

**Understanding attitudes and self-efficacy of in-service  
teachers and professionals towards inclusive education in  
the Republic of Armenia**

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## ABSTRACT

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The concept and practices of inclusive education have been spreading worldwide for over two decades, pushing governments to adopt child-centered policies and consider basic school education as a fundamental human right for all children. This movement has created mixed attitudes and problematic perceptions among teachers who have to teach children in special needs education. Transitioning from a dual school system to an inclusive one is an ongoing process in the Republic of Armenia and the aim of the current study is to understand the Armenian teachers' overall attitudes towards inclusive education and their self-efficacy for inclusive practices.

A quantitative study was conducted to understand teachers' attitudes and self-efficacy towards inclusive education. The data was collected from 187 in-service teachers from 11 mainstream schools. The respondents completed a questionnaire on their Sentiments, Attitudes, and Concerns about Inclusive Education Revised (SACIE-R) scale (Forlin, Earle, Loreman & Sharma, 2011) and the Teacher Efficacy for Inclusive Practices (TEIP) scale (Sharma, Loreman, and Forlin, 2011).

The analysis revealed that the Armenian teachers' attitude formation depends on different factors. For example, the higher the level of the inclusive education training was, the more positive were the attitudes. Also, the teachers' sentiments towards direct contact with children with disabilities were higher than concerns and attitudes. The data also indicated that the teachers' level of concerns with including learners with disabilities in their classes was mostly dependent on how they felt about implementing the inclusive practices.

**Keywords:** inclusive education, disability, teacher, self-efficacy, attitude, Armenia

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# 1 INTRODUCTION

In 1994 the field of inclusive education (IE) globally experienced a fresh start with the adoption of the Salamanca World Conference principles, Policy and Practice in Special Needs Education and a Framework for Action. It reaffirmed the commitment of the 92 participant governments and 25 international organizations to Education for All. This adoption recognized and embraced the necessity and urgency to provide education for children, youth and adults with special educational needs within the regular education system. (UNESCO, 1994)

Another important document in the field of child rights was the United Nations Convention on the Rights of the Child (UN CRC) which came into force in 1990. It was “the first instrument to incorporate the complete range of international human rights - including civil, cultural, economic, political and social rights as well as aspects of humanitarian law” (UNICEF, 2014). The document consists of a number of articles that define universal concepts of the child rights. UN CRC was the first human rights treaty that contained a specific reference to disability; the Article 2 on non-discrimination and the Article 23 exclusively dedicated to the rights and needs of children with disabilities (OHCHR, 2018).

As a result of these processes, the concept of IE started spreading among countries, where under the adoption and reforms of new educational legislation and policies mainstream schools were to provide also IE. This gave the opportunity to every child to be an integrated member of the society and develop appropriate IE practices (Ainscow, 2005). It should be noted that in many countries IE practice is understood as education solely for students with disabilities and special needs (Malinen & Savolainen, 2008). Meanwhile, the introduced principals of Salamanca (1994) and other international treaties suggest that IE should be the move toward development of schools and practices, rather simply involving children with disabilities in mainstream schools (Ainscow, 2005).

Nowadays the most recent international document that encourages the world to develop IE system and “ensure inclusive and equitable quality

education and promote lifelong learning opportunities for all” (UN General Assembly, 2015, p. 14) by 2030 is the Transforming our world: the 2030 Agenda for Sustainable Development document developed by the United Nations. It includes 17 Sustainable Development Goals and has been built based on the previously implemented but failed Millennium Development Goals (Rambla & Langthaler, 2016). And in both cases Armenia has been part of the process.

The Republic of Armenia was also among the countries that showed readiness to embrace and adopt the international policies that would improve the education provided to the children of the country. The Armenian education system started doing its first steps towards developing an IE society, where every child would be treated equally, by the end of the 1990s. Already in the early 2000s, the Armenian government announced that IE was a priority in education (Center for Educational Research and Consulting, 2013). In 2005 the government adopted the law on Education for Persons in Need of Special Education Conditions (Center for Educational Research and Consulting, 2013; Hunt, 2009, Arlis.am, 2015) which was cancelled on December 1<sup>st</sup> 2014 based on the amendments in the Law on Education (see Article 20) (Arlis.am, 2014). As a result of this amendment, the existing special schools all over the country are to gradually transform into psycho-pedagogical services and support children’s full integration and inclusion into community schools (Enabling Education Network, 2017).

Since the concept and approach to IE education are relatively new to the Armenian society, there are not that many international studies focusing on the Armenian IE. Therefore, there is an interest to explore the developing IE context from teachers’ perspective. For that reason, the following paper studies the attitudes and self-efficacy of the Armenian teachers and professionals in IE practices with the hope to provide empirical evidence necessary for future improvements of the ongoing reforms and shift of the educational paradigm.

The following chapters of the paper will concentrate on the development of the IE in Armenia, with several studies on teachers’ attitude towards IE and their self-efficacy for inclusive practices.

## 2 THEORETICAL FRAMEWORK

### 2.1 General overview on Armenia and its IE

The Republic of Armenia (RA) is a mountainous country located in South Caucasus region of Eurasia. It is a landlocked country that borders with Georgia in the North; Azerbaijan in the East; Iran in the South, Nakhijevan (Azerbaijani enclave) in the South-West and Turkey in the West. (Education for All 2015 National Review Report: Armenia)

From 1921 to 1991 Armenia was part of the Soviet Union. During these years it set the foundations of its education system (Balasanjan, 2007) and also established the dual school system which preserved its presence after the independence. (Lapham & Papikyan, 2012; Hunt, 2009). Before regaining independence Armenia had managed to create and maintain a very competitive and strong education system that gave birth to a continuous intellectual elite in the country. Unfortunately, this era of educational success and advancement was abruptly deteriorated due to fast increasing economic difficulties, the armed conflict in Nagorno - Karabakh (Ayunts, Zolyan & Zakaryan, 2016) and also the aftermath of a devastating earthquake of 1988 (Education for All 2015 National Review Report: Armenia; Hovhannisyan & Sahlberg, 2010, Laitin & Suny, 1999). As a consequence of this all, Armenia suffered strong emigration waves (Laitin & Suny, 1999) and infrastructure malfunctioning that required reforms.

No matter how painful the price for independence entailed, Armenia steadily made progress toward building a new and independent democratic country where education was a priority agenda. As a result, in 1993 the RA ratified the UN CRC (United Nations Treaty Collection, 2018). Another step towards building better education for the children was Armenia's succession to UNESCO's Convention against Discrimination in Education in 1993 (UNSECO, 2018). Consequently, aligning to the Salamanca principles along with to the UN CRC and other similar pledges prompted the RA to adopt the Law of Child's Rights in 1996 (Human Rights Defender of the RA, 2018). Already in 2010 the UN

Convention on the Rights of Persons with Disabilities (UN CRPD), which includes a commitment to provide IE according to its Article 24, was ratified. (Lapham & Papikyan, 2012)

“States ... recognize the right of persons with disabilities to education [and] shall ensure an inclusive education system at all levels and lifelong learning directed to the full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity ... enabling persons with disabilities to participate effectively in a free society” (UN CRPD, 2018, Article 24)

This meant that the Armenian government started to view disability as a human rights issue and committed to bring it to a new level and provide equal educational opportunities for all the children (Abovyan, Alaverdian, et al., 2014). Adoption of the convention was especially important for the main law regulating the disability field in Armenia. It became the foundation for the development of the draft law on Rights Protection and Social Inclusion of Persons with Disabilities which should have replaced the law on the Social Protection of Disabled People in Armenia, adopted in 1993 (Disability.am, 2018). However, up till today the law has not been adopted and remains as a draft.

Based on the “Education for All 2015 National Review Report: Armenia” (2014) the current stage of education reforms began in 2003. As a result of that the state has enacted a whole set of laws and legal and normative documents which serve as a basis for the development of education system in the RA. Due to the reforms, for instance, the 10-year general school system shifted to 12-year one (Turpanjian Center for Policy Analysis & American University of Armenia, 2012). As already mentioned above, another major transition that commenced at the beginning of the 2000s was the development of IE (Tadevosyan, 2013; Center for Educational Researches and Consulting, 2013). And already on December 1, 2014, the parliament of Armenia made a decision to have all schools converted to inclusive schools by August 1, 2025 (MoES, 2018).

“...it is a priority to develop the inclusive education system in the general education and in the vocational education too, which will allow the children to at least receive quality basic education and to have a specialization” (Armenia Development Strategy for 2014-2025, p. 115)



This way Armenia has been developing its new era of democratization, adhering to international laws and conventions not only in education but also into other industries. However, despite Armenia's significant progress in this matter, and despite the efforts of government and civil society, there is still a considerable and visible inequity among various sectors of the society and education for children with disabilities or special education needs is not an exception. According to a recent 102-page report "When Will I Get to Go Home? Abuses and Discrimination against Children in Institutions and Lack of Access to Quality Inclusive Education in Armenia" published by Human Rights Watch (2017, p. 7) "children with disabilities, including those in mainstream schools designated as inclusive, often do not receive a quality education on an equal basis with others".

Different international donor or local reports on the Armenian IE state that actual IE practices considerably differ from the legislation and policies that have been developed over the years. And the current Armenian education system has been facing many barriers in implementing IE and some of them are directly connected to the main issues existing in the education sector.

One of the first issues that implementation of IE faces is the insufficient state funding that will allow to equip appropriately classrooms, redesign schools, create necessary materials, etc. (Center for Educational Researches and Consulting, 2013). Expenditures per student in general education are lower than the average for the European Union (Armenia Development Strategy for 2014-2025). And lack of desirable funding hinders the provision of quality education for children with special education needs (Center for Educational Researches and Consulting, 2013).

Secondly, according to a research study "Access to School Education in Armenia" heavy politicization of general education field negatively affects on teacher performance as well as on student outcome. And principals play a crucial role in this matter. (Turpanjian Center for Policy Analysis & American University of Armenia, 2012). Meanwhile, healthy and positive attitudes among teachers

and the principals are one of the factors that can ensure healthy inclusive practices at school (Sharma & Desai, 2008; Bailey, 2004; Avramidis & Norwich, 2002).

In addition, the teacher training studies of recent years have revealed that there is lack of strong professional development among teachers in the field of IE. And there is urging need to improve professional knowledge and practice of teachers during training which is often organized by the National Institute of Education (NIE). Lack of expertise also demotivates mainstream teachers to have a desire to spend extra time on children with special education needs (SEN) (Center for Educational Researches and Consulting, 2013) or develop positive attitudes toward the inclusive concept (Vaughn, Schumm, Jallad, Slusher & Saumell, et. al, 1996). The report of Center for Educational Researches and Consulting (2013) on assessing the implementation of IE in the RA revealed that out of 369 teachers, 228 (61.8%) were trained only once, out of which 50.1% of the trained teachers did not remember the name of the organization that provided them the IE training and the 43.2% could not recall the topic of the training.

Another reason for teacher frustration and ineffective teaching approaches in IE can be explained by the traditional teacher-centered and authoritarian role that individually teachers practice in class as part of the Soviet pedagogical legacy (Hovhannisyan & Sahlberg 2010). Furthermore, a number of studies have shown that teachers often complain of lack of freedom in designing teaching plans (Hovhannisyan & Sahlberg 2010), inexistence of necessary materials and also quality training which often does not correspond to the realities of schools and actual teacher needs or practices (Turpanjian Center for Policy Analysis & American University of Armenia, 2012). Also, in some schools there is shortage of professionals and the available teachers have to teach several subjects. This demotivates teachers along with the low salaries (Turpanjian Center for Policy Analysis & American University of Armenia, 2012; Khachatryan, Petrosyan & Terzyan, 2013). And the various researches sources indicate that IE practices

require additional hours of input from the teachers, to prepare lesson plans to meet the needs of a very diverse population (Avramidis & Norwich 2002).

## **2.2 Teachers' attitude towards inclusive practices**

A significant role in providing successful IE plays teachers' attitudes towards successful integration and inclusion of children with SEN (Avramidis & Norwich 2002, Burke & Sutherland, 2004). According to Avramidis and Norwich (2002), Norwich in his 1994 study argues that teacher beliefs and attitudes are critical in providing inclusive practices. Different international research cases suggest that attitudes of teachers who provide IE are strongly influenced by the nature of students' disabilities or other educational problems (Avramidis & Norwich 2002). Forlin in her 1995 study of measuring teachers' perception concluded that those teachers who were specialized to work with children with SEN tended to have a more positive attitude to inclusion than their mainstream counterparts who had less experience. Similar findings were presented in the Avramidis and Norwich 2002 work on teachers' attitudes towards integration. Other studies also revealed that the teachers of those countries that had a legislative provision on providing IE expressed more positive attitude towards inclusion rather in those countries that did not, and the latter were mostly non-Western countries (Bowman, 1986; Leyser, Kapperman & Keller, 1994). This explains the motivation and pressure of international organizations upon CIS governments to start adopting or changing the legislation on IE.

Studies on teachers' attitudes from different countries also showed that those mainstream teachers who had a few years of experience in IE had more positive attitudes about the concept and its practices rather the teachers who did not (Avramidis & Norwich 2002). The study of Vaughn et al. (1996) on mainstream and special teachers' perception of inclusion showed that those teachers who were not participating in inclusive programs had negative attitudes towards inclusion.

Unfortunately, there is a scarce study of teacher attitudes towards IE in Armenia. A recent study on IE implementation in Armenia, which surveyed 600 teachers, concluded that teachers' attitudes are biased and stereotypical towards children with SEN, also, there is a negative attitude and narrative from parents' side (Center for Educational Researches and Consulting, 2013). It is the purpose of this study to understand the attitudes of the Armenian in-service teachers and professionals towards inclusion. Different studies have shown that positive attitudes towards inclusion often increase the success of the inclusion reforms and improve the learning environment (Monsen, Ewing & Kwoka 2014; Forlin, 2011; Rose-Hill, 2009).

### **2.3 Teachers' self-efficacy for inclusive practices**

The idea of teacher efficacy was first pioneered and promoted 40 years ago by psychologist Albert Bandura (1977). Bandura (1994) asserted that "a strong sense of efficacy enhances human accomplishment and personal well-being in many ways" and that a strong self-efficacy is based on high assurance in self capabilities to handle a task and overcome difficulties, and commitment is an inseparable part. According to Hoy (2000, p. 2), "teacher efficacy is teachers' confidence in their ability to promote students learning" and is a choice of behavioural settings which determines how much effort people put to achieve certain goals or overcome obstacles and aversive experiences (Bandura, 1977).

To understand better the term teacher efficacy Anita Woodlock Hoy in her interview to Shaughnessy (2004) suggests to use terms like sense of efficacy, self-efficacy of teachers, instructional efficacy, teachers' efficacy beliefs, or teachers' perceived efficacy. She argues that the term "teacher efficacy" is too often confused with teacher "effectiveness". Hoy states that teachers who have students who learn and succeed more likely demonstrate a high sense of efficacy and persistently act on it. (Shaughnessy, 2004)

In his studies of self-efficacy in 1977 Bandura conducted a social learning analysis with a group of participants who had snake phobia. As a result, he concluded that “the greater are increment in self-perceived efficacy, the greater the changes in behavior”. (Bandura, 1977, p 206)

Bandura (1977) developed a theoretical framework which defined 4 levels of self-efficacy: 1. mastery experiences (performance accomplishment) 2. vicarious experiences 3. social persuasion (verbal persuasion) and 4. emotive modes (emotional arousal), which proved that they had an important role in forming cognitive processes and prominently affected upon the acquisition and retention of new behaviour patterns (Bandura, 1977).

Several studies were conducted where it was proven that teachers success in providing inclusive practices were interdependent on the level of their efficacy. According to Sharma, Loreman and Forlin (2011, p. 2) “high teacher efficacy can be viewed as a key ingredient to create successful inclusive classroom environments”.

## **2.4 Relationship between teachers’ attitudes towards IE and self-efficacy for inclusive practices**

Although factors affecting the performance of IE practices are various and in each country differ based on the existing cultural, historical and socio-economic conditions (Savolainen et al, 2012; Bowman, 1986; Leyser et al, 1994), different studies support the idea that there is a positive relationship between teacher self-efficacy and attitudes towards IE (Meijer and Foster 1988; Weisel & Dror, 2006). The current study aims to explore the attitudes and self-efficacy in implementing inclusive teaching in Armenia. Recent research on self-efficacy in China has shown that these two factors are interconnected and successful teachers’ performance in IE much depends on their level of self-efficacy (Malinen et al, 2012). Also, a fresher study in Japanese schools showed that Japanese teachers’ level of confidence plays a significant importance on their general attitudes towards IE (Yada & Savolainen, 2017).

## 3 METHODOLOGY

### 3.1 Purpose of the research

Since the commenced transition towards full inclusion has been relatively fresh in the Armenian education system, but fast spreading, it is imperative to understand the phenomenon from various perspectives. Therefore, the purpose of the following research paper is to understand the general ethos of attitudes towards IE and self-efficacy for inclusive practices among general/basic school teachers and professionals in Armenia. In addition, it aims to understand the relationship of attitudes and self-efficacy and to what extent they are interrelated i.e. how self-efficacy influences the attitudes of the teachers towards IE and vice-versa. Furthermore, the study aims to understand how different factors (demographic variables) can influence on the attitude and self-efficacy of teachers. Therefore, the main research questions are:

1. What is the level of Armenian teachers' overall and specific attitudes towards IE?
2. How are teachers' background factors related to Armenian teachers' overall attitude towards IE?
3. What is the level of Armenian teachers' overall and specific self-efficacy for inclusive practices?
4. How are teachers' background factors related to the Armenian teachers' overall self-efficacy for inclusive practices?
5. Do the Armenian teachers' self-efficacy for inclusive practices correlate with attitudes towards IE?
6. Are there any differences in attitudes towards IE between soviet education era teachers and new independent Armenia teachers?
7. Are there any differences in self-efficacy for inclusive practices between the soviet education era teachers and new independent Armenia teachers?

### 3.2 Research participants

The data for this study was obtained from 5 basic, 3 secondary school and 2 educational complexes and one private school. The total number of participants was 187. The majority of the participants were in-service teachers and taught across all grade levels (elementary school (1st-4th grades), middle (basic) school – (5th-9th grades), high school (10th-12th years)) (MoES, 2018). Among the school respondents were members of the IE support teams (special educators, psychologists, and speech therapists) and class teachers. In this research they have not been specifically identified as separate groups and are counted in the in-service teachers' total (187). In addition, data was collected from NIE and the Yerevan Medical-Psychological-Pedagogical Assessment Center (YMPPAC) comprised 9 (4.5%). Unfortunately, they were not included in the final data analysis since the number of respondents was low. On the state-level, NIE and YMPPAC are the two main authorized structures in Armenia that train mainstream school teachers in IE (Center for Educational Researches and Consulting, 2013).

The participant schools were located in the capital area Yerevan, with the exception of one educational complex that was from Kotayk Marz (region). Even though for more comprehensive results for the current research it would be crucial to collect data from more than one Marz, due to lack of time and available resources the research was more convenient to conduct in the capital.

Most of the participants were informed of the purpose of the study directly from the researcher (except a couple of cases when the questionnaires were left with a school representative who later distributed them to the school teachers and then collected them back). In addition, the participants were also informed that the participation in the research was completely voluntary and unanimous and they would not be anyhow identified individually in the data analysis. The participants could also decline participation by not completing the questionnaire.

The questionnaire used a number of demographic questions that helped to understand attitudes and self-efficacy from other perspectives. One of the factors was gender. 182 indicated their gender with 174 (95,6%) being females and 8 (4,4%) being males. The female teachers were aged 22-71 years, and males 26-64. According to the Statistical Committee RA (2018), the number of female workers in the primary and secondary level in both private and non-private sectors across Armenia is 32 671 and male workers 5599. This explains the high amount of female teachers in the current study.

Another demographic question related to age distribution. Out of 187 respondents only 179 indicated their age. The age of in-service teachers (both male and female) ranged between 22 and 71, with the average age 43.30 (SD = 12.13). The demographic question on teaching experience showed that on average the teachers had 17.08 (SD=11.95) years of teaching experience with the minimum of 4 months and maximum 47 years.

The grade level factor revealed that some teachers taught in more than one grade level. General education in Armenia is divided into a three-level system with 12 years of duration in total: elementary school (1-4 grades), middle school (5-9) and high school (10-12) (MoES, 2018; Education for All 2015 National Review Report: Armenia, 2014). Out of 166 respondents 65 (34.8%) responded that they taught elementary grade children, 100 (53.5%) taught middle school children, and 46 (24.6%) taught high school children. 21 (11.2%) taught both in elementary and middle school grades, 14 (7.5%) taught both in middle and high school grades, and 5 (2.7%) taught across all the grade levels.

The respondents were asked to specify their highest level of education through selecting one of the appropriate options 1. Bachelor's degree, 2. Master's degree and 3. Other (please specify). While working with the data, it became clear that not all the respondents had specified the correct answer. The current two-tiered structure of higher education (Bachelor and Master's degree) system was introduced system-wide in 2005-2006 as part of the reforms taking place in the higher education field (Budaghyan, Harutyunyan, Tsaturyan & Santurjyan, 2015). Many graduates who studied prior to that transition had studied in a 5-



year education system that was inherited from of the Soviet Union times and received a Diploma of a specialist which was not officially accredited as a Bachelor's or Master's degree. Due to that misconception many respondents who were over 35 and above chose master's or bachelor's degree instead of choosing the 3<sup>rd</sup> other option. This means that the respondents simply reckoned their 5-year diploma as Bachelor's or Master's degree without having official grounds. And by comparing these answers to the responses of the full-time teacher training, or to the number of teaching years and age, a conclusion was made to specify a new demographic variable for the teachers who had graduated from the old or new education system. The analysis used only those answers that were most valid for this type of a conclusion and did not create doubts. Accordingly, out of 174 valid responses 41 (23.6%) graduated with a bachelor's or master's degrees and 133 (76.4%) with 5-year Diploma of a specialist. Thus we can see that the amount of teachers with old education system at least triple times prevails the newer generation.

The average of 176 answers to the question asking to indicate the completed years of full-time teacher training was 4.84 (SD = 1.52), where the minimum was less than 1 and the maximum was 15 years.

Out of 179 respondents 23 (12,8%) indicated that they did not have training at all regarding teaching of learners with disabilities in mainstream classes. 34 (19%) reported having "very little" training, 92 (51.4%) "some" training, 25 (14%) "quite much" training and only 5 (2.7%) participants had "very much" training. Out of 179 responses 1 (0.6%) responded that he/she had "none" knowledge of local legislation or policy relating to learners with disabilities, 14 (7.8%) reported that they had "poor" knowledge, 96 (51.3%) had "average" level, 65 (36.3%) had "good" level, and only 3 (1.7%) reported that they had "very good" knowledge. In the Armenian translation "very good" was translated as "Excellent" to make a clearer difference between "good" and "very good". It is also interesting to note that Yada and Savolainen (2017) in a similar study conducted in Japanese schools reported that out of 323 answers there was no teacher "who saw himself or herself as a person with 'very high level' of knowledge" in legislation or policy.

The data on level of confidence to teach learners with disabilities showed that out of 179 responses only 1 (0,6%) teacher had “very low” confidence level, 6 (3,4%) answered that they had “low” confidence, while 109 (60,9%) reported having “average” level of confidence, 61 (34,1%) stated they had “high” level, and only 2 (1,1%) reported “high level” of confidence.

Rating the level of experience in teaching learners with disability was also asked in the questionnaire. Out of 179 responses 4 (2,2%) rated their level of experience “very low”, 6 (3,4%) indicated that they had “low experience”, 121 (64,7%) mentioned that they had “average” experience, 46 (24,6%) reported to have “high” and only 2 (1,1%) mentioned that had “very high” experience.

The in-service teachers were also divided into Soviet and post-Soviet groups. Out of 181 respondents 161(89%) were categorized as teachers who studied in the Soviet Union period and only 20 (11%) who studied in the independent Armenia.

Finally, the last demographic question referred to teachers’ type of experience in teaching children with disabilities. It was reported that out of 176 respondents 6 (3,4%) had “somewhat negative” experiences while working with the children, 38 (21,6%) mentioned that they had “neutral” experiences, 114 (64,8%) answered they had “somewhat positive” experiences, and only 18 (10,2%) reported that they had very positive experiences.

Unfortunately, there was no question that would clarify the position of various school administrators. Therefore all the answers were regarded as in-service teachers who at different levels dealt with the same children individually or as a group. In addition, the teachers were asked to provide answers on their perception of the importance of facilities and equipment necessary to provide barrier-free IE environment for learners. For more details, see Table 12.

### **3.3 Research instruments**

The research data were collected using a designed questionnaire that was broken into 3 sections; a general information section about the participant’s perception

of IE where also the information of confidentiality was mentioned. The next section consisted of two international scales using ordinal Likert-type format (with 4 and respectively 6 forced-choice point scales). The first scale included the revised Sentiments, Attitudes, and Concerns about IE (SACIE-R) questions which were aimed to identify in-service “teachers’ attitudes towards inclusion and their sentiments and concerns about inclusive education” (Forlin, Earle, Loreman & Sharma, 2011, p. 58). The scale consisted of 13 items each with four Likert scale format answers ranging from 1-4 (1 = *Strongly Disagree*; 2= *Disagree*; 3 = *Agree*, and; 4 = *Strongly Agree*). The questions covered 3 factors: *Sentiments*, *Attitudes* and *Concerns*, e.g. “I tend to make contact with people with disabilities briefly and I finish them as quickly as possible”, “Students who have difficulty expressing their thoughts verbally should be in mainstream classes”, “I am concerned that students with disabilities will not be accepted by the rest of the class”. At all stages negatively worded items were reverse coded prior to calculation of reliability indices (Forlin, Earle, Loreman & Sharma, 2011, p. 54). Originally the SACIER-R contained 15 items (Forlin, Earle, Loreman & Sharma, 2011), however, only 13 were applied in the questionnaire, since 2 items (“I dread the thought that I could eventually end up with a disability” and “I would feel terrible if I had a disability”) were removed due to their misleading factors and were considered as problematic (Savolainen, Engelbrecht, Nel, & Malinen, 2012; Yada & Savolainen, 2017) and irrelevance to the Armenian cultural context. While analyzing the data on the three-factor model reverse coding was applied to the calculation of reliability indices of sentiments and concerns in order to give the responses positive direction of scale (Forlin, Earle, Loreman & Sharma, 2011). The Cronbach’s alpha for the SACIE-R scale was moderately reliable ( $\alpha = 0.77$ ).

The second scale was the Teacher Efficacy for Inclusive Practices (TEIP) scale which was designed to examine teachers’ perceived efficacy for inclusive practices (Sharma, Loreman & Forlin, 2011). This scale contained 18 items, each item with six Likert scale format answers ranging from 1 to 6 (1= *Strongly Disagree*, 2=*Disagree*, 3=*Disagree Somewhat*, 4=*Agree Somewhat*, 5=*Agree* and 6=*Strongly agree*). All items were worded positively, each starting either with “I

can . . . .”, or “I am confident . . . .”, or “I am . . . .” e.g. “I am able to provide an alternate explanation or example when students are confused”, “I can provide appropriate challenges for very capable students.”, “I am confident in my ability to prevent disruptive behaviour in the classroom before it occurs” (Sharma, Loreman & Forlin, 2011). The TEIP scale consisted of three factors: *Instruction*, *Collaboration* and *Behaviours* (Sharma, Loreman & Forlin, 2011). Each was used to measure and provide a general overview of teacher efficacy. In the current study the overall TEIP Cronbach’s Alpha reliability was high ( $\alpha = 0.90$ ).

Apart from understanding teachers’ attitudes and self-efficacy level, a section of the questionnaire focused on understanding teachers’ perception and opinion on the importance of basic necessities, which are vital to creating a proper environment for integration and inclusion of children with disabilities or SEN at school. That is to say how important teachers realized and considered different environmental or non-environmental factors were necessary to be in place in order to create obstacle-free schools. For that purpose, a seven-item questionnaire was created that included four Likert scale format anchor points ranging from 1-4 (1=*Extremely Important*, 2=*Important*, 3=*Not Very Important*, 4=*Not At All Important*). A couple of sample questions are as follows: “How important is it that all schools are adapted to various special needs?; How important is it that schools have different resource materials?”.

The last section contained the participants’ demographic information such as age, gender, teaching experience, levels of education, etc. The demographic questions were used later in analyzing the results of teachers’ SACIE-R and TEIP.

For reading and analyzing the collected data Statistical Package for the Social Science (SPSS) computer application was used, where special variables and coding categories were applied.

### **3.4 Translation of the questionnaires**

The questionnaire of the current study was originally composed in English and later on translated into Armenian for the in-service teachers as the language of instruction at schools and the official language of the country is Armenian. The translation was performed by the researcher of this study who is native to Armenia. Upon the translation, the translated questionnaire was checked by another native Armenian who is the head of the “Unison” NGO for Support of People with Special Needs and whose area of expertise is disability, accessibility and the rights of people with disabilities. Also, when the questionnaire was sent to the Ministry of Education and Science (MoES) to obtain permission for school visits, the ministry suggested several slight language modifications which did not change the meaning of the original translation. The suggested modifications bore synonymous character and were in line with the legislation on education. This way maximum similarity with the original questionnaire was ensured.

It is worth noting that the original scale tools for measuring the attitudes and self-efficacy of teachers towards IE (SACIE-R and TEIP) were never translated into Armenian by other authors. At least, the researcher did not identify a translation of the scale instruments. The translation of SACIE-R did not include all the initial 15 questions but only 13 which were most suitable for the purpose of the study and the cultural context of the country.

### **3.5 Ethical issues**

Prior to data collection, special permission in written form was obtained from the MoES of the RA. At every school the principal and/or vice-principal responsible for educational affairs and the target participants were informed about the nature of the study and its confidentiality. Also, the first section of the questionnaire stated clearly about the confidentiality of the data. It was clearly communicated with every participant that the data collection was anonymous and no how would be used in an individual form. The participants also had a freedom of choice to opt out of filling in the questionnaire. At most of the schools, the

questionnaire was filled in in the presence of the researcher. This type of approach attempted to minimize possible implications with filling in the questionnaires and maintain honest responses. Only in two schools the questionnaires were left with the person in charge who later on gave them to the corresponding school teachers and collected them back within the designated deadline.

The schools for this study were chosen using the convenience sampling (also known as Haphazard Sampling or Accidental Sampling) research method. Convenience sampling is often used in similar quantitative studies when there is limited timing or resources. Convenience sampling is also considered as nonprobability sampling. (Etikan, Musa, & Alkassim, 2016)

Prior to school visits, an official permission was obtained from the MoES, which allowed the researcher to conduct the study at schools. Also, a staff member of MoES was appointed as a point of contact to assist the researcher in choosing schools, and also in making the first contact with them. Some schools were visited based on the initial suggestion of the MoES. They were high schools, however, also basic schools participated in the study. Each school was contacted in advance and informed about the research. Some schools were chosen based on a referral.

In addition, data was collected from some of the members of NIE and YMPPAC, who are responsible for organizing IE training for schools. The sampling of this group is small and has been excluded from the total of in-service teachers.

The collected questionnaires were safely delivered home and locked in the researcher's working room. Only one participant indicated the email address on the questionnaire with the hope to receive the published thesis results, the rest of the participants did not show any desire to have the results.

### 3.6 Data analysis

Once the data was collected, its processing began. IBM SPSS 23 was used to process and analyze the data. The processing started by coding and setting up the variables to each question of the questionnaire. Afterwards the collected answers were manually inserted into the SPSS file. Frequency or descriptive analysis was run to validate the reliability of the information and some fixes were applied. The overall teacher attitudes and self-efficacy towards IE and their subscales were analyzed mainly by Bivariate correlation, Independent t-test, One-way ANOVA and Univariate analysis. In case of concern of SACIE-R scale reverse coding was applied to maintain correct reliability indices.

## 4 RESULTS

### 4.1 The level of Armenian teachers' overall and specific attitudes towards IE

The result of descriptive analysis for SACIE-R revealed that on the scale from 1 to 4 the overall attitudes towards IE among the Armenian teachers were slightly leaning above the average neutral mid-point 2.5. The overall mean score was 2.64 ( $SD = 0.39$ ). This means that the teachers on average did not express extreme attitudes for or against IE.

The analysis of individual sub-scales also indicated that the overall tendency towards IE was above the average neutral point. The most positive attitude that prevailed in the sample group was among teachers' sentiments ( $M = 2,89$ ) towards direct contact with children with disabilities. It is worth noting that sentiments and concerns were computed with a reverse variable approach to preserve the accuracy of the scale. The attitudes ( $M = 2.59$ ) and concerns ( $M = 2.55$ ) toward involving children with SEN in mainstream school were close to the neutral point. Based on the comparison of non-overlapping of confidence interval (CI) (see Table 1) the Armenian teachers' sentiments were higher than attitudes and concerns, and there was no much difference in the CI between attitudes and concerns.

TABLE 1 The mean score results of overall SACIE-R scale and its sub-scales, and 95% confidence interval

	Mean	SD	Lower CI	Upper CI
SACIE-R	2,64	0,39	2,59	2,70
Attitudes	2,59	0,47	2,52	2,67
Sentiments	2,89	0,68	2,80	3,00
Concerns	2,55	0,53	2,48	2,62



## 4.2 Relation between Armenian teachers' background factors and overall attitude towards IE

### 4.2.1 Influence of age factor upon teachers' attitudes towards IE

There is a statistically significant negative correlation between age and overall attitudes. The older the teachers are, the more negative their attitudes towards IE are, but the effect size is small.

On the sub-scale level, the results indicated that there was no relationship between the teachers' age and the sub-scale of attitudes towards IE (see Table 2). A correlation was found between the age and teachers' concerns. Although the effect size was small the concerns of teachers were higher if they were older.

There was also statistically significant but negative correlation between the age and teachers' sentiments.

TABLE 2 The correlation between age and the overall SACIE-R

	N	Pearson Correlation	Sig
Age and overall SACIE-R	176	-0.181	0.016
Age and attitudes	176	-0.044	0.559
Age and concerns	176	-0.152	0.044
Age and sentiments	176	-0.201	0.008

### 4.2.2 Influence of gender factor upon teachers' attitudes towards IE

An independent t-test was conducted to check relationship between the teachers' gender and overall attitudes towards IE. There was no difference in the overall attitudes between males ( $M = 2.64$ ,  $SD = 0.40$ ) and females ( $M = 2.75$ ,  $SD = 0.42$ ) ( $t(177) = 0.82$ ,  $p > 0.415$ ,  $d = 0.12$ ).

#### **4.2.3 Influence of years of teaching experience factor upon teachers' attitudes towards IE**

A correlation coefficient was computed to assess the relationship between the years of teaching experience and overall attitudes of teachers towards IE. The results showed that there was a negative correlation between the two variables ( $r = -0.122$ ,  $n = 179$ ,  $p = 0.108$ ). This means that there was no significant relationship between the years of teaching experience and overall SACIE-R, i.e. the years of teaching experience did not have important role in determining teacher attitudes towards providing IE.

#### **4.2.4 Influence of old and new higher education system factor upon teachers' attitudes towards IE**

An independent samples t-test was conducted to understand whether the teachers' attitudes who graduated before or after the higher education reforms of the 2000s significantly differed in their attitudes towards IE. There was no difference between the average attitudes of these groups (new system  $M = 2.73$ ,  $SD = 0.40$ ; old system ( $M=2.62$ ,  $SD=0.40$ );  $t(169) = 1.50$ ,  $p = 0.134$ ).

#### **4.2.5 Influence of level of training in teaching of learners with disabilities upon teachers' attitudes towards IE**

A one-way analysis of variance (ANOVA) was conducted to assess the relationship between the Armenian teachers' amount of training in teaching learners with disability and overall attitudes towards IE. The Post Hoc (using Tukey HSD) comparison of results showed that those teachers who had "very much" training expressed clearly more positive attitude towards IE than the teachers who had "not at all, little or very little training" ( $p = .01$  for all) (see Table 3). The effect size was moderate ( $\eta_p^2 = 0.082$ ).

TABLE 3 Mean score of the Armenian teachers' overall SACIE-R towards IE based on their level of training in teaching learners with disabilities

	Mean	SD	df	F	Sig.
1 - Not at all, n = 22	2.57	0.33			
2 - Very Little, n = 34	2.57	0.35			
3 - Some, 1n = 91	2.60	0.40			
4 - Quite Much, n = 25	2.81	0.39			
5 - Very Much, n = 5	3.17	0.36			
Between groups			4	4.415	.002
Within groups			172		

#### 4.2.6 Influence of grade level upon teachers' attitudes towards IE

One-way ANOVA was conducted to understand whether grade level where the teachers taught had an influence on the overall SACIE-R. There were 3 types of grade level groups 1. Elementary, 2. Middle and 3. High School. There were teachers who taught at more than one grade level. Thus, apart from the above 3 groups, the analysis includes 3 more groups that determined the grade status of teachers: 4. Elementary and Middle, 5. Middle and High school, 6. Elementary, Middle and High School. There was no statistically significant difference between the grade level and the attitudes of teachers towards IE. (see Table 4).

TABLE 4 The mean score of the Armenian teachers' overall SACIE-R towards IE based on their grade level

	Mean	SD	df	F	Sig.
1 - Elementary, n = 38	2.71	0.44			
2 - Middle, n = 60	2.60	0.36			
3 -High School, n = 27	2.63	0.38			
4 - Elementary and Middle n = 20	2.75	0.47			
5 - Middle and High School n = 14	2.73	0.36			
6 - Elementary, Middle and High school n = 5	2.68	0.26			
Between groups			5	1.028	0.403
Within groups			158		

#### 4.2.7 Influence of teacher confidence in teaching learners with disabilities upon teachers' overall SACIE-R towards IE

A one-way analysis of variance (ANOVA) was calculated on the teachers' level of confidence in teaching learners with disabilities and how it could affect the overall attitudes towards IE. There answer was divided into 5 groups (1. Very Low, 2. Low, 3. Average, 4. High and 5. Very High). In the analysis, the "Very Low" group was combined with the "Low". There was found a statistically significant difference between the level of confidence of teachers and the overall SACIE-R ( $p < 0.05$ ) (see Table 5). The effect size is moderate ( $\eta_p^2 = 0.085$ ).

TABLE 5 The mean score of the Armenian teachers' level of confidence in teaching learners with disabilities and its influence upon overall attitudes towards IE

	Mean	SD	df	F
1 - Very Low and 2. Low, n = 7	2.37	0.52		
3 - Average, n = 107	2.57	0.36		
4 - High, n = 61	2.78	0.41		
5 - Very High, n = 2	3.15	0.10		
Between groups			3	6.440***
Within groups			173	

Note\*\*\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*,  $p < .001$

#### 4.3 The level of Armenian teachers' overall and specific self-efficacy for inclusive practices

The descriptive analysis of TEIP with the scale of 1-6 showed that the Armenian teachers' overall self-efficacy for inclusive practices was pretty high ( $M = 4.51$ ,  $SD = 0.6$ ). On the sub-scale levels, the mean score for the Armenian teachers' self-efficacy in using inclusive instruction was 4.56,  $SD = 0.68$ , for collaboration 4.51,  $SD = 0.72$  and for behaviour 4.55,  $SD = 0.73$ . The results were statistically significant both for the overall TEIP and across all sub-dimensions with 95% confidence interval (see Table 6).

TABLE 6 Mean score results of overall TEIP scale and its sub-scales, and 95% confidence interval of means

	Mean	SD	Lower CI	Upper CI
TEIP	4.51	0.60	4.46	4.42
Instruction	4.56	0.68	4.66	4.46
Behaviour	4.55	0.73	4.66	4.44
Collaboration	4.51	0.72	4.62	4.40

#### **4.4 Relation between Armenian teachers' background factors and overall and specific self-efficacy for inclusive practices**

##### **4.4.1 Influence of age factor upon teachers' overall self-efficacy for inclusive practices**

The correlation analysis results indicated that there was no statistically significant difference between the teachers' age factor and their self-efficacy for inclusive practices ( $r = 0.002$ ,  $n = 179$ ,  $p = 0.97$ ).

##### **4.4.2 Influence of gender factor upon teachers' overall self-efficacy for inclusive practices**

An independent t-test was conducted to understand the influence of gender on teachers' overall self-efficacy for inclusive practices. The results showed that there is no statistical significance between male ( $M = 4.75$ ,  $SD = 0.54$ ) or female ( $M = 4.49$ ,  $SD = 0.59$ ) genders and teachers' overall TEIP ( $t(179) = 1.24$ ,  $p = 0.21$ ).

##### **4.4.3 Influence of years of teaching experience factor upon teachers' overall self-efficacy for inclusive practices**

A bivariate correlation was conducted to understand the relationship between teachers' teaching experience and their overall self-efficacy for inclusive practices. There was no statistically significant relationship between these two variables ( $r = -0.030$ ,  $n = 185$ ,  $p = 0.69$ ).

#### 4.4.4 Influence of old and new higher education system graduates upon teachers' overall self-efficacy for inclusive practices

An independent samples t-test was conducted to find out whether teachers who graduated before or after the reforms in higher education systems had differences in organizing their overall self-efficacy while implementing inclusive practices. There was found no statistically significant difference between these two groups of teachers (new system  $M = 4.57$ ,  $SD = 0.43$ ; old system  $M = 4.50$ ,  $SD = 0.65$ ,  $t(171) = 6.66$ ,  $p = 0.50$ ).

#### 4.4.5 Influence of level of training in teaching of learners with disabilities upon teachers' overall self-efficacy for inclusive practices

A univariate analysis was conducted to understand the impact between the teachers' training in providing IE and their overall TEIP. There was no statistically significant difference between the level of training of teachers in teaching of learners with disabilities and their overall self-efficacy for inclusive practices. Also, the Post-hoc comparisons using the Tukey HSD test did not reveal any relationship between the amount teacher training and the overall TEIP (see Table 7). The effect size was very low ( $\eta_p^2 = -.004$ ).

TABLE 7 The mean score of the Armenian teachers' TEIP for inclusive practices based on their level of training in teaching learners with disabilities

	Mean	SD	df	F	Sig.
1 - Not at all, n = 23	4.30	0.69			
2 - Very Little, n = 34	4.55	0.57			
3 - Some, 1n = 91	4.52	0.57			
4 - Quite Much, n = 25	4.57	0.59			
5 - Very Much, n = 5	4.48	1.10			
Between groups			4	0.81	0.517
Within groups			173		

#### 4.4.6 Influence of grade level upon teachers' overall self-efficacy for inclusive practices

The results of ANOVA indicated that there is no statistical significance between the grade level variables and the teachers' overall TEIP (see Table 8).

TABLE 8 The Mean score of the Armenian teachers' overall TEIP based on the grade level they teach in

	Mean	SD	df	F	Sig.
1 - Elementary, n = 39	4.63	0.56			
2 - Middle, n = 60	4.39	0.62			
3 -High School, n = 27	4.46	0.62			
4 - Elementary and Middle n = 20	4.74	0.40			
5 - Middle and High School n = 14	4.61	0.43			
6 - Elementary, Middle and High school n = 5	4.77	0.24			
Between groups			5	1.781	0.12
Within groups			159		

#### 4.4.7 Influence of teacher confidence in teaching learners with disabilities upon overall self-efficacy for inclusive practices

In order to obtain valid statistical data some of the groups were combined, as separately they represented small numbers and were not enough for running a statistical analysis. The "very low" and "low" groups were combined into "average" and the "very high" was combined into "high". There was a statistically significant difference between the teacher confidence and their overall TEIP on average and high levels (see Table 9).

TABLE 9 The mean score of the Armenian teachers' level of confidence in teaching learners with disabilities and its influence upon the overall TEIP

	Mean	SD	df	F
1 - Very Low, 2. Low and 3. Average, n = 115	4.34	0.61		
2 - High and Very high, n = 63	4.82	0.47		
Between groups			1	29.69***
Within groups			176	

Note\*\*\* p<.05, \*\*. p<.01,\*\*\*;p<.001

## 4.5 Correlation between Armenian teachers' self-efficacy for inclusive practices and attitudes towards inclusive practices

Pearson correlation test was conducted to understand the correlation between the teachers' self-efficacy for practices and their attitudes towards IE. There was a high correlation between sentiments and concerns ( $r = 0.63$ ). Overall TEIP was weakly correlated with the overall attitudes ( $r = 0.27$ ), sentiments ( $r = 0.24$ ), attitudes ( $r = 0.19$ ) and concerns ( $r = 0.16$ ). The self-efficacy in inclusive instructions weakly correlated with the overall SACIE-R ( $r = 0.20$ ), and sentiments ( $r = 0.23$ ). (see Table 8). Finally, the collaboration factor moderately correlated with the overall SACIE-R ( $r = 0.36$ ), weakly correlated with the sentiments ( $r = 0.29$ ), attitudes ( $r = 0.22$ ) and concerns ( $r = 0.28$ ). Managing behaviour did not have any correlation with the attitudes. (See Table 10)

TABLE 10 Pearson correlation between the Armenian teachers' TEIP and SACIE-R scales' overall and their sub-scales' scores.

	1	2	3	4	5	6	7
1. Overall SACIE-R	-						
2. Sentiments	0.771***	-					
3. Attitudes	0.547***	0.078	-				
4. Concerns	0.830***	0.630***	0.112	-			
5. Overall TEIP	0.271***	0.235**	0.194**	0.167*	-		
6. Inclusive instruction	0.195**	0.234**	0.142	0.063	0.790***	-	
7. Managing behaviour	0.099	0.094	0.082	0.049	0.847***	0.513***	-
8. Collaboration	0.363***	0.287***	0.224**	0.279***	0.873***	0.549***	0.630***

Note\*\*\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

## 4.6 Influence of Soviet era teachers and post-Soviet era teachers upon their self-efficacy for inclusive practices

An independent t-test was conducted to understand the relationship between the Soviet or post-Soviet era teachers and their overall self-efficacy for inclusive practices. There was found no statistically significant difference in the overall TEIP between the Soviet ( $M = 4.54$ ,  $SD = 0.60$ ) and post-Soviet era teachers ( $M = 4.52$ ,  $SD = 0.42$ ) ( $t(178) = 0.160$ ,  $p = 0.873$ ) (see Table 11).



TABLE 11 The mean score of the Armenian teachers' overall TEIP based on the Soviet or post-Soviet era teachers

	Mean	SD	df	t	Sig.
Soviet, n = 160	4.54	0.60	178	0.160	0.873
Post-Soviet n = 20	4.52	0.42			

#### 4.7 Teachers' perception of proper environment for implementing IE

A descriptive analysis was conducted to understand the in-service teachers' perception of the importance of school facilities and equipment, which are necessary to provide barrier-free and accessible IE environment for learners. The questions referred to the importance of a number of environmental factors that need to exist in any educational environment to provide the basic minimum accessibility and barrier-free IE for learners with disabilities.

TABLE 12 The teachers' perception of basic necessities for barrier-free and accessible IE

	Extremely important	Important	Not very Important	Not at all important
1. All school are physically accessible to all the children, n = 186	99 (52.9%)	83 (44.6%)	3 (1.6%)	1 (0.5%)
2. All classrooms are adapted to various special needs, n = 185	105 (56.8%)	73 (39.5%)	6 (3.2%)	1 (0.5%)
3. Adapted sanitation (bathroom) system are available, n = 186	113 (60.8%)	70 (37.6)	2 (1.1%)	1 (0.5%)
4. Playground or sports halls are accessible for all the children, n = 186	98 (52.7%)	77 (41.4%)	10 (5.4%)	1 (0.5%)
5. Cafeteria are accessible for all children, n = 184	95 (51.6%)	81 (44%)	8 (4.3)	-
6. Schools have different resource materials, n = 184	106 (57.6)	72 (39.1%)	6 (3.3%)	-
7. Schools have proper heating system, n = 184	136 (73.9%)	46 (25%)	1 (0.5 %)	1 (0.5 %)

## 5 DISCUSSION

The objective of this study was to explore the attitudes towards IE and self-efficacy in implementing inclusive practices among the Armenian teachers. The study used two main instruments - the SACIE-R scale and the TEIP scale (Yada & Savolainen, 2017, Malinen et al., 2012; Savolainen et al., 2012). The SACIE-R was used to understand the teachers' attitudes towards IE (Forlin, et al., 2011) and TEIP was used to understand the overall self-efficacy of teachers for inclusive practices (Sharma, Loreman & Forlin, 2011). The questions of the SACIE-R scale were adapted to the cultural context, in that regard, the original scale with 15 questions was cut down to 13 questions.

The results of the teachers' attitudes towards IE were slightly above the average and did not express extreme attitudes for or against IE. Similar findings were reported in the previously obtained studies in Finland, China, South Africa and Japan (Savolainen et al., 2012; Malinen et al. 2012; Yada & Savolainen, 2017). On the sub-scale level, the attitudes of the Armenian teachers varied by country. The data analysis revealed that the Armenian teachers' sentiments towards direct contact with children with disabilities were higher than the concerns and attitudes. However, less positive than in the Japanese, Finnish and South African studies (Yada & Savolainen, 2017, Savolainen et al., 2012). The Armenian teachers' attitude toward including children with disabilities into the mainstream classroom was close to the neutral point, similar to the Japanese results and slightly higher than the Finnish and South African indicators. The Armenian teachers' concerns towards IE were near the neutral point and relatively higher than in the Finnish, South African and Japanese cases.

A correlation between the age and the overall attitudes towards IE revealed that the older the teachers were, the more negative their attitudes were. The average teacher age among 179 respondents was 43.3 out of which only 20 were born after the 1991 independence. Thus, the negativity phenomenon can be explained that most of these teachers received their pedagogical training and education in the Soviet Union period, where the education for people with

disabilities was strongly segregated, and disability was viewed as a purely medical issue. Meanwhile, IE of today bears characteristics of the social model.

Interesting to note that the number of female respondents in this study was dominating, out of 187 respondents only 8 were males, the rest were females. This type of situation can be explained that the education is not considered a prestigious and well-paid profession. And since the Armenian society is more patriarchal this means that men seek jobs with higher wages to be able to sustain their families. The study showed that gender did not influence on the general attitudes of teachers towards IE, neither did the years of teaching experience nor the type of higher education system that the teachers had graduated from, nor the grade level in which the teachers were teaching.

A clear positive shift in the teachers' attitudes towards IE was noticed among those teachers who reported to have "very much" training in IE. Another important finding was that those teachers who reported to have "high" or "very high" confidence had more positive attitude towards IE. While those who had low confidence showed more negative attitudes. Based on the findings, we can suggest that the more training is organized for the teachers, the chances are that they will shape more positive attitudes in them and increase their confidence level which entails more positive attitudes. Similar suggestions were recommended in the 2013 study of the Center for Educational Research and Consulting. The study emphasized that special attention was to be paid to the practical knowledge and skills of the teachers.

The Armenian teachers' overall self-efficacy on inclusive practices was quite high. Similar results were reported in the Finnish and South African studies. (Savolainen et al., 2012). On the sub-scale levels, the Armenian teachers showed equally same ability to handle the inclusive practices which was in line with the overall TEIP. The highest self-efficacy was reported in implementing inclusive instruction and managing behaviour.

As in case of the attitudes, as well as in case of the self-efficacy a number of factors (age, gender, years of teaching experience, grade level, old and new higher education system graduates) did not provide enough evidence to

conclude that they effected on the teachers' overall self-efficacy. An interesting finding was that the Armenian teachers' self-efficacy was not influenced by the amount of teacher training, contrary to the Japanese teachers who showed that high level of teacher training had a direct influence on their self-efficacy for inclusive practices (Yada & Savolainen, 2017).

The study showed that the higher the level of confidence in teachers in teaching learners with disabilities was, the higher the teachers' self-efficacy was.

The results of the study to determine the relationship between the overall TEIP and overall SACIE-R showed that there was a weak correlation between them. However, strong correlations were found among both the sub-scale levels. There was a strong correlation between the sentiments and concerns. This meant that the teachers' level of concerns with including learners with disabilities in their classes were mostly dependent on how they felt about implementing the inclusive practices. Weak correlation was found between the attitudes and concerns and no correlation was found with the managing behaviour. A moderate relationship was found between the collaboration and the overall attitudes. Thus, those teachers who practised collaboration with other professionals or parents had more positive attitudes towards IE. Hence, we can conclude that the collaboration of the teachers with different parties can play an important role in increasing their positive attitudes towards IE.

Since the average age threshold among the respondents was 43.3, this meant many of the teachers had received their pedagogical qualifications either during the Soviet Union years or shortly after the first years of independence of Armenia, when the inherited education system or a significant mentality shift did not occur then. Thus, the participants of the research were broken into the Soviet and post-Soviet groups to understand if the Soviet or post-Soviet mentality effected on the self-efficacy of teachers. It is worth noting that the post-Soviet teachers were not older than 27. The results showed that the overall self-efficacy of both groups was not influenced by the Soviet or post-Soviet factors.

Since the IE reform in Armenia is fresh and still on-going, the current study also aimed to understand how well teachers understood the concept of IE, and

what aspects of the environment they considered important for creating a barrier-free and all-inclusive school. The results showed that only 99 (52.9%) of 186 teachers considered that having physically accessible schools for all is an extreme necessity, while 83 (44.6%) answered that it was simply important, 3 (1.6%) teachers said that it was not very important, and only 1 (0.5%) answer stated that it was not important at all. 105 (56.8%) answered that it was extremely important to have all classrooms adapted to various special needs, while 73 (73.5%) answered that it was simply important, 6 (3.2%) answered not very important, and 1 (0.5%) completely disagreed on the importance of all the classrooms to be adapted. On the state of adapted bathroom facilities, only 113 (60.8%) respondents answered having an accessible bathroom was extremely important, while 70 (37.6%) answered that it was simply important. For a full list of answers see Table 12. From the provided responses we can assume that although the majority of teachers saw the extreme importance for different environmental or non-environmental factors for creating a barrier-free school, it is still bothering that almost half of the respondents did not think that those factors were extremely important. This allows us to conclude that the teachers did not fully embrace what the social model of IE was about. It can be suggested in order to increase teachers' perception of all-inclusive environment, teacher training can focus on teachers' overall understanding of the social model of inclusion.

## 6 CONCLUSION

The current study is the first one of its kind in the field of IE in Armenia where teachers' attitudes towards IE and self-efficacy toward inclusive practices are explored through cross-sectional analysis and also through different demographic factors. The findings showed that the younger the teachers were, the more positive attitudes they formed about IE. This means that even though the agenda of IE is relatively fresh in Armenia and still needs to develop considerably to be able to provide the basic minimum for implementing IE across the whole country, it has already given its positive results. However, we notice that the majority of the respondents have negative attitudes, thus the government of Armenia should put much more effort in changing the attitudes of teachers' and other professionals towards IE. It is suggested that the government should organize more teacher training for IE and inclusive practices both for pre-service and in-service teachers, since the data revealed that the more training teachers have, the more positive attitude they have for IE. Also, it is interesting to point out that the Armenian teachers' sentiments play a significant role in influencing the collaboration. This means that importance and attention during the teacher training should be given to understanding how sentiments can be managed to enhance teacher efficacy. In addition, it is suggested that training should take into account boosting the confidence factor in the Armenian teachers as the higher their confidence was, the more positive both their attitudes and self-efficacy were.

The organized training should not only focus on improving factors responsible for teacher attitudes and self-efficacy, but it also should increase their general outlook on what IE is and what basic minimums should exist to allow learners with disabilities to have a barrier-free and all-inclusive environment.

From personal face to face conversations with teachers at different schools, it became clear that most of them complained about the lack of time and extra workload that comes in with their new responsibilities. Thus, considering cutting down on teacher workload can give teachers enough time to prepare better for

classes and also improve their self-satisfaction and confidence which will in its turn boost teachers' attitude and efficacy.

The current research had a number of limitations. First, the findings cannot be generalized to the whole country because of the convenience sampling method, which limited the choice of schools and also the time. This can be considered as a reflection of teachers' attitudes and self-efficacy towards IE around the capital city, Yerevan. The study includes only one school which was not located in Yerevan but was in one of the nearest regions. Second, the questionnaire was translated into Armenian maintaining the best possible meaning, however, it may be possible that the translation did not convey in parts the whole meaning of the original version. Third, although the collected data produced psychometrical results, for more comprehensive results it would be necessary to conduct longitudinal qualitative research to understand the teachers' perceptions for the attitudes in IE and also self-efficacy for inclusive practices. Moreover, a similar quantitative longitudinal analysis would also help us better understand whether self-efficacy predicts attitudes and vice-versa. Fourth, there is a concern that in some cases the answers of the teachers were not very honest since they might have been victims of the principal's authoritative approaches which occur often in the politicized school environment in Armenia. This type of strict hierarchical influence can also create negative attitudes among the teachers not only towards IE but also toward general teaching. Fifth, the study questionnaire did not include a special question asking the respondents to specify their positions at school. Due to this, the schools' IE support teams were also regarded as in-service teachers. If similar studies were to be undertaken in the future for more precise results, it is suggested to include questions specifying the positions of the respondents at the given institution.

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