

# FAMILY CLIMATE AND STUDENTS' ATTITUDE TOWARD SCHOOL: A SYSTEMATIC REVIEW

## **Keywords**

*family climate, attitude to school, parental style*

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## **Abstract**

*This paper studies the relationship between the family climate and students' attitude towards school. The family climate can be determined by the parental style, the degree of involvement of the parents in the child's life, the socioeconomic status. Students attitude towards school can also affect the attitude towards teachers and colleagues, the self-image. There were selected 12 studies, the samples varied according to age, geographical area and number of subjects. The results of the studies showed that there is a significant relationship between the involvement of parents in the school life of the students and their academic results, which may vary according to gender, geographical area and age of children.*

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## 1. Review of literature

The family is an open system that depends on the environment for survival and the regulation of internal and external interactions to reach a delimited state of balance. In a family system each action and reaction cause a change of the system as a whole.

Patterson (2002) identifies four functions of the family: (a) belonging and training, (b) economic support, (c) feeding, education, and socialization, (d) protecting vulnerable members. Each of these functions has positive and negative implications for family members. The first function ensures the unity of the family, to which are added the children planned and wanted, but divorce can also occur. The second function ensures the necessary food and clothing, the safety of the home, but there is a risk in neglecting children. The third function ensures mutual support, love, marital satisfaction, but there may be episodes of domestic violence, child abuse. The fourth function is to ensure the care of children with special needs, but the impossibility of fulfilling this function leads to sending family members with disabilities in foster care.

Although most parents love their children, there are times when they behave inappropriately, because within the parent-child relationship, unresolved traumas from the parents' childhood can be triggered. In these situations, the parents may be dominated by anger, fear, sadness or frustration, and their response to the child's behavior will be totally inappropriate. Parental frustration can cause disorientation, insecurity, and frustration in child. These behaviors will lead to unhappiness and exhaustion on both sides, and the relationship will become increasingly difficult. Often the unresolved traumas and problems are transmitted from one generation to another. The only solution proposed by Siegel and Hartzell (2017) is acceptance, understanding and solving of past problems. Only this way the relationship between parents and

children will be healthy and produce positive results in each person's life.

Effective communication between parents and the child will help the child to feel understood, protected and have a sense of belonging. Siegel and Hartzell (2017) propose three stages of attachment development: alignment, balance and coherence. They suggest that, first of all, it is necessary to align the parents' spiritual state with the child's, and then the child will obtain a state of bodily, emotionally and mentally balance, which will help him to feel integrated and connected, for the relationship to become consistent.

Björnberg and Nicholson (2007) identify family dimensions according to: the balance between authority and attention in the parent-child relationship (Figure 1), the relationship between emotional and cognitive unity among family members (Figure 2) and the relationship between open communication and adaptability within the relationships among family members (Figure 3). All these aspects determine the family climate.

According to Amatea, Smith-Adcock and Villares (2006), there are several key methods that lead to children's academic success, grouped into four categories. The first of these concerns the expectations and beliefs of the family and is expressed through a sense of purpose, a positive outlook, and a sense of efficiency. The second category refers to the emotional connections existing in the family and is materialized through affection, warmth, a sense of belonging, open expression of emotions, clear communication, and collaboration in solving problems. The third category refers to the habits of family organization, which consist of a strong leadership, with clear expectations, a friendly but firm management style and emphasizes the development of social ties. The last category considers the learning opportunities of the family and is achieved by developing routines, habits that support the achievement of

family members and guide children to acquire both academic and social skills.

Researchers often associate family climate with parental style. Baumrind (1971), for example, identified four parenting styles, depending on the balance between the exigency and the ability of parents to react to children. The classification of these styles is like the dimensions of the intergenerational style suggested by Björnberg and Nicholson (2007). The authoritarian style is characteristic of those parents who are often restrictive and require unconditional listening to their children. Authoritative parents set reasonable standards but are open and flexible to the needs of their children. Permissive parents set only a few limits to children's behavior and are tolerant of certain deviations. Negligent parents do not impose limits or rules on their children, nor do they demand performance from them (Baumrind, 1971).

Students' attitudes towards school can be determined by several factors. Chen and Howard (2010) found that students' attitudes towards science learning are strongly correlated with their training and participation in live simulations and are significantly influenced by the teacher, and boys tend to have a better attitude towards science than girls. The study was conducted on 311 high school students.

Domino (2009) conducted a quantitative study on high school students. He also states that students' attitudes towards mathematics can be influenced by the quality of the teacher, the psychosocial climate in the classroom and the organization-management of the classroom. The qualities of teachers that determine students' positive attitude towards mathematics consist in teaching techniques that appeal to the practicality and usefulness of mathematics in everyday life, constant care for students, ensuring understanding of content, willingness to provide additional explanations and, last but not least, the enthusiastic attitude of the teacher.

Lee (2016) conducted an analysis of the PISA studies from 2003, 2009 and 2012 and found that there is no direct relationship between the general attitude towards school and the academic results of students in reading and mathematics. The non-existence of this relationship between school attitudes and academic outcomes was observed for most of the 64 countries that participated in the survey. These results varied according to gender, socio-economic status of the family from each student came from, membership of the OECD, level of education. The conclusion was that the attitude towards school may be, to a small extent, related to the school results, but it is not a predictor of them.

Based on the researched aspects, I chose to do a systematic review. This will have the role of providing useful information in order to make practical decisions of educational policies, which will facilitate the improvement of the attitude of the students towards school.

## **2. Methodology**

This systematic review was elaborated using PRISMA Declaration's guidelines (Moher, Liberati, Tetzlaff, Altman, & Prisma Group, 2009).

### **Inclusion and Exclusion Criteria**

The main inclusion criteria were: (a) the purpose of the included studies is to determine the influence of the family climate on the student's attitude towards school; (b) the population must be composed of students of all levels of education; (c) the results provided are obtained by quantitative methods.

## **Search Strategy**

In order to identify articles and studies that aimed to highlight a relationship between family climate and students' attitude towards school, we studied different publications and articles, searching in different databases keywords or synonyms: family climate, parental style, family environment, attitude towards school, school results, school environment. The databases and sources used were: Academic Search Complete, Psychology and Behavioral Sciences Collection, ERIC, Professional Development Collection, Atla Religion Database, Academic Publishing, Google Scholar, JSTOR, ScienceDirect.

## **Selection of Studies**

Because the searches regarding the school results, the school environment, the family environment gave a lot of irrelevant results, I tried to reformulate the terminology in order to obtain results closer to the topic of my research. The excluded articles studied either the family climate compared to variables other than attitude towards school, or the attitude towards school determined by other variables, or the researched population was not made up of students, or were too small groups of students, selected according to certain criteria. The main moderators were the age of the subjects, the geographical area, the socio-economic and cultural context.

## **Bias Risk Assessment**

To perform a critical reading, we used the Systematic Review Checklist from the Critical Appraisal Skills Program (CASP; <http://www.casp-uk.net/casp-tools-checklists>). We checked the 10 questions for each revised study. This list, structured in three sections, checks: if the results of the study are valid, what are the results and if the results help locally. The questions can be found in the Appendix.

## **Tabulation and Data Analysis**

The selected studies were summarized in Table 1, in which we recorded the author's name, geographical area or country, year of study, objectives/ hypotheses, number of participants, age of subjects, variables evaluated and results obtained/ conclusions.

## **3. Results**

The selection of studies was accomplished in three stages. First, I searched for the most relevant titles, which correspond to the inclusion and exclusion criteria formulated, accessing the mentioned databases, as well as from other sources. Out of the total of 2023 studies, we eliminated the duplicates and 685 studies remained for reading the abstracts. We have included in this systematic review a meta-analysis by Castro et al. (2015) and a systematic review by Ruiz-Hernandez, Moral-Zafra, Llor-Esteban, Jiménez-Barbero (2019).

After reading the summaries, I eliminated the ones that did not meet the requirements. There were 23 studies that we included in the qualitative synthesis, of which 12 in the systematic synthesis. Figure 4 describes the selection of studies.

### **Description of Studies**

The interest of the specialists regarding the influence of the family environment on the behavioral aspects of the students is increasing. There are studies that show that students' attitudes towards school can depend on several factors.

Research by Erkman et al. (2010) showed that the perception of teacher's acceptance was significantly positively correlated with self-image, sub-scales of attitude towards school (academic self-perception, attitude towards teachers, towards school, evaluation of motivation and values) and school results. The study also shows that perception of teacher's acceptance and academic self-

perception were the only important and significant precursors of boys' academic achievement. For girls, only academic self-perception was significantly associated with school results. The conclusion is that teachers' perceptions of behavior vary by gender.

Avnet et al. (2019) conducted a study on 450 students from kindergarten to fourth grade, out of which 66 students had autism spectrum disorders (TSA). The data were collected through the PFI questionnaire, a section of NHESP, which was part of a national database developed by the NCES. This tool included questions related to school choice, family and parent involvement in children's school life, children's behaviour at school, parents' satisfaction with children's school life, and other factors affecting parent involvement. The results showed that students with autism had worse outcomes than the other students. However, if the students' results were better, there was a decrease in the level of involvement of parents in the school life of students, both those with autism and others.

Sengul, Zhang and Leroux (2019) conducted a longitudinal study using a national database that recorded the progress of students from the 10<sup>th</sup> grade to the post-secondary level. The random effect of all predictors, including students' perceptions of the teacher-student relationship and family structure, was insignificant, except for socioeconomic status, as a control variable, with significant variation from certain schools.

Most of the time, children are influenced by the mood and emotions of adults. In the classroom, the teacher may be stressed by the disturbing attitudes of certain children. If there are already a few children of this kind in the classroom, the stress increases, the teacher feels more and more upset, and therefore changes their attitude towards them. On the other hand, the other children feel this attitude of the teacher and transfer it to the disturbing children, behaving in a negative way towards them.



The results of the study conducted by Papanastasiou (2002) show that there are three external factors – the educational environment of the family, the encouragement of students and the school climate – which can be precursors of students’ attitudes towards learning science. The way teachers teach can be a predictor of students’ attitudes toward science.

Valeski and Stipek (2001) proposed an instrument called Feelings About School (FAS) to examine the factors associated with school-related feelings of kindergarten and first-grade children. This tool measures children’s perceptions of academic competence, their feelings about the teacher and their general attitude towards school. FAS has 12 items, operationalized on a Likert scale from 1 (not good) to 5 (exceptionally good). In general, in kindergarten and in the first year of school, the attitude of the children is positive, and their feelings about their relationship with the teachers are better in the first class, compared to the kindergarten. Children’s perception of their own competence is a precursor to their attitude towards school.

The results obtained by Ruiz-Hernandez, Moral-Zafra, Llor-Esteban and Jiménez-Barbero, (2019) in their systematic review show that authoritarian parenting style is often associated with behavioral problems. This situation is explained by the attitude of parents who use coercive methods through physical punishment. In contrast, trusting parenting style is strongly associated with the dimensions of affection, communication, and autonomy. On the other hand, the careless parenting style generates contradictory behaviors, which must be treated individually. The author considers that there are differences between the parental practices of mothers and fathers.

This systematic review highlighted that there are many factors that can influence the students’ attitude towards school. By analyzing the documents included in the comparative table (Table 1), certain aspects can be observed. As independent variables are

considered: the family climate (Hu, Leung and Chen, 2018; Papanastasiou, 2002; Spătărelu, 2015), the parental style (Ang and Goh, 2006; Ruiz-Hernandez, Moral-Zafra, Llor-Esteban, Jiménez-Barbero, 2019), the degree of parents' involvement in the school life of students (Assefa and Sintayehu, 2018; Castro et al., 2015; Ratelle et al., 2005; Spătărelu, 2015), family structure (Sengul, Zhang and Leroux, 2018), self-image of students, level of parents' studies (Lai, Stevens, Martinez and Ye, 2015), the level of students' education, socio-economic situation (Spătărelu, 2015), teaching materials, school climate (Lai, Stevens, Martinez and Ye, 2015; Papanastasiou, 2002), teachers' attitude towards students (Erkman et al., 2010; Sengul, Zhang and Leroux, 2018) and other family and personal factors, such as gender, time spent on homework, number of books owned (Hu, Leung and Chen, 2018; Lai, Stevens, Martinez and Ye, 2015) etc.

As dependent variables, the students attitude towards school (Lai, Stevens, Martinez and Ye, 2015), towards certain specific disciplines (Hu, Leung and Chen, 2018; Papanastasiou, 2002), academic achievements (Assefa and Sintayehu, 2018; Castro et al., 2015; Erkman et al., 2010; Sengul, Zhang and Leroux, 2018), test results (Ang and Goh, 2006; Spătărelu, 2015), adaptability (Ratelle et al., 2005; Ruiz-Hernandez, Moral-Zafra, Llor-Esteban, Jiménez-Barbero, 2019).

In some studies, students' attitude towards school and academic results, in an interdependent relationship, are compared, so that attitude towards school becomes a dependent variable (Erkman et al., 2010; Verešová and Malá, 2016).

The age groups on which the research was conducted were from kindergarten (Castro et al., 2015), primary school (Castro et al., 2015), secondary school (Ang and Goh, 2006; Assefa and Sintayehu, 2018 ; Castro et al., 2015; Erkman et al., 2010; Lai, Stevens, Martinez and Ye, 2015; Papanastasiou, 2002; Spătărelu, 2015), high school (Assefa and Sintayehu, 2018; Lai, Stevens,

Martinez and Ye, 2015; Ratelle et al., 2005; Sengul, Zhang and Leroux, 2018; Spătărelu, 2015; Verešová and Malá, 2016) to first year of college (Assefa and Sintayehu, 2018; Sengul, Zhang and Leroux, 2018).

A research conducted by Polovina (2009) aimed the understanding of the relation between the attitude towards school and the educational aspirations of the students according to the educational status of their mothers and fathers, as indicators of the gender role. The survey was conducted on a sample of 2447 eighth-grade students from 36 schools in Serbia. This study analyzed data from a broader TIMMS survey from 2007. Research has shown that girls have significantly higher educational aspirations than boys and demonstrate a better attitude towards school as a learning environment in their daily lives in extracurricular activities towards boys. On the other hand, the educational aspirations of female students are positively correlated with the interest in study and academic achievement.

The study realized by Borelli et. Al (2018) shows those children who are too emotionally attached to their parents face difficult stressful situations in their lives. Thus, when they are faced with stimuli that create discomfort, including school tasks, they manifest insecurity, have difficulty adjusting their emotions, and feel the failure more strongly.

#### **4. Discussions and Conclusions**

Analyzing the previously presented documents, it is observed that the research was conducted on populations of different ages, from different geographical areas. The results of the research varied according to these moderators, but also on the type of subjects and the period during which the studies were carried out. This systematic review offers a multicultural perspective on issues related to family climate / parenting style and students' attitude

towards school, being conducted in countries in Europe, Asia, America, Asia-Pacific, Africa.

The impact of parents' involvement in the school life of students is extraordinarily strong, being recognized both by teachers, administrators, and decision-making forums, so that in-depth studies on this topic are needed (Assefa and Sintayehu, 2018).

The involvement and support of both parents in the students' lives are positively associated with the school results, with the sense of competence, autonomy and belonging. The perception regarding the autonomy granted to the students by the parents persists even after two years after the completion of the studies, but the perceived involvement is not related to the persistence in the sciences (Ratelle et al., 2005). A study conducted by Spătăreanu (2015) shows that the absence of the mother in the child's life imbalances him at an intellectual and emotional level, but the influence of the father's level of education is greater than that of the mother.

The conclusions of this study consist in the fact that the family, in its complexity, is one of the impact factors on children's behavior, which manifests itself in the form of attitude towards school, towards a particular subject, attitude in certain circumstances, how he evaluates life and how he relates to certain situations.

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## Tables, Figures and Appendices

Table 1. Comparative study

Author/ Zone	Objectives/ Hypotheses	N/Age	Instruments/ Variables evaluated	Results
Ang and Goh (2006)/ Singapore	Identify subgroups of adolescents who perceive parents as having an authoritative style Self-regulation and students' school outcomes	548 students: 241 boys 307 girls 13 years old	PAQ – Parental Authority Questionnaire (30 items) RSE – Rosenberg Self-Esteem Scale (10 Items) BASC – Behavior Assessment System for Children (55 items)	The authoritative parenting style has a different cultural meaning for Asians than for Caucasians. Two adolescent groups with authoritative parents have been identified: those who do not self-regulate have low self-esteem, poor interpersonal relationships and a high level of maladjustment, while those who self-regulate have high self-esteem, relate well to others and have a low degree of maladjustment.
Assefa and Sintayehu (2018)/ Ethiopia	Studying the relationship between parental involvement and school outcomes of primary and secondary school children	58 parents 60 students Students 11-22 years Parents 21-50 years	Parental involvement – questionnaire with 10 questions Academic outcomes	There is a statistically positive relationship between parental involvement and students' school outcomes, so the more involved the parents are, the better the students' outcomes.
Castro et al. (2015)	Studying the effect of parental involvement on student academic achievement	37 studies from 2000-2013 Kindergarten, primary and secondary school children	Meta-analysis Parental involvement Student academic achievements	Strong associations have been identified between the type of parental involvement and the academic achievements of children. High-expectation parents developed and maintained communication with them about school life and promoted the development of reading habits. Variations in the intensity of correlations presented in different studies, even meta-analyses, were



Table 1. Comparative study (continued)

Author/ Zone	Objectives/ Hypotheses	N/Age	Instruments/ Variables evaluated	Results
Erkman et al. (2010)/ Turkey	Identifying the influence of students' perception on teacher acceptance, self-image and attitude towards school on students' academic achievements	223 students 5th grade	The Teacher Acceptance-Rejection/Control Questionnaire, Piers-Harris Self-Concept Scale; School Attitude Assessment Survey Revised	The perception of teacher acceptance was significantly correlated with a positive attitude towards school and a high self-image of both boys and girls. Perceived teacher acceptance was significantly correlated with the academic achievement of boys, but not girls. However, both boys and girls who felt accepted by teachers had a positive school attitude and a good self-image.
Hu, Leung and Chen (2018)/ Hong Kong	School, family, and other personal factors are influencing the students in their attitude towards sciences	3600 students 145 classes 132 schools Parents, teachers, and their principals	TIMMS 2015 Attitude towards science, gender of students, attitude towards school, time spent on homework, number of books possessed, parents' education, parental occupation, teacher gender, teachers' teaching experience, teacher education level, class size, classroom teaching materials	Students' attitude towards science was strongly associated with attitude towards school, the number of books possessed, the higher educational level of the parents, but poorly associated with the time spent on homework, the teacher's gender, his teaching experience, the size of the class of students, the teaching materials used. The boys' attitude was significantly better than the girls' attitude to science. Attitudes towards school differ significantly among students of the same school and less between schools, and, also, according to school level.

Table 1. Comparative study (continued)

Author/ Zone	Objectives/ Hypotheses	N/Age	Instruments/ Variables evaluated	Results
Lai, Stevens, Martinez and Ye (2015)/ Australia, Hong Kong, Indonesia, Japan, Korea, Macau, New Zealand, Shanghai, Singapore, Taipei, Thailand	Investigating and analyzing students' attitudes towards school Demonstration of the existence of four types of attitudes of students towards school	68,350 15-year-old students from 11 units in Asia-Pacific	PISA Database, 2009 Attitude towards school of boys and girls, economic status, size of school, school climate, discipline problems in the classroom, teachers' attitude towards students	Students' attitude towards school is strongly correlated with classroom discipline issues, teachers' attitude towards students and students' academic interests.
Papanastasiou, C. (2002)/ Cyprus	Influence examination of family and school factors on students' attitude towards science	1269 students 13 years/ 8th grade	TIMMS 1995 database -Attitude towards science -School climate -Teaching -The educational environment in the family -Pressure of the social and family environment	There are three major factors influencing students' learning and attitude towards science: the school climate, encouragement, and the educational environment in family
Ratelle et al (2005)/ Quebec	Examine individual factors that explain how young adults adapt to the transition between high school and college. Examination of the impact of perceived parental involvement and parental support on the adaptation process.	729 (373 girls, 356 boys) Average age 17 years	Longitudinal study -Parental involvement -Parental support/autonomy -School membership -Scientific competence -Self-determination in the program -Persistence in science -Sciences results in high school -SES Family	There are differences in scores between boys and girls in several variables. The girls perceived a higher involvement of the parents and a higher level of belonging than the boys. Parental involvement and perceived support were positively associated with results in science, but also with a sense of competence, autonomy and belonging.

Table 1. Comparative study (continued)

Author/ Zone	Objectives/ Hypotheses	N/Age	Instruments/ Variables evaluated	Results
Ruiz-Hernandez, Moral-Zafra, Llor- Esteban, and Jiménez- Barbero (2019)	Synthesis of existing records on the influence of parental style on the development of adolescents' externalizing behaviors	17 significant studies from 2010-2016	Systematic review Parental style Adolescent externalization behavior	The authoritarian parental style is strongly associated with the externalization problems of adolescents. The authoritative style, through its components of affectivity, communication, and the promotion of autonomy, is associated with the positive results of adolescent behavior.
Sengul, Zhang and Leroux (2018)/ U.S.A.	Impact of students' perception concerning quality of teacher-student relationship and family structure on academic achievement	Total 17,000 Students Parents, teachers Out of 750 schools Students from 10th to post-secondary	Longitudinal study -Base-year Student Questionnaire – students' perception of the teacher-student relationship -Base-year Parent Questionnaire – Family Structure -Parent and Student Questionnaire – Socioeconomic Status	Students who have a positive perception of the relationship with their teachers come from families with both biological parents and have a high socio-economic level. The high socio-economic level was also positively associated with math results. Math scores were lower in public school students than in private Catholic schools.
Spătărelu (2015)/ Romania	Influence examination of the family environment on the averages obtained by the students at PISA assessment	5225 15-year-old students from 40 counties, 178 schools	PISA, 2012 Family size, absence/ presence of mother/father, education level of parents, socio-economic status of parents. Reading, Mathematics, Science	The absence of the father from the children's lives has less influence on PISA tests than the absence of the mother. The high level of education of parents is strongly correlated with the results obtained by the students. The socio-economic status of parents is positively correlated with

Table 1. Comparative study (continued)

Author/ Zone	Objectives/ Hypotheses	N/Age	Instruments/ Variables evaluated	Results
Verešová and Malá (2016)/ Slovakia	Studying the significance of attitudes towards school and learning as a significant predictor of academic achievement	269 adolescents: 146 girls, 123 boys 17-19 years old	Questionnaire of attitudes towards school and learning, created by authors (10 items) Academic achievements measured with GPA	Attitudes towards school and learning are a significant predictor of academic achievement. The stronger their feelings and relationships with the school, the greater the tendency of students to act in accordance with school requirements and obligations. The more thoughts and opinions are conductive to learning, the better the academic results in the main subjects.

		low		high	
		high		low	
Attention	high	INDULGENT	AUTHORITATIVE		
	low	NEGLECTING	AUTHORITARIAN		

Figure 1. Family dimensions – Intergenerational style

		Cognitive cohesion	
		low	
Emotional cohesion	high	DIVERSE	BONDED
	low	FRAGMENTED	LIKE-MINDED

Figure 2. Family dimensions – Family cohesion

		Open communication	
		low	
Adaptability	high	REACTIVE	ADAPTIVE
	low	RIGID	AVOIDANT

Figure 3. Family dimensions – Family process



## PRISMA 2009 Flow Diagram

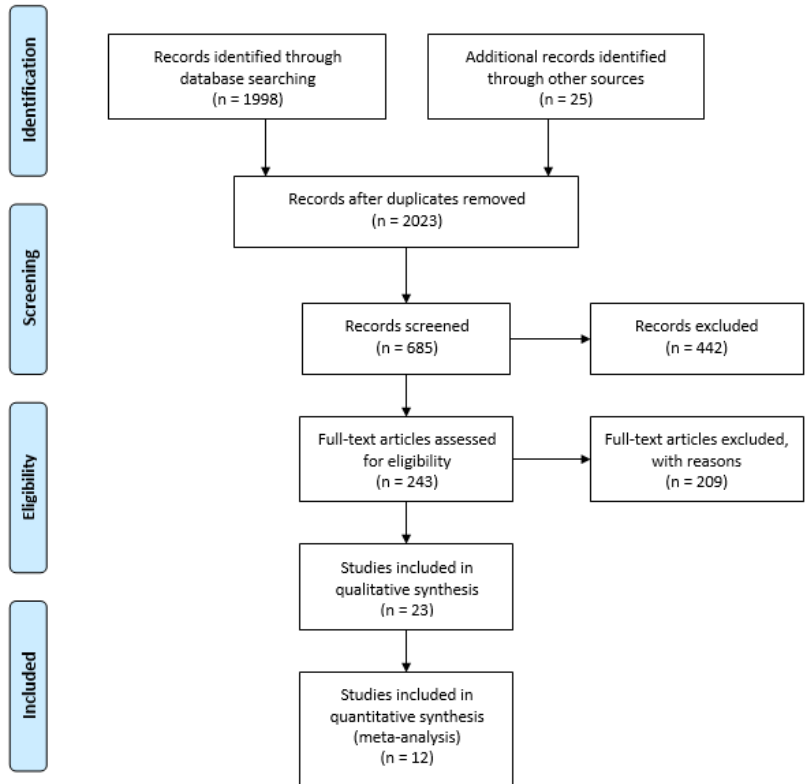


Figure 4. The selection of studies (following PRISMA Guidelines; Moher et al., 2009)

## **APPENDIX**

Section A: Are the results of the review valid?

Did the review address clearly focused question?

Did the authors look for the right type of papers?

Do you think all the important, relevant studies were included?

Did the review's authors do enough to assess quality of the included studies?

If the results of the review have been combined, was it reasonable to do so?

Section B: What are the results?

What are the overall results of the review?

How precise are the results?

Section C: Will the results help locally?

Can the results be applied to the local population?

Were all important outcomes considered?

Are the benefits worth the harms and costs?