the context of the proposed goal of the research, based on the fundamental premise that real inclusion is giving place for diversity in the human community, we tried to allow the recognition of the development from social education to social integration and inclusion, seeking for practical ways of permitting students with disabilities to be an active part of the society from the elementary stages of their education, relating to the relevant changes in the educational support systems, moving toward examination of concrete practices labeled “mainstreaming”, “integration”, and finally “inclusion.

Eventually, we expose the pedagogical model which constitutes the framework of the implementation program.

Based on the specified theoretical approaches and identified methodological landmarks, while taking into account the need to adapt the school to social transformations and trends in education, with emphasis on the inclusion of students with disabilities in the education system, we conceptualized the **Pedagogical Model for the development of the physical education teachers’ positive attitudes towards the inclusion of students with disabilities** (figure 2.8).

This scientific construct is linked to the 2030 Agenda for Sustainable Development, which includes quality education, encouraging the participation and recognition of people with disabilities as active members of the society: who must not face any discrimination or be ignored or left behind.

Our Pedagogical Model intends to offer an operative approach that can enhance a meaningful change in the initially stigmatic attitudes of PE teachers toward the inclusion of students with disabilities.

The Pedagogical Model for the development of the Physical Education Teachers’ positive attitudes towards inclusion of students with disability is a theoretical and methodological construct, which includes in its structure a system of interactional values, which are part of the general paradigm of better training students prepared for life, in particular, the integration of students with disabilities in sports/ physical education with students without disabilities.

The output of the Pedagogical Model is to create the framework to improve the inclusion of disabled students together with those without disabilities in PE lessons in schools in the Arab sector of Israel, ensuring the reduction of negative impact on them, increase their inclusion for personal and social development and create an inclusive social environment.

The foundation of the conceptual framework of the Pedagogical Model to developing the Physical Education Teachers' positive attitudes towards inclusion of students with disability focused on exploring several theories and concepts: the theory of planned behavior (TPB) (Ajzen I. [17]), the theory of social learning (Bandura A. [30]), the theory of experimental learning (Kolb D.[102]), the concept of attitude (Allport G. [19], Bandura A. [29], Block M. et al.[37; 38], Callo T. [3] etc.), the fundamentals of physical education and the values of sport, set out in Chapter 1, para 2.2 .

The model is based on the following legitimacy of education:

1. Educational objectives, character and content are determined by the objective needs of society and man, by socio-cultural and ethnic norms and values.
2. The aims of education are determined by the correspondence of the pedagogical intervention with the objective and subjective factors associated with the education process.
3. The positive reaction of the personality to the pedagogical influences is determined by the needs, needs, interests and possibilities of the learner, focusing on the creation of optimistic perspectives for personal / individual development.
4. The efficiency of education is determined by the level of activism of the personality, by the content and applied educational technologies, by the reasons for participating in the activity, by the character of the educational management.
5. The efficiency of education is motivated by the understanding / acceptance of the integrity of the human personality and by the organization of the system of educational influences.
6. The educational process has a teleologically determined character, it is integral and bipolar.
7. The process of personality formation-development cannot take place without its active participation in this process.
8. Skills development is interconnected and interdetermined. In the real process of personality formation these competencies are manifested in different combinations.
9. The competencies of the educational process are not equal in relation to each other, there is an interconnection between them, thus constituting an integrated educational process.

The functionality of the Model focuses on the principles of inclusive education (proposed by UNESCO [160]):

- Inclusion and quality are mutual;
- Access and quality are linked and mutually reinforcing;
- Quality and equity are essential to ensure inclusive education.

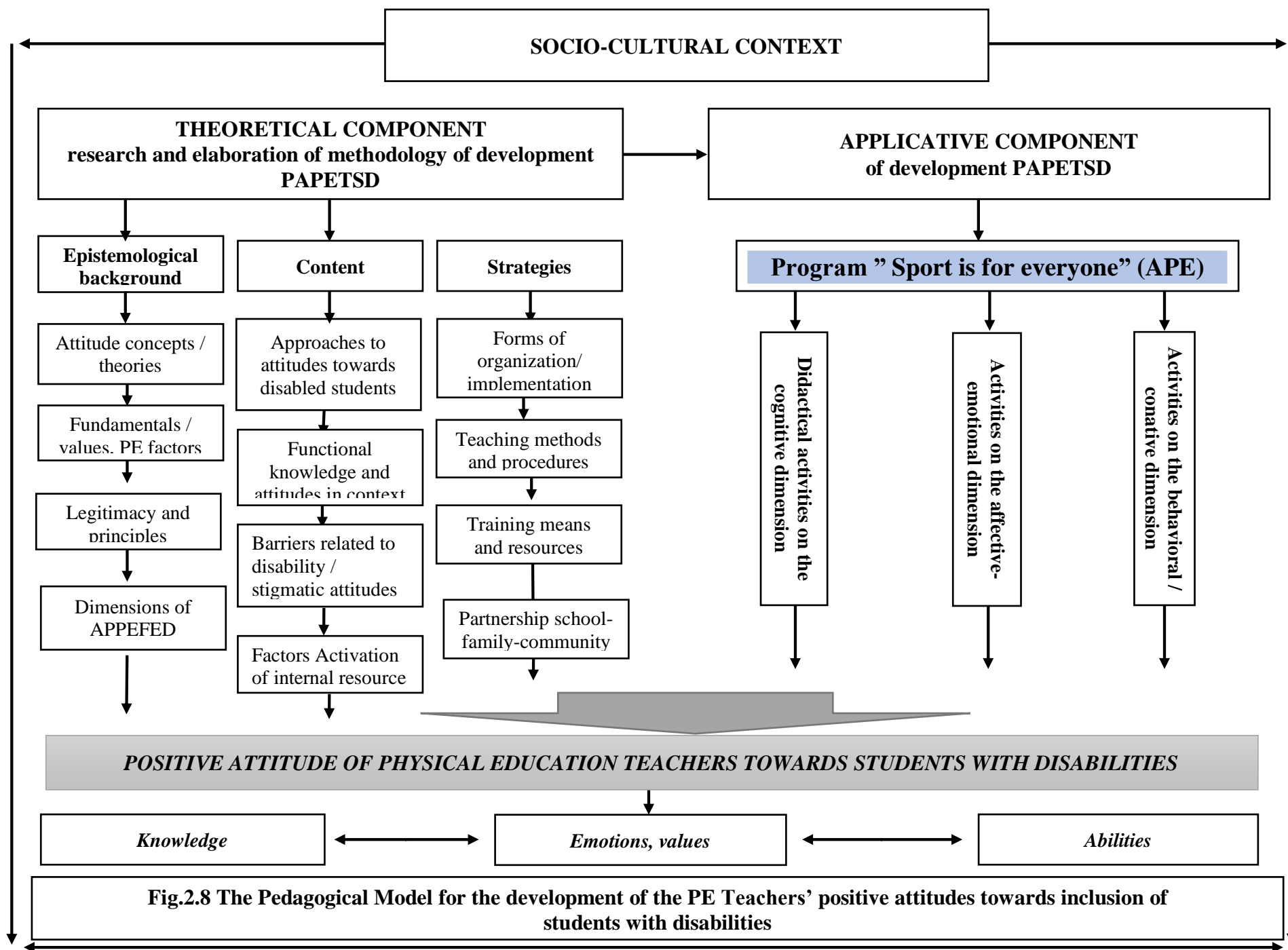
But also on the principles, proposed by us:

- *human rights-based approach*: treating all people as good people, despite their disabilities
- *non-categorical approach*: covering all types of disabilities should be developed as a common core, before further specializing in one or more disability-specific areas
- *complementarity and mobility*: specialized training in the field of special needs education leading to additional qualifications should normally be integrated or preceded by training and experience as a regular education teacher
- *the principle of (co) creation* of the teacher and the student in the educational process, the interconnected, coordinated activity of the teacher and the student, based on the needs of the student
- *Gender equality approach*: equal treatment of girls and boys, prevention of sexual harassment and sexual abuse, etc.

The components of the model are mutually conditioned and constitute a continuous cycle which, through the use of different methods, forms, means of learning, results in the transformation of the attitude of physical education teachers. The activity of learning (development) with reference to inclusion must start from a volume-support of knowledge, which selected and correlated with each other, will substantiate further training at a higher level, by operationalizing knowledge and training / developing skills, models specific behavior and attitudes, thus ensuring the development of the positive attitude of physical education teachers towards students with disabilities and their inclusion together with children without disabilities in sports / physical education activities.

Next, based on the general foundation of the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disability (APPEFED), we established its components and basic provisions in interconnection and presented them in a schematic form (figure 2.8).

The pedagogical model includes two components: the theoretical component and the application component, which includes the elaboration of the methodology for developing the positive attitudes of physical education teachers towards inclusion of students with disabilities and the training program " Sport is for everyone " and the application of training and assessment methodology of the obtained results.



The model includes several inter-dependent components starting with the identification of the conceptual measures which lie behind the stigmatic traditional attitudes of PE teachers who may often be compelled to cope for the first time with the inclusion of students with disabilities in their regular classes by the new inclusive educational system policy, moving to the urgent aims of creating a change enabling platform by elaborating an attitudinal plan for increasing the participation of students with disabilities in PE lessons. The model specifies the exact tools that were identified as the most adequate ones as attitudinal change providers.

It is important to note that the model is intended for the physical education teachers which have a negative attitudes towards inclusion and this is particularly prominent in the lack of participation of those students with different disabilities.

The goal of the model is to developing the inclusive attitudes of physical education teachers towards students with disabilities. The proposed Model is based on Formative program "Sport is for everyone" (APE) to train physical education teachers for the effective inclusion of disabled students on equal basis as non-disabled students in order to make their education more effective. It is proposed to explore the variables: seniority in work, accessibility of teachers to participate in academic courses, previous experience working with children with disabilities. Indicators of involvement of students with disabilities in PE lessons, involvement in school, behavior were established. The matrix of indicators of the positive attitude of PE teachers in the vision of students with disabilities reflects the progress on three dimensions: cognitive, affective-emotional, behavioral / conative.

The components of the pedagogical model are mutually conditioned and constitute a continuous cycle which, through the use of different methods, forms, means of learning, results in the development of positive attitudes of physical education teachers towards students with disabilities. The learning activity must start from a volume of knowledge, which is selected and correlated with each other, by operationalizing knowledge and developing skills, specific attitudes and behavioral strategies, thus ensuring the effective inclusion of students with disabilities and those without disabilities in PE/ school activities.

2.4. Conclusions on Chapter 2

In the chapter we deduced the importance of educational strategies focused on improving the PE teachers' attitudes regarding the inclusion of students with disabilities into PE activities, taking into account the specific needs of girls and boys, but also the sociocultural and family context etc.

1. We found that Physical Education is an integral part of the curriculum and education in the school because physical activity is an important factor in child development, not only in physical but also the psychological and social aspects. Finally, it promotes self-determination and participation of individuals with disabilities in the community.
2. We determined that one of the educational responsibility of teachers is to ensure the implementation of the basic right of students with disabilities to study together with students of the same age group in the same educational system, including participation in the physical education lessons. From the other hand, the effectiveness of this inclusion depends on many factors, including the teachers' attitudes.
3. In the frame of the current research we proposed Concept of developing of physical education teachers' positive attitudes towards the inclusion of students with disabilities, that includes the following components: analysis of physical education sector in Israel in relation with inclusion; Adaptation of Physical Education for Students with Disabilities; overview of Socio-cultural determinants of teachers' attitudes towards the disabled students.
4. *We introduced models guiding attitudes and behaviors toward persons with disability: the three types of orientations* is very significant for the planning of lessons. This is very important to PE teacher when he/she plans the lesson. It also so important to understand the all-encompassing concept of the attitude change.
5. Based on importance of special teachers' training on special needs education we introduced the following principles: *a Human Rights Based Approach; a Noncategorical approach; Complementarity and mobility; a Gender Equality Based Approach.*
6. Our "Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disability", intends to offer an operative approach that can enhance a meaningful change in the initially stigmatic attitudes of PE teachers toward the inclusion of students with disabilities. The above understandings led us to the crucial relevance of creating educational opportunities to widen access towards education and to recognize several indicators that are important for PE teachers who have to cope with inclusion challenges during his/ her classes.

3. THE EXPERIMENTAL FRAMEWORK TO DEVELOPING THE PHYSICAL EDUCATION TEACHERS' POSITIVE ATTITUDES TOWARDS INCLUSION OF STUDENTS WITH DISABILITIES

3.1. Diagnosis of the the PE teachers attitudes towards the inclusion of students with disabilities in PE activities

The multi-dimentional pedagogical system in the Arab sector (which includes, the school administration, teachers, school staff, local authority education department etc.) are in charge of formulating methods of dealing with the adequate inclusion of children with disabilities in the educational system, along with support services within and outside the school. In addition, the students' family involvement in the inclusion process is also taken into account. In this complex process, physical education field, whith its specific characteristics as an enriching part of the school system which unlike regular lessons of the curricula is applied outside the regular class frontal frame, has the potential of being a connective link between children with disabilities special needs and the educational systemic goals.

According to UNESCO, teachers' positive attitudes towards inclusion depend strongly on their experience with learners who are perceived as 'challenging' [160]. Teacher education, the availability of support within the classroom, class size and overall workload are all factors which influence teachers' attitudes. Negative attitudes of head-teachers, inspectors of education, teachers and adults (parents and other family members) are considered as major barriers to inclusion [163; 174]. Thus, empowering the teachers and other actors, equipping them with new confidence and skills in the process of introducing inclusion as a guiding principle, will have implications for teachers' attitudes and performances.

In this context a pedagogic experiment divided into three classical stages had been organized in the course of the current research. The main objectives of the ascertaining experiment were:

1. To identify the PE teachers' attitude to the inclusion of students with disabilities in PE lessons
2. To determine the conditions to increase the participation of students with disabilities in physical education lessons.
3. To ascertain the correlation between the 4 PE teachers' distinguished key features and their impact on their attitudes with regards to students with disabilities inclusion as specificated below:

- Experience in integrating students with special needs;
- PE teachers gender;
- Years of work experience (in teaching PE);
- Participation in an academic course (“Sport for everyone”- the course which gives tools for PE teachers in including process-APE).

The research sample

At the initial constative experimental stage, 160 physical education teachers (68 women and 92 men) from various schools in the Nazareth, Cana, Reina, Eilut, Ein-Mahel, Haifa, and Mashhad regions participated in the questionnaires. After that, 90 teachers of physical education were randomly selected for pedagogical formative experiment based on negative attitudes toward students with disabilities and divided by gender and experience in working with such children.

The purpose of the research for the experimental finding is to analyze and determine the level of manifestation of physical education teachers' attitudes towards the inclusion of students with disabilities and to find effective practices for their inclusion in physical education activities.

In line with the purpose of the research, we launched the following ***objectives***:

1. To examine whether the complexity of correlations between the attitudes of physical education teachers and between the variables of: participation in an academic course, experience in integrating students with disabilities, gender, years of work experience (in teaching).
2. To validate a Pedagogical Model for the development of the PE teachers' positive attitudes for the inclusion of disabled students together with nondisabled students to make their education more efficient.
3. To determine the impact of the mentioned Model on the motivation of students with disabilities to participate in the physical education lessons /activities/ and on the attitudes of the teachers involved in the process.

Thus, to generate the picture of the various attitudes of PE teachers towards children with disabilities within the frame of physical education classes in various school of Israeli Arab sector, and to create a clearer idea about improving effective methodology program for physical education teachers attitude - toward the inclusion, we uppered working hypotheses. We made the following assumptions in the experiment:

Hypothesis 1: There will be a difference in attitudes towards students with disabilities between teachers that participate in an academic course designed to increase self-awareness to one's

discrimination tendency and teachers who did not participate in such a course.

Hypothesis 2: There will be a difference in attitudes towards students with disabilities between teachers that have previous experience in integrating students with special needs and the ones who do not.

Hypothesis 3: There will be a difference in attitudes towards students with disabilities between males and females.

Hypothesis 4: There will be a difference in attitudes towards students with disabilities based on years of work experience (in teaching PE).

To investigate teachers attitudes towards students with disabilities we used The Attitude Questionnaire (ATIPE) and Demographic Questions scale.

The basic research periods: The research had been carried out from September 2014 to January 2018 and included the following periods:

1. The first pre-training stage was – (October, 2013 – August, 2014) orientational/ including ascertaining the relevant details: examining and analysing literature related to physical education teacher's attitudes, designing the model which provided the basis for projecting the methodological program for physical education teachers negative attitudes prevention and facilitated further elaboration of adequate strategies designed for the prevention of physical education teachers negative attitudes which had been implemented and validated during the formative stage of the experiment.
2. The second stage (September, 2014 – April, 2016) included the formative implementation of the experimental research: fulfilling the ascertaining experiment which defined the current situation related to physical education lessons within the Arab sector of Israel, and putting the implications into practice.
3. The third stage (May, 2016 – May, 2018) included the evaluation and validation of the formative stage: working out the research findings, i.e. analysis, generalization, systematization, summary, and description of the experimental research results; studying connections between the theoretical and empirical conclusions, elaborating perspective directions for further scientific researches in the domain.
4. Follow-up stage (September, 2018-December, 2019)

Statistical methods: Cronbach's alpha, students' t test for independent samples, One sample t test, two way analysis of variance, one way analysis of variance, Pearson correlation, U Mann

Whitney, Wilcoxon etc:

The following features were identified as suitable to constitute the base for the elaboration of the experimental stage, enabling us to draw conclusions on which we decided which implementation strategies to use:

- The possibility to use an unlimited sample;
- Having full control during the study;
- Uniformity of research tools (the same questions to all participants in both groups at the pre-training and the post training stages);
- Numerical information;
- Clear rules for viewing and reporting of findings;
- Relationships could accurately be drawn between the variables tested in the study;

Distribution description of the examined phenomenon was made as it occurred in the natural environment.

The decision to use the classical social tool of surveys delivery, had been taken since it can facilitate the process of obstacles identification in integrating different populations-in our case the inclusion of children with disabilities in regular frames. The approach had been found suitable to defining subjects' attitudes, as stipulated in our context, is as a common denominator of all human beliefs to others or to social phenomena or as an emotionally charged opinion which serves as the basis for a series of behaviors toward a particular social phenomenon. This definition reflects the three main characteristics (consciousness, emotional, and behavioral) of the attitude.

The teachers' positions in school are largely a reflection of public opinion, so it is interesting to know the processes taking place in this field over recent years in the country. In our research it was used for gathering information on the main aspect of this study - the identification of factors and indicators related to teachers' attitudes related to the issue of children with disabilities inclusion in the PE. The gathered data was quantifiable and measurable, and thus it gave us an evaluable picture of the studied situation. This method helped us to predict teachers' behavior in various challenging situations and examine the correlations between the determined variables and hypotheses.

Hence, it may be concluded that the tool of the attitudes' survey enabled us to test when teaching PE under inclusive conditions testing this way the research *dependent variables, permitting us to* determine the unconscious causes behind them, making them conscious and attainable by eventually defining the implementation strategies and elaborating the interventional program:

Non participation of the student with disabilities in PE lessons. Negative attitude for physical education teacher regarding the inclusion, negative attitudes peers, personal attitude regarding the disability (figure 3.1, designed by author).

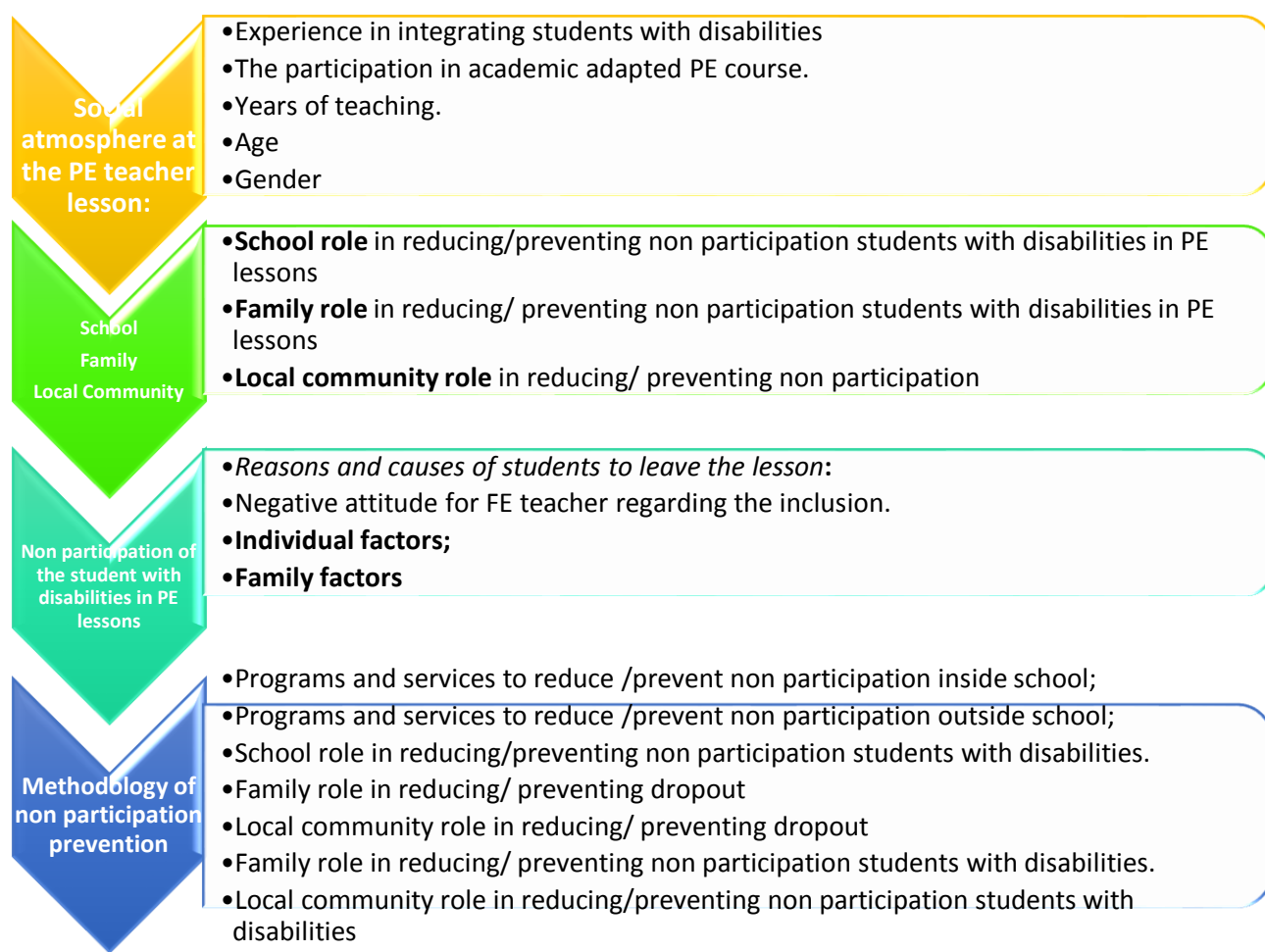


Fig.3.1. Factors/ reasons that cause students to leave the lesson

In addition, a detailed survey was made to check specific indicators of PE teachers in which demographic questions were also included. This survey was designed to assess how experience the PE teacher have with the option of practical and meaningful inclusion of students with certain disabilities into general physical education classes. The PE teacher had been informed about the student's various challenges before the encounter took place. The disabilities were of three types and they could be either an intellectual, physical, or visual disability. Furtherly, these factual descriptions were followed by a series of personal questions such as: "How confident do you feel about performing certain tasks to include this student into your program?".

Since Israel's Arab population is multicultural and composed of many religious and ethnic groups, we decided to include a variety of sub-group Arab minorities to attain a valid representative sample. Therefore, the sample of this research was chosen with a consistent view to all ethnic groups in the Arab society. The questionnaires were distributed in various communities of the Arab sector - Muslim - Bedouin and Circassian, Christian, among different inclusive schools.

- **Dependent variables:** attitudes towards children with disabilities in PE lessons; The reasons and causes of students to leave the lesson were categorized: negative attitude of the physical education teacher regarding the inclusion.
- **Independent variables:** social atmosphere at the PE teacher lesson, experience in integrating students with disabilities, the participation in an academic course, years of teaching, gender, age of the physical education teachers.

All questionnaires were followed by Cronbach alpha reliability analysis. All subscales presented a single factor solution. The factor solution for the ID subscale explained 85% of variance; $\alpha = .97$; The PD subscale explained 87% of variance; $\alpha = .96$; the VI subscale explained 90% of variance; $\alpha = .97$.

Age: The effect of age across questionnaire sub-scales was assessed using Pearson correlations. All correlations were *small to moderate and significant* at 0.01 level in which the correlation was trivial and non-significant and Attitude Challenge subscale were the relationship was significant at 0.05 level. The details of the relationships can be found in Table 3.1, designed by author.

Table 3.1. Relationships between Subscales and participants' age

Variables	Age	p value
<i>ATT Threat</i>	-0.22	<0.01
<i>ATT Challenge</i>	0.36	<0.05

Gender: T-tests computed between genders present *significant differences*.

Table 3.2, designed by author, presents the outcomes in each of the scales surveyed.

Table 3.2. Means and standard deviations (SD) of questionnaire scores across gender

Variables	Mean (SD)		t	p	Confidence interval	
	Males	Females			Upper	Lower
<i>ATT threat</i>	2.00 (1.05)	1.36 (0.47)	-4.62	<.001	0.36	0.9
<i>ATT Challenge</i>	2.77 (1.01)	3.22 (0.71)	-3.1	<.002	-0.72	-0.16

Due to the significant differences between males and females, an ANOVA within subjects across disability subscales was employed in each gender separately to explore the relative impact of disability on survey participants.

The findings *exhibited significant effects for disability* ($F[159,2]= 56.6$; $p<0.001$), and for the interaction of Disability*Gender ($F[159,2]=3.86$; $p<0.03$). Post-hoc pair wise comparisons depicted that the SE attributed to including students with VI was lower than for including students with ID or PD. This trend was more significant in the female participants. **Note:** M=Males; F=Females

Years of teaching experience: The effect of teaching experience was assessed using a general linear model comparing between experience periods ranging five years each. The total range of experience was collapsed into five-year epochs (i.e., 0-5; 6-10; 11-15; 16-20; 21 years or more). These epochs were entered into a 1-way ANOVA with scale score as the dependent variable. Tukey post-hoc analyses revealed differences between epochs.

Findings of the 1-Way ANOVA with Tukey post-hoc analyses revealed significant main effects and that in all scales and subscales, there were significant post-hoc effects ($p<0.05$) between teachers with only one to five years of experience compared to those with more years of experience.

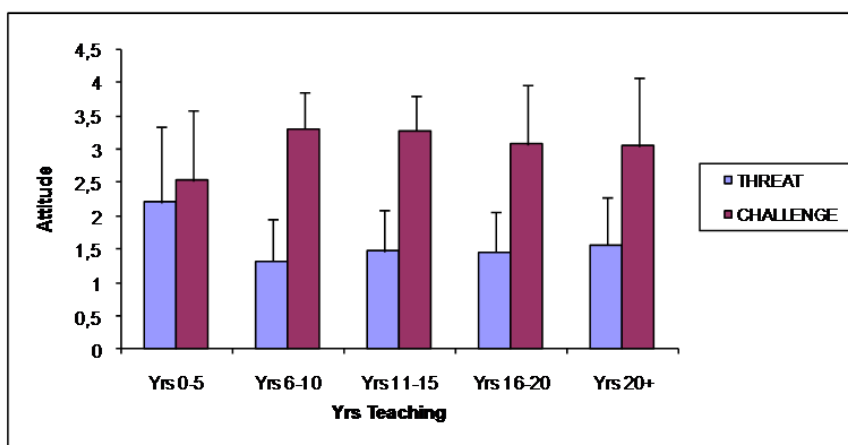


Fig.3.2. Attitudes of participants with different teaching experience toward students with different disabilities

Attitudes: Figure 3.2, designed by author, presents the data revealed regarding the two subscales of the attitude scale. Teachers with zero to five years of experience exhibited significantly greater threat and lower challenge than those with six years or more.

Participation in an academic Adapted PE course/s (which mentined above): Teacher responses regarding their volume of participation in adapted physical activity training were divided

between those attending two courses or less and those attending three courses or more during their basic or continuing education programs. Results of the T-test across the volume of participation are presented in Table 3.3, designed by author.

Table 3.3. Means, standard deviations (SD) and t-test results of questionnaire scores across teachers attending training courses in integrating students with disability

Variables	Mean (SD)		t	p	Confidence interval	
	2 or less	3 or more			Upper	Lower
<i>ATT thr</i>	2.13 (1.02)	1.28 (0.47)	6.61	<0.001	0.59	1.1
<i>ATT Chl</i>	2.54 (0.93)	3.43 (0.64)	-6.93	<0.002	-1.14	-0.63

Experience in integrating students with disabilities: The effect of having experience in providing physical education to students with disabilities was assessed using T-tests between those who indicated that they had experience and those who did not. The outcomes are presented for each of the subscales / i.e., ID, PD, & Tables 3.4 and 3.5, 3.6 below, designed by author, describes the outcomes of the T-tests across experience categories and instrument sub-scales.

Table 3.4. Means, standard deviations (SD) and t-test results of questionnaire scores across teachers having experience in integrating students with ID

Variables	Mean (SD)		t	p	Confidence interval	
	No	Yes			Upper	Lower
<i>ATT Threat</i>	2.38 1.06)	1.34 (0.51)	8.36	<0.001	-0.79	1.28
<i>ATT Challenge</i>	2.31 (0.93)	3.35 (0.66)	-8.28	<0.001	-1.29	-0.79

Table 3.5. Means, standard deviations (SD) and t-test results of questionnaire scores across teachers having experience in integrating students with VD

Variables	Mean (SD)		t	p	Confidence interval	
	No	Yes			Upper	Lower
<i>ATT Threat</i>	2.40 1.05)	1.36 (0.56)	8.45	<0.001	-0.82	1.32
<i>ATT Challenge</i>	2.29 (0.92)	3.32 (0.71)	-7.81	<0.001	-1.28	-0.76
<i>SSSE-VI</i>	1.98 (0.96)	3.18 1.10)	-6.86	<0.001	-1.54	-0.85

Table 3.6. Means, standard deviations (SD) and t-test results across teachers having experience in integrating students with PD

Variables	Mean (SD)		t	p	Confidence interval	
	No	Yes			Upper	Lower
<i>ATT Threat</i>	2.20 (1.03)	1.31 (0.52)	6.97	<0.001	-0.63	1.34
<i>ATT Challenge</i>	2.50 (0.93)	3.34 (0.73)	-6.16	<0.001	-1.07	-0.55

According to the above results and also through the interviews (see appendix D) held with those students whose teachers have passed an academic specific plan adapted to PE curricula, the increase of positive attitudes towards the inclusion of children with disabilities in PE was clearly validated and we could also conclude that the specific model that had been elaborated during this research was an effective base for the formative experiment implementation and one of the main factors of the successfully including children with disabilities in the regular PE lessons.

As we can see, although the movement toward “inclusive education” is anchored in the broad human rights agenda which has become a global issue influencing countries that are committed to democracy like Israel including the Arab sector, when coming to the practical implications it is easy to realize that many educators have still serious reservations about supporting the widespread placement of students with disabilities in their lessons within mainstream schools.

In accordance with this notion, our findings indicate that PE teachers within the Arab Israeli sector had mixed attitudes about the inclusion issue: The scores on the emotional subscale (social effects and feeling) in our study were relatively positive. In contrast, the teachers experienced moderate degrees of difficulty and barriers. According to previous research equivocal findings had been reported.

The current research is in strong concordance with the existing research findings [11; 37; 44] that PE teachers might have negative attitudes toward inclusion itself and its challenges which are probably derived from their fear that they did not have adequate training and might be lacking the experience and knowledge to successfully include students with disabilities in the general school system. Some researchers argue that most PE teachers may have mixed feelings and express obvious reluctance to the practical inclusion claiming simultaneously that their general attitude toward inclusion is positive; teachers may also vary according to the type of disability [123; 4; 9; 14]. Obrusnikova (2008) [123] found that PE teachers' beliefs were favorable toward teaching children with specific learning disabilities and less favorable toward teaching children with emotional and behavioral disorders.

Significant predictors of positive beliefs in Turkey study were: perceived competence, positive teaching experience with children with disabilities, and course work in APA. The results of this study emphasize the role of pre-service education in Turkey, which did not include course work in APA before 2000. The lack of training may explain the difference in attitudes between teachers with up to 10 years in service and those who enrolled into service before the teacher preparation program in Turkey was changed.

Gender: Our hypothesis about gender differences was supported and confirmed existing research in the field. Male and female teachers differed in their attitude scores: females had more positive attitudes than male teachers. The trend of more positive attitudes among the females is in accordance with previous research related to attitudes towards participation of children with disabilities in physical education classes summarized elsewhere and this fact strengthens the validity of our findings, [72; 73; 76]. However, there are also other studies which revealed no significant gender differences. By now it can be assumed that teachers who work in the conservative context of the Arab Israeli sector, may have gender oriented attitudes like in other conservative communities as it had been pointed out in previous research.

Based on the Theory of Reasoned Action, the significant differences found in both threat factors with fairly similar self-efficacy suggest that females who are naturally community oriented- may have better acquired with the norm of teaching under diverse conditions, incorporated in the inclusion approach [137]. On the other hand, male teachers who are naturally task-oriented still conform to the norm of accomplishing the designated task either than dealing with the challenges of inclusion-e.g. teaching the class a specific skill, for which a child with disabilities requiring extra attention may produce a threat. One explanation of this gender difference may be the different personality attributes among males and females. Numerous findings in the USA reported by Bain (1990) suggest that males are more conservative and authoritarian, and have a strong orientation towards coaching rather than teaching [apud 140]. The stronger authoritarian and coaching may increase the role conflict facing the need to include a child with disability, and thus produce a greater perceived threat among male students.

Years in Teaching: Our hypothesis about years in teaching was confirmed. Those teachers with an experience of 6-20 years have more favorable attitudes than with an experience of only to 5 years. However those with 15 years and above present more similar threats to those with only 0-5 years of experience. Turkey s' findings according to a representative sample, showed that older PE teachers possessed less favorable attitudes toward inclusion than did their younger counterparts; these findings

are consistent with earlier research, which has suggested that younger and less experienced teachers tend to be more receptive regarding the idea of including [141]. However, it seems that the main reason for the difference was due to the introduction to the new Physical Education Teaching Program in 2000 involving all universities. Initially APA took place as an obligatory PE teaching curriculum for one semester in 2000, and after that a “special Education” course and an APA practical course was added in 2005. Younger teachers who were educated in universities during the past 11 years have received various degrees of training in APA, thus strengthening the teachers’ knowledge base about how to include children with disabilities. In contrast, another study reported that in Italy, PE teachers with more years of experience believed that they have more skills to cope with the special needs of the children, and they were more positive towards benefits of inclusion compared to less experienced educators [142]. The difference in results from these two studies may be explained by the differing legislative framework, and the different PE teacher education programs causing significant differences between both countries regarding inclusion. It can be assumed, starting from existing research that the same reason is at the base of the current findings’ study.

Fifty years ago the first school for special education started in Israel, and in 1950 the special education department at the Ministry of Education and Culture was opened. In Turkey inclusion occurred only in the last decade, not permitting enough exposure and experiences within the PE practice. Our findings with regard to having a lot of years in teaching may be explained by to the potential influence of negative experiences while teaching classes including students with disabilities while support, services and knowledge were still lacking, in spite of the existing open-minded legislation.

Previous acquaintance and having a student with disabilities in the class: Our hypothesis about the impact of having an acquaintance and experience with person with disability upon the readiness to include children with disabilities in PE was supported. It was found that teachers that have had experience with students with disability had more favorable attitude scores than their counterparts without such experience. However, some previous studies have revealed that previous experience and contact with students having certain disabilities lead to positive attitude formation [143; 170; 172; 98]. Most authors supported their findings with the Contact Theory [apud 143; 159], which suggests that the amount and type of contact is related to its effect. However, it is also likely that those teachers with an a priori more positive attitude toward students with disability would reach out for opportunities to include them in their classes.

Participation in an academic course, pertaining to children with disabilities: Similar to previous experience, teachers in our sample who had attended academic courses pertaining to children with disabilities had gained an improved perceived self-efficacy of inclusion practice; after the training, these teachers substantially differed in their attitudes from teachers who had not attended such a course. Course preparation appeared to be a significant factor for US college and university students [apud 145]. In contrast, course preparation was not found to be a significant predictor of attitudes in several other studies in US and Israeli populations [apud 147].

The ascertaining pre-training preparations

Before implementing the intervention program, we assessed these indicators at the level of both the experimental and control groups, on a sample of 90 physical education teachers. In this context, in order to gather data for this study, teachers filled questionnaires with the following sections:

A. Attitude Questionnaire: *The Attitude Questionnaire (ATIPE)* (see Appendix 3) deals with the perception of the difficulties and the advantages of integrating children with disabilities / abnormalities in physical education, adapted by Schechtman (1991)[148]. This questionnaire contains 15 items, first used in 1991. The instrument includes short statements regarding the inclusion context. Internal consistency of the questionnaire was found in Shechtman $\alpha = .84$. The questionnaire is constructed by arguments *for* and *against* integration. All arguments are phrased in a positive way to reduce the risk of social desirability bias.

The original scale was expanded from a dichotomous scale of four degrees. The purpose of the expansion was to reduce the risk of following concern "yes" and "no" to pull in the direction of social bias. Also, some items in the questionnaire were replaced on issues relevant to students and teachers of Physical Education. There were also adjustments of the concept "learning deficiency" which was changed to "motor disability", "exceptional child" to "child with special needs", "teacher" - to "physical education teacher" and "class" – "physical education class". The adjustments were examined and confirmed by a team of five experts in teacher education and special education.

B. Demographic Questions: in this questionnaire the physical education teacher provide us his experience with the inclusion towards children with disabilities, (see Appendix 4). This instrument could be used to investigate attitudes beliefs of PETE majors toward the inclusion of students with disabilities in GPE. Based on previous attitude surveys in Europe and the U.S [128], it was concluded that different disabilities are perceived differently by practitioners, and that physical, intellectual, and sensory disabilities appear to create the greatest challenges when including students. Further studies

based on student and teacher reports have supported this notion (e.g., [129], [130]). Therefore, this instrument targets the following three disabilities: intellectual disability (ID), physical disability (PD), and visual impairment (VI).

Based on Bandura's (2006) recommendations for constructing a attitude instrument, an instrument was constructed and initial validation was performed to measure attitude toward including students with ID, PD, VI in PE frameworks, including teaching skills, playing sport games, and performing fitness activities [29].

Below is an example of the vignette for a student with ID: Noah is a high school student with an intellectual disability, so he does not learn as quickly as his classmates. Because of his intellectual disability, he also does not talk very well, so sometimes it is hard to understand what he is saying. However, he will point or gesture to help people know what he wants. He also has trouble understanding verbal directions, particularly when the directions have multiple steps. Noah likes playing the same sports as his classmates, but he does not do very well when playing actual games. Even though he can run, he is slower than his peers and tires easily. He can throw, but not very far, and he can catch balls that are tossed directly to him. He likes soccer, but he cannot kick a ball very far, and he never can remember where to go on the field. He also likes basketball, but he does not have enough to make a basket. He also does not really know the rules for basketball or other team sports. And he easily gets distracted and is off task during the game.

Following the vignette, three sets of questions with varying numbers were presented focusing on how confident the respondent felt in the specific context of conducting fitness testing (3-4 questions), teaching sport skills (3-5 questions), and organizing the actual playing of a sport (3-4 questions), totaling 10-12 questions in each scale. Demographic questions were included at the end of the instrument. an example of a fitness testing? An example of a question targeting teaching a sport skill was, how confident are you in your ability to modify the actual skills to help Noah when teaching sport skills? Finally, an example of a question targeting organizing the actual sport with the class was, how confident are you in your ability to modify the rules of the game for Noah? As noted above, participants rated their degree of confidence to complete these situational-specific GPE activities for each of the targeted disabilities on a scale of 1 (no confidence) to 5 (complete confidence).

C. Interview. In this study, we have also interviewed a group of students with disabilities and also physical education teachers regarding inclusion. Name tool: semi-built-in-depth interview questionnaire positions. Type of research tools: depth semi-structured interview. The interview in this

study built after a review of the literature on attitudes, and based on the key questions that encourage the development of major significance descriptions of the respondents used them in the organization of our world and lives as children with disabilities. The interview structure provided flexibility, you can talk to evolve, and let the interviewer exceed pre-prepared questions and ask questions according to the interviewees' life stories.

Target population: students with disabilities enrolled in schools participating in the study and their physical education teachers. The interview took place in the Eshkol Pais belongs to every town and village, after agreement by telephone each student. *The interview was conducted for 80 students* - 40 students studied with teachers since been the intervention program (intervention group), and 40 students studied with teachers who did not receive any intervention program (control group). The students were from different regions of Nazareth, Reina, Ein Mahel, Aksal, Cfrana, students belonging to schools and some elementary division and part of high school. Students with disabilities had various mental, some Ahk was with physical disabilities and five were disabled Riina. The results are presented in para 3.2.2

3.2. The Formative program “Sport is for everyone”

3.2.1. Formative program design and implementation

For inclusive physical education lessons to be practically effective, it is important that students with disabilities who are included in physical education lessons, regardless of which of the approaches mentioned above, are allowed to feel confident. Such a confidence can be enabled by the following conditions:

- A non-threatening environment for participation in PE lessons and all the informal activities that occur in the school.
- To foster teaching resources providing knowledge as well as specific solutions to sample case studies or profiles using all the methods warranted to empower critical thinking about real-life situations, including children with varied abilities and disabilities in class settings.
- To provide the student and teacher with a clear educational policy, regarding ‘to do and not ‘not to do’ guidelines for children with various disabilities.
- To include simulations and other sensitizing agents into introductory teacher courses, for challenging the normative belief.

Considering the factors impacting the attitudes of the PE teachers towards the inclusion of children with disabilities which had been identified through the ascertaining phase, we selected the Multidimensional educational methodology involving cooperation and partnerships between school, local community (Sports Department in the local community) and family.

The general objectives of the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disability (see figure 2.8) are: To increase the participation of students with disabilities in PE lessons; To raise awareness among PE teachers about the risks to which they were doing when you got a negative attitude regarding the inclusion; To create a stimulative-inclusive educational environment for all the students by: promoting student-teacher cooperation; maintaining motivation; promoting attractive learning.

The specific objectives include a series of actions addressed to all subjects concerned by school staff, relationship between children with disabilities and disabled peers, local community and family:

O1. To elaborate an operational plan for increasing participation in PE lessons at the level of school, family and local community.

O2. To include a specific program in the education system and make it affective towards children with disabilities in several areas in the school and especially in physical education.

O3. To involve local authorities and families in encouraging inclusion students with disabilities in every program in the school.

The inter-dependent design of responsibility distribution based on the Pedagogical Model to developing the Physical Education Teachers' positive attitudes towards inclusion of students with disability is present in the table 3.7, designed by author.

Table 3.7. The inter-dependent design of responsibility distribution based on the Pedagogical Model for the development of the PE teachers' positive attitudes

Specific Objectives	Actions	
	School	Local community
O1. To elaborate an operational plan for increasing participation in PE lessons at the level of school, family and local community	<ol style="list-style-type: none"> 1. Forming a monitoring committee, led by the school principal, that analyzes and proposes to the Council of school administration solutions for solving the cases of non-participation students with disabilities; 2. Identifying a strategy for including students with disabilities. 3. Elaborating an annual report on inclusion process in the school 	<ol style="list-style-type: none"> 1. Forming a working group for school safety in order to succeed in inclusion process. 2. Approving the plan of measures for inclusion process; 3. Advising school leaders to develop operational plans for encouraging inclusion process for students with disabilities.

O2. To include a specific program in the PE system and make it affective towards children with disabilities.	<ol style="list-style-type: none"> 1. Elaborating a procedure of monitoring absences/ non participation for students with disabilities at school level; 2. Creating a data base with children with disabilities. 3. Application of questionnaires (for students with disabilities) to determine the causes of Non participation in PE lesson 4. Application of questionnaires (for the PE teachers) to determine the causes of negative attitudes towards the inclusion. 5. Development of customized intervention plans in cooperation with class teachers, parents and school counselor; 6. Monthly inform students' parents about their children's school situation. 	<ol style="list-style-type: none"> 1. Surveying students with disabilities attendance, activities with parents and measures; 2. Analysis of school attendance and school absences for students with disabilities within the sittings of school directors;
O3. To involve local authorities and families in encouraging inclusion students with disabilities in every program in the school.	<ol style="list-style-type: none"> 1. Implementing the project "Sport is for everyone" for students with disabilities. 2. Organizing additional training activities for those who have difficulties of inclusion and participation in the school. 3. Organizing educational seminars of aspects of all the teachers-students in regard to inclusion, such as participation, motivation, self –efficacy for both teachers-students. 4. Organizing educational seminars in order to inform parents about optimal schooling of their children. 	<ol style="list-style-type: none"> 1. Ensuring appropriate equipment and allowance for students from poor families. 2. Preventive educational activities carried out during different thematic sets focused on the legal consequences of discrimination and social impact on medium and long term.

The model assumes a sets of deserving interaction among school (teachers-students), local community and families. Theses interactions maximize opportunities for students with disability to receive a variety of services in a supportive, effective climate and to receive an positive attitude during PE lessons from PE teachers.

Table 3.7 reflects the The inter-dependent design of responsibility distribution based on the *The Pedagogical Model for the development of the PE teachers' positive attitudes towards inclusion of students with disabilities*.

The inter – dependent design assumes a set of deserving interaction among school (teachers-students), local community and families. Theses interactions maximize opportunities for students with disability to receive a variety of services in a supportive, effective climate and to receive an positive

attitude during PE lessons from PE teachers.

The Formative program "Sport is for everyone" included 10 meetings, 2 hours each. The objectives of the program were to:

1. Increase education aspects of all the teachers-students in regard to inclusion, such as participation in PE lessons and all the activities, motivation, self-efficacy for both teachers-students and also sense of belonging to school.
2. Reduce risk factors such as discipline problems and involvement in violence.
3. Reduce risk social factors such as develop a sense of social rejection.

The program based on the factors associated with the adapted physical education, which mean that the teacher must provide an activities for all the children. Social psychologists have long been interested in understanding the conditions under which attitudes influence behaviors; thus, a growing body of research has highlighted the importance of affective attitudes as a key correlate of various behaviors. We must understand and predict behaviors, which means, that behavior is determined by intentions which are in turn determined by attitudes, subjective norms and perceived behavioral control. Underlying these three factors are beliefs that can form the basis of interventions to change behavior. In school, engagement is reflected in the relationships among students themselves and with their teachers. Students who are at risk tend to have poorer relationships in school, and that fact, they feels lonely in the school. The program sought to change that set of circumstances by teaching PE teachers to become more aware that they have significant control over many important aspects of students life, especially relationships.

During the program implementation teachers were taught a "language" of relationships that they could use to discuss and understand how relationships work and how their behaviors contribute to the positive or negative outcomes of interactions with others. The interpersonal language and model of relating to others used in the intervention derives from the theoretical model for the study of classroom teaching. According to the theoretical model, it is important to prepare future physical education teachers in engaging with inclusive practices for students with disabilities in GPE settings. According to proposed model of teachers reaction to having to include a students with disabilities we could understand the motivational factors affecting intentions, which mean, it is possible to understand the relationship between attitudes and behavior, so then we accept the assumption that people are decent creatures that may result from their actions considerate, so only the position cannot be used to guide behavior.

In addition to learning a relationship language and a model for understanding relationships, teachers in the program were taught how to understand the connection between the goals, beliefs, predictions and success and participation in physical education. Behavior of participants on exercise depends on their orientation about the goals of the activity. Thus, this program give the teachers the chance to understand the orientation for the students to participate in PE lessons.

The formative program “Sport is for everyone” was organized as a nonformal activity addressing several issues:

Meeting 1: Motivation for participating in the program

Objective: Sharing motivation for participating in the program (affective-emotional dimension).

During the first meeting all the PE teachers were introduced to one another, while every teacher shared with his/her friends the main reasons and motivations to participate in this program. Most teachers expressed their wish to succeeded to include all the students in his lesson as result, they will feel a feeling of satisfaction in their work. In addition, they described the problems and obstacles experienced by in the lessons as a result that was the first experience with student with disability. There is need to recognize and identify and to enhance the motives and to reduce the barriers of participation in physical activity among students [adapted from 35].

Meeting 2-5: Concept of attitude and teacher’s role in inclusion process

Objective: Improving the attitude concept and teacher’s affect in inclusion process. (cognitive, affective-emotional and behavioral/ conative dimensions)

During meetings 2, 3, 4 and 5, the intervention mostly focused on attitude concept, as we described to the teachers the importance of their attitudes and influence of teachers in the success of the inclusion process for the school- teachers- students. Attitude is considered the primary theoretical model for understanding the inclusion process, thus, negative attitude leads to inadequate inclusion process, positive attitudes leads to successful inclusion process. The program succeeded to show and explain the relationship between attitude-behavior, the program provide the teachers an examples in our practical life that shows this connection. In the end of the program teachers reported higher rated of showing a positive attitudes towards inclusion students with disabilities. In addition the students reported that was a significant change towards them in the lessons. There are several strategies for developing these relationships, *including experience in integrating students with disabilities, acknowledging student voice, increasing implementing equity students and adults in schools,*

reducing the feelings to be rejected socially. Very important to the physical education teacher to recognize the importance of planning in the lesson, teacher planning in physical education has become a target, planning will reduce any anxiety, students will have more time on task [45].

In *the second meeting* we focused on *reducing the feelings to be rejected socially*, we did that during Let part of the teachers be people with disabilities(trial role play) and the other teachers have an negative attitudes towards them- the teachers describe their bad feelings about this experience, and we do it again but they receive a positive attitude. At the end of the intervention all the teachers agree that equity is very important concept to feel good and accepted socially.

In *the third meeting* we focused on *experience in integrating students with disabilities*, we invited ugh them students with disabilities and we give the teachers to taught them PE lesson. The teachers reported how they pleased to understand the importance of inclusion, in other hand the students describe their feelings in the lesson and the “good attitude that receive from the teachers”... one of the students with disabilities say” wow really feel that I a normal child... wow I very happy to be here... thanks...”

In the *fourth meeting* we focused on *acknowledging student voice*, I worked as social education coordinator for many years, I gave for the teachers and also for students (with and without disabilities) that we invited to this meeting a lecture on the role of *student* council (including also students with disabilities). Then we asked each of the students to write a letter to the school administration or the local council or PE teachers in which he/ she complains or talks about any problem he/she has at school. Moreover, we asked them to write their own suggestion for solutions. Finally, the students built a complains box, they decorated it and chose its motto “*The pupils have a voice, listen!!*”.

We agreed with the school’s administration to put this box next to the secretary office and one teacher volunteered to be responsible for this box.

In the *fifth meeting* we focused on *increasing implementing equity students and adults in schools* which based on the necessity of not only listening to students, not only engaging students, but actually on giving students the platform to create, inform, and advocate for positive school transformations. We invited meaningful adults with disabilities from school to this meeting, principals, home teachers, counselors, regular teachers, we made a trial role play in which students and adults exchanged roles and each one had to stand in front of a jury and defended his/her contribution to the learning process in school. In this way both students and adults could see things in the others’ perspective.

Meetings 6-8: Adapted physical activity (APA) (cognitive, affective-emotional and behavioral/ conative dimensions)

Objective: Learning and understanding the importance of adapted physical activity (APA).

In those meetings, the intervention mostly focused on educational aspects in school, mainly on learning skills that contribute to use of adaption for the inclusion. We organized many activities, which gave them a feeling of academic success. As PE teachers engaged in activities, they were affected by personal information and situational influences that provided them with cues about how well they are teaching.

In the sixth meeting we focused on goals from participation in PE lessons and activities setting. We started by explaining why “goals setting” is important, and it is very important to the teachers to recognize the causes that student with disability and without participate in PE lesson [adapted from 42]. We explain for them also that behavior of participants on exercise depends on their orientation about the goals of the activity.

Therefore the program succeeded in enhancing using an adapted games when they perceived they are performing well or becoming more skillful. Those meetings were aimed to deal with slow progress that doesn't necessarily reduce if teachers believe they can perform better by expending more effort or using more effective strategies (Table 3.8, designed by author).

Table 3.8. Professional development workshop topics and schedule

Topic	Descriptions
<i>Education and students with disabilities</i> <i>Distinguishing between integration versus inclusion</i> <i>Strategies for facilitating inclusion</i> <i>Practical class activities for including students with several disabilities</i> <i>The inclusion of students with disabilities in the context of physical education and sport</i> <i>The role and responsibilities of physical education teachers</i>	<ul style="list-style-type: none"> - <i>A discussion about education and students with disabilities.</i> - <i>The term disability was discussed and defined, and laws enacted to protect the rights of people with disabilities including civil and educational provisions with disabilities.</i> - <i>A discussion about the philosophical underpinnings of these orientations and group participation in a demonstration highlighting the differences between integration and inclusion.</i> - <i>A discussion about strategies for facilitating the inclusion of students with disabilities in physical education and sport environments.</i> - <i>Hands –on demonstrations of use of picture exchange communication system symbols, structure, and differentiated instruction in common physical education activities.</i> - <i>Review of key content from the previous day and an introduction of additional content and concepts on the inclusion of students with disabilities in physical education and sport environments.</i> - <i>A discussion about the roles and responsibilities of highly qualified physical education teachers in working with students with disabling conditions.</i>

We explain for the teachers that they should know the three types of orientations:

- Task orientation – appears in the investment of effort in performing the activity - task, while ignoring the results of the competition.
- Ego-oriented - self-orientation-appears when the purpose of the activity is to demonstrate the ability and make most of it will be higher than others (i.e., to win the competition).
- Orientation for evaluation and social acceptance - appears when the purpose of the activity is to achieve a positive evaluation from others and be acceptable.

Duda's seven values inherent in sport had been also discussed and eventually put into practice [60]:

- ✓ The sport has to teach us the value of cooperation,
- ✓ Makes better citizens.
- ✓ Teaches us the competition.
- ✓ Helping people to move forward and achieve social status.
- ✓ Enhances the self-restraint.
- ✓ Teaches us how to get ahead in life and become more successful.

Accordingly, we organized a number of activities such as deciding / numbering/ discussing the most valuable decisions for the teacher to succeed including student with disabilities in his lesson.

Accordingly, we organized a number of sport activities; such like; basketball game for people with disabilities (we brought wheelchairs- role play) to give the teachers strong challenge to believe in their ability to play in these disabilities...

The teachers in the end of the meetings describe their feelings and the sense of frustration that they had initially- but they but all their desire and motivation led them to play- one of the teachers shouted” I'm really bad teacher—wow how I could be indifferent to such students.. and cried”..

In the ***eight and ninth meeting*** we focused on Programming Objectives:

- *Programing objectives in adapted physical education are identical to objectives in regular physical education.*
- *Theses objectives are based on the following: (1) neuromuscular and cardiovascular needs; (2) 2. social needs; (3) recreational needs and (4) interests.*
- *Children in the developmental program require activities which develop specific perceptual motor abilities and skills. However, programming for development of social skills and leisure time activities should not be neglected.*

Game and Activity Adaptation

- Virtually all activities in the regular physical education program can be modified in one way or another with just a slight bit of imagination.

Strategies and movements undertaken in sports are designed with two concepts:

1. To accomplish the game's objective, scoring or speed, etc. and
2. To stay within the rules while accomplishing the objectives.

Modifications may, therefore, be directed toward rule changes, equipment, or changes in the objectives of the game or activity.

Generally, there should be just enough change to make it safe for children in the adapted program, while retaining as much of the original character of the game as possible.

Activity Adaptations-Rules and Equipment (see Table 3.9, Table 3.10, designed by author)

Table 3.9. Professional development workshop with visual impairments students

Topic	Descriptions	Implications
Practical activities for including students with visual impairments	<ul style="list-style-type: none"> - Children with visual impairment are generally fit unless there are other disabilities . their movements however are not as free as those of other children. - Sport help the visual impaired person to overcome frustrations and social isolation. 	<ul style="list-style-type: none"> - One major method of dealing with the visually impaired involves the prescription of prosthetic device would allow an individual to function normally with impaired vision. - Glasses and contact lenses are the common prosthetic devices utilized for refractive problems. - It is very important for the severely visually impaired to be provided with a great deal of movement experience in spite of the disability in order to stimulate development. Since the blind child lacks a sensory channel by which he learns about the environment and about himself, his development may be some what slow the only way the child can compensate for visual inadequacy is by tactile, auditory and kinesthetic experience through movement. Although the blind child may be afraid to move in spite of the disability in order to maintain development. The blind must learn to substitute intact sensory channels for inadequate ones. - The design of prosthetic stimuli and prosthetic environments constitutes the types of adaptations in the physical education program. Prosthetic stimuli in physical education would include such things as sound devices on the baskets in basketball and physically assisting blind baserunners in baseball. - These methods substitute one sensory channel for an inadequate one. Prosthetic environments would include changing some game rules to slow down , to guide the blind child (ropes or

		<p><i>bouys). The physical educator can quite easily conceive such alterations and design them according to the activity and need.</i></p> <ul style="list-style-type: none"> - <i>Guiding Techniques; Auditory running.</i> - <i>Teaching strategies: goal ball field; Basketball court. tactile teaching- modeling (children teach children).</i> - <i>Physical guidance and adapted equipment.</i>
--	--	--

Table 3.10. Professional development workshop with intellectual disabled children

Topic	Descriptions	Implications
Practical activities for including students with intellectual disability	<ul style="list-style-type: none"> - <i>Persons with a mental health condition can be characterized as individuals who are experiencing more dependence and less autonomy than most other members of society.</i> - <i>Personal competence perceiving, experiencing and becoming acquainted with one's own body and knowing how to handle how it in different situations.</i> - <i>Environmental competence: being able to adjust to one surroundings coping with them and being capable of changing them.</i> - <i>Social competence: being able to adjust to others cooperation with them and being capable of them.</i> 	<ul style="list-style-type: none"> - <i>In the process of physical education and adapted physical education, it is therefore of great significance to offer a broad spectrum of different opportunities in which individuals with intellectual disabilities can experience and achieve more independence.</i> - <i>Treading walking – a treadmill walking program was designed to increase walking tolerance and muscle power.</i> - <i>In individuals five minutes of active stretching exercise were undertaken prior to each walking session and included prolonged and progressive stretching of the child, the hamstrings, and the quadriceps muscles, the treadmill program consisted of individually prescribed low-endurance, walking at 0% incline.</i> - <i>Ball exercises: large gym balls made of thick vinyl used for the exercises. these balls function as important aids in achieving normal movement and equilibrium.</i> - <i>Two ball sizes were chosen according to the height of the participants. the ball exercises were all performed individually in standing, sitting and lying position on 5 minutes.</i> - <i>The ball exercises were designed to improve control of postural alignment, balance and also to strengthen specific muscle groups.</i> - <i>Ball exercises involving whole-body activities help improve midline orientation while forcing the body to make rapid compensatory movements.</i>

Activity Adaptations-Rules and Equipment:

- *Reduce playing area to restrict movement.*
- *Use larger equipment to make game easier or slower.*

- *Use more players to reduce the activity of each player.*
- *Change rules to specifically limit excess activity by individuals.*
- *Shorten duration of games.*
- *Rotate players frequently to equalize activity time and provide rests.*
- *Reduce point requirements for winning.*
- *Use free substitutions so students can limit themselves.*
- *Plan frequent rest periods into the activity.*
- *Allow balls to bounce or be caught in games such as volleyball.*
- *Allow substitute runners.*
- *Use lighter equipment.*
- *Substitute walking or jogging for running .*
- *Simplify exercises.*

So in this meeting we give the chance for every teacher to express his feelings as he spoke, explaining to the rest of the teachers on the experience he has. Some of the PE teachers say “one of the teachers was against inclusion, at first he would not listen to me and even” said that they should be in school for special education”....

“At the beginning I laughed because I remembered that I was in the same attitude.... but this teacher today is the more reliable on the inclusion.....” (teacher’s reflections).

Meeting 10: Summary. In this meeting, we decided to give them more psychological support, we invited again students with disabilities and we give them to play football game (every group was mix teachers-students), it was an real example for inclusion concept and for the program's success, it was wonderful, amazing inclusion. Then, we summarized the program. It should be noted monitoring process during all meetings.

All activities were structured according the attitude dimensions: cognitive, affective-emotional and behavioral. Implementation of Formative program ”Sport is for everyone” was correlated with others component of the model.

3.2.2. Validation of physical education teachers' attitudes towards the inclusion of students with disabilities

The ***Pedagogical Model for the development of the PE teachers' positive attitudes towards inclusion of students with disabilities***, besides the above-mentioned strategies, included as a basic component the ***Formative program "Sport is for everyone"***, validated in the formative experiment, involving 90 PE teachers identified at the initial stage with negative attitudes towards the inclusion of disabled students. Their demographic characteristics are shown in Appendix 6.

Our ***sample*** is focused on two major groups of similar initial essence: the control and the experimental group. ***Physical education teachers in the education system***: There were 90 respondents who agreed to take part in the sample, (45 women and 45 men). The participants' ages ranged from 23 to 54 years. Teachers experience ranged from 5-24 years. The category of teachers was classified according to each five years of seniority. In order to validate the formative stage two groups were used- the findings of the experimental /intervention group who received a specific plan in order to succeed in the integration of students with disabilities (N=45, experimental group), were compared to those of the other group who did not receive any session or program (N=45, control group). Then again, ***we performed interviews with those students of the two groups***, and we saw the ratio and the teachers attitudes towards the integration of children with disabilities. The same questionnaires which were distributed to the teachers in the pre-training stage, were re-distributed at the post-training stage, to see the difference in the results. Collecting all the data regarding all the teachers was conducted in person through the department of education in the local authority to which the schools belong.

As it already was said, participants were assigned into two groups, the first (N=45) went through the intervention while the other (N=45) was a control group which didn't experience any program. To ensure clear understanding and visibility of the progress in the field, a comparative analysis of data regarding experimental group and control group was realized. Considering the specificity of the subject and the hypotheses, the author resorted to the comparative analysis of the results of the intervention group (experimental) and the control group before training and at the post-training stage, but also in relation to other coordinates: gender, experience of working with disabled children, teacher participation in an academic course.

Main findings are presented below.

Most teachers who participated described feelings of higher self-efficacy and positive attitudes towards the inclusion. Below we expose data analysis procedures, presented together with results by

goals order (table 3.12, figure 3.4, designed by author).

To compare ATT threat and ATT Challenge specific to control group (CG) and experimental (EG) at the pretest stage (before the intervention), we will follow the average scores obtained by the two groups in table 3.11 and Figure 3.3. (designed by author).

**Table 3.11. Means&standard deviations of questionnaire scores across two groups
before the intervention**

Variables	Mean (SD)		t	p	Confidence interval	
	Intervention group	Control group			Upper	Lower
<i>ATT Threat</i>	1.11 (0.21)	1.18 (0.18)	7.56	<0.110	-0.79	1.28
<i>ATT Challenge</i>	1.25 (0.34)	1.30 (0.41)	6.49	<0.221	-1.29	-0.79

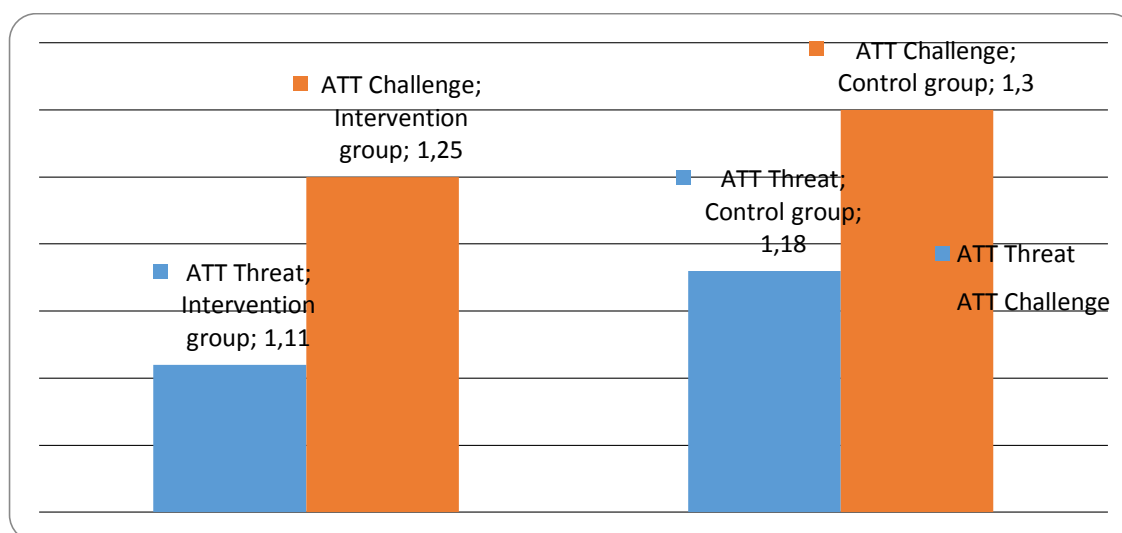


Fig. 3.3. Average values (means) of attitudes in PE teachers in control and experimental groups before the intervention

The graphical representation of the means obtained by control group and experimental group at the pretest stage does not indicate differences between the them, which allows us to assume that both groups are homogeneous. The average results obtained by simple are as follows: variable ATT threat for control group ($M_1=1.18$; $SD=0.18$) and for experimental group ($M_2=1.11$; $SD=0.21$); variable ATT Challenge ($M_1=1.30$; $SD=0.41$) and for experimental group ($M_2=1.25$; $SD=0.34$).

As we supposed that there are gender differences and it was already demonstrated in previous experimental stage this hypothesis in our formative experiment was also selected two homogenous samples of 45 males and 45 females. We ranged them as follows: 23 females and 22 males from

experimental group; 23 females and 22 males from control group and then compared them separately through nonparametric statistical test U Mann Whitney because the groups of females and males were to small.

Table 3.12. Comparative statistical differences of questionnaire scores of males and females across two groups *before the intervention*

	Males Intervention group	Males Control group	Females Intervention group	Females Control group
	<i>ATT Threat</i>	<i>ATT Challenge</i>	<i>ATT Threat</i>	<i>ATT Challenge</i>
<i>U (Mann-Whitney)</i>	43.500	63.000	86.000	70.500
<i>p values</i>	0.280	0.539	0.664	0.734

The statistical test does not indicate statistically significant differences between the results obtained by the experimental group and the control group of males and females at the pretest stage (table 3.12).

The results are as follows: ATT Threat variable for intervention males group ($U = 43.500$, $p \leq 0.280$); ATT Challenge variable for control males group ($U = 63.000$, $p \leq 0.539$); ATT Threat variable for intervention females group ($U = 86.000$, $p \leq 0.664$); ATT Challenge variable for control females group ($U = 70.500$, $p \leq 0.734$).

The graphical representation of the means obtained by control group and experimental group of females and males at the pretest stage is shown below in figure 3.4.

The graphical representation in Stacked Bar Graph of the means obtained by control group of males and experimental group of males and females also at the pretest stage does not indicate any differences, which allows us to assume that groups are also homogeneous.

The average results obtained by simple are as follows: variable ATT threat for control male group ($M_1=1.19$; $SD=0.20$) and for experimental male group ($M_2=1.12$; $SD=0.23$); variable ATT Challenge ($M_1=1.32$; $SD=0.30$) for control male group ($M_2=1.23$; $SD=0.29$) for experimental male group; variable ATT threat for control female group ($M_1=1.17$; $SD=0.22$) and for experimental female group ($M_2=1.10$; $SD=0.21$); variable ATT Challenge ($M_1=1.29$; $SD=0.34$) for control female group ($M_2=1.24$; $SD=0.19$) for experimental female group.

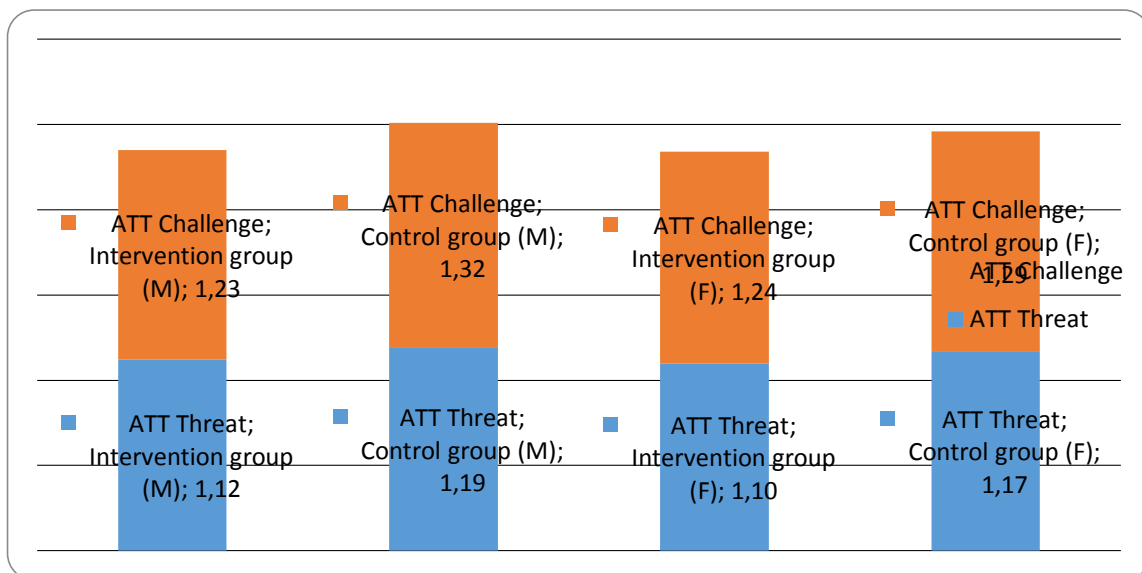


Fig. 3.4. Average values (means) of attitudes in PE teachers separately by gender in control and experimental groups before the intervention

The same thing was realized based on previous experience of PE teachers in working with disability students. The groups were also selected by previous experience. In that case we obtained 45 teachers with experience and 45 without proficiency of teaching children with disabilities and divide them according to the same principle. We ranged them as follows: 23 experienced and 22 inexperienced from experimental group; 23 experienced and 22 inexperienced from control group and then compared them separately through nonparametric statistical test U Mann Whitney (table 3.13, designed by author).

Table 3.13. Comparative statistical differences of questionnaire scores of experienced and inexperienced teachers across two groups *before the intervention*

	Experienced Intervention group	Experienced Control group	Inexperienced Intervention group	Inexperienced Control group
	<i>ATT Threat</i>	<i>ATT Challenge</i>	<i>ATT Threat</i>	<i>ATT Challenge</i>
<i>U (Mann-Whitney)</i>	28.000	43.500	56.500	32.500
<i>p values</i>	0.320	0.458	0.445	0.654

The statistical test does not indicate statistically significant differences between the results obtained by the experimental group of experienced and inexperienced teachers and the control group of experienced and inexperienced teachers at the pretest stage.

The results are as follows: ATT Threat variable for intervention experienced group ($U = 28.000$, $p \leq 0.320$); ATT Challenge variable for control experienced group ($U = 43.500$, $p \leq 0.458$); ATT Threat variable for intervention inexperienced group ($U = 56.500$, $p \leq 0.445$); ATT Challenge variable for control inexperienced group ($U = 32.500$, $p \leq 0.654$).

The graphical representation of the means obtained by control group and experimental group of experienced and inexperienced teachers at the pretest stage is shown below in figure 3.5, designed by author.

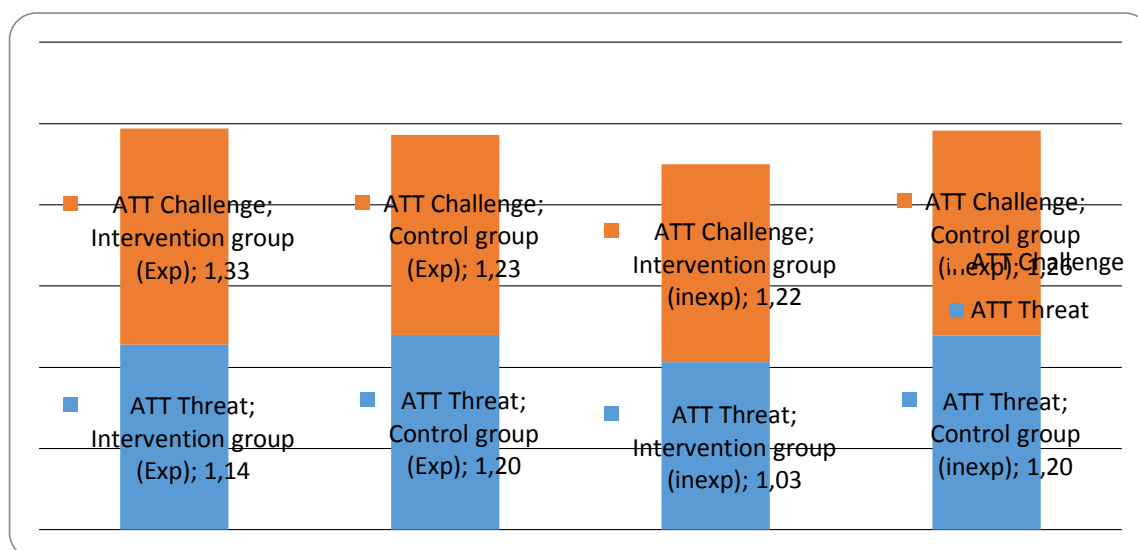


Fig. 3.5. Average values (means) of attitudes in PE teachers separately by experience in control and experimental groups before the intervention

The graphical representation of the means obtained by control experienced group and experimental experienced group at the pretest stage does not indicate any differences, which allows us to assume that groups are homogeneous.

The average results obtained by simple are as follows: variable ATT threat for control experienced group ($M_1=1.20$; $SD=0.15$) and for experimental experienced group ($M_2=1.14$; $SD=0.18$); variable ATT Challenge ($M_1=1.23$; $SD=0.25$) for control experienced group ($M_2=1.33$; $SD=0.26$) for experimental experienced group; variable ATT threat for control inexperienced group ($M_1=1.20$; $SD=0.19$) and for experimental inexperienced group ($M_2=1.03$; $SD=0.23$); variable ATT

Challenge ($M_1=1.26$; $SD=0.24$) for control inexperienced group ($M_2=1.22$; $SD=0.17$) for experimental inexperienced group.

After experiment the same sample of teachers that were selected by gender, experience of working with students with disability and divided in two groups based on these criterions. But the basic criterion was their predominated negative attitude toward PE training with students with disabilities. After the intervention the results were changed.

To compare ATT threat and ATT Challenge specific to control group (CG) and experimental (EG) at the posttest stage (after the experimental intervention), we will follow the average scores obtained by control group ($N=45$) and experimental group ($N=45$) in table 3.14 and Figure 3.6, designed by author.

Table 3.14. Means&standard deviations of questionnaire scores across two groups after the intervention

Variables	Mean (SD)		t	p	Confidence interval	
	Intervention group	Control group			Upper	Lower
<i>ATT Threat</i>	2.17 (0.21)	1.19 (0.19)	6.43	<0.001	-0.59	1.38
<i>ATT Challenge</i>	2.25 (0.32)	1.32 (0.37)	7.59	<0.001	-1.30	-0.69

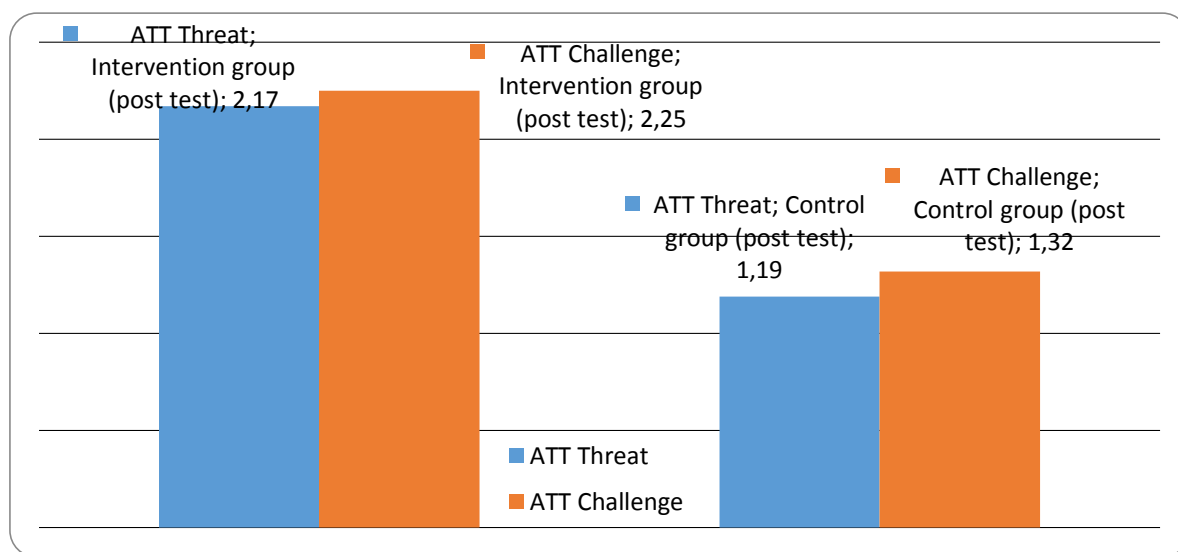


Fig. 3.6. Average values (means) of attitudes in PE teachers in control and experimental groups after the intervention

The means obtained by control group and experimental group at the posttest stage indicates differences and positive dynamics, which allows us to assume that both groups are homogeneous. The results obtained by simple are as follows: variable ATT threat for control group ($M_1=1.19$; $SD=0.22$) and for experimental group ($M_2=2.17$; $SD=0.27$); variable ATT Challenge for control group ($M_1=1.32$; $SD=0.31$) and for experimental group ($M_2=2.25$; $SD=0.19$). As a result the variables ATT threat and ATT Challenge were increased on experimental group.

The posttest comparison by gender showed us the same results (table 3.15, designed by author).

Table 3.15. Comparative statistical differences of questionnaire scores of males and females across two groups after the intervention

	Males Intervention group (posttest)	Males Control group (posttest)	Females Intervention group (posttest)	Females Control group (posttest)
	<i>ATT Threat</i>	<i>ATT Challenge</i>	<i>ATT Threat</i>	<i>ATT Challenge</i>
<i>U (Mann-Whitney)</i>	83.500	73.000	95.000	70.000
<i>p values</i>	0.025	0.039	0.046	0.734

The statistical U Mann Whitney test showed statistically significant differences between the results obtained by the experimental group and the control group of males and females at the posttest stage.

The results are as follows: ATT Threat variable for intervention males group ($U = 83.500$, $p \leq 0.025$); ATT Challenge variable for control males group ($U = 73.000$, $p \leq 0.039$); ATT Threat variable for intervention females group ($U = 95.000$, $p \leq 0.046$); ATT Challenge variable for control females group ($U = 70.000$, $p \leq 0.037$).

The graphical representation of the means obtained by control group and experimental group of females and males at the posttest stage is shown below in figure 3.7 (designed by author).

The graphic representation of the means obtained by control group of males and experimental group of males and females at the posttest stage indicates significant differences. The average results obtained by simple are as follows: variable ATT threat for control male group ($M_1=1.19$; $SD=0.20$) and for experimental male group ($M_2=2.12$; $SD=0.23$); variable ATT Challenge ($M_1=1.32$; $SD=0.30$) for control male group ($M_2=2.23$; $SD=0.28$) for experimental male group; variable ATT threat for control female group ($M_1=1.17$; $SD=0.23$) and for experimental female group ($M_2=2.10$; $SD=0.23$);

variable ATT Challenge ($M_1=1.29$; $SD=0.35$) for control female group ($M_2=2.24$; $SD=0.18$) for experimental female group.

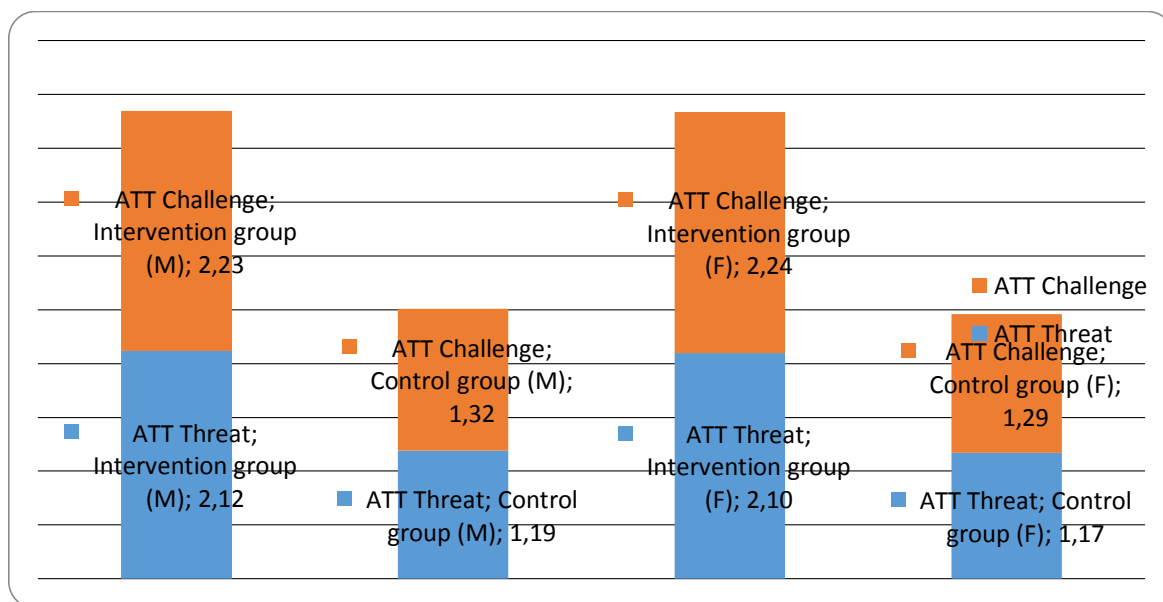


Fig. 3.7. Average values (means) of attitudes in PE teachers separately by gender in control and experimental groups after the intervention

The presented results based on gender data make it clear that male and female teachers, unlike those in the control group, have a higher level of attitudes. This means that *these teachers from the experimental group appreciate the importance of physical training with children with disabilities*.

Table 3.16. Comparative statistical differences of questionnaire scores of experienced and inexperienced teachers across two groups after the intervention

	Experienced Intervention group	Experienced Control group	Inexperienced Intervention group	Inexperienced Control group
	<i>ATT Threat</i>	<i>ATT Challenge</i>	<i>ATT Threat</i>	<i>ATT Challenge</i>
<i>U (Mann-Whitney)</i>	59.500	65.500	48.500	62.500
<i>p values</i>	0.020	0.045	0.045	0.033

The statistical test indicates statistically significant differences between the results obtained by the experimental group of experienced and inexperienced teachers and the control group of experienced and inexperienced teachers at the pretest stage (table 3.16, designed by author).

The results are as follows: ATT Threat variable for intervention experienced group ($U = 59.500$, $p \leq 0.020$); ATT Challenge variable for control experienced group ($U = 65.500$, $p \leq 0.045$); ATT Threat variable for intervention inexperienced group ($U = 48.500$, $p \leq 0.045$); ATT Challenge variable for control inexperienced group ($U = 62.500$, $p \leq 0.033$).

The graphical representation of the means obtained by control group and experimental group of experienced and inexperienced teachers at the posttest stage is shown below in figure 3.8 (designed by author).

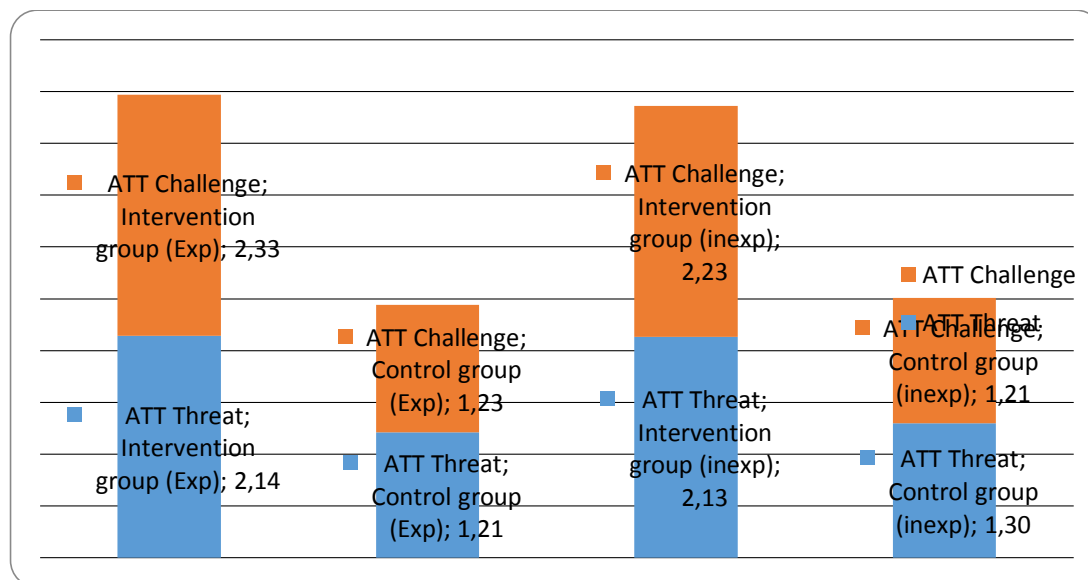


Fig. 3.8. Average values (means) of attitudes in PE teachers separately by experience in control and experimental groups after the intervention

The results obtained between control experienced group and experimental experienced group at the posttest stage indicates statistical significant differences at ≤ 0.05 p value. The average results obtained by simple are as follows: variable ATT threat for control experienced group ($M_1=1.21$; $SD=0.25$) and for experimental experienced group ($M_2=2.14$; $SD=0.19$); variable ATT Challenge ($M_1=1.23$; $SD=0.24$) for control experienced group, ($M_2=2.33$; $SD=0.22$) for experimental experienced group; variable ATT threat for control inexperienced group ($M_1=1.30$; $SD=0.19$) and for experimental inexperienced group ($M_2=2.13$; $SD=0.23$); variable ATT Challenge ($M_1=1.21$; $SD=0.21$) for control inexperienced group, ($M_2=2.23$; $SD=0.17$) for experimental inexperienced group.

We can conclude from these results that after experimental intervention as experienced teachers as inexperienced one can change their attitudes.

In this case we can assume that after experimental intervention based on specific pedagogical model, the PE teachers' attitudes can be changed toward students with disabilities at the classroom physical education lessons.

In order to highlight the experimental influence on the experimental sample through our experimental activities, the subjects were retested through the same questionnaire *The Attitudes towards including students with a disability and Demographic questionnaire*. We compared the data obtained before and after experimental intervention (test and posttest). In this case we used paired samples t test and a nonparametric version Wilcoxon two related samples.

The comparative results obtained by teachers from experimental group in the test stage and posttest stage, regarding the tendencies of positive attitudes are presented in Figure 3.9 (designed by author).

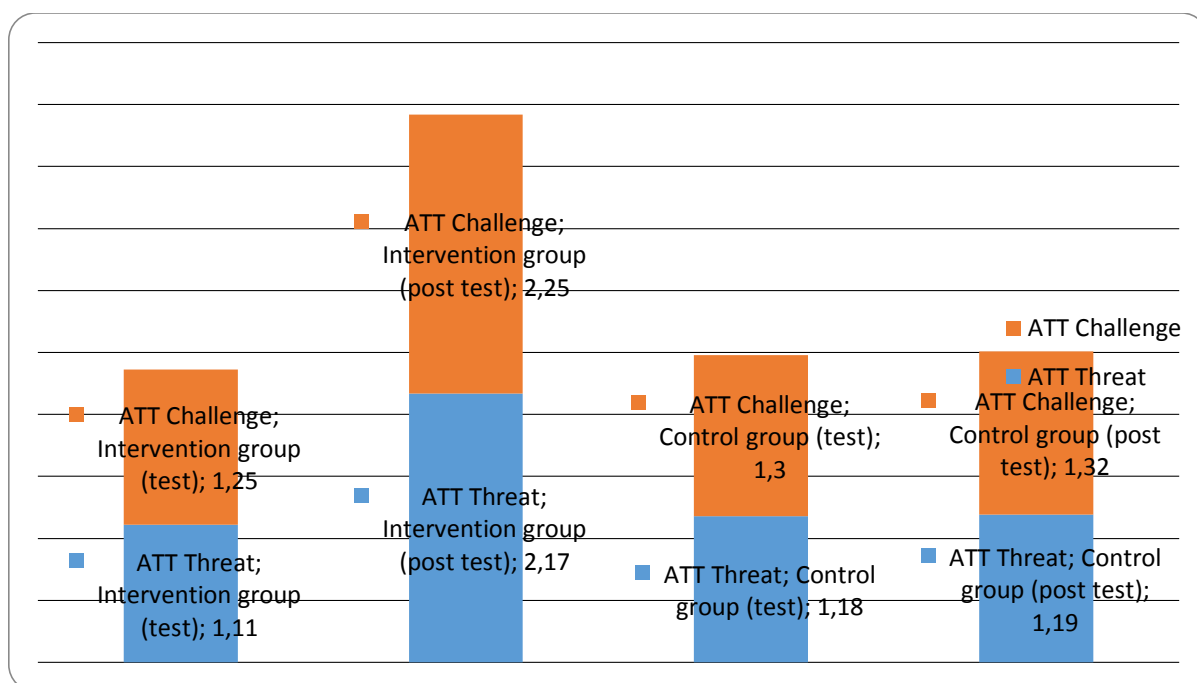


Fig. 3.9. The comparative results on attitude trends in PE teachers in control and experimental groups before and after experimental intervention

According to the results, there are differences between the means obtained by experimental group of teachers in pretest stage and after experimental intervention in posttest stage. The statistical processing of the data obtained by the Wilcoxon test, statistically significant differences were found at variable ATT Challenge ($Z = -2.907$, $p = 0.005$) and variable ATT Treat ($Z = -2.121$, $p = 0.034$). Instead, there is no evidence for difference at control group in pretest stage and after experimental

intervention in posttest stage at variable ATT Challenge ($Z = -3.805$, $p = 0.533$) and variable ATT Treat ($Z = -2.042$, $p = 0.042$).

Significant changes made by experimental group of teachers are due to the general optimization of psycho-emotional states by developing active listening skills by recognizing the importance of self-esteem and acceptance of others by expanding personality traits, by developing communicative skills and by awareness tolerant behavior toward children with disabilities.

The analysis by gender showed the same results. As females as males from experimental group denotes differences between the means obtained by experimental group of teachers in pretest stage and after experimental intervention in posttest stage. In the control group there were no identified significant differences after experimental intervention.

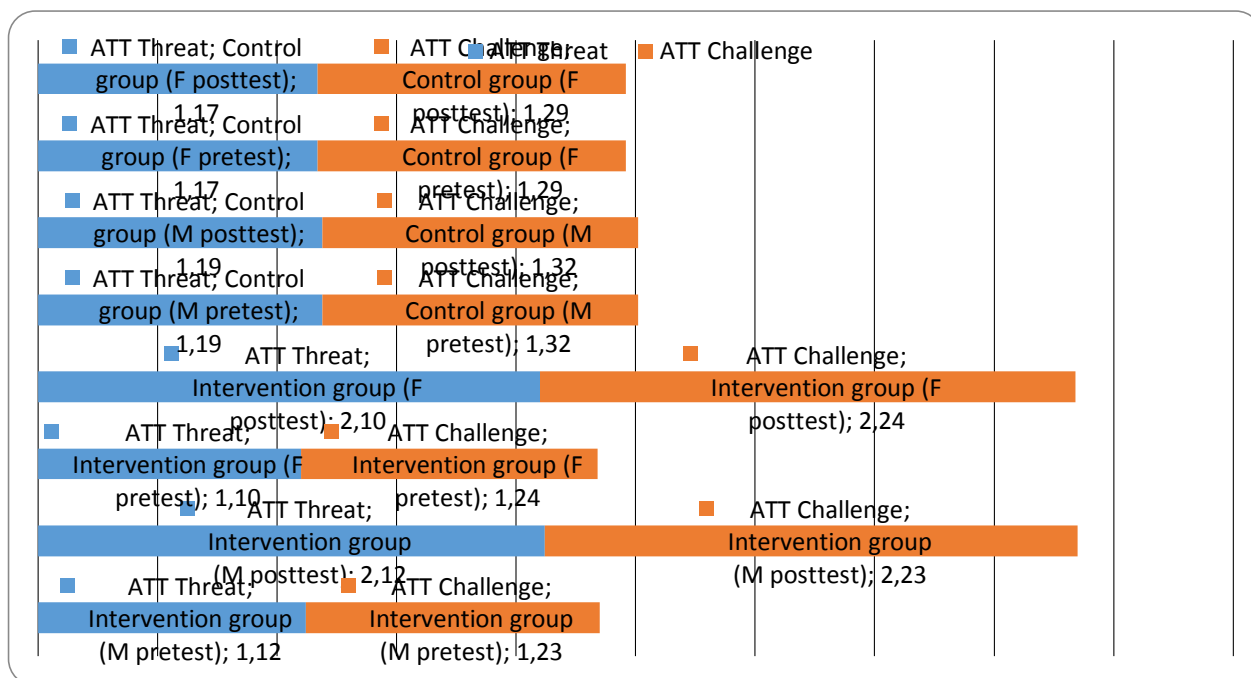


Fig. 3.10. The comparative results on attitude trends in PE teachers by gender in control and experimental groups before and after experimental intervention

The statistical processing of the data obtained by the Wilcoxon test indicate statistically significant differences at experimental male group in pretest and posttest stages at variable ATT Challenge ($Z = -2.301$, $p = 0.024$), and variable ATT Treat ($Z = -2.000$, $p = 0.024$) and experimental female group at variable ATT Challenge ($Z = -2.110$, $p = 0.004$), and variable ATT Treat ($Z = -2.240$, $p = 0.042$). At control male group we didn't obtained any differences at variable ATT Challenge ($Z = -2.121$, $p = 0.350$) and variable ATT Treat ($Z = -2.877$, $p = 0.240$) and at control female group we

also didn't obtained any differences at variable ATT Challenge ($Z = -2.800$, $p = 0.600$) and variable ATT Treat ($Z = -2.555$, $p = 0.440$) (figure 3.10, designed by author).

The comparison between pretest and posttest stages based on experience of PE teachers in working with children with disabilities elevated positive changes in their attitudes comparative with control group. The experimental group as experienced teachers as inexperienced changed their attitudes regard physical education with children with disabilities.

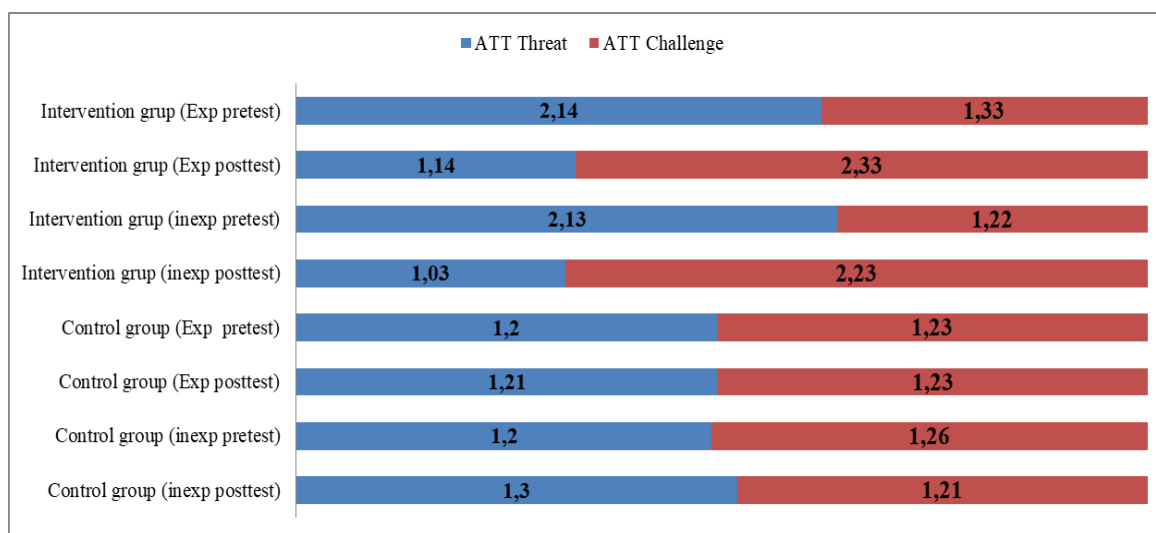


Fig. 3.11. The comparative results on attitude trends in PE teachers by experience in control and experimental groups before and after experimental intervention

Obtained results revealed statistical differences between experienced teachers from experimental group in pretest and posttest for variable ATT Challenge ($Z = -2.000$, $p = 0.035$) and for variable ATT Treat ($Z = -2.566$, $p = 0.044$). The same thing we can find in inexperienced experimental group of teachers for variable ATT Challenge ($Z = -2.875$, $p = 0.005$) and for variable ATT Treat ($Z = -2.225$, $p = 0.001$). About the control group we cannot attest major changes. The results were unsemnificative statistically for both variables and subgroups (control group of experienced teachers and control group of inexperienced teachers) experienced control group of teachers for variable ATT Challenge ($Z = -2.400$, $p = 0.150$) and for variable ATT Treat ($Z = -2.251$, $p = 0.240$); inexperienced control group of teachers for variable ATT Challenge ($Z = -2.500$, $p = 0.550$) and for variable ATT Treat ($Z = -2.250$, $p = 0.400$) (figure 3.11, designed by author).

Significant changes made by the experimental group of teachers are a consequence of learning the ability to perceive situations from the point of view of others; the skills of communicating to others;

the recognition of differences between people and respect for each individual's individuality.

The experimental details connected to the PE teachers' attitudes are presented in figures 3.4-3.11 per groups: the control versus the experimental group, divided also per categories like gender and experience in working with children with disabilities, permitting us to ascertain the following situation: we can ascertain the significant change realized in the experimental group at time 2 (the post-test stage); *the experimental group teachers who had participated at the formative intervention which had been focused on examining and modifying the stigmatic attitudes are approaching this time the integration issue as an opportunity to cope with a challenge and not just a risk, while on the opposite the subjects of the control group are still referring to the same situation as a risk.*

Most teachers who participated in the formative program described feelings of higher self-efficacy and positive attitudes towards the inclusion.

The positive result of the research were confirmed by the positive results of PE teacher's adaptive activities with students with different disabilities – pre and post tests: (table 3.17, designed by author).

Table 3.17. Results of PE teacher's adaptive activities – pre and post tests

	Pre-curs	Post-curs
PE teachers come to their class with a lot of adjustment (adallhon) to include students with intellectual disability (MD)	0,5	2,5
PE teachers that use with large balls and outstanding for students who have visual impairment (VI)	1	3
PE teachers that use with large balls and outstanding for students who have physical disabilities (PD)	1,5	4, 5

Special note: all students with disabilities were assisted to offer the feedback regarding PE teacher's attitudes (for example, the assistant noted their answers).

The statistic values derived from the pedagogic experiment confirmed **the research hypothesis:**

Hypothesis 1: There are difference in attitudes towards children with disabilities between teachers that participate in an academic course designed to increase self-awareness to one's discrimination tendency and teachers who did not participate in such a course.

Hypothesis 2: There are difference in attitudes towards children with disabilities between teachers that have previous teaching experience in teaching PE and the ones who do not.

Hypothesis 3: There are difference in attitudes towards children with disabilities between males and females.

Based on the students' answers, the Matrix of indicators of the positive attitude of EF teachers in the vision of students with disabilities (developed by us) was completed. In table 3.18. (designed by author) the results of the vision of students from the experiential group (of teachers from GE) (GE) and from the control group (of teachers from GC) (GC) are presented.

**Table 3.18. The Matrix of indicators of the positive attitude of PE teachers
in the vision of students with disabilities**

Nr.	Indicator	GE (nr)	GC (nr)
Cognitive dimension			
1	Knows how to encourage children with disabilities to take the same risks as other children so that they can win.	34	10
2	Knows how to teach children with different disabilities to access information in different ways.	37	22
3	Knows how to encourage children to understand and appreciate the differences of others	34	10
4	Knows how to support all children to participate equally in activities (taking into account their possibilities).	35	10
5	Responds to a child's individual needs (language, gestures, facial expressions for children)	33	15
Emotional dimension			
6	Recognize that every child can contribute	30	11
7	Recognize that every child is valuable	32	11
8	He/she is friendly, open and understanding	38	32
9	It is flexible to change / adapts to the needs of children	35	23
10	Model good communication so that children learn from what they see and hear	34	18
Behavioral (or intentional) dimension			
11	Encourages cooperation in lessons for children with and without disabilities	36	11
12	Encourages teamwork and child-to-child activities	39	19
13	It motivates children to come together to support each other	40	32
14	Encourages an inclusive environment by praising children who say they do not understand or ask for help or thank them for asking and then offer help or an explanation	37	11
15	Gives children enough time to understand what they are talking about and formulate their answers	34	12
16	It allows the children themselves to decide where to stay and to take part in activities	32	8

Based on the students answers, we conclude significant progress: *increased the positive attitude of PE teachers in the vision of students with disabilities from the experimental group (GE) / with teachers involved in the training programme.*

At the same time, it can be deduced from these interviews that before the formative stage some students do not have the positive attitudes and satisfaction with the treatment they get from some of the physical education teachers. Also we can understand that some of PE teachers understand the importance of inclusion towards children with disabilities but they admit that they did not have the skills and tools to deal with the difficulties of the inclusion and how to success to include child with disability. Regarding the administrators' opinion they understand also the importance of inclusion and they try to give all the possibilities of teachers in general and in particular physical education teachers to integrate these children in the school. Some of the parents do not see that society respects these children and they think that there is need for a special program to engage students with disabilities.

At the same time, we would like to mention that the intervention program, despite of the progress, didn't succeed significant results in preventing the phenomenon of rejection towards students with disabilities at activities that might occur at and out of some schools. This can be explained through a social and psycho-pedagogical perspective. During the experiment period we observed that in the schools when teachers, involved in the program, cooperated well with parents and students without disabilities, and specialized services addressed to disable students, students with and without disabilities demonstrated more motivation to play / to study together.

From psycho-pedagogical perspective, assuming that changing stereotypical attitudes and transforming them into concrete actions is a more challenging and time spending mission beyond that of increasing awareness of the importance of inclusion and even of succeeding in the primary stage of implementation during the PE lessons. It can be argued that any practical intervention at behavior level requires a closer cooperation between family, students at risk, psychologists, teachers and community, requiring a complex and prolonged educational process whose successful implementation can be evaluated over time perspective.

3.3. Conclusions on Chapter 3

1. The aspects of the experimental research followed the increasing of inclusion process towards students with disabilities through the validation of a Pedagogical Model for the development of PE teachers' positive attitudes towards inclusion of students with disabilities, elaborated on the

basis of ascertaining experiment results. In this context, the data provided by ascertaining experiment showed the correlation existing between background factors and the abilities of PE teachers to include students with disabilities in their lessons. The model helped to decide about factors that could be influenced through a pedagogic experiment and consequently prevent failure inclusion process in the PE activities.

2. It was concluded that gender, PE teacher participation in an academic course, teachers' experience in including students with disabilities, have a significant impact over inclusion they can be exposed to a formative intervention. The assessment of these indicators level in both groups showed the necessity of an intervention that could improve them and served as a criterion in elaboration of the formative program, in choosing the issues addressed during the intervention, and subsequently in elaborating&adapting the educational forms, strategies and methods with a formative perspective.
3. At the same time, the efficacy of the Pedagogical Model, activities and methods aimed at increasing inclusion process towards students with disabilities in PE class depends on the involvement of the educational factors concerned: family, school (PE teachers as a part of them), community and the students themselves. The relationships established among the different components of Pedagogical Model for the development of PE teachers' positive attitude towards inclusion of students with disabilities, validated during the implementation, positively influenced the intervention and the formative process as a whole.
4. The formative program "Sport is for everyone" can serve as an example of good practice for PE attitude and the attempt to increase the inclusion process towards students with disabilities at school, through activities similar to those promoted under the program, can help improve their performance of those students and their participation in the activities, and thus can reduce rejection phenomenon rate among students with disabilities from Israeli Arab sector.
5. Based on the Matrix of indicators of positive attitude of PE teachers in the vision of students with disabilities proposed by us (Table 3.18.) we found significant changes in the attitude of teachers, structured in three dimensions: cognitive, emotional, behavioral, exploring knowledge, emotions and EF teachers' behaviors toward students with disabilities.
6. The actions stipulated by the Pedagogical Model for the development of PE teachers' positive attitude towards inclusion of students with disabilities and the issues addressed during the intervention program stages: Promoting school' equipments, Enhancing cognitive and

psychological engagement, Information processing, Situational influences through teaching strategies; Acknowledging students' voice had as a result the following important phenomena, teachers awareness towards inclusion students with disabilities - improvement of PE teacher' attitudes (positive attitudes) – increasing students with disabilities participation in PE activities.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

The theoretical analysis and pedagogical experiment in the frame of our research allowed the determination and clarification of the theoretical-methodological basis of the *Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities* in physical education activities.

The analysis of the theoretical benchmarks and the interpretation of the research results regarding the development of positive attitudes of physical education teachers towards the inclusion of students with disabilities in physical education activities confirmed the significance of the subject, by achieving the purpose and objectives, attesting to its theoretical and praxeological value, the scientific novelty.

Based on the analysis, the explanations and the interpretation of the theoretical, experiential aspects, as well as the data obtained during the pedagogical experiment, we can conclude the following:

1. Inclusion of students with disabilities in regular schools is an essential educational process which is recognized by several international documents. Teachers' attitudes regarding this process are recognized as crucial by different authors and documents. Based on international standards and literature review, we deduced the importance of educational strategies on improving the PE teachers' attitudes towards the inclusion of students with disabilities into PE activities, taking into account the specific needs of girls and boys, but also the sociocultural, education and family context etc.
2. Following the evolution of scientific trends regarding teachers' attitudes towards the inclusion of students with disabilities, the analysis of pedagogical, psychological, sociological and psycho-pedagogical approaches was undertaken. The problem under study allowed **establishing the essence of the basic concepts**: *teacher's attitudes to inclusion, dimensions of teacher's attitudes (subchapter 1.1), school' inclusive environment, inclusion, inclusive education, in relation to PE (subchapter 1.2.)*. The definitions on inclusive education and inclusive culture were reinforced. We also proposed our definitions of *positive attitude (Ch.1, p.35); inclusive culture of school (Ch.1, p.40)*; the exhaustive definition of *inclusive education from a broad and a narrow perspective (Ch.1, p.49)*. In the frame of research, concepts of inclusion in education system and connections between inclusion and physical education were explored (*subchapter 1.3*). Moreover, *social, pedagogical and physiological backgrounds of inclusive physical education (subchapter 1.3.)* were specified.

3. The theoretical significance of our research is ensured by the contribution to the development of the concepts and theories of inclusion in relation to PE; identification of factors and indicators of inclusive education in relation with PE; contributions to the theory of education by exploring the concept of inclusive PE based on social, pedagogical and psychological foundations; contribution to changing the traditional paradigm that sport is an unimportant topic for students with disabilities to approach it as a key element for the implementation of inclusive PE lessons; analyzing various PE teacher's attitudes programs, systems and alternative facilities for disabled students to reduce the risk of their rejection.
4. *The Concept of developing physical education teachers' positive attitudes towards the inclusion of students with disabilities* (subchapter 2.1) was developed by author. The concept includes the following components: analysis of the physical education sector in Israel concerning inclusion; physical education adaptations for students with disabilities; and an overview of the sociocultural determinants of teachers' attitudes towards students with disabilities. The concept served as a theoretical and praxiological framework for including students with disabilities in PE lessons together with non-disabled students.
5. Given the importance of specialized teacher training in inclusive education, *Successful Inclusion points* (Ch.2, p.70), *a set of principles of IE addressed to teachers* (Ch.2, p. 84), *the Connection between PE teachers' attitudes and psycho-pedagogical strategies* (Ch.2, p.85), *the Diagnostic Model for Changing Stigmatized Attitudes: Challenges vs. Goals and Practical Steps* (Ch.2, p. 86), *the Attitude Modification construct* (Ch.2, p.88), *the Matrix of indicators of the positive attitude of PE teachers in the vision of students with disabilities* (Ch.3, p.133) were developed by the author. To forming the positive attitude of PE teachers, *the teacher's new promoting role as a mediator/ model in the integrative process of students with disabilities was proposed* (Ch.2, p.87).
6. Based on previously and present research we state that the Physical Education teacher's role is to keep a vital atmosphere in the PE classes containing all students, constituting a live model for his regular students in the process of learning to accept others and deal tolerantly with their difference. By exploring *Pedagogical Model for the development of the PE teachers' positive attitudes towards inclusion of students with disability* (subchapter 2.3) and implementing the *formative program "Sport is for everyone"* ((subchapter 3.2), the Physical Education teacher is provided with a praxiological tools to include every student with/without a disability in his/her

classes. The implementation of the formative program "Sport is for everyone" (subchapter 3.2) ensures a successful practice in the educational environment and represents the premise of promoting the values of respect, active support, and empowerment of students with disabilities; and establishing inclusive school culture.

7. The results of the experimental research (Chapter 3) demonstrate the change of attitude towards the students' disability as a threat (problem) to the approach as a challenge (opportunity for development) in their involvement in physical education activities; improving the willingness of students with disabilities to participate in physical education activities together with students without disabilities.
8. Research contributes to the enrichment of the theoretical knowledge and methodological approach regarding the inclusive PE in the schools in Arab sector of Israel with an emphasis on: the concepts of inclusion in education system in correlation with teachers' attitude towards disabled children inclusion; the complexity of correlations between the attitudes of PE teachers and between the variables of: participation in an academic course, experience in integrating disabled students, gender, years of work experience.
9. The scientific originality and novelty of the research consists in the examination of changing trends in the attitudes of physical education teachers towards the inclusion of students with disabilities in their regular lessons at a historical and conceptual level; updating the concepts of inclusion, inclusive school environment, positive attitudes of physical education teachers; helping to change the traditional paradigm that sport is an unimportant subject for students with disabilities, to address it as a key inclusion element in physical education lessons; establishing indicators for evaluating the attitudes of physical education teachers towards the inclusion of students with disabilities in physical education activities; development, implementation and validation of the Pedagogical Model for the development of the Physical Education Teachers' positive attitudes towards inclusion of students with disabilities in physical education activities, based on the formative program "Sport is for everyone".
- 10. The scientific problem solved in the research** consists in increasing the positive attitudes of physical education teachers towards the inclusion of students with disabilities in physical education activities and, as a result, increasing the motivation of disabled students to participate in physical education lessons together with non-disabled colleagues by: establishing the epistemological and methodological context of the training of physical education teachers,

based on the correlations between attitudes and variables: participation in a university course, experience in integrating students with disabilities, gender, years of work experience (in teaching); exploring the predictive factors of teachers' attitudes towards the inclusion of students with disabilities; adapting the curriculum and physical education activities to the specific needs of students with disabilities, reducing the harm done to students with disabilities; the development of some indicators of the positive attitude of physical education teachers in the view of students with disabilities; and by experimentally demonstrating the functionality of the Pedagogical Model for the development of the PE teachers' positive attitudes towards inclusion of students with disability, based on the formative program "Sport is for everyone".

11. Thus, the scientific research problem was solved by design, implementing and validating the Pedagogical Model for the development of the PE teachers' positive attitudes towards inclusion of students with disability that contributed to make their education more efficient, confirmed by increased participation of students with disability together with non-disabled students in PE lessons in the Arab sector of Israel schools, ensuring decreasing the negative impact to disabled students, enhancing their inclusion for personal and social development, and creating an inclusive environment.

This research is a valuable scientific-methodological tool for PE teaching staff, school managers, special inclusion personnel in their educational and managerial activity, also for parents and community representatives.

RECOMMENDATIONS

Recommendations for policy makers:

- Consider the unique traits and special needs of the students and adapt the environmental conditions to include them.
- We conclude that in-service education programme planning of adapted physical activity (APA) should be provided to all PE teachers. Training actual adaptations and empowerment practices applied to real cases during the coursework, as well as well-organized practicum sessions where adaptive teaching practices and provision of support can be practiced are strongly recommended for achieving this purpose.
- It is necessary to include a specific program in the education system and make it affective towards children with disabilities in several areas in the school.

Recommendations for environmental adaptations

- Mind the physical conditions necessary for a pleasant and comfortable atmosphere. The class should be with special adaption for students with disabilities, and decorated in such way to create a sense of comfort and belonging among students.
- Providing the necessary space and equipment for the class to help the teacher to include all his students.

Recommendations for curriculum makers

- Due to our research, it is recommended not only to have a unique course on the subject of integration processes of students with special needs, but also to include it in the teaching material of regular courses in Colleges of Physical Education. Normalization of the learning materials about integration contributes to reducing the sense of threat which teachers might face when they reach a point where they need to integrate students with disabilities as part of the school curriculum.
- To build a new teaching plan in physical education, taking into consideration students with special needs, the differences between students and their individual goals.

Recommendations for school managers

- Encouraging regular attendance and reducing absences for students with disabilities and rewarding the student with few delays and absences with a class prize and a school prize.
- To encourage physical education and to increase its importance for all the students, and rewarding the class with more participation in break activity.
- Involvement of parents – to maintain regular contact with parents or close people of these students.
- To encourage parents to contact the class teacher and subject teachers anytime, for any relevant reason. The classroom teachers have to contact parents especially in positive contexts such as the student progress or improvement of behavior, to increase their motivation as well as their self-image.

Recommendations for PE teachers

- Building a detailed profile of physical education teachers "sensitive to inclusion" in order to succeed to integrate children with disabilities in their classes and in sport activities.
- Providing the student and teacher with a clear educational policy, regarding 'to do' and 'not to do' guidelines for children with various disabilities.

- Fostering teaching resources providing knowledge as well as specific solutions to sample case studies or profiles using all the methods warranted to empower critical thinking about real-life situations, including children with varied abilities and disabilities in class settings.
- Increasing the amount of guided training for inclusion-type contexts, thus raising confidence in positive outcomes of the applied practices.
- Including simulations and other sensitizing agents into introductory teacher courses, for challenging the normative belief.
- It is highly recommended to hold regular meetings between future physical education teachers and children with disabilities, to increase teachers' sense of belief in their ability to teach these students effectively. For these meetings to be beneficial, it is necessary for teachers who have knowledge and experience to monitor them.
- Presentations of youth with disabilities for other students to explain about their bodies and how they deal with their disabilities are another mean of preparation to integration; it should be used to advance the processes of both inclusion and integration.

Research limits: the research also highlighted some limitations, such as insufficient testing of the impact of the age indicator on the inclusion of students with disabilities; low awareness of protective factors against potential rejection and inclusion of other minorities such as Bedouin or Druze; insufficient involvement of other stakeholders in creating an inclusive environment at the level of society. At the same time, the research opens a new "door" for investigating different aspects of the inclusion of people with disabilities in physical education activities, based on intersectionality.

Research perspectives: in addition to PE teachers who may function as relevant change agents within the school system provided that they are well equipped with integration friendly attitudes comprehending the long run benefit and possessing coping resources as suggested by the current research, it is recommended to honestly revise the whole system culture and enforce attitude changing implementation wherever it is needed, so that the integration policy is not just contemplated, but also successfully practiced. After mapping the attitudinal systemic picture, it is suggested to proceed to test the connections between the inclusion of students with disabilities and teachers' attitudes in other subjects besides PE. Therefore, more research that could shed light on the development of rejection prevention programs for people with different types of disabilities is needed.

BIBLIOGRAPHY

Romanian language

1. BUCUN N., PALADI O., RUSNAC V., *Evaluarea pentru educația incluzivă a copiilor de vârstă preșcolară și școlară mica*. Chișinău: Tipografia "Sirius", 2013. 372 p. ISBN 978-9975-57-114-2
2. BUCUN, N., VRABIE, S. Atitudinea cadrelor didactice față de incluziunea elevilor cu autism în școală. In: *Univers Pedagogic*, 2017, nr. 4(56), pp. 66-76. ISSN 1811-5470.
3. CALLO T. *Pedagogia practică a atitudinilor*. Chișinău: Litera, 2014. 240 p. ISBN 978-9975-74-340-2
4. CARA, A. *Implementarea educației incluzive în Republica Moldova: Studiu de politici publice*. Chișinău: Lexon-Prim, 2015. 60 p. ISBN 978-9975-3030-4-0.
5. *Educație incluzivă: Unitate de curs* / Balan V., Bortă L., Botnari V., Bulat G., Eftodi A., Gînu D., Lisnic E., Petrov E., Prițcan V., Șevciuc M., Velișco N.. – Ed. rev. și compl. – Chișinău: S. n., 2017 (Tipogr. «Bons Offices»). 308 p. ISBN 978-9975-87-298-0
6. *Educație incluzivă. Ghid metodologic pentru instituțiile de învățământ primar și secundar general*. Keystone, Open Society Foundation, Institutul Științe ale Educației. Chișinău, 2013. 173 p.
<http://www.keystonemoldova.md/wp-content/uploads/sites/4/2020/08/Guide-inclusive-education.pdf>
7. *Incluziunea socială în mediul academic: provocări, oportunități, soluții contemporane: Suport didactic* / Aurelia Racu, Doru Vlad Popovici, Ovidiu [et al.]. Chișinău: Pontos, 2019. 132 p. ISBN 978-9975-72-412-8.
8. LUPUȘOR M-R., Atitudinile cadrelor didactice față de fenomenul integrării copiilor cu autism în învățământul de masă In: *Studia Universitatis Moldaviae*, 2020, nr.11, pp.84-86. ISSN online 2345-1025
9. MALCOCI, L., CHISTRUGA-SINCHEVIC, I. *Incluziunea elevilor cu CES în școlile din comunitate*. Studiu sociologic, Chișinău, 2015, 56 p.
https://aliantacf.md/wp-content/uploads/2018/07/APSCF_incluziunea-copiilor-CES-2015.pdf
10. PANICO, V., NOUR, A. Aspecte teoretice și praxiologice ale diferențierii și individualizării instruirii. În: *Studia Universitatis Moldaviae*. Chișinău: CEP USM, 2016, nr. 9 (99), pp. 74-81. ISSN 1857-2103

11. RACU A., POPOVICI D.V., DANII A. *Educația incluzivă. Ghid pentru cadrele didactice și manageriale*. Chișinău: "Tipografia Centrală", 2009. 150 p.
12. RACU A., POPOVICI D.V., DANII A. *Psihopedagogia integrării*. Ed. a 2 rev și comp. Chișinău: "Tipografia Centrală", 2014. 416 p.
13. RUSNAC, V. Implementarea educației incluzive în Republica Moldova: provocări, realizări și viziuni. In: *Asistența complexă a copiilor cu cerințe educaționale speciale în mediul educațional incluziv*. Materialele conferinței științifice internaționale. Chișinău, UPS "Ion Creangă". 2020, pp.8-18. ISBN 978-9975-46-480-2.
14. TIMUȘ, A. Atitudinea cadrelor didactice față de integrarea copiilor cu deficiențe mintale și de auz In: *Asistența complexă a copiilor cu cerințe educaționale speciale în mediul educațional incluziv*. Materialele conferinței științifice internaționale. Chișinău, UPS "Ion Creangă". 2020, pp.244-257. ISBN 978-9975-46-480-2.

English language

15. *A Guide for ensuring inclusion and equity in education*. UNESCO. Assistant Director-General for Education, 2010-2018 (Qian Tang). 2017, 46p. ISBN 978-92-3-100222-9 (print/pdf).
16. ABU-HABIB, L. Working with disabled women: reviewing our approach. In *Gender and disability: Women's experiences in the Middle East*, London, Oxfam, 1997, pp.9-25.
<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/121184/bk-gender-disability-middle-east-010197-en.pdf;jsessionid=89169C4F895D10C69B9D36B13806E742?sequence=5>
17. AJZEN, I. From intentions to actions: A theory of planned behavior. In. Kuhl, J. et al. *Actions Control From Cognition to Behavior*. Springer-Verlag, Berlin Heidelberg, 1985, pp.11-39. DOI: 10.1007/978-3-642-69746-3_2
18. AJZEN, I., & FISHBEIN, M. The influence of attitudes on behavior. In D. Albarracin, B. T. Johnson & M. P. Zanna (Eds.), *The handbook of attitudes*. Mahwah, NJ: Lawrence Erlbaum Associates. 2005, pp. 173-221.
https://www.researchgate.net/publication/264000974_The_Influence_of_Attitudes_on_Behavior
19. ALLPORT, G. "Attitudes," in *A Handbook of Social Psychology*, ed. C. Murchison. Worcester, MA: Clark University Press, 1935, p. 789-844.
20. ALOIA G.E., KNUTSON R., MINNER SA.H.& VONB SEGGER, M. Physical education

- teachers' initial perceptions of handicapped children. *Mental Retardation*. 1980, p.26-37.
PMID: 6454046
21. Arab Resource Collective. Comparative regional analysis of ECCE in four Arab countries. Paper commissioned for the EFA Global Monitoring Report 2007, Strong foundations: *Early childhood care and education*. 2007, p.33-55.
<https://unesdoc.unesco.org/ark:/48223/pf00000147440>
 22. AZORÍN, C., and AINSCOW, M.. "Guiding Schools on Their Journey Towards Inclusion." *International Journal of Inclusive Education*, 2020, 24 (1), pp. 58–76. ISSN: 1360-3116 (Print)
 23. AVISSAR, G. Inclusive education in Israel from a curriculum perspective: an exploratory study. In: *European Journal of Special Needs Education*. 2011, iFirst article, p.1-15.
DOI:[10.1080/08856257.2011.613602](https://doi.org/10.1080/08856257.2011.613602)
 24. AVRAMIDIS E, NORWICH B. Teachers' attitudes towards integration/inclusion: a review of the literature. *European Journal of Special Needs Education*. 2002;17(2):129–47. pp.201-211
doi: 10.1080/08856250210129056.
 25. BAALPE. Physical Education For Pupils With Special Educational Needs in *Mainstream Education*. West Midlands: The British Association of Advisors and Lecturers in Physical Education. 1996.p.55-69.
 26. BANDURA, A. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 1977, 84, p. 191-215.
<https://doi.org/10.1037/0033-295X.84.2.191>
 27. BANDURA A. *Bandura's Teacher Efficacy scale 1997* [cited 2005 15 August]. Available from:
<http://www.coe.ohio-state.edu/ahoy/researchinstruments.htm#Ban.p.40-52>.
 28. BANDURA A. *Self-efficacy: The exercise of control*. New York: W. H. Freeman; 1997. 604 p.
ISBN: 9780716726265, 9780716728504, 0716726262, 0716728508
 29. BANDURA, A. *Attitude: the exercise of control*. New York: Freeman. 1977. 604 p.
DOI:10.1891/0889-8391.13.2.158
 30. BANDURA, A. "Social Learning Theory" (PDF). General Learning Corporation. Archived from the original (PDF) on 24 October 2013. Retrieved 25 December 2013. [cited: 20.08.2019]
http://www.jku.at/org/content/e54521/e54528/e54529/e178059/Bandura_SocialLearningTheory_ger.pdf

31. BANDURA, A. Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds). *Self-efficacy Beliefs of Adolescents*. Ct: Information Age Publishing. 2006, pp.307-337
DOI: 10.12691/jpar-2-1-2
32. BARON, R.M., & KENNY, D.A. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of personality and Social Psychology*. 1986. p10-22. <https://doi.org/10.1037/0022-3514.51.6.1173>
33. BEKIARI A. & SAKELARIOU K. Physical education teacher's opinion towards inclusion of students with disabilities. *Italian Journal of sport Sciences II*, 2004, 10-15. 1286 - 1310, 30.08.2021
34. BENDER W.N., VAIL CO, SCOTT K. Teachers Attitudes Toward Increased Mainstreaming: Implementing Effective Instruction for Students with Learning Disabilities. *Journal of Learning Disabilities*. 1995; 28(2):87-94. doi: 10.1177/002221949502800203 [PubMed]
35. BLINDLE, E.M., & MCCALLISTER, S.G. Listening to the voices of students with physical disabilities: Experiences in the physical education classroom. *JOPERD*. 1998. pp.33-54.
36. BLOCK, M.E. *A Teacher's Guide to Including Students with Disabilities in General Physical Education*. Baltimore: Paul H. Brookes Publishing Co. 2007. 448 p. ISBN: ISBN-9-781-5576-6835-6
37. BLOCK M.E. & RIZZO T. Attitudes and attributes of physical educators associated with teaching individuals with severe and profound disabilities. *The Journal of the Persons with Severe Handicaps* 20, 1995, pp.80-87. ISSN: ISSN-0274-9483
38. BLOCK, M.E. Development and validation of the Children's Attitudes Toward Integrated Physical Education- *Revised (CAIPE-R) Inventory Adapted Physical Activity Quarterly*. 1995
DOI:
<https://doi.org/10.1123/apaq.12.1.60>
39. BLOCK, M.E. Did we jump on the wrong bandwagon? Problems with inclusion in graphic "physical being helped/inclusive setting" education (part 1). *Palaestra*, 15(3). 1999, pp.30-38, 55-56. ISSN: 8756-5811
40. de BOER A, PIJL SJ, MINNAERT A. Regular primary school teachers' attitudes towards inclusive education: a review of the literature. *International Journal of Inclusive Education*. 2011;15(3):331-53. doi: 10.1080/136031110903030089
41. BOUKHARI, H. Invisible victims: working with mothers of children with learning disabilities.

- In L. Abu-Habib(Ed). *Gender and disability: Women's experiences in the Middle East*. London, 1997. pp.36-77.
<https://oxfamlibrary.openrepository.com/bitstream/handle/10546/121184/bk-gender-disability-middle-east-010197-en.pdf?sequence=5>
42. BOURSIER, C.&KAHRS, N. Inclusion in sports, In: H.Van Coppenolle, J,-C.De Potter, A. Van Peteghem, S.Djobova &K.Wijns(Eds) *Inclusion and integration through adapted physical activity: end report of the Thematic Network Educational and social Integration of persons with a Disability through Adapted physical Activity*, available. Faculty of physical Education and Physiotherapy. 2003, pp.8-28.
 43. BRICKER, D. The challenge of inclusion. *Journal of Early Intervention*. 1995, 19, pp.179-194.
<https://doi.org/10.1177/105381519501900301>
 44. Cassady Jennifer M. Teachers' Attitudes Toward the Inclusion of Students with Autism and Emotional Behavioral Disorder. *In Electronic Journal for Inclusive Education* Vol. 2, No. 7 (Winter/ Spring, 2011), art.5, pp.2-24. ISSN: 1545-0473
 45. Committee on Adapted Physical Education. Guiding principles for adapted physical education. *Journal of Health, Physical Education and Recreation*, 1952, 23, pp.15-28.
<https://doi.org/10.1177/074193258200300106>
 46. CORBIN, C.B. Physical activity for everyone: What every physical educator should know about promoting lifelong physical activity. *Journal of Teaching in Physical Education*. 2002.p128-144. DOI: <https://doi.org/10.1123/jtpe.21.2.128>
 47. *Dakar Framework for Action, Education for All: Meeting our Collective Commitments*. UNESCO, 2000. P.378-399. <https://unesdoc.unesco.org/ark:/48223/pf0000121147>
 48. **DANIEL-SHAMA E.**, Forming teachers' positive attitudes towards students with disabilities. În: *Studia Universitatis Moldaviae*, 2020. Seria "Științe ale educației"/ ISSN 1857-2103. Chișinău: CEP USM, nr.11, 2020, p. 28-32. <http://studiamsu.eu/wp-content/uploads/5.-p.-28-32.pdf>
 49. **DANIEL-SHAMA E.**, General overview of the physical education in Israel. În: *STUDIA UNIVERSITATIS MOLDAVIAE*, 2022. Seria "Științe ale educației"/ ISSN 1857-2103. Chișinău: CEP USM, nr.9 (159), 2022, pp. 104-107.
 50. **DANIEL-SHAMA E.**, Theoretical aspects of the physical education teachers' attitudes towards students with disabilities. În: *STUDIA UNIVERSITATIS MOLDAVIAE*, 2022. Seria "Științe ale

- educației”/ ISSN 1857-2103. Chișinău: CEP USM, nr. 5 (155), 2022, pp. 124-129.
51. **DANIEL-SHAMA E.**, Forming inclusive education environment for children with disabilities in Israel. In: *Conferința științifică națională cu participare internațională „Integrare prin cercetare și inovare”*, USM, 10-11 noiembrie 2020, pp. 202-205 CZU: 376(569.4)
https://ibn.idsi.md/sites/default/files/imag_file/202-205_15.pdf
 52. **DANIEL-SHAMA E.**, Forming inclusive attitudes of physical education teachers in the arab sector schools Israel. In: *Conferința științifică națională cu participare internațională „Integrare prin cercetare și inovare”*, 7-8 noiembrie 2019. UNIVERSITATEA DE STAT DIN MOLDOVA. Rezumate ale comunicărilor. Științe sociale, V.I. Chișinău, CEP USM, 2019. Pp. 131-134.
https://ibn.idsi.md/sites/default/files/imag_file/St_Sociale_Vol_1_2019.pdf
 53. **DANIEL-SHAMA E.**, The conceptual context of attitudes of physical education teachers to students with disability. In: *Materialele Conferinței științifice internaționale “Formarea inițială și continuă a psihologilor în domeniul protecției copilului față de violență”*, 26 octombrie 2018/ Ministerul educației al Republicii Moldova, Universitatea Pedagogică de Stat „Ion Creangă”. Chisinau, 2018, pp. 118-126 CZU 376.112.4.
https://ibn.idsi.md/sites/default/files/imag_file/118-126_0.pdf
 54. DARREN, C. TREASURE AND GLYN C. ROBERTS. Cognitive and Affective Concomitants of Task and Ego Goal Orientations During the Middle school Years. *Journal Of Sport & Exercise Psychology*. 1984, pp.15-28.
http://groups.jyu.fi/sporticus/lahteet/LAHDE_12.pdf
 55. DEPAUW, K.P.,& DOLL-TEPPER, G|. Toward progressive inclusion and acceptance: Myth or reality? The inclusion debate and the bandwagon discourse. *Adapted physical Activity Quarterly*. 2000, 17, pp.135-143.
 56. *Desk Review for Developing Measures on Discriminatory Attitudes and Social Norms towards Children with Disabilities in Europe and Central Asia region*, 2018. UNICEF, 2019, 51 p.
<https://www.unicef.org/eca/media/13391/file>
 57. DOWNS, P.& WILLIAMS, T. Student attitudes toward integration of people with disabilities in activity settings; a European comparison, *Adapted Physical Activity Quarterly*. 1994, 11(1), 32-43. DOI:10.1123/APAQ.11.1.32
 58. DOWNS, P. Toward a society for all through adapted physical activity-Is a paradigm shift

- needed? In M. Dinold, G.Gerber,&T.Reinelt (Eds). *Toward a society for all-Through adapted physical activity. Proceedings of the 13th International Symposium Adapted Physical Activity* 2001 (pp.19-28). Vienna, Austria: Manz Verlag Schulbuch. 2003. In paper
59. *Dubai Declaration on Urban Children and Yout.*
[http://www.araburban.org/employee/menacpi/uploadfiles/Dubai Declaration.p.6-36.](http://www.araburban.org/employee/menacpi/uploadfiles/Dubai%20Declaration.p.6-36)
 60. DUDA, J.L. Multi-sample confirmatory factor Analysis of the Task and Ego Orientation in sport Questionnaire. In: *Research Quarterly for Exercise and sport*. 1989, pp.91-98. PMID: 7644838 DOI: 10.1080/02701367.1995.10762216
 61. *Education Policy Outlook 2015: Making Reforms Happen*. Paris: OECD, 2015, 316 p. ISBN 978-92-64-225442
 62. *Education 2030. Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4*. 2016, 83 p. UNESCO et al. [cited 21.02.2020] ED-2016/WS/28
https://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en_2.pdf
 63. *European Disability Forum (2003) Madrid Declaration*. [cited 21.02.2018] Available online at:
[http://www. Madrid-declaration.org/en/intro.htm/p.309-327](http://www.Madrid-declaration.org/en/intro.htm/p.309-327)
 64. FAZIO, R.H., & ZANNA, M.P. Direct experience and attitude-behavior consistency. *Advances in experimental social psychology*, 1981, 14, pp.161-202.
[http://dx.doi.org/10.1016/S0065-2601\(08\)60372-X](http://dx.doi.org/10.1016/S0065-2601(08)60372-X)
 65. FAISON-HODGE, J., & PORRETTA, D.L. Physical Activity Levels of Students With Mental Retardation and Students Without Disabilities. In: *Adapted Physical Activity Quarterly*, 2004, 21, p.139-152. DOI:10.1123/apaq.21.2.139
 66. Federal Register (1977). PL.94-142. *The Education For All Handicapped Children Act*. Washington DC: The Author. [cited 20.01.2017]
<https://files.eric.ed.gov/fulltext/ED179070.pdf>
 67. FEIGIN, N., TALMOR, R.&ERLICH, I. *Causes for abrasion in physical education teachers in classes integration children with special needs: final research report* (Netanya, Israel, Zinman College for physical Education and Sport Sciences). 2002. Print
 68. FLORIAN L. Inclusion: special or inclusive education: future trends. *British Journal of Special Education*, 2008, 35, pp.202-208.

- <https://doi.org/10.1111/j.1467-8578.2008.00402.x>
69. FLORIAN, V., KATZ, S., The impact of cultural, ethnic, and national variables on attitudes towards the disabled in Israel: A review In: *International Journal of Intercultural Relations*, Volume 7, Issue 2, 1983, pp. 167-179.
- [https://doi.org/10.1016/0147-1767\(83\)90019-6](https://doi.org/10.1016/0147-1767(83)90019-6)
70. FLORIAN, V., *Attitudes towards people with a disability – comparison between Jewish and Arab youth in Israel*. 1990. [https://doi.org/10.1016/0147-1767\(83\)90019-6](https://doi.org/10.1016/0147-1767(83)90019-6)
- https://www.kshalem.org.il/uploads/pdf/article_1587_1550921145.pdf
71. FLORIAN, L. Preparing teachers to work in inclusive classrooms: key lessons for the professional development of teacher educators from Scotland's Inclusive Practice Project. *Journal of Teacher Education*, 2012, 63(4): pp.275-285. ISSN: 0022-4871
- <https://doi.org/10.1177/0022487112447>
72. FOLSOM-MEEK, F.L., NEARING, R.J., GROTELUSCHEN, W., & KRAMPF, H., Effects of academic major, gender, and hands-on experience on attitudes of preservice professionals. *Adapted Physical Activity Quarterly*. 1999 DOI:10.1123/APAQ.16.4.389
73. FORLIN C, LOREMAN T, SHARMA U, EARLE C. Demographic differences in changing pre-service teachers' attitudes, sentiments and concerns about inclusive education. *International Journal of Inclusive Education*. 2009;13(2):195–209. Doi: 10.1080/13603110701365356
74. FORLIN C. Pre-service teacher education: involvement of students with intellectual disabilities. In: *The International Journal of Learning Annual Review*. 2003; 10:317–26. Online ISSN: 1447-9540. Print ISSN: 1447-9494
75. FORLIN, C., KEEN, M., & BARRETT, E. "The concerns of mainstream teachers: coping with inclusivity in an Australian context" *International Journal of Disability, Development and Education*, 2008, vol.55, n. 3, pp. 251-264.
76. FREEDMAN, D. Changes in the sex role attitudes of women. *American Sociological Review*. 1979, V.44, pp. 831-843
- <https://doi.org/10.2307/2094530>; <https://www.jstor.org/stable/2094530>
77. GAO, Z., XIANG, P., HARRISON, L., JR., GUAN, J. & RAO, Y. A cross-cultural analysis of self-efficacy and achievement goals between American and Chinese college students in physical education. *International Journal of Sport Psychology*. 2008, 39(4), pp.312-328.
- <http://www.ijsp-online.com/abstract/view/39/312>

78. *Global education monitoring report, 2020: Inclusion and education: all means all*. Global Education Monitoring Report Team. UNESCO, 2020, 502 p. ISBN 978-92-3-100388-2
<https://unesdoc.unesco.org/ark:/48223/pf0000373718>
79. GOODWIN, D.L.& WATKINSON, E.J. Inclusive Physical Education From the Perspective of Students With Physical Disabilities. *Adapted Physical Activity Quarterly*, 2000, 17, pp.144-160.
80. GOMPEL, T. Special education in Israel towards the 21st century: where did we come from and where are we aiming? *Special Education and Rehabilitation*, 1999, 14(2), pp. 82-71
<https://www.nitzan-israel.org.il/media/408916/Special-Education-in-Israel.pdf>
81. *Education for All Global Monitoring Report*. Overcoming inequality: why governance matters. UNESCO, 2009. 477p. ISBN 978-92-3-104089-4, 978-0-19-954419-6
82. HEIKINARO-JOHANSON, P., SHERILL, C., FRENCH, R., & HUUHKA, H. Adapted physical education consultant model to facilitate integration. *Adapted Physical Activity Quarterly*, 1995, 12, pp. 12-33. DOI:10.1123/APAQ.12.1.12
83. HODGE, S.R., TANNEHILL, D., & KLUGE, M.A. Exploring the Meaning of Practicum Experiences for PETE Students. *Adapted Physical Activity Quarterly*, 2003, 20, pp.381-399. DOI:10.1123/apaq.20.4.381
84. HODGE, S.R., MURATA, N.M., & KOZUB, F.M. Physical Educators' Judgements About Inclusion: A New Instrument for Preservice Teachers. *Adapted Physical Education Quarterly*, 2002, 19, pp.435-452. doi: 10.1123/apaq.19.4.435
85. HODGE, S.R., & JANSAMA, P. Effects of contact time and location of practicum experiences on attitudes of physical education majors. *Adapted Physical Activity Quarterly*, 1999, 16, pp.48-63. P.151-157
<https://doi.org/10.1177/088840640002300304>
86. Human Development Department, MENA Region. *A Note on Disability Issues in the Middle East and North Africa*. Washington, D.C., World Bank, 2005.
87. HUTZLER, Y. Attitudes toward the participation of individuals with disabilities in physical activity: A review. *Quest*. 2003 pp.347-373.
<https://doi.org/10.1080/00336297.2003.10491809>
88. HUTZLER, Y., ZAMIR, G. & FLIESS-DOUER, O. Inclusion children with physical disabilities in physical education: facilitators and limiting factors. *Issues in Special Education and Rehabilitation*, 2004, 19(1), pp.33-58. doi: 10.1123/apaq.19.3.300.

89. HUTZLER, Y., FLIESS, O., CHACHAM, A., & VAN DEN AUWEELE, Y. Perspectives of children with physical disabilities on inclusion and empowerment: Supporting and limiting factors. *Adapted Physical Activity Quarterly*, 2002, 19, p.300-317. DOI:10.1123/apaq.19.3.300
90. HUTZLER Y., **DANIEL-SHAMA E.** Attitudes and Self-Efficacy of Arabic-speaking Physical Education Teachers in Israel toward Including Children with Disabilities. *International Journal of Social Science Studies*, September 2017. 5(10):28 DOI: 10.11114/ijss.v5i10.2668
91. JORDAN, A. & STANOVICH, P. The beliefs and practices of Canadian teachers about including students with special needs in their regular elementary classrooms. In: *Exceptionality Education Canada*, 2004, 14, p.25-46 . ISSN-1183-322X
92. Jordan Ministry of Education. *The Development of Education National Report of the Hashemite Kingdom of Jordan*. Presented to the 48th Session of Education, Geneva, 2008.
<https://unesdoc.unesco.org/ark:/48223/pf0000182999>
93. *Initial Report Concerning the implementation of the Convention on the rights of persons with disabilities*. State of Israel, Ministry of Justice, 2017. 90p. print
94. *Initial Report Concerning the implementation of the Convention on the rights of persons with disabilities*. State of Israel, Ministry of Justice, Annex No. I, Statistical Data, 2017. 24p. print
95. *Initial Report Concerning the implementation of the Convention on the rights of persons with disabilities*. State of Israel, Ministry of Justice, Reply to List of Issues in relation to Israel's Initial Report. Presented to the UN CRPD Committee, 2022. 90 p. [cited 21.02.2020]
Available:
https://www.gov.il/BlobFolder/reports/crpd_explained_text_and_guides/en/sitedocs_human_rights_convention_crpd_2022_appendix.pdf
96. *Inclusive teaching: Preparing all teachers to teach all students*. Policy paper 43. UNESCO, 2020, 16p. ED/GEM/MRT/2020/PP/43
97. *Inclusive Education for Students with Disability*. A review of the best evidence in relation to theory and practice. The Australian Research Alliance for Children and Youth (ARACY), 2013. Paper [cited 12.05.2019] Available: https://www.aracy.org.au/publications-resources/command/download_file/id/246/filename/Inclusive_education_for_students_with_disability_-_A_review_of_the_best_evidence_in_relation_to_theory_and_practice.pdf
98. INCE, S. Preschool teacher candidates' attitudes and concerns about inclusive education taking into consideration whether they took special courses or not at university. *International Journal*

- of Early Childhood Education and Research*, 2012, 1(3), 1–19.
<http://ijecer.net/pfi-depo/v1n3/seyda.pdf>
99. *International Standard Classification of Education*. ISCED 2011. UNESCO-UIS 2012, 88 p. ISBN 978-92-9189-123-8
 100. KABBARA, N. Identifies Violence as a Major Cause of Disability In: *Arab Conference on Disability*, October 2002 in Beirut. Print
 101. KATZ, L.G. Developmental stages of preschool teachers. *Elementary School Journal*. 1972
<https://www.jstor.org/stable/1000851>
 102. KOLB, D. *Experiential Learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall. 1984. Print
 103. KOWALSKI, E.M.&RIZZO, T.L. Factors influencing preservice students' attitudes toward individuals with disabilities. *Adapted Physical Activity Quarterly*, 1996, 13, p. 180-196. DOI:10.1123/APAQ.13.2.180
 104. KUDLACEK, M. State of knowledge about inclusion of children with disabilities into general physical education. *Proceedings of European Congress of Adapted Physical Activities*. 2006 (b) pp.46-61. Print
 105. KUDLACEK, M. Components of attitudes toward inclusion of students with physical disabilities in Physical Education in the revised "ATIPDPE-R" instrument/scale for prospective Czech educators. In: "*Acta Universitatis Palackianae Olomucensis. Gymnica*", 2007, 37(1), pp. 13-18. ISSN 1212-1185 (Print); ISSN 1213-8312 (On-line)
<https://www.gymnica.upol.cz/pdfs/gym/2007/01/02.pdf>
 106. KUDLACEK, M., VALKOVA, H., SHERRILL, C., MYERS, B., & FRENCH, R. An inclusion instrument based on planned behavior theory for prospective physical educators. In: *Adapted Physical Activity Quarterly*, 2002, 19, pp.280-299. DOI:10.1123/apaq.19.3.280
 107. KUNC, N. The need to belong. Rediscovering Maslow 's Hierarchy of Needs. In: R.A. Villa, L.S. Thousand, W. Stainback , & S. Stainback (Eds), *Restructuring for caring and effective education: Administrative guide to creating heterogenous schools*. Baltimore: Paul Brooks. 1992, pp.281-287. Print
 108. LAHAD, M., SCHACHAM, M., AYALON, O. *The "Basic PH" Model of Coping and Resiliency. Theory, Research and Cross-Cultural Application*. Jessica Kingsley Pub., London & Philadelphia, 2012, 288p. Print

- 109.LEWIS, MAUREEN A. & MARLAINE E. Lockheed. *Inexcusable Absence: Why 60 million girls aren't in school and what to do about it*. Washington, D.C.: Center for Global Development, 2006, 200p. ISBN-10 1933286148
<https://www.cgdev.org/sites/default/files/9781933286143-Lewis-Lockheed-inexcusable.pdf>
- 110.LEYSER Y, KIRK R. Evaluating Inclusion: an examination of parent views and factors influencing their perspectives. *International Journal of Disability, Development and Education*. 2004; 51(3): pp.271–285. Doi: 10.1080/1034912042000259233
- 111.LIEBERMAN, L.J., HOUSTON-WILSON, C. Strategies for Inclusion. In: *A Handbook for Physical Educators*. U.S.A: Human Kinetics. 2002, pp.3-26. ISBN 978-0736003247
- 112.LIFSHITZ, H., GLAUBMAN, R. & ISSAWI, R. Attitudes toward inclusion: the case of Israeli and Palestinian regular and special education teachers. *European Journal of Special Needs Education*, 2004, 19, p.171-190 DOI:10.1080/08856250410001678478
- 113.MANGOPE B., MANNATHOKO M.C., KUYINI A.B. Pre-service physical education teachers and inclusive education: attitudes, concerns and perceived skill needs in *International Journal of Special Education*, Vol 28, No: 3. 2013, p.82-92
<https://files.eric.ed.gov/fulltext/EJ1024424.pdf>
- 114.MARGALIT, M. *Loneliness Among Children With Special Needs: Theory, Research, Coping, and Intervention*. Softcover reprint of the original 1st ed. 1994 Edition. 241 p. ISBN-10: 146127611X
- 115.MARTINS, CELINA LUÍSA RAIMUNDO. Inclusive Physical Education: Teachers' Attitudes. University of Vigo, Vigo, Spain, Porto Alegre, v. 20, n. 2, p. 637-656, abr./jun. de 2014. Print <file:///C:/Users/user/Downloads/40143-Texto%20do%20artigo-241775-1-10-20150930.pdf>
- 116.MAZAWI, ANDRE ELIAS. The Contested Terrains of Education in the Arab States: An Appraisal of Major Research Trends. *Comparative Education Review*. 1999.Vol.43, No. 3. pp.291-317.
<https://www.jstor.org/stable/1189122>
- 117.MILLAR, M.G., & TESSER, A. The role of beliefs and feelings in guiding behavior: The mismatch model. In *L.L. Martin & A. Tesser (Eds.), The construction of social judgments*, 1992, pp.277-300. Mahwah, NJ: Erlbaum. ISBN 9780805811490
- 118.MILLER, S. Inclusion of children with disabilities: can we meet the challenge? *Physical Educator*. 1994, pp. 47-65. ISSN-0031-8981

- 119.MORLEY, D., BAILEY, R., TAN, J., & COOKE, B. Inclusive physical Education: Teachers' views of including pupils with Special Educational Needs and/or disabilities in general physical Education. *European Education Review*, vol II (I), 2005, p.84-107.
<https://doi.org/10.1177/1356336X0504982>
- 120.National Center For Education Statistics. <https://nces.ed.gov/fastfacts/display.asp?id=64>
- 121.NICHOLLS, J.G. Achievement motivation: conceptions of ability, subjective experience, mastery choice, and performance. *Psychological Review*, 91, 1984, p.328-346.
<https://doi.org/10.1037/0033-295X.91.3.328>
- 122.NIRJE, B. The normalization principle and its human management implications. In *R.Kugel & W.Wolfensberger (Eds), Changing patterns in residential services for the mentally retarded*. 1969, pp.19-23.
https://www.canonsociaalwerk.eu/2008_inclusie/The%20Normalization%20Principle%20and%20Its%20Human%20Management%20Implications.pdf
- 123.OBRUSNIKOVA I. Physical Educators' Beliefs about Teaching Children with Disabilities. In: *Percept Mot Skills*. 2008 Apr;106(2):637-44. Doi: 10.2466/pms.106.2.637-644
- 124.OMER M. The USE paradigm. In: *Revista de psihoterapie experențială*. Bucharest: SPER cons edit, 2007, nr.40, pp. 25-29. ISSN 1453-634X
- 125.*On the road to inclusion: highlights from the UNICEF and IIEP Technical Round Tables on Disability-inclusive Education Sector Planning*. UNESCO IIEP, UNICEF, 2019, 20 p. CC BY-SA 3.0 IGO
- 126.Organization for Economic Cooperation and Development [OECD]. *Students with disabilities, learning difficulties and disadvantages: Statistics and indicators*. Paris: OECD Publishing; 2005, 154 p. ISBN 92-64-00980-9 –pp.23-30
- 127.PAJARES, F. *Assessing self-efficacy beliefs and academic outcomes: The case for specificity and correspondence*. Paper presented at a symposium chaired by B. J. Zimmerman, Measuring and mismeasuring self-efficacy. 1996, pp.1-22.
<https://files.eric.ed.gov/fulltext/ED395264.pdf>
- 128.Peters, S. Inequalities in Education for people with Disabilities. In Donald B.Holsinger and W.James Jacob (Eds), *Inequality in Education: Comparative and International Perspectives*. 2008. pp149-171. ISBN : 978-962-8093-14-4

129. POLLOWAY, EA., SMITH, J.D., PATTON, J.R., & SMITH, T.E.C. Historical changes in mental retardation and development disabilities. *Education and Training in Mental Retardation and Development Disabilities*, 1996, 31, pp.3-12. ISSN-1079-3917
130. *Preparing General Education Teachers to Improve Outcomes for Students With Disabilities*. Prepared for AACTE and NCLD by Linda P. Blanton, Marleen C. Pugach, and Lani Florian, April 2011 [cited 11.04.2019] Available: www.aacte.org
131. PIT-TEN CATE IM and GLOCK S. Teachers' Implicit Attitudes Toward Students From Different Social Groups: A Meta-Analysis. *Frontiers in Psychology*. 2019, Volume 10:2832. | <https://doi.org/10.3389/fpsyg.2019.02832>
132. REID, G. Defining adapted physical activity. In R. D. Steadward, G. D. Wheeler, & E. J. Watkinson (Eds.), *Adapted Physical Activity*, 2003, pp. 11-25. Edmonton, AB: University of Alberta Press.
133. *Recommendation CM/Rec(2010)2 of the Committee of Ministers to member states on deinstitutionalization and community living of children with disabilities*. <https://archive.crin.org/en/library/legal-database/recommendation-cm/rec20102-committee-ministers-member-states.html>
134. Recommendation Rec(2006)5 of the Committee of Ministers to member states on the Council of Europe Action Plan to promote the rights and full participation of people with disabilities in society: improving the quality of life of people with disabilities in Europe 2006-2015.p. 10-23. <https://rm.coe.int/16806994a0>
135. *Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning*. [cited 21.02.2018] Available http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2008.111.01.0001.01.ENG&toc=OJ:C:2008:111:FULL
136. RICHMAN, N. Violence and disabled children. In P. Zinken & H. McConahie (Eds). *Disabled children and developing countries*. London, Cambridge University Press. 1995. P.203-213. ISBN 978-1898683049
137. RIZZO T.L. & VISPOEL W.P. Changing Attitudes about Teaching Students with Handicaps In: *Adapted Physical Activity Quarterly*. Volume 9: Issue 1. 1992, pp. 319-327. DOI: <https://doi.org/10.1123/apaq.9.1.54>

138. ROBERTS, G.C. Understanding the dynamics of motivation in physical activity: the influence of achievement goals on motivational process. In G.C Roberts (Ed), *Advances in motivation in sport and exercise*. Champaign, IL: Human Kinetics. 2001.pp. 161-176. DOI: 10.4236/psych.2017.83031
139. ROGERS, J. The inclusion revolution. *Phi Delta Kappa Research Bulletin*. 1993, pp.40-47. Print. Available online at <http://www.pdkintl.org/edres/resbul11.htm>
140. ROUSSO, H. Education For All: A Gender and Disability Perspective. *An unpublished report prepared for the World Bank*, 2004. p.1-27.
<https://unesdoc.unesco.org/ark:/48223/pf0000146931>
141. ROSS-HILL R. Teacher attitude towards inclusion practices and special needs students. *Journal of Research in Special Educational Needs*. 2009; 9(3):188–98. Doi: 10.1111/j.1471-3802.2009.01135.x
142. RUGGS, ENRICA & HEBL, MICHELLE. Literature Overview: Diversity, Inclusion, and Cultural Awareness for Classroom and Outreach Education. In B. Bogue & E. Cady (Eds.). *Apply Research to Practice (ARP) Resources*. 2012, 16p. Retrieved from
<http://www.engr.psu.edu/AWE/ARPResources.aspx>
143. SANDERSON, Ca. A. *Social psychology*. Publisher: Wiley; New edition, 2009. 640 p. ISBN-13 978-0471250265
144. SAAD, Ali. Syrian Experience for All: A Gender and Disability Perspective. *An unpublished report prepared for the World Bank*, 2004, pp.574-577. Print
145. SAVOLAINEN H, ENGELBRECHT P, NEL M, MALINEN P. Understanding teachers' attitudes and self-efficacy in inclusive education: implications for pre-service and in-service teacher education. *European Journal of Special Needs Education*. 2012;27(1):51–68. Doi: 10.1080/08856257.2011.613603
146. SCHLEICHER A. *Teaching and Learning International Survey*. TALIS2018. Insights and Interpretations. © OECD 2020, 73 p. ISSN 9789264805972 (PDF)
147. SHARMA U, FORLIN C, LOREMAN T, EARLE C. Pre-service teachers' attitudes, concerns and sentimenta about inclusive education: an international comparison of the novice pre-service teachers. *International Journal of Inclusive Education*. 2006; 21(2), pp.1-24.
<https://files.eric.ed.gov/fulltext/EJ843609.pdf>
148. SHECHTMAN, Z. Changing attitudes of teachers in regular education toward integration the

- exceptional in regular settings: empirical findings and an intervention plan. *Dapin* 1991, 13, p. 54-59. Print
149. SHERRILL, C. *Adapted Physical Activity, Recreation, and Sport: Crossdisciplinary and Lifespan*. Boston: McGraw-Hill. 2004. 783 p. ISBN-13978-0697295132
 150. SIEDENTOP, DA. & TANNEHILL, D. *Developing Teaching Skills in Physical Education* (4th ed.). New York, NY: McGraw-Hill. 2001, 416 p. ISBN-13 978-0072552324
 151. SHYMAN, E. "Toward a Globally Sensitive Definition of Inclusive Education Based in Social Justice." *International Journal of Disability, Development and Education*. 2015, 62 (4), pp. 351–362. doi:10.1080/1034912X.2015.1025715
 152. *Social Integration: Approaches and Issues*. UNRISD Briefing Paper No. 1. World Summit for Social Development. March 1994, 16 p. [cited 21.02.2019]. Available at: https://numerons.files.wordpress.com/2012/04/1_social-integration-approaches-and-issues-unrisd.pdf
 153. SOODAK, LC, PODELL, DM, LEHMAN, LR. Teacher, Student, and School Attributes as Predictors of Teachers' Responses to Inclusion. *The Journal of Special Education*. 1998; 31(4):480–97. doi: 10.1177/002246699803100405
 154. SORIANO, V., WATKINS, A., EBERSOLD, S. *Inclusive Education for Learners with Disabilities*. Brussels: European Union. 2017, 47p. PE 596.807
 155. SZE, S. A literature review: pre-service teachers' attitudes toward students with disabilities. *Education*, 2009, 130, 53-56. ISSN-0013-1172
 156. STAINBACK, W., & STAINBACK, S. *Inclusion: A Guide for Educators*. Baltimore: Brookes Publishing Co. 1996, 416 p. ISBN-1-55766-231-2
 157. TSAKIRIDOU H., POLYZOPOULOU K. Greek Teachers' Attitudes toward the Inclusion of Students with Special Educational Needs. *American Journal of Educational Research*. 2014; 2(4):208-218. doi:10.12691/education-2-4-6.
 158. TOMASEVSKI, K. *Education Denied: Costs and Remedies*. New York: Zed Books, 2003. 205 p. ISBN 1-84277-251-1.
 159. TRIPP, A., FRENCE, R. & SHERRILL, C. Contact theory and attitudes of children in physical education programs toward peers with disability. *Adapted Physical Quarterly*. 1995, pp.323-332. DOI:10.1123/APAQ.12.4.323
 160. UNESCO, *Policy Guidelines on Inclusion in Education*, 2009

- <https://unesdoc.unesco.org/ark:/48223/pf0000177849>
- 161.UNESCO. *Education for All by 2015: Will we make it?* Paris: UNESCO, 2008, 13p. ISBN 978-92-3-104058-0, 978-0-19-953263-6
- 162.UNESCO. *The SALAMANCA Statement and Framework for Action on Special Needs Education*. Paris: UNESCO; 1994. 50 p. ED.94/WS/18
- 163.UNESCO *Convention against Discrimination in Education*, 42 p.
<https://unesdoc.unesco.org/ark:/48223/pf0000145922>
- 164.UNICEF. Children in Jordan: Situation Analysis 2006/2007. Amman, Jordan: *National Council for family Affairs*. 2007. Pp.1-32. http://www.unicef.org/sitan/files/SITAN_Jordan_Eng.pdf
- 165.UN *Convention on the Rights of the Child* (1989) [cited 21.02.2020] Available at:
<https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>
- 166.UN *Convention on the Rights of Persons with Disabilities* (2006) [cited 21.02.2020] Available:
<https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-persons-disabilities>
- 167.UNRWA. *Annual Report of the Department of Health*. 2007. 771p. [cited 21.02.2020]
Available: <https://www.unrwa.org/resources/reports/health-department-annual-report-2007>
- 168.VAZ SH., WILSON N., FALKMER M., SIM A., SCOTT M., CORDIER R., FALKMER R.
Factors Associated with Primary School Teachers' Attitudes Towards the Inclusion of Students with Disabilities. PLoS ONE 10(8): e0137002. Published: August 28, 2015; pp132-144.
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0137002>
- 169.WANDERI, P.G. *An Assessment of Teachers' Attitudes and their Commitment to Inclusive Educational Settings in Bahati Sub-County, Kenya*. Master's Thesis, UNIVERSITY OF OSLO, 2015. 100p. Print
<https://core.ac.uk/download/pdf/30827815.pdf>
- 170.WALKER, Thomas James, "Attitudes and Inclusion: An Examination of Teachers' Attitudes Toward Including Students with Disabilities" (2012). Dissertations. Paper 401. 109p. [cited 21.02.2020] Available at:
http://ecommons.luc.edu/luc_diss/401
- 171.WEHBI, S. Obstacles and facilitative factors affecting community organizing on disability issues: Case study of Lebanon. *International Social Work*. January 1, 2007. V. 50 (1), pp.67-78.
<https://doi.org/10.1177/0020872807071483>

172. WEISEL A, DROR O. School climate, sense of efficacy and Israeli teachers' attitudes toward inclusion of students with special needs. *Education, Citizenship and Social Justice*. 2006; 1(2); pp.157–74. doi:10.1177/1746197906064677
173. WEIR, T. The new PE. USA Today, 2000, p.39-46. Print.
174. *Welcoming diversity in the learning environment: teachers' handbook for inclusive education*. UNESCO Office Bangkok and Regional Bureau for Education in Asia and the Pacific/Person as author: Kaplan, Ian, Bista, Min Bahadur. 2022, 198 p. ISBN 978-92-9223-692-2 <https://unesdoc.unesco.org/ark:/48223/pf00000384009>
175. XIANG, P., & LEE, A.M. Achievement goals, perceived motivational climate, and students' self-reported mastery behaviors. *Research Quarterly for Exercise and Sport*. 2002, p 149-163. DOI: 10.1080/02701367.2002.10608992
176. YEO, R., & MOORE, K. Including Disability. Somerset: *Action on Disability and Development*. 2001, pp.571-590. DOI:10.1016/S0305-750X(02)00218-8
177. YEO, R. Chronic Poverty and Disability. Somerset: *Action on Disability and Development*, 2001, pp.125-140. https://www.chronicpoverty.org/uploads/publication_files/WP04_Yeo.pdf

Internet references:

178. *Standard Rules on the Equalization of Opportunities for Persons with Disabilities* [A/RES/48/96] [cited 15.11.2018]. Available: <https://www.un.org/development/desa/disabilities/resources/general-assembly/standard-rules-on-the-equalization-of-opportunities-for-persons-with-disabilities-ares4896.html>
179. *What is an Inclusive Culture?* March 2011. The Burton Blatt Institute (BBI) at Syracuse University [cited 15.11.2018]. Available: http://www.bbi.syr.edu/projects/Demand_Side_Models/docs/a_inclusive_culture.pdf
180. Schulman, St. *Building a Culture of Inclusion*, 2011 [cited 10.11. 2016]. Available: <http://www.diversityjournal.com/1768-building-a-culture-of-inclusion/>
181. *World Programme of Action Concerning Disabled Persons*, [cited 15.11.2017]. Available: <https://www.un.org/development/desa/disabilities/resources/world-programme-of-action-concerning-disabled-persons.html#:~:text=Background%20and%20Concepts-Objectives,%2C%20and%20of%20%E2%80%9Dequality%E2%80%9D>
182. *Education and Early Childhood Development* [cited 15.11.2017]. Available:

- <http://www.ed.gov.nl.ca/edu/k12/inclusion.html>
183. *European Education Area. Quality education and training for all* [cited 15.10.2019].
http://ec.europa.eu/education/policy/strategic-framework/social-inclusion_en
184. Judy Kugelmass (2004) *What is a Culture of Inclusion?*
http://www.eenet.org.uk/resources/eenet_newsletter/news8/page14.php
185. *Inclusion in education: towards equality for students with disability* [Internet]. 2013 [cited 13 August 2014]. Available from:
<http://apo.org.au/node/3612>
186. *Theory of Planned Behavior*. Summary of TPB by Ajzen. Abstract.
http://www.valuebasedmanagement.net/methods_ajzen_theory_planned_behaviour.html
187. <https://academic.oup.com/heapro/article/21/3/238/559289/Contextualizing-salutogenesis-and-Antonovsky-in>
188. PETERS, SUSAN J. *Review of marginalisation of people with disabilities in Lebanon, Syria and Jordan, 2009*. Background paper prepared for the Education For All Global Monitoring Report 2010. 35p. [cited 23.05.2015]
<http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Beirut/pdf/Background%20paper%20EFA%202010-Marginalization%20in%20Jordan%20Syria%20and%20Lebanon.pdf>
189. Guidance Note A DFID practice paper. *Education for children with disabilities - improving access and quality*. 22 p. [cited 23.05.2015]
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67664/edu-chi-disabil-guid-note.pdf
190. SCHWARZ N. and BOHNER G. *The Construction of Attitudes*, 2001, 33p. [cited 23.05.2014]
https://dornsife.usc.edu/assets/sites/780/docs/schwarz__bohner_attitude-construction-ms.pdf
191. WOOD J.K., FABRIGAR L.R., *Attitudes*, 2015 [cited 23.05.2016]
<https://www.oxfordbibliographies.com/view/document/obo-9780199828340/obo-9780199828340-0074.xml>
192. UNICEF Moldova
<https://www.unicef.org/moldova/educa%C8%9Bia-incluziv%C4%83>
193. *Voluntary National Review: Sustainable Development Goals progress report at the High Level Political Forum / Israel*, 2019

- <https://digitallibrary.un.org/record/3866775>
194. UNESCO. *Israel. Inclusion*. [cited 23.06.2021]
<https://education-profiles.org/northern-africa-and-western-asia/israel/~inclusion>
195. *Inclusive School Physical Education and Physical Activity* [cited 21.05.2018]
https://www.cdc.gov/healthyschools/physicalactivity/inclusion_pepa.htm
196. WATSON, S. *Physical Education Adaptations for Students with Disabilities*, 2019 [cited 28.02.2020]
<https://www.thoughtco.com/physical-education-for-students-with-disabilities-3111349>
197. *Disability and Inclusive Education*. A Stocktake of Education Sector Plans and GPE-Funded Grants. The Global Partnership for Education. Working paper #3 February 2018. 2018, 84p.
<https://www.globalpartnership.org/node/document/download?file=document/file/2018-07-gpe-disability-working-paper.pdf>
198. WANG, K. *7 Ways to Include a Student with Special Needs in Physical Education*, 2013 [cited 23.02.2015]
<https://www.friendshipcircle.org/blog/2013/11/12/7-ways-to-include-a-student-with-special-needs-in-physical-education>
199. *People with Disabilities in Israel 2021: Facts and Figures*. Publish Date: 26.06.2022
https://www.gov.il/en/Departments/General/pwd_israel_2021_statistics
200. *Circular Standing Instruction* No. 0123 of 2019
https://pop.education.gov.il/tchumey_daat/physical-education/
201. https://meyda.education.gov.il/files/Mazkirut_Pedagogit/hinuchgufani/ot.pdf
202. <http://www.education.gov.il/pe>
203. *Children with special educational needs* [cited 26.05.2022]
<https://www.nidirect.gov.uk/articles/children-special-educational-needs>
204. ZIRI D., *Close to a million people of working age in Israel have disabilities*. December 2, 2013. [cited 20.05.2022]
<https://www.jpost.com/national-news/report-close-to-one-million-people-of-working-age-in-israel-have-disabilities-333738>
205. FERGUSON C. *PROMOTING SOCIAL INTEGRATION*, 2008 [cited 20.05.2022]
<https://www.gsdr.org/docs/open/se6.pdf>
206. <https://quizlet.com/105939877/defining-adapted-pa-flash-cards/>

207. Education Code of the Republic of Moldova No. 152 dated July 17, 2014 [cited 22.05.2020]

https://mecc.gov.md/sites/default/files/education_code_final_version_0.pdf

208. The Israel Physical Activity Report Card for Children and Adolescents, 2022 [cited 22.10.2022]

<https://www.activehealthykids.org/wp-content/uploads/2022/11/Israel-report-card-short-form-2022.pdf>

APPENDICES

Appendix 1. Timeline of inclusive education events and documents

Year	Event	Document	Notes
25 - 27 September 2015	United Nations Sustainable Development Summit 2015, New York	Global “Agenda 2030”	<i>Disability is referenced in various parts of the SDGs and specifically in parts related to education, growth and employment, inequality, accessibility of human settlements, as well as data collection and monitoring of the SDGs</i>
19-22 May 2015	World Education Forum 2015, Incheon, Republic of Korea Equitable and inclusive quality education and lifelong learning for all by 2030. Transforming lives through education	Adoption of Incheon Declaration “Education 2030: Towards inclusive and equitable quality education and lifelong learning for all”	Recognition that: <i>Inclusion and equity in and through education is the cornerstone of a transformative education agenda; to addressing all forms of exclusion and marginalization, disparities and inequalities in access, participation and learning outcomes; to focusing the efforts on the most disadvantaged, especially those with disabilities, to ensure that no one is left behind.</i>
13-16 July, 2015	Third international Conference on Financing for Development	Addis Ababa Action Agenda	contains 6 references to persons with disabilities and disability, 1 <i>to inclusive education</i> , 1 to inclusive learning environment and 2 to accessible technologies and infrastructures
28-30 May, 2013	UNESCO’s 5th World Conference of Ministers and Senior Officials Responsible for Physical Education and Sport(MINEPS V)	the “Declaration of Berlin”	p.5 Recognizing the unique potential of sport to foster <i>social inclusion</i> Stressing the paradigm shifts in policy concerning <i>persons with disabilities, from a deficit-orientated approach to a strength-based one</i> , as well as <i>from a medical model to a social one</i>
2010	Adopted by the Committee of Ministers on 3 February 2010 at the 1076th meeting of the Ministers’ Deputies	Recommendation CM/Rec(2010)2 of the Committee of Ministers to member states on deinstitutionalisation and community living of children with disabilities	Mainstreaming or sector responsibility requires health, education and social care agencies <i>to take children with disabilities into account in all their planning and service delivery from their inception.</i>
2009	UNESCO	UNESCO Policy Guidelines on Inclusion in Education	Recognised that inclusion and quality are reciprocal – that an inclusive ethos can make a significant contribution to the quality of education for all learners. The role of inclusive

			education in the development of a more just, equal and democratic society where diversity is celebrated is also considered to be of increasing importance.
2006	The Convention was adopted by the United Nations General Assembly on 13 December 2006 and has been in effect since 3 May 2008	Convention on the Rights of Persons with Disabilities	Recognised as one of the principle: respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities. To <i>ensure an inclusive education system</i> at all levels and lifelong learning ...
2006	Adopted by the Committee of Ministers on 5 April 2006 at the 961 st meeting of the Ministers' Deputies	Recommendation Rec(2006)5 of the Committee of Ministers to member states on the Council of Europe Action Plan to promote the rights and full participation of people with disabilities in society: improving the quality of life of people with disabilities in Europe 2006-2015	To ensure that all persons, irrespective of the nature and degree of their impairment, <i>have equal access to education, and develop their personality, talents, creativity and their intellectual and physical abilities to their full potential</i> ; to Facilitate efficient transitions between each phase of their education and between education and employment;
2002	the European Congress on Disability, Madrid, 20-23 martie 2002	The Madrid Declaration "Non discrimination plus positive action results in social inclusion"	Education plays a key role in defining the future for everybody, both from a personal point of view, as well as a social and professional one. The education system has, therefore, to be the key place to ensure personal development and social inclusion, which will allow children and youngsters with disabilities to be as independent as possible. The education system is the first step towards an inclusive society.
2000	World Education Forum. Paris, UNESCO.	The Dakar Framework for Action: Education for All – Meeting our Collective Commitments	Clearly paves the way for inclusive education as one of the main strategies to address the challenges of marginalization and exclusion in response to the fundamental principle of EFA, namely that all children, youth and adults should have the opportunity to learn.
15 September 1995	Fourth World Conference on Women, Beijing	Beijing Platform for Action	has 24 references to persons with disabilities, including in education
7-10 June 1994	World Conference on Special Needs Education: Access and	Salamanca Statement	Highlighted the <i>importance to enhancing teacher education</i> as regards <i>provision for special educational needs, etc....</i>

	Quality Salamanca, Spain,		
1993	85th plenary meeting	United Nations Standard Rules on the Equalisation of Opportunities for People with Disabilities	Rule 6. Education – state that the <i>education of persons with disabilities is an integral part of the educational system.</i> Rule 11. Recreation and sports - to ensure that <i>persons with disabilities have equal opportunities for recreation and sports.</i>
1990	Resolution adopted by the General Assembly [on the report of the Third Committee (A/48/627)]	Economic and Social Council resolution 1990/26 of 24 May 1990	the establishment of an ad hoc open-ended working group of government experts, to elaborate standard rules <i>on the equalization of opportunities for disabled children, youth and adults,</i>
1989	Adopted by General Assembly resolution 44/25 of 20 November 1989 entry into force 2 September 1990	Convention on the Rights of the Child	Art. 25, p.3 Recognizing the special needs of a disabled child, to ensure that the <i>disabled child has effective access to and receives education, training, health care services, rehabilitation services, preparation for employment and recreation opportunities in a manner conducive to the child's achieving the fullest possible social integration and individual development, including his or her cultural and spiritual development</i>
3 December 1982	UN General Assembly	World Programme of Action concerning Disabled Persons, adopted by the General Assembly by its resolution 37/52 of	emphasized <i>the right of persons with disabilities to the same opportunities as other citizens</i> and to an equal share in the improvements in living conditions resulting from economic and social development; offered <i>definition of equalization of opportunities</i> . There also, for the first time, <i>handicap was defined as a function of the relationship between persons with disabilities and their environment.</i>
1979	the Convention on the Elimination of All Forms of Discrimination against Women	General Recommendation No. 18 (tenth session, 1991) / Disabled women	Recommends that States parties take measures to deal with disabled women particular situation, including special measures to ensure their equal access to education and employment, health services and social security, and to ensure that they can participate in all areas of social and cultural life.
original Charter adopted in 1978, amended in 1991	UNESCO	The International Charter of Physical Education, Physical Activity and Sport	Highlights the health benefits of physical activity, <i>the inclusion of persons with disabilities</i> , the protection of children, the role of sport for development and peace, as well as the need to protect the integrity of sport from doping, violence, manipulation and corruption.

Appendix 2. The situation with social inclusion versus exclusion in MENA region

In the context of present research, the general overview of situation in MENA region (MENA region as containing 20 countries: Algeria, Bahrain, Egypt, Iraq, Iran, *Israel*, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen) represents the framework for understanding of socio-cultural context.

The situation in MENA countries highlights the need to understand a socially exclusive approach to marginalisation of people with disabilities; i.e., one that includes indexes of quality of life in relation to material, human, social, cultural, and environmental resources. Social exclusion of people with disabilities occurs in combination with several forms of discrimination, including gender bias, unequal employment opportunities, lack of access to education, inadequate health services, and patriarchal or religious norms [apud 6; 70; 75; 77; 139; 166].

According to the most recent available statistics, the incidence of disability in the MENA region ranges from 1-12% of the population. In terms of the prevalence of school-aged children and youth with disabilities, there is no available data for Syria. In Lebanon, the Arab Resource Collective reports that findings from the 2006 National Inclusion Project indicate that the “majority of children with disabilities are in special care institutions, and private schools have a policy of automatically eliminating students with disabilities”. Further, only a handful of schools in Lebanon nationwide cater to students with special needs. “About 20 schools allow adapting them into the curriculum.” [apud 6].

In 2001 the Ministry of Social Development in Jordan reported that the total percentage of disabled persons in Jordan is 12.6% of the population. The total number of children served in MSD-registered institutions is 16,719, or 7.94% of all disabled children. The National Council of Family Affairs estimated in 2003 that more than 230,000 disabled children live in Jordan, or about 10% of the young population. Evidence from 1995-2004 reveals that in a regular school, about one-third of children enter school with a hearing-listening and language speech disability that has not been identified or diagnosed, preventing them from succeeding in school. In total, it is estimated that the underserved school-age population with disabilities is around 218,000, or 92% of the total [apud 78]

Causes and characteristics of disability in the MENA region

According to the MENA Human Development Department [78], MENA countries experience high rates of disabilities caused by:

- (i) large numbers of individuals whose conditions could be mitigated with appropriate health and social interventions, and
- (ii) weaknesses in primary and secondary prevention mechanisms, especially those that address the new emerging causes of disability. These include prevention and management of chronic diseases, work related injuries, road accidents, mental health problems, and newly emerging infectious diseases.

Causes of high rates of disability have been identified due to poverty, malnutrition, violence, and blood marriage. For example, hearing loss is the most frequently occurring birth defect in the world and in the MENA region as well. In Jordan, the incidence of a significant permanent hearing loss is 6-7 times higher than in the United States. It is estimated that by 2004 there would be a minimum of 73,000 very young Jordanians with a serious hearing problem. Major causes of hearing loss are reported as consanguinity and poor health related to poverty.

Another contributing factor for increased numbers of children with disabilities is the significant growth in the population as a whole. Illiteracy rates differ significantly by gender and disability. While several countries now report overall literacy rates of better than 90%, in 2005 rates of illiteracy for women continue to lag behind: 10-20% in six countries and 25-40% in 7 countries of the region. For people with disabilities, the rates of illiteracy may be as high 80%. A study of its 1870 members

conducted by the Lebanese Sitting Handicapped Association (LSHA) found that 80% were totally illiterate. Out of these, 82% were women. Links between level of education, literacy, employment, fertility rates, and mothers' and children's' health and consequential disability have been well documented [apud 78; 166].

Violence in countries experiencing conflict contributes to the incidence of disability in several ways. First, it directly contributes to disability because many of the casualties are women and children. United Nations Enable reports that for every child killed in warfare, there are the injured who acquire a permanent form of disability [112]. Second, it affects children's well-being through social disruption and exacerbated conditions of poverty. Third, it reduces access to basic health services and resources for preventive health care. Fourth, malnutrition increases, adversely affecting children's' cognitive development [112].

It is important to disaggregate disability as a sub-group. "Not only is this a misleading, monolithic term which implies that every disabled person and all disabilities are the same, but it also categorises people by one aspect of their identity in a way which is likely to lead to social prejudice against them". As a result, "there can be little value in adopting a blanket, standardised approach to disability, because the individual experience of disability varies markedly by sex and according to other important factors such as age-and also, of-course, the nature of the disability" [1]

The previous sections of this report documented the overwhelming percentage of children and youth who are excluded from formal education. Provision of special schools has been the primary method of educational service delivery for those children with disabilities who are included. Yet, only a handful of schools cater to these students with special needs. For example, in Lebanon, 20 schools allow entry to children with disabilities. However, the majority of children with disabilities are in special care institutions, and private schools have a policy of automatically eliminating these students [apud 139].

The provision of resource rooms within public schools represents a shift towards integration into the mainstream education system. Jordan has achieved partial integration for a small number of mentally impaired students by annexing classrooms to regular schools for these students and providing qualified teachers for this category of disabilities. Five annexed classrooms have been established for students with severe mental impairment, providing educational services for approximately 35-40 students per classroom. These children share with their non-disabled peers such collective activities as break times, playing, art education, physical education and field trips. Jordan has also begun a programme of integration for blind students. For example, blind students who complete grade six at Abdullah Ibn Umm Maktoum School are transferred to nearby regular schools to be integrated with their non-disabled peers. As of 2007/2008, 438 blind students in Jordan received educational services at public schools [aud 75].

While these programmes represent promising trends, the main responsibility for disabled students' education, especially at the primary level, resides with special teachers, and their integration is limited to non-academic activities. Reaching out to the vast majority of students who are yet not included still remains to be accomplished.

Addressing marginalisation of children /youth with disabilities in the MENA region

Legislation and related policies provide a necessary prerequisite for addressing marginalization. Although some special laws for persons with disabilities have been promulgated by royal or presidential decrees; e.g., Jordan, Egypt, and Yemen, monitoring and enactment have been limited. For example, Yemen created a special Disability by law in 2002, but inadequate human resources combined with inefficient public finance systems minimized the impact of this law. Other regional initiatives such as an Arabic sign-language dictionary for the deaf, and a barrier-free design manual published by the Economic and Social Commission For Western Asia (ESCWA) to promote

accessible buildings, have not yet been adopted or widely utilized by all the Arab States. In Jordan, legislation For the Care Of the Handicapped No.12 of 1993 limited its attention to individuals with physical disabilities, and disabled people themselves did not participate in its development or implementation.

In education, Jordan developed a comprehensive 2004-2013 ECD Strategy document and Plan of Action for early childhood education. The plan establishes specific targets for increased enrolment, and evaluation instruments to measure school readiness. The Education Act No.3 in 1994 established a development plan with several stages. One of the principles underling education policies in this act is “expanding educational patterns to include special education programmes, and programmes for the gifted and those with special needs. In 2005, the Human Development Department (HDD) for the MENA Region produced a report entitled “A Note on Disability Issues in the Middle East and North Africa”. The report notes that public policy on disabilities in MENA countries “tends to focus on a medical approach that promotes an inclusive environment” [78].

Subsequent to the HDD report noted above, all major world regions held workshops on Inclusive Education throughout 2007 in preparation for the 2008 International Conference on Inclusive Education sponsored by UNESCO’S International Bureau of Education. The preparatory conference for the Arab Region, entitled “Regional Seminar on Quality Education for All: No Exclusion and No Marginalization”, took place in Beirut, Lebanon on 25-27 August 2008. The conference was attended by 40 participants from 13 Arab countries, six international organizations and NGOs. A summary of the Gulf Arab States regional workshop indicates that “the workshop’s discussion at a discussion of the current status of such policies”. With regard to future recommendations, participants recognised the need for adopting legislation that supports the improvement of school infrastructures and transportation to make schools accessible to all [136].

Overall, participants at the 2008 Arab preparatory workshop recognised “the challenge of social exclusion, especially in relation to disabled people”. They reached agreement on the following priorities with regard to public policies: 1. Raise social awareness about broadening the concept of inclusive education. 2. Encourage participatory policymaking. 3. Promote and enact legislation for all categories of students and reflect them in national strategic plans. 4. Provide adequate funds to attain free compulsory education to all learners including students with disabilities.

Beyond regional and state-level legislation and policies to promote inclusion of children and youth with disabilities, several important international policies and conventions could be addressed. First, Jordan, Syria and Lebanon were all signatories to the convention on the Rights of Persons with Disabilities. Jordan ratified the Convention in March 2008. This convention and its protocols provide specific guidelines for establishing inclusive education for children and youth with disabilities. Conventions bind the states that ratify them to their benchmarks and protocols.

The 1994 Salamanca Statement, as well as the 1993 United Nations Standard Rules on the Equalisation of Opportunities for People with Disabilities, also provides countries with a framework for action in relation to inclusive education and issues of barrier removal.

At the 2007 UNESCO/ IBE sponsored workshops on Inclusive Education, the Arab Gulf States, participants recommended that all countries in the region sign and ratify all relevant international conventions and declarations promoting inclusion, in particular, the Convention on the Rights of Persons with Disabilities.

In the 10 years since its adoption, the Convention on the Rights of Persons with Disabilities has been one of the most quickly ratified of all the international human right treaties and, at 2 December 2016, more than 163 States (including from MENA region) and one regional organisation (the European Union) have ratified or acceded to the Convention.

Appendix 3. The Attitudes towards including students with a disability

A.1 Questionnaire

Please mark with an X the number most representing your view

1 = Not at all agree, 2 = To some extent agree, 3 = Mostly agree, 4 = Absolutely agree

1 2 3 4

1. The PE teacher doesn't have knowledge and skill to teach a child with sensorimotor disability.
2. One shouldn't include a child with disability in the class because his/her image is disgusting.
3. Since excellence is a major requirement, it is important to avoid any disturbance to the PE class, such as inclusion of children with disability.
4. Children with disability can profit a lot from PE classes.
5. Children with disability often cause discipline problems during PE classes.
6. A teacher who includes a child with disability in the class will reduce the amount of time devoted to all the other children.
7. A child with disability could slow the learning of his/her peers.
8. A child with a disability is a threat to the PE teacher.
9. Children with disabilities should be taught in special classes.
10. Including a child with a disability is a personal challenge for the PE teacher.
11. A teacher who includes a child with disability is at risk of more stress.
12. Including a child with disability could enhance democratic and pluralistic values.
13. Including a child with disability in the class creates frustration and embarrassment.
14. The regular class can profit from the inclusion of a child with disability.
15. It is not appropriate to ask a teacher who is supposed to take a whole class to pay attention to the special needs of a disabled child and his/her family.

Appendix 4. Demographic Questions

1. _____ Your age
2. _____ Your year in college (e.g., 3rd year, 4th year)
3. _____ Have you had a general physical education internship in a middle or high school?
4. _____ Course work in adapted physical education (APE) (e.g., 1 course, 2 courses, etc.)
5. _____ Did your APE course have a practicum? (yes/no)
6. _____ If yes to #5 above, was the practicum:
 - a. ____ working with a student with a disability 1-on-1 at your college/university?
 - b. ____ working with a small group of students with disabilities at your college/university?
 - c. ____ working with a student with a disability 1-on-1 in a local school?
 - d. ____ working with a small group of students with disabilities in a local school?
 - e. ____ assisting a student being included in a general physical education class?

7. What are your experiences with the following students with physical, intellectual, or visual disabilities in physical education or community sports?

	<u>No experience</u>	<u>Once or twice</u>	<u>Several Times</u>
Intellectual disability	_____	_____	_____
Physical disability	_____	_____	_____
Visual disability	_____	_____	_____

8. What are your personal experiences with people with intellectual, physical, or visual disabilities?

	<u>Family member</u>	<u>A friend</u>	<u>Someone at school</u>
Intellectual disability	_____	_____	_____
Physical disability	_____	_____	_____
Visual disability	_____	_____	_____

Appendix 5. Semi-structured interview

Question general outline positions

1. What it means to be a child with disabilities for you?
2. Describe your relationship with your parents? Did your parents treat you differently from the rest of the brothers / sisters of yours?
3. What are the things you like to do?
4. Describe what it is a physical education teacher in charge of the school successful?
5. What are the concessions / price that you feel is required of you to make physical education at school?
6. What are the disability you place yourself?
7. What things have you learned about yourself that you never knew before Shsstft PE lesson? And what forces Gilat yourself? And weaknesses?
8. What have you learned about your sports teacher did not know before?
9. What have you learned about the students and the class was with you by sporting activity during a shutdown?
10. Whether and how change your priorities-school program since you participated in physical education classes in school?
11. What are the things you have learned to appreciate as a result of dealing with the environment - bsiaor sport that had been perhaps obvious

Appendix 6. Tables and Data Processing- Population characteristics

Case Processing Summary^a

		N	%
Cases	Valid	160	100.0
	Excluded ^a	0	0.0
	Total	160	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.983	11

Item Statistics

	Mean	Std. Deviation	N
SssePart1QuestionA	3.16	1.102	160
SssePart1QuestionB	3.36	1.251	160
SssePart1QuestionC	3.28	1.224	160
SssePart1QuestionD	3.24	1.141	160
SssePart1QuestionE	3.13	1.166	160
SssePart1QuestionF	3.22	1.153	160
SssePart1QuestionG	3.23	1.312	160
SssePart1QuestionH	3.38	1.273	160
SssePart1QuestionI	3.18	1.277	160
SssePart1QuestionJ	3.26	1.210	160
SssePart1QuestionK	3.24	1.273	160

1 Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SssePart1QuestionA	32.51	129.623	.888	.982
SssePart1QuestionB	32.31	126.742	.881	.982
SssePart1QuestionC	32.38	126.036	.931	.980
SssePart1QuestionD	32.43	128.523	.900	.981
SssePart1QuestionE	32.53	127.672	.914	.981
SssePart1QuestionF	32.44	128.362	.897	.981
SssePart1QuestionG	32.44	124.235	.928	.981
SssePart1QuestionH	32.29	125.514	.911	.981
SssePart1QuestionI	32.49	125.761	.899	.981
SssePart1QuestionJ	32.40	127.084	.900	.981
SssePart1QuestionK	32.42	124.836	.938	.980

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
35.66	153.118	12.374	11

Reliability

Reliability Statistics

Cronbach's Alpha	N of Items
.986	12

Item Statistics

	Mean	Std. Deviation	N
SssePart2QuestionA	3.40	1.240	160
SssePart2QuestionB	3.33	1.253	160
SssePart2QuestionC	3.34	1.268	160

SssePart2QuestionD	3.33	1.277	160
SssePart2QuestionE	3.26	1.250	160
SssePart2QuestionF	3.17	1.245	160
SssePart2QuestionG	3.21	1.256	160
SssePart2QuestionH	3.39	1.249	160
SssePart2QuestionI	3.10	1.224	160
SssePart2QuestionJ	3.16	1.170	160
SssePart2QuestionK	3.21	1.290	160
SssePart2QuestionL	3.28	1.255	160

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SssePart2QuestionA	35.78	165.270	.890	.986
SssePart2QuestionB	35.84	164.510	.906	.985
SssePart2QuestionC	35.84	163.307	.934	.985
SssePart2QuestionD	35.85	163.499	.920	.985
SssePart2QuestionE	35.92	163.937	.927	.985
SssePart2QuestionF	36.01	164.283	.919	.985
SssePart2QuestionG	35.96	164.061	.918	.985
SssePart2QuestionH	35.79	163.678	.937	.985
SssePart2QuestionI	36.08	164.762	.920	.985
SssePart2QuestionJ	36.01	165.849	.928	.985
SssePart2QuestionK	35.96	163.319	.915	.985
SssePart2QuestionL	35.89	163.995	.921	.985

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
39.18	195.177	13.971	12

Reliability

Notes

Scale: ALL VARIABLES

Case Processing Summary^a

		N	%
Cases	Valid	159	99.4
	Excluded ^a	1	.6
	Total	160	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.988	10

Item Statistics

	Mean	Std. Deviation	N
SssePart3QuestionA	2.69	1.217	159
SssePart3QuestionB	2.85	1.274	159
SssePart3QuestionC	2.73	1.157	159
SssePart3QuestionD	2.79	1.250	159
SssePart3QuestionE	2.82	1.266	159
SssePar3QuestionF	2.70	1.343	159
SssePart3QuestionG	2.79	1.243	159
SssePart3QuestionH	2.75	1.268	159
SssePart3QuestionI	2.78	1.256	159
SssePart3QuestionJ	2.73	1.266	159

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SssePart3QuestionA	24.94	116.206	.926	.987
SssePart3QuestionB	24.79	115.106	.924	.987
SssePart3QuestionC	24.91	117.073	.942	.987
SssePart3QuestionD	24.85	115.053	.946	.986
SssePart3QuestionE	24.81	115.103	.931	.987
SssePar3QuestionF	24.93	113.318	.939	.987
SssePart3QuestionG	24.84	115.083	.951	.986
SssePart3QuestionH	24.89	114.658	.947	.986
SssePart3QuestionI	24.86	115.289	.931	.987
SssePart3QuestionJ	24.91	114.694	.947	.986

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
27.64	141.980	11.916	10

Reliability

Scale: ALL VARIABLES

Case Processing Summary^a

		N	%
Cases	Valid	160	100.0
	Excluded ^a	0	0.0
	Total	160	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.875	4

Item Statistics

	Mean	Std. Deviation	N
ATTAndSE_part1_ques4	3.14	1.119	160
ATTAndSE_part1_ques10	2.68	.927	160
ATTAndSE_part1_ques11	3.14	1.104	160
ATTAndSE_part1_ques14	2.88	1.162	160

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ATTAndSE_part1_ques4	8.71	8.322	.625	.882
ATTAndSE_part1_ques10	9.16	8.829	.710	.851
ATTAndSE_part1_ques11	8.70	7.633	.779	.820
ATTAndSE_part1_ques14	8.96	7.106	.831	.797

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
11.84	13.604	3.688	4

Reliability

Scale: ALL VARIABLES

Case Processing Summary

	N	%
Cases Valid	160	100.0
Excluded ^a	0	0.0
Total	160	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.969	11

Item Statistics

	Mean	Std. Deviation	N
ATTAndSE_part1_ques1	1.85	1.041	160
ATTAndSE_part1_ques2	1.54	.977	160
ATTAndSE_part1_ques3	1.59	.999	160
ATTAndSE_part1_ques5	1.68	1.007	160
ATTAndSE_part1_ques6	1.84	1.021	160
ATTAndSE_part1_ques7	1.86	.994	160
ATTAndSE_part1_ques8	1.58	.942	160
ATTAndSE_part1_ques9	1.74	1.156	160
ATTAndSE_part1_ques12	1.83	1.136	160
ATTAndSE_part1_ques13	1.72	.979	160
ATTAndSE_part1_ques15	1.79	1.189	160

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ATTAndSE_part1_ques1	17.16	83.680	.825	.967
ATTAndSE_part1_ques2	17.47	83.685	.886	.965
ATTAndSE_part1_ques3	17.42	82.824	.915	.964
ATTAndSE_part1_ques5	17.33	84.072	.834	.966
ATTAndSE_part1_ques6	17.17	83.286	.866	.965
ATTAndSE_part1_ques7	17.14	83.985	.851	.966
ATTAndSE_part1_ques8	17.43	84.586	.866	.966
ATTAndSE_part1_ques9	17.26	80.585	.894	.965
ATTAndSE_part1_ques12	17.18	82.954	.784	.968
ATTAndSE_part1_ques13	17.29	84.986	.805	.967
ATTAndSE_part1_ques15	17.22	81.568	.814	.967

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19.01	100.472	10.024	11

Reliability

Case Processing Summary^a

		N	%
Cases	Valid	159	99.4
	Excluded ^a	1	.6
	Total	160	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.981	15

Item Statistics

	Mean	Std. Deviation	N
ATTAndSE_part2_ques1	2.97	.937	159
ATTAndSE_part2_ques2	2.94	1.011	159
ATTAndSE_part2_ques3	3.18	.904	159
ATTAndSE_part2_ques4	2.38	1.163	159
ATTAndSE_part2_ques5	2.98	.951	159
ATTAndSE_part2_ques6	3.09	.979	159
ATTAndSE_part2_ques7	2.87	.988	159
ATTAndSE_part2_ques8	2.57	1.116	159
ATTAndSE_part2_ques9	2.84	1.028	159
ATTAndSE_part2_ques10	2.77	1.032	159
ATTAndSE_part2_ques11	2.86	1.078	159
ATTAndSE_part2_ques12	2.85	1.057	159
ATTAndSE_part2_ques13	2.92	1.100	159

ATTAndSE_part2_ques14	3.31	.878	159
ATTAndSE_part2_ques15	3.11	1.128	159

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ATTAndSE_part2_ques1	40.67	166.148	.876	.980
ATTAndSE_part2_ques2	40.70	164.086	.892	.980
ATTAndSE_part2_ques3	40.46	169.908	.741	.982
ATTAndSE_part2_ques4	41.25	164.316	.756	.982
ATTAndSE_part2_ques5	40.65	165.443	.893	.980
ATTAndSE_part2_ques6	40.54	164.971	.885	.980
ATTAndSE_part2_ques7	40.77	165.116	.871	.980
ATTAndSE_part2_ques8	41.06	161.211	.908	.980
ATTAndSE_part2_ques9	40.79	162.672	.933	.979
ATTAndSE_part2_ques10	40.87	163.027	.914	.980
ATTAndSE_part2_ques11	40.78	161.818	.919	.979
ATTAndSE_part2_ques12	40.79	162.422	.916	.979
ATTAndSE_part2_ques13	40.71	162.220	.884	.980
ATTAndSE_part2_ques14	40.33	168.399	.835	.981
ATTAndSE_part2_ques15	40.53	160.593	.921	.979

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
43.64	188.195	13.718	15

Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
age	33.99	8.678	160
SSSe_part1	3.2420	1.12492	160
SSSe_part2	3.2646	1.16421	160
SSSe_part3	2.7685	1.18945	160
ATTAndSE_part1_A	1.7278	.91123	160
ATTAndSE_part1_B	2.9609	.92210	160
ATTAndSE_part2	2.9029	.91497	160

Correlations

		age	SSSe_part1	SSSe_part2	SSSe_part3	ATTAndSE_part1_A	ATTAndSE_part1_B	ATTAndSE_part2
age	Pearson Correlation Sig. (2-tailed)	1	.333**	.282**	.119	-.220**	.157*	.253**
	N	160	160	160	160	160	160	160
SSSe_part1	Pearson Correlation Sig. (2-tailed)	.333**	1	.924**	.805**	-.796**	.746**	.872**
	N	160	160	160	160	160	160	160
SSSe_part2	Pearson Correlation Sig. (2-tailed)	.282**	.924**	1	.829**	-.808**	.750**	.914**
	N	160	160	160	160	160	160	160
SSSe_part3	Pearson Correlation Sig. (2-tailed)	.119	.805**	.829**	1	-.653**	.594**	.839**
	N	160	160	160	160	160	160	160

ATTAndSE _part1_A	ation Sig. (2- tailed)	.13 4	.000	.000		.000	.000	.000
	N	160	160	160	160	160	160	160
	Pearso n Correl ation	-. .22 0**	-.796**	-.808**	-.653**	1	-.886**	-.855**
ATTAndSE _part1_B	Sig. (2- tailed)	.00 5	.000	.000	.000		.000	.000
	N	160	160	160	160	160	160	160
	Pearso n Correl ation	.15 7*	.746**	.750**	.594**	-.886**	1	.757**
ATTAndSE _part2	Sig. (2- tailed)	.04 7	.000	.000	.000	.000		.000
	N	160	160	160	160	160	160	160
	Pearso n Correl ation	.25 3**	.872**	.914**	.839**	-.855**	.757**	1
	Sig. (2- tailed)	.00 1	.000	.000	.000	.000	.000	
	N	160	160	160	160	160	160	160

T-Test

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
SSSe_part1	0 male	92	2.9654	1.28916	.13440
	1 female	68	3.6163	.70608	.08562
SSSe_part2	0 male	92	2.9293	1.31836	.13745
	1 female	68	3.7181	.70196	.08513
SSSe_part3	0 male	92	2.3734	1.21958	.12715
	1 female	68	3.3029	.91276	.11069
ATTAndSE_part1_A	0 male	92	1.9970	1.05523	.11002
	1 female	68	1.3636	.47329	.05739

ATTAndSE_part1_B	0 male	92	2.7717	1.01476	.10580
	1 female	68	3.2169	.70961	.08605
ATTAndSE_part2	0 male	92	2.6181	1.05723	.11022
	1 female	68	3.2882	.45442	.05511

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SSSe_part1	Equal variances assumed	40.309	.000	-3.765	158	.000	-.65090	.17288	-.99235	-.30944
	Equal variances not assumed			-4.084	#### ##	.000	-.65090	.15936	-.96583	-.33596
SSSe_part2	Equal variances assumed	54.787	.000	-4.484	158	.000	-.78879	.17592	-1.13624	-.44134
	Equal variances not assumed			-4.879	#### ##	.000	-.78879	.16167	-1.10833	-.46925
SSSe_part3	Equal variances assumed	10.063	.002	-5.284	158	.000	-.92951	.17591	-1.27695	-.58207
	Equal variances not assumed			-5.514	#### ##	.000	-.92951	.16858	-1.26247	-.59655

	ed									
ATTAndSE_part1_A	Equal varian ces assum ed	87.52 5	.00 0	4.61 6	158	.000	.63340	.13723	.3623 6	.9044 4
	Equal varian ces not assum ed			5.10 4	#### ##	.000	.63340	.12409	.3879 7	.8788 2
ATTAndSE_part1_B	Equal varian ces assum ed	29.48 2	.00 0	- 3.09 9	158	.002	-.44517	.14363	- .7288 5	- .1614 9
	Equal varian ces not assum ed			- 3.26 4	#### ##	.001	-.44517	.13637	- .7145 3	- .1758 1
ATTAndSE_part2	Equal varian ces assum ed	109.4 72	.00 0	- 4.90 0	158	.000	-.67017	.13676	- .9402 9	- .4000 5
	Equal varian ces not assum ed			- 5.43 8	#### ##	.000	-.67017	.12323	- .9139 5	- .4263 9

General Linear Model

Within-Subjects Factor

Measure: MEASURE_1

part	Dependent Variable
1	SSSe_part1
2	SSSe_part2
3	SSSe_part3

Between-Subjects Factor

	Value Label	N
gender 0	male	92
1	female	68

Descriptive Statistics

gender		Mean	Std. Deviation	N
SSSe_part1	0 male	2.9654	1.28916	92
	1 female	3.6163	.70608	68
	Total	3.2420	1.12492	160
SSSe_part2	0 male	2.9293	1.31836	92
	1 female	3.7181	.70196	68
	Total	3.2646	1.16421	160
SSSe_part3	0 male	2.3734	1.21958	92
	1 female	3.3029	.91276	68
	Total	2.7685	1.18945	160

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
part Pillai's Trace	.336	39.802 ^b	2.000	157.000	.000	.336
Wilks' Lambda	.664	39.802 ^b	2.000	157.000	.000	.336
Hotelling's Trace	.507	39.802 ^b	2.000	157.000	.000	.336
Roy's Largest Root	.507	39.802 ^b	2.000	157.000	.000	.336
part * gender Pillai's Trace	.044	3.582 ^b	2.000	157.000	.030	.044
Wilks' Lambda	.956	3.582 ^b	2.000	157.000	.030	.044
Hotelling's Trace	.046	3.582 ^b	2.000	157.000	.030	.044
Roy's Largest Root	.046	3.582 ^b	2.000	157.000	.030	.044

a.Design: Intercept + gender Within Subjects Design: part

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
part	.748	45.581	2	.000	.799	.811	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a.Design: Intercept + gender Within Subjects Design: part

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
part	Sphericity Assumed	23.031	2	11.515	58.597	.000	.271
	Greenhouse-Geisser	23.031	1.597	14.417	58.597	.000	.271
	Huynh-Feldt	23.031	1.621	14.204	58.597	.000	.271
	Lower-bound	23.031	1.000	23.031	58.597	.000	.271
part * gender	Sphericity Assumed	1.518	2	.759	3.861	.022	.024
	Greenhouse-Geisser	1.518	1.597	.950	3.861	.031	.024
	Huynh-Feldt	1.518	1.621	.936	3.861	.030	.024
	Lower-bound	1.518	1.000	1.518	3.861	.051	.024
Error(part)	Sphericity Assumed	62.099	316	.197			
	Greenhouse-Geisser	62.099	252.400	.246			
	Huynh-Feldt	62.099	256.186	.242			
	Lower-bound	62.099	158.000	.393			

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
part	Linear	16.024	1	16.024	62.871	.000	.285
	Quadratic	7.006	1	7.006	50.713	.000	.243
part *	Linear	1.518	1	1.518	5.954	.016	.036
	Quadratic	5.210E-05	1	5.210E-05	.000	.985	.000
Error(part)	Linear	40.271	158	.255			
	Quadratic	21.828	158	.138			

Tests of Between-Subjects Effects

Measure:

MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	4658.387	1	4658.387	1457.793	.000	.902
gender	73.157	1	73.157	22.894	.000	.127
Error	504.890	158	3.196			

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
3.151	.083	2.988	3.314

part 2

Estimates

Measure: MEASURE_1

part	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	3.291	.086	3.120	3.462
2	3.324	.088	3.150	3.497
3	2.838	.088	2.664	3.012

Pairwise Comparisons

Measure: MEASURE_1

(I) part	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
				Lower Bound	Upper Bound
1 2	-.033	.035	.356	-.103	.037
1 3	.453*	.057	.000	.340	.565
2 1	.033	.035	.356	-.037	.103
2 3	.486*	.055	.000	.377	.594
3 1	-.453*	.057	.000	-.565	-.340
3 2	-.486*	.055	.000	-.594	-.377

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	.336	39.802 ^a	2.000	157.000	.000	.336
Wilks' lambda	.664	39.802 ^a	2.000	157.000	.000	.336
Hotelling's trace	.507	39.802 ^a	2.000	157.000	.000	.336
Roy's largest root	.507	39.802 ^a	2.000	157.000	.000	.336

Each F tests the multivariate effect of part. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic

3. Gender

Estimates

Measure: MEASURE_1

gender	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0 male	2.756	.108	2.544	2.969
1 female	3.546	.125	3.299	3.793

Pairwise Comparisons

Measure: MEASURE_1

(I) gender	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
				Lower Bound	Upper Bound
0 male 1 female	-.790*	.165	.000	-1.116	-.464
1 female 0 male	.790*	.165	.000	.464	1.116

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Measure: MEASURE_1

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	24.386	1	24.386	22.894	.000	.127
Error	168.297	158	1.065			

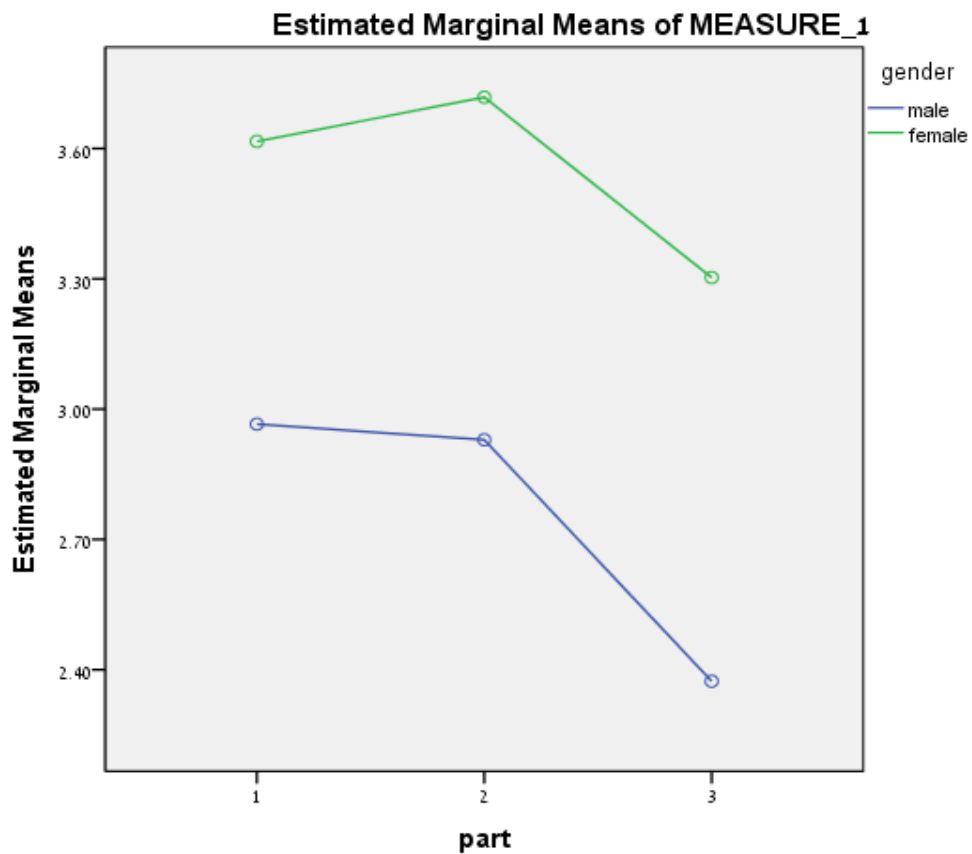
The F tests the effect of gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

4. Gender * part

Measure: MEASURE_1

				95% Confidence Interval	
				Lower Bound	Upper Bound
0 male	1	2.965	.113	2.743	3.188
	2	2.929	.115	2.703	3.156
	3	2.373	.115	2.147	2.600
1 female	1	3.616	.131	3.357	3.875
	2	3.718	.133	3.455	3.982
	3	3.303	.133	3.039	3.566

Profile Plots



**One way
Descriptives**

		N	Mean	Std. Deviat ion	Std. Erro r	95% Confidence Interval for Mean		Minimu m	Maximu m
						Lower Bound	Upper Bound		
SSSe_part1	1.00 0-5	57	2.5486	1.1816 9	.156 52	2.2351	2.862 2	1.00	5.00
	2.00 5-10	25	3.5964	.84838	.169 68	3.2462	3.946 6	1.73	5.00
	3.00 10- 15	36	3.6035	.86166	.143 61	3.3120	3.895 1	1.27	4.91
	4.00 15- 20	22	3.7645	.81922	.174 66	3.4012	4.127 7	1.73	5.00
	5.00 20 and up Tota l	20	3.5500	1.0883 0	.243 35	3.0407	4.059 3	1.09	5.00
	160	160	3.2420	1.1249 2	.088 93	3.0664	3.417 7	1.00	5.00
	SSSe_part2								
	1.00 0-5	57	2.5351	1.2262 6	.162 42	2.2097	2.860 5	1.00	5.00
	2.00 5-10	25	3.6167	.92108	.184 22	3.2365	3.996 9	1.33	5.00
SSSe_part2	3.00 10- 15	36	3.8171	.64081	.106 80	3.6003	4.033 9	1.50	4.67
	4.00 15- 20	22	3.8220	.88203	.188 05	3.4309	4.213 0	1.42	5.00
	5.00 20 and up Tota l	20	3.2958	1.2344 0	.276 02	2.7181	3.873 5	1.00	5.00
	160	160	3.2646	1.1642 1	.092 04	3.0828	3.446 4	1.00	5.00
	SSSe_part3								
	1.00 0-5	57	2.3220	1.1400 9	.151 01	2.0195	2.624 5	1.00	5.00
	2.00 5-10	25	2.9520	1.0408 8	.208 18	2.5223	3.381 7	1.30	5.00
	3.00 10- 15	36	3.1528	1.1309 9	.188 50	2.7701	3.535 4	1.30	4.70

ATTAndSE_p art1_A	4.00 15- 20	22	3.1136	1.2781 3	.272 50	2.5469	3.680 3	1.00	4.70
	5.00 20 and up Tota l	20	2.7400	1.1904 9	.266 20	2.1828	3.297 2	1.00	5.00
	1.00 0-5	57	2.1994	1.1323 9	.149 99	1.8989	2.499 8	1.00	4.00
	2.00 5-10	25	1.3927	.62914	.125 83	1.1330	1.652 4	1.00	2.91
	3.00 10- 15	36	1.4722	.63201	.105 34	1.2584	1.686 1	1.00	3.55
	4.00 15- 20	22	1.4587	.58680	.125 11	1.1985	1.718 9	1.00	2.73
	5.00 20 and up Tota l	20	1.5591	.70743	.158 19	1.2280	1.890 2	1.00	3.27
	1.00 0-5	57	2.5263	1.0624 3	.140 72	2.2444	2.808 2	1.00	4.00
	2.00 5-10	25	3.3300	.56697	.113 39	3.0960	3.564 0	2.00	4.00
	3.00 10- 15	36	3.2778	.53378	.088 96	3.0972	3.458 4	1.75	4.00
ATTAndSE_p art1_B	4.00 15- 20	22	3.0682	.88702	.189 11	2.6749	3.461 5	1.50	4.00
	5.00 20 and up Tota l	20	3.0500	1.0150 2	.226 97	2.5750	3.525 0	1.25	4.00
	1.00 0-5	57	2.3906	.98234	.130 11	2.1300	2.651 3	1.00	4.00
	2.00 5-10	25	3.1547	.74826	.149 65	2.8458	3.463 5	1.40	4.00
	3.00	36	3.2019	.66409	.110	2.9772	3.426	1.33	4.00
ATTAndSE_p art2	4.00 15- 20	22	3.1136	1.2781 3	.272 50	2.5469	3.680 3	1.00	4.70
	5.00 20 and up Tota l	20	2.7400	1.1904 9	.266 20	2.1828	3.297 2	1.00	5.00
	1.00 0-5	57	2.1994	1.1323 9	.149 99	1.8989	2.499 8	1.00	4.00
	2.00 5-10	25	1.3927	.62914	.125 83	1.1330	1.652 4	1.00	2.91
	3.00 10- 15	36	1.4722	.63201	.105 34	1.2584	1.686 1	1.00	3.55
	4.00 15- 20	22	1.4587	.58680	.125 11	1.1985	1.718 9	1.00	2.73
	5.00 20 and up Tota l	20	1.5591	.70743	.158 19	1.2280	1.890 2	1.00	3.27
	1.00 0-5	57	2.5263	1.0624 3	.140 72	2.2444	2.808 2	1.00	4.00
	2.00 5-10	25	3.3300	.56697	.113 39	3.0960	3.564 0	2.00	4.00
	3.00 10- 15	36	3.2778	.53378	.088 96	3.0972	3.458 4	1.75	4.00

10-15					68		5		
4.00	22	3.3483	.70537	.15039	3.0355	3.6610	1.73	4.00	
15-20									
5.00	20	3.0200	.89889	.20100	2.5993	3.4407	1.13	4.00	
20 and up									
Total	160	2.9029	.91497	.07233	2.7600	3.0457	1.00	4.00	

Anova

		Sum of Squares	df	Mean Square	F	Sig.
SSSe_part1	Between Groups	43.150	4	10.787	10.579	.000
	Within Groups	158.055	155	1.020		
	Total	201.205	159			
SSSe_part2	Between Groups	51.278	4	12.819	12.099	.000
	Within Groups	164.230	155	1.060		
	Total	215.508	159			
SSSe_part3	Between Groups	20.157	4	5.039	3.814	.005
	Within Groups	204.795	155	1.321		
	Total	224.952	159			
ATTAndSE_part1_A	Between Groups	19.996	4	4.999	6.917	.000
	Within Groups	112.029	155	.723		
	Total	132.025	159			
ATTAndSE_part1_B	Between Groups	18.198	4	4.549	6.027	.000
	Within Groups	116.995	155	.755		
	Total	135.193	159			
ATTAndSE_part2	Between Groups	24.397	4	6.099	8.696	.000
	Within Groups	108.713	155	.701		
	Total	133.110	159			

Post Hoc Tests

Multiple Comparisons

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
SSSe_part1	Tukey	1.00	2.00	-1.04772*	.24224	.000	-1.7163	-.3791
		HSD	0-5					
			5-10					
			3.00	-1.05489*	.21498	.000	-1.6483	-.4615
			10-15					
			4.00	-1.21582*	.25346	.000	-1.9154	-.5162
			15-20					
			5.00	-1.00136*	.26244	.002	-1.7257	-.2770
			20 and up					
		2.00	1.00	1.04772*	.24224	.000	.3791	1.7163
		5-10	0-5					
			3.00	-.00717	.26289	1.000	-.7328	.7185
			10-15					
			4.00	-.16810	.29519	.979	-.9829	.6467
			15-20					
			5.00	.04636	.30294	1.000	-.7898	.8825
			20 and up					
		3.00	1.00	1.05489*	.21498	.000	.4615	1.6483
		10-15	0-5					
			2.00	.00717	.26289	1.000	-.7185	.7328
			5-10					
			4.00	-.16093	.27327	.977	-.9152	.5933
			15-20					
			5.00	.05354	.28162	1.000	-.7238	.8309
			20 and up					
		4.00	1.00	1.21582*	.25346	.000	.5162	1.9154
		15-20	0-5					

SSSe_part2	Tukey HSD	20	2.00	.16810	.29519	.979	-.6467	.9829
			5- 10					
			3.00	.16093	.27327	.977	-.5933	.9152
			10- 15					
			5.00	.21446	.31199	.959	-.6467	1.0756
			20 and up					
		5.00	1.00	1.00136*	.26244	.002	.2770	1.7257
		20	0-5					
		and	2.00	-.04636	.30294	1.000	-.8825	.7898
		up	5- 10					
			3.00	-.05354	.28162	1.000	-.8309	.7238
			10- 15					
			4.00	-.21446	.31199	.959	-1.0756	.6467
			15- 20					
		1.00	2.00	-1.08158*	.24692	.000	-1.7631	-.4000
		0-5	5- 10					
			3.00	-1.28204*	.21914	.000	-1.8869	-.6772
			10- 15					
			4.00	-1.28688*	.25836	.000	-2.0000	-.5738
			15- 20					
			5.00	-.76075*	.26752	.040	-1.4991	-.0224
			20 and up					
		2.00	1.00	1.08158*	.24692	.000	.4000	1.7631
		5- 10	0-5					
			3.00	-.20046	.26798	.945	-.9401	.5392
			10- 15					
			4.00	-.20530	.30090	.960	-1.0358	.6252
			15- 20					
			5.00	.32083	.30880	.837	-.5315	1.1732
			20 and up					

SSSe_part3	Tukey HSD	3.00	1.00	1.28204*	.21914	.000	.6772	1.8869
		10-15	0-5					
			2.00	.20046	.26798	.945	-.5392	.9401
			5-10					
			4.00	-.00484	.27856	1.000	-.7737	.7640
			15-20					
			5.00	.52130	.28707	.368	-.2711	1.3137
			20 and up					
		4.00	1.00	1.28688*	.25836	.000	.5738	2.0000
		15-20	0-5					
			2.00	.20530	.30090	.960	-.6252	1.0358
			5-10					
			3.00	.00484	.27856	1.000	-.7640	.7737
			10-15					
			5.00	.52614	.31802	.465	-.3517	1.4039
			20 and up					
		5.00	1.00	.76075*	.26752	.040	.0224	1.4991
		20 and up	0-5					
			2.00	-.32083	.30880	.837	-1.1732	.5315
			5-10					
			3.00	-.52130	.28707	.368	-1.3137	.2711
			10-15					
			4.00	-.52614	.31802	.465	-1.4039	.3517
			15-20					
		1.00	2.00	-.62997	.27574	.155	-1.3910	.1311
		0-5	5-10					
			3.00	-.83075*	.24471	.008	-1.5062	-.1553
			10-15					
			4.00	-.79161	.28851	.052	-1.5879	.0047
			15-20					
			5.00	-.41797	.29874	.629	-1.2425	.4066
			20 and					

	up					
2.00	1.00	.62997	.27574	.155	-.1311	1.3910
5-	0-5					
10	3.00	-.20078	.29925	.962	-1.0268	.6252
	10-					
	15					
	4.00	-.16164	.33602	.989	-1.0891	.7658
	15-					
	20					
	5.00	.21200	.34484	.973	-.7398	1.1638
	20					
	and					
	up					
3.00	1.00	.83075*	.24471	.008	.1553	1.5062
10-	0-5					
15	2.00	.20078	.29925	.962	-.6252	1.0268
	5-					
	10					
	4.00	.03914	.31106	1.000	-.8194	.8977
	15-					
	20					
	5.00	.41278	.32057	.699	-.4720	1.2976
	20					
	and					
	up					
4.00	1.00	.79161	.28851	.052	-.0047	1.5879
15-	0-5					
20	2.00	.16164	.33602	.989	-.7658	1.0891
	5-					
	10					
	3.00	-.03914	.31106	1.000	-.8977	.8194
	10-					
	15					
	5.00	.37364	.35513	.830	-.6066	1.3539
	20					
	and					
	up					
5.00	1.00	.41797	.29874	.629	-.4066	1.2425
20	0-5					
and	2.00	-.21200	.34484	.973	-1.1638	.7398
up	5-					
	10					
	3.00	-.41278	.32057	.699	-1.2976	.4720
	10-					
	15					
	4.00	-.37364	.35513	.830	-1.3539	.6066

ATTAndSE_part1_A	Tukey HSD	1.00 0-5	15- 20					
			2.00	.80663*	.20394	.001	.2437	1.3695
			5- 10					
			3.00	.72714*	.18099	.001	.2276	1.2267
		4.00	10- 15					
			4.00	.74068*	.21338	.006	.1517	1.3297
			15- 20					
			5.00	.64027*	.22095	.034	.0304	1.2501
		2.00 5- 10	20 and up					
			1.00	-.80663*	.20394	.001	-1.3695	-.2437
			0-5					
			3.00	-.07949	.22133	.996	-.6904	.5314
		4.00	10- 15					
			4.00	-.06595	.24852	.999	-.7519	.6200
			15- 20					
			5.00	-.16636	.25505	.966	-.8703	.5376
		3.00 10- 15	20 and up					
			1.00	-.72714*	.18099	.001	-1.2267	-.2276
			0-5					
			2.00	.07949	.22133	.996	-.5314	.6904
		4.00 15- 20	5- 10					
			4.00	.01354	.23006	1.000	-.6215	.6486
			15- 20					
			5.00	-.08687	.23710	.996	-.7413	.5676
		4.00 15- 20	20 and up					
			1.00	-.74068*	.21338	.006	-1.3297	-.1517
			0-5					
			2.00	.06595	.24852	.999	-.6200	.7519
		5- 10	5- 10					
			3.00	-.01354	.23006	1.000	-.6486	.6215
			10- 15					

ATTAndSE_part1_B	Tukey HSD	1.00 0-5	5.00 20 and up	5.00 20 and up	-.10041	.26266	.995	-.8254	.6246
			5.00 20 and up	1.00 0-5	-.64027*	.22095	.034	-1.2501	-.0304
			5.00 20 and up	2.00 5- 10	.16636	.25505	.966	-.5376	.8703
			5.00 20 and up	3.00 10- 15	.08687	.23710	.996	-.5676	.7413
			5.00 20 and up	4.00 15- 20	.10041	.26266	.995	-.6246	.8254
			1.00 0-5	2.00 5- 10	-.80368*	.20841	.002	-1.3789	-.2284
			1.00 0-5	3.00 10- 15	-.75146*	.18496	.001	-1.2620	-.2410
			1.00 0-5	4.00 15- 20	-.54187	.21806	.099	-1.1438	.0600
			1.00 0-5	5.00 20 and up	-.52368	.22579	.144	-1.1469	.0995
		2.00 5- 10	2.00 5- 10	1.00 0-5	.80368*	.20841	.002	.2284	1.3789
			2.00 5- 10	3.00 10- 15	.05222	.22618	.999	-.5721	.6765
			2.00 5- 10	4.00 15- 20	.26182	.25397	.841	-.4392	.9628
			2.00 5- 10	5.00 20 and up	.28000	.26064	.819	-.4394	.9994
		3.00 10- 15	3.00 10- 15	1.00 0-5	.75146*	.18496	.001	.2410	1.2620
			3.00 10- 15	2.00 5- 10	-.05222	.22618	.999	-.6765	.5721
			3.00 10- 15	4.00 15-	.20960	.23511	.900	-.4393	.8585
			3.00 10- 15						

ATTAndSE_part2	Tukey HSD	1.00	20					
			5.00	.22778	.24230	.881	-.4410	.8966
			20					
			and					
			up					
			4.00	1.00	.54187	.21806	.099	-0.0600
			15-	0-5				1.1438
			20	2.00	-.26182	.25397	.841	-.9628
			5-					.4392
			10	3.00	-.20960	.23511	.900	-.8585
			10-					.4393
			15	5.00	.01818	.26842	1.000	-.7227
			20					.7591
			and					
			up					
			5.00	1.00	.52368	.22579	.144	-.0995
			20	0-5				1.1469
			and	2.00	-.28000	.26064	.819	-.9994
			up	5-				.4394
			10	3.00	-.22778	.24230	.881	-.8966
			10-					.4410
			15	4.00	-.01818	.26842	1.000	-.7591
			20					.7227
			15-					
			20	2.00	-.76402*	.20090	.002	-1.3185
			5-	5-				-.2095
			10	3.00	-.81121*	.17829	.000	-1.3033
			10-					-.3191
			15	4.00	-.95763*	.21020	.000	-1.5378
			20					-.3774
			15-					
			20	5.00	-.62936*	.21765	.035	-1.2301
			20					-.0286
			and					
			up					
			2.00	1.00	.76402*	.20090	.002	.2095
			5-	0-5				1.3185
			10	3.00	-.04719	.21803	1.000	-.6490
			10-					.5546
			15					

Homogeneous Subsets

SSSe_part1

c_teachingSeniority		N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^{a,b}	1.00 0-5	57	2.5486	
	5.00 20	20		3.5500
	and up			
	2.00 5-10	25		3.5964
	3.00 10-15	36		3.6035
	4.00 15-20	22		3.7645
	Sig.		1.000	.933
Tukey B ^{a,b}	1.00 0-5	57	2.5486	
	5.00 20	20		3.5500
	and up			
	2.00 5-10	25		3.5964
	3.00 10-15	36		3.6035
	4.00 15-20	22		3.7645

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 27.659.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

SSSe_part2

c_teachingSeniority		N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^{a,b}	1.00 0-5	57	2.5351	
	5.00 20 and up	20	3.2958	3.2958
	2.00 5-10	25		3.6167
	3.00 10-15	36		3.8171
	4.00 15-20	22		3.8220
	Sig.		.052	.321
Tukey B ^{a,b}	1.00 0-5	57	2.5351	
	5.00 20 and up	20		3.2958
	2.00 5-10	25		3.6167
	3.00 10-15	36		3.8171
	4.00 15-20	22		3.8220

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 27.659.

Se_part3

c_teachingSeniority		N	Subset for alpha = 0.05
			1
Tukey HSD ^{a,b}	1.00 0-5	57	2.3220
	5.00 20 and up	20	2.7400
	2.00 5-10	25	2.9520
	4.00 15-20	22	3.1136
	3.00 10-15	36	3.1528
	Sig.		.060
Tukey B ^{a,b}	1.00 0-5	57	2.3220
	5.00 20 and up	20	2.7400
	2.00 5-10	25	2.9520
	4.00 15-20	22	3.1136
	3.00 10-15	36	3.1528

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 27.659.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ATTAndSE_part1_A

c_teachingSeniority		N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^{a,b}	2.00 5-10	25	1.3927	
	4.00 15-20	22	1.4587	
	3.00 10-15	36	1.4722	
	5.00 20 and up	20	1.5591	
	1.00 0-5	57		2.1994
	Sig.		.950	1.000
Tukey B ^{a,b}	2.00 5-10	25	1.3927	
	4.00 15-20	22	1.4587	
	3.00 10-15	36	1.4722	
	5.00 20 and up	20	1.5591	
	1.00 0-5	57		2.1994

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 27.659.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ATTAndSE_part1_B

c_teachingSeniority		N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^{a,b}	1.00 0-5	57	2.5263	
	5.00 20 and up	20	3.0500	3.0500
	4.00 15-20	22	3.0682	3.0682
	3.00 10-15	36		3.2778
	2.00 5-10	25		3.3300
	Sig.		.144	.752
Tukey B ^{a,b}	1.00 0-5	57	2.5263	
	5.00 20 and up	20	3.0500	3.0500
	4.00 15-20	22	3.0682	3.0682
	3.00 10-15	36		3.2778
	2.00 5-10	25		3.3300

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 27.659.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ATTAndSE_part2

c_teachingSeniority		N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^{a,b}	1.00 0-5	57	2.3906	
	5.00 20 and up	20		3.0200
	2.00 5-10	25		3.1547
	3.00 10-15	36		3.2019
	4.00 15-20	22		3.3483
	Sig.		1.000	.591
Tukey B ^{a,b}	1.00 0-5	57	2.3906	
	5.00 20 and up	20		3.0200
	2.00 5-10	25		3.1547
	3.00 10-15	36		3.2019
	4.00 15-20	22		3.3483

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 27.659.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

T-Test Group Statistics

c_teaching_level		N	Mean	Std. Deviation	Std. Error
SSSe_part1	1.00 Elementary	35	2.5870	1.05979	.17914
	2.00	125	3.4255	1.07686	.09632
	Elementary&Secondary				
SSSe_part2	1.00 Elementary	35	2.7071	1.16603	.19710
	2.00	125	3.4207	1.11933	.10012
	Elementary&Secondary				
SSSe_part3	1.00 Elementary	35	2.2143	1.02157	.17268
	2.00	125	2.9236	1.19038	.10647
	Elementary&Secondary				
ATTAndSE_part1_A	1.00 Elementary	35	2.1610	1.19024	.20119
	2.00	125	1.6065	.78005	.06977
	Elementary&Secondary				
ATTAndSE_part1_B	1.00 Elementary	35	2.6929	1.08818	.18394
	2.00	125	3.0360	.86001	.07692
	Elementary&Secondary				
ATTAndSE_part2	1.00 Elementary	35	2.4324	.99006	.16735
	2.00	125	3.0346	.85130	.07614
	Elementary&Secondary				

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SSSe_part1	Equal variances assumed	.029	.866	-4.085	158	.000	-.83844	.20524	-1.24381	-.43308
	Equal variances not assumed			-4.122		.000	-.83844	.20339	-1.24601	-.43088
SSSe_part2	Equal variances assumed	1.236	.268	-3.303	158	.001	-.71352	.21601	-1.14016	-.28688
	Equal variances not assumed			-3.228		.002	-.71352	.22106	-1.15695	-.27009
SSSe_part3	Equal variances assumed	3.125	.079	-3.208	158	.002	-.70936	.22110	-1.14604	-.27267
	Equal variances not assumed			-3.497		.001	-.70936	.20286	-1.11484	-.30388
ATTAndSE_part1_A	Equal variances assumed	29.169	.000	3.278	158	.001	.55449	.16915	.22040	.88859
	Equal variances not assumed			2.604		.013	.55449	.21294	.12491	.98408

ATTAndSE_part1_B	es not assumed Equal variances assumed	8.516	.004	-1.963	158	.051	-.34314	.17478	-.68835	.00206
	Equal variances not assumed			-1.721	### ##	.092	-.34314	.19937	-.74433	.05805
ATTAndSE_part2	Equal variances assumed	4.348	.039	-3.566	158	.000	-.60225	.16886	-.93577	-.26873
	Equal variances not assumed			-3.276	### ##	.002	-.60225	.18386	-.97173	-.23276

T-Test

Notes

Group Statistics

cPhysicallyExperience		N	Mean	Std. Deviation	Std. Error
SSSe_part1	.00	55	2.3570	1.01169	.13642
	1.00	105	3.7056	.87864	.08575
SSSe_part2	.00	55	2.2424	1.03181	.13913
	1.00	105	3.8000	.82306	.08032
SSSe_part3	.00	55	1.9836	.95777	.12915
	1.00	105	3.1796	1.09101	.10647
ATTAndSE_part1_A	.00	55	2.4281	1.05288	.14197
	1.00	105	1.3610	.54654	.05334
ATTAndSE_part1_B	.00	55	2.2909	.92141	.12424
	1.00	105	3.3119	.70522	.06882
ATTAndSE_part2	.00	55	2.2096	.93340	.12586
	1.00	105	3.2660	.66349	.06475

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SSSe_part1	Equal variance s assumed	5.953	.016	-8.747	158	.000	-1.34860	.15418	-1.65312	#####
	Equal variance s not assumed			-8.370	97.220	.000	-1.34860	.16113	-1.66839	#####
SSSe_part2	Equal variance s assumed	14.527	.000	-10.399	158	.000	-1.55758	.14978	-1.85341	#####
	Equal variance s not assumed			-9.695	90.761	.000	-1.55758	.16065	-1.87670	#####
SSSe_part3	Equal variance s assumed	2.359	.127	-6.860	158	.000	-1.19594	.17434	-1.54027	-.85161
	Equal variance s not assumed			-7.145	122.879	.000	-1.19594	.16738	-1.52725	-.86463
ATTAndSE_part1_A	Equal variance s assumed	70.466	.000	8.451	158	.000	1.06706	.12627	.81766	#####
	Equal variance s not assumed			7.036	69.599	.000	1.06706	.15166	.76455	#####
ATTAndSE_part1_B	Equal variance s assumed	13.581	.000	-7.806	158	.000	-1.02100	.13080	-1.27934	-.76265
	Equal variance s not assumed			-7.189	87.925	.000	-1.02100	.14203	-1.30325	-.73874
ATTAndSE_part2	Equal variance s assumed	22.148	.000	-8.280	158	.000	-1.05642	.12758	-1.30841	-.80443
	Equal variance s not assumed			-7.464	83.336	.000	-1.05642	.14154	-1.33792	-.77492

T-Test

Group Statistics

cvisuallyExperienceI		N	Mean	Std. Deviation	Std. Error
SSSe_part1	.00	75	2.5927	1.02693	.11858
	1.00	85	3.8150	.87044	.09441
SSSe_part2	.00	75	2.6000	1.10910	.12807
	1.00	85	3.8510	.86000	.09328
SSSe_part3	.00	75	1.9360	.83288	.09617
	1.00	85	3.5030	.94983	.10302
ATTAndSE_part1_A	.00	75	2.1976	1.02726	.11862
	1.00	85	1.3134	.52082	.05649
ATTAndSE_part1_B	.00	75	2.5300	.93357	.10780
	1.00	85	3.3412	.72769	.07893
ATTAndSE_part2	.00	75	2.3750	.89800	.10369
	1.00	85	3.3686	.63717	.06911

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SSSe_part1	Equal variances assumed	6.813	.010	-8.147	158	.000	-1.22225	.15002	-1.51855	-.92594
	Equal variances not assumed			-8.064	145.905	.000	-1.22225	.15157	-1.52181	-.92268
SSSe_part2	Equal variances assumed	13.901	.000	-8.020	158	.000	-1.25098	.15598	-1.55905	-.94291
	Equal variances not assumed			-7.896	138.903	.000	-1.25098	.15844	-1.56424	-.93772
SSSe_part3	Equal variances assumed	3.183	.076	-11.028	158	.000	-1.56701	.14210	-1.84766	-1.28635
	Equal variances not assumed			-11.119	157.995	.000	-1.56701	.14094	-1.84537	-1.28865

ATTAndSE_part1_A	Equal variance s assumed	83.84 2	.00 0	6.985	158	.000	.88421	.12658	.63419	1.13422
	Equal variance s not assumed			6.730	106.54 6	.000	.88421	.13138	.62374	1.14467
ATTAndSE_part1_B	Equal variance s assumed	18.34 2	.00 0	-6.165	158	.000	-.81118	.13157	- 1.07104	-.55131
	Equal variance s not assumed			-6.071	139.33 3	.000	-.81118	.13361	- 1.07533	-.54702
ATTAndSE_part2	Equal variance s assumed	26.98 0	.00 0	-8.141	158	.000	-.99358	.12205	- 1.23464	-.75252
	Equal variance s not assumed			-7.973	131.49 0	.000	-.99358	.12461	- 1.24008	-.74708

STATEMENT

I, the undersigned, declare on my own responsibility that the materials presented in the present doctoral thesis are the result of my own researches and scientific achievements. I confirm this fact; otherwise, I will bear the consequences in accordance with the law in force.

Sincerely,

Shama Einas

Signature 

February, 2024

CURRICULUM VITAE

Personal information

Date of birth: 29.04.1980

Surname: SHAMA

First name: Einas

Address:

Kishon Road 14/2, P.O.Box 10412

City-Upper Nazareth

Postal code - 17000

Country - ISRAEL

Mobile: +972- 52- 6550680

Telephone(s): +972- 4- 6020857

Fax:: +972- 4- 6465846

E-mail(s): einas.sport@live.com

Occupational field

- PE teacher and Social Education Coordinator
- PhD student

Work experience

2011-2015 Physical Education teacher in junior high in Nazareth city

2002-2011 Physical Education teacher in junior high in Turran village and Sport guide for students with disabilities in Father Institute

2002-2008 One of the directors of Camp in Nazareth

2002-2008 Sports instructor for students with disabilities in the Municipality in Nazareth city.

2002-2004 Public education instructor from the School of Social Education

2000-2002 Sports instructor in Wingate Institute

Education and training

2002-2005 M.Ed in Physical Education towards students with disabilities in Wingate Institute

2003-2005 Social Education Course.

1999-2002 B.ED in Physical Education in Wingate Institute

Language (s): Arab, Hebrew, English

Personal skills and competences

Providing guidance to integrate students with disabilities in PE class.

Application of social – physical projects for the purpose of social bonding