UNIVERSIDAD DE CONCEPCIÓN
FACULTAD DE EDUCACIÓN
PEDAGOGÍA EN INGLÉS

CREATION AND VALIDATION OF A CLASSROOM MANAGEMENT QUESTIONNAIRE

SEMINARIO PARA OPTAR AL GRADO DE LICENCIADO EN EDUCACIÓN

Profesor Guía : Dr. Claudio Díaz Larenas
Seminaristas : Georgina González Toledo
Lucas Jara Ramírez
Javiera Muñoz Parra

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Acknowledgements

As a group

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Content index

Abstract..... **14**

Resumen..... **15**

Chapter I: Introduction..... **16**

1.1. Statement of the problem..... 18

1.2. Thesis organization..... 18

Chapter II: Theoretical framework..... **20**

2.1. Concept of classroom management..... 21

2.1.1. Classroom management in Chile..... 22

2.2. Advantages of including classroom management in the teaching practice..... 23

2.2.1. Examples of classroom management techniques..... 24

2.2.1.1. Giving clear instructions..... 24

2.2.1.2. Concept check questions (CCQs)..... 24

2.2.1.3. Modelling..... 24

2.2.1.4. Monitoring..... 25

2.2.1.5. Praising..... 25

2.2.1.6. Setting up the room for specific activities..... 25

2.2.1.7. Varying teacher positions..... 25

2.3. Teachers' beliefs and classroom management practices..... 25

2.4. Research on classroom management..... 26

2.4.1. Historical review of classroom management questionnaires..... 27

2.4.1.1. Appraisal of classroom management instruments..... 30

2.5. The need of an updated and modern questionnaire on classroom management practices..... 31

2.5.1. The structure of the CMQ..... 32

2.5.1.1. Discipline dimension..... 32

2.5.1.1.1. Inside the classroom.....33

2.5.1.1.2. Outside the classroom.....33

2.5.1.2. Teaching and learning dimension..... 33

2.5.1.2.1. Organization of the lesson..... 34

2.5.1.2.2. Interaction during the lesson..... 34

2.5.1.3. Personal dimension..... 34

2.5.1.3.1. Teacher-student personal communication.....34

2.5.1.3.2. Psychological and social classroom environment.....35

Chapter III: Research design..... 36

3.1. Type of study.....37

3.2. Objectives..... 37

3.2.1. General objective..... 37

3.2.2. Specific objectives.....37

3.3. Research variables..... 37

3.4. Research participants..... 38

3.4.1. Demographic information.....38

3.5. Instrument..... 41

3.6. Procedure.....42

3.7. Type of statistical analysis.....42

3.7.1. Delphi technique.....43

3.7.2. Fleiss' Kappa technique.....43

3.7.3. Cronbach's Alpha.....44

Chapter IV: Data analysis and discussion…….46

4.1. Results by specific objectives…….. 47

4.1.1. Specific objective 1: To validate the CMQ using two member checking techniques (Delphi and Fleiss' Kappa)……..... 47

4.1.1.1. Delphi technique applied to the CMQ…… 47

4.1.1.1.1. Discipline dimension analysis…….....48

4.1.1.1.2. Teaching and learning dimension analysis……..... 49

4.1.1.1.3. Personal dimension analysis…….....51

4.1.1.2. Fleiss' Kappa applied to the CMQ……..53

4.1.1.2.1. Discipline dimension analysis…….....53

4.1.1.2.2. Teaching and learning dimension analysis…….. 55

4.1.1.2.3. Personal dimension analysis……57

4.1.2. Specific objective 2: To estimate the CMQ internal consistency using the Cronbach's Alpha technique……..58

4.1.2.1. Cronbach's Alpha applied to the CMQ……..……58

4.1.2.1.1. Discipline dimension analysis…….....59

4.1.2.1.2. Teaching and learning dimension analysis…….....59

4.1.2.1.3. Personal dimension……59

4.1.2.1.4. Cronbach's Alpha analysis per item…….....60

4.1.3. Specific objective 3: To describe participants' views on classroom management techniques once applied the pilot test of the CMQ…….63

4.1.3.1. Mean scores and standard deviation (SD)…… 63

4.1.3.1.1. Discipline dimension.....63

4.1.3.1.2. Teaching and learning dimension…….. 65

4.1.3.1.3. Personal dimension……66

Chapter V: Conclusions……...68

5.1. Limitations…… 71

5.2. Further research…… 71

Chapter VI: Bibliography…….....73

Appendix…….....82

Figure index

Figure 1. Age range of participants……...38

Figure 2. Number of participants for each one of the age ranges……38

Figure 3. Participants' sex…….. 39

Figure 4. Number of participants by sex…….. 39

Figure 5. Grade levels in which participants teach……40

Figure 6. Number of participants by type of school…… 40

Figure 7. Participants' years of experience……..41

Figure 8. Landis & Koch (1977) Kappa's Benchmark scale……..44

Figure 9. George & Mallery's (2003) scale……....45

Figure 10. Sample of *Rúbrica de evaluación de pares*……..47

Figure 11. Mean score per item for the Discipline dimension ……48

Figure 12. Changes made to items #6, #15, #16, #20……...49

Figure 13. Mean score per item for the Teaching and learning dimension…… 50

Figure 14. Changes made to item #39…….. 51

Figure 15. Mean score per item for the Personal dimension…… 52

Figure 16. Fleiss' Kappa coefficient results for the Discipline dimension……...54

Figure 17. Fleiss' Kappa coefficient results for the Teaching and learning dimension…….. 56

Figure 18. Fleiss' Kappa coefficient results for the Personal dimension…… 57

Figure 19. Internal consistency of CMQ (overall instrument)……58

Figure 20. Internal consistency of CMQ per dimension (Discipline)…… 59

Figure 21. Internal consistency of CMQ per dimension (Teaching and learning)…….59

Figure 22. Internal consistency of CMQ per dimension (Personal)…….. 60

Figure 23. Correlation of CMQ's items…….. 60

Figure 24. Discipline dimension mean score for the CMQ…… 64

Figure 25. Mean and standard deviation scores for the CMQ (Discipline dimension)……. 64

Figure 26. Teaching and learning dimension mean score for the CMQ……. 65

Figure 27. Mean and standard deviation scores for the CMQ (Teaching and learning dimension)…… 66

Figure 28. Personal dimension mean score for the CMQ…….. 66

Figure 29. Mean and standard deviation scores for the CMQ (Personal dimension)…….…… 67

List of abbreviations

BDI	—	Beliefs on Discipline Inventory
CCQ	—	Concept Check Question
CMQ	—	Classroom Management Questionnaire
ICMS	—	Inventory of Classroom Management Style
PCI	—	Pupil Control Ideology
QCME	—	Questionnaire on Classroom Management in Early Childhood Education
SD	—	Standard Deviation

Abstract

Classroom management is a permanent concern and challenge for teachers. Good classroom management practices are critical to facilitate effective learning. For these reasons, researchers are continuously exploring ways to measure this construct from different perspectives. One of the resources used to gather relevant data are questionnaires. Although there exists a wide range of them, there is not an updated and holistic questionnaire that includes new insights and current topics (e.g., social networks) related to classroom management.

This study aims to create and validate a new classroom management techniques questionnaire. To elaborate the instrument, a variety of techniques was selected from different sources. To validate it, items were assessed by experts in the field. After the application of two member checking techniques, namely Delphi and Fleiss' Kappa, a series of changes was made in some of the items. Then, a pilot test conducted among teachers of English and preservice teachers yielded an excellent Cronbach's Alpha giving as a result a highly reliable questionnaire. Finally, an examination of the participants' responses revealed that the years of experience of participants influenced the tendency of their responses.

Key words: Classroom management, classroom management techniques questionnaires.

Resumen

El manejo de aula es una preocupación y un desafío permanente para los profesores. Buenas prácticas de manejo de aula son vitales para facilitar un aprendizaje efectivo. Por estas razones, los investigadores están continuamente explorando formas de medir este constructo desde diferentes perspectivas. Uno de los recursos usados para recolectar datos relevantes son los cuestionarios. Aunque existe una amplia gama de ellos, no existe un cuestionario actualizado y holístico que incluya nuevas perspectivas y temas actuales (por ejemplo, redes sociales) relacionados con el manejo de aula.

Este estudio tiene como objetivo crear y validar un nuevo cuestionario de técnicas de manejo de aula. Para elaborar este instrumento, se seleccionó una variedad de técnicas de diferentes fuentes. Para validarlo, los ítems fueron evaluados por expertos en el campo. Después de la aplicación de dos técnicas de evaluación de pares, a saber Delphi y Fleiss' Kappa, una serie de cambios fueron realizados en algunos de los ítems. A continuación, una prueba piloto se aplicó a profesores de inglés y profesores principiantes arrojando un excelente Alfa de Cronbach dando como resultado un cuestionario altamente confiable. Finalmente, un examen de las respuestas de los participantes, reveló que los años de experiencia de los participantes influían en la tendencia de sus respuestas.

Palabras clave: Manejo de aula, cuestionarios de técnicas de manejo de aula.

Chapter I: Introduction

Classroom management is a matter of concern among teachers everywhere. This is partly due to the fact that it is a broad concept; it covers most aspects of teaching practice, and as such, it can be complex for teachers to master.

Gordon (2001) for example indicates that managing a classroom can be a critical challenge for teachers, especially for beginners. Being the first professional activity to be developed, classroom management is assumed as part of teachers' duties and one of their main responsibilities (Marzano, Marzano & Pickering, 2003). However, classroom management is far from being a cause of distress just for novice teachers. According to Okutan (2005) to manage a classroom can be problematic even for experienced teachers. Due to rapid cultural changes, teachers need to be constantly updated and aware of external conditions which may change students' attitudes towards learning, discipline and interaction in the classroom.

Hence, it is of high relevance for both teachers and other stakeholders to identify the classroom management techniques teachers use or are more likely to use. This can be helpful for a number of reasons, so as to be aware of the techniques teachers tend to use mostly and to identify patterns of behaviour; to find out which ones are more effective; to identify teachers' beliefs behind their actions inside and outside the classroom; and one of the most relevant, to enable pedagogical reflection by making teachers conscious of their teaching process in order to identify weaknesses and strengths and possible modifications of their practices.

In fact, "in recent years, classroom management has received an increasing amount of attention from education leaders, reformers, and researchers, who have begun to investigate, analyse, and document the effective strategies used by successful teachers" (Edglossary.org, 2014). At the end of the quotation it is clearly stated the key points and true reasons why it is important to research into classroom management. "The growing emphasis on classroom management is based on the general recognition that effective instruction requires effective classroom management, and that strong management skills are the foundation of strong teaching" (Edglossary.org, 2014).

1.1. Statement of the problem

One of the main tools that contributes to the effective investigation of classroom management is questionnaires. Researchers use them widely and frequently to collect relevant data with the purpose of reaching and supporting their findings. It is important then, to count on reliable and valid questionnaires which reflect on current views about classroom management. Looking into old and new instruments utilized for different types of research on classroom management practices and teachers' beliefs behind those practices, it was uncovered that even though there exists an array of them, one of their weaknesses is a lack of updating. For example, most of the instruments do not include current topics such as social networks, parental involvement, or new findings and understandings of the topic. Indeed, a number of questionnaires which do include recent views on classroom management are addressed specifically to teachers who teach kids, not to teachers of English in general. Therefore, there are no recent instruments that deal with classroom management techniques used specifically by teachers of English, making the creation of a questionnaire on this area paramount.

1.2. Thesis organization

The following research aims to *the creation of an instrument* to determine the classroom management techniques used by teachers of English. The research was organized into four main sections: (1) the elaboration of the instrument, based on the current literature and previous classroom management questionnaires; (2) the validation of the instrument through member checking; (3) the application of the questionnaire on teachers of English; (4) the analysis of the collected questionnaires to validate the instrument through the results obtained.

In **Chapter two**, the theoretical framework is presented. In this chapter, there is a revision of the literature consulted during the current research. This section is divided into five main topics. Firstly, the term *classroom management* is conceptualized, explaining what this concept covers and making a contextualization of how classroom management is conceived in the Chilean educational system. Secondly, the advantages of having and applying a good variety of classroom management techniques in the teaching practice are

presented, alongside a list of some of the main classroom management techniques. Thirdly, it is explained how teachers' beliefs influence their acts when choosing which classroom management techniques they will use. Fourthly, a quick review of research on classroom management and of the previous instruments related to classroom management techniques is made with an appraisal of their strengths and weaknesses. Fifthly and finally, it is expressed the reasons why an updated questionnaire on classroom management practices is needed, with a quick description of the new instrument and an explanation of its component dimensions.

In **Chapter three**, the research design is organized. Under this chapter, the type of research conducted is explained, alongside the elements related to the research itself. The general and specific objectives are stated. The research variables and the participants are described. Furthermore, the procedure followed through the research is detailed, as well as the description of the instrument created. Finally, the type of data analysis conducted is presented.

In **Chapter four**, the results obtained from the data collected are reported. In this part, statistical analysis is shown for each one of the specific objectives previously stated: Delphi and Fleiss' Kappa analysis dealing with the first specific objective; Cronbach Alpha for the second and third specific objectives. Additionally, there is also a discussion of the results obtained.

In **Chapter five**, conclusions are drawn. Furthermore, the limitations faced during the conduction of the research are commented, and reference is made to the possible researches that can be approached in future studies.

Chapter II: Theoretical framework

2.1. Concept of classroom management

What is the first word that comes to teachers' minds when hearing the term classroom management? Teachers typically answer with words such as control, order, and discipline. One of the possible reasons for such responses is the fact that discipline issues are the main problem that teachers face and it is rated consistently as a leading cause of teachers' stress and burnout (Lewis, Romi, Qui, & Katz, 2005). However, it would be inappropriate to consider classroom management as only related to discipline.

The concept of classroom management has been widely defined and every author explains it from a different perspective. According to Edglossary.org (2014),

> "a limited or more traditional interpretation of effective classroom management may focus largely on *compliance*—rules and strategies that teachers may use to make sure students are sitting in their seats, following directions, listening attentively, etc.—a more encompassing or updated view of classroom management extends to everything that teachers may do to facilitate or improve student learning, which would include such factors as behaviour (a positive attitude, happy facial expressions, encouraging statements, the respectful and fair treatment of students, etc.), environment (for example, a welcoming, well-lit classroom filled with intellectually stimulating learning materials that's organized to support specific learning activities), expectations (the quality of work that teachers expect students to produce, the ways that teachers expect students to behave toward other students, the agreements that teachers make with students), materials (the types of texts, equipment, and other learning resources that teachers use), or activities (the kinds of learning experiences that teachers design to engage student interests, passions, and intellectual curiosity)".

Therefore, there are several other aspects that the concept of classroom management covers, besides discipline. In short, classroom management can be seen as all the actions a teacher performs inside a school in order to enable learning to happen. Classroom management can be conceived thus as all the educational decisions teachers make (Marzano, Marzano & Pickering, 2003).

Such understanding of the concept gives a central role to students and takes the focus off the teacher as an element of control inside the classroom. This is due to the fact that all those actions or decisions teachers make enable students to learn effectively. Then, classroom management is viewed as a condition for student learning, by allowing teachers to accomplish other important instructional goals (Kounin & Sherman, 1979; Garrett, 2015). On this same line, Marzano (2003) suggests that classroom management is the foundation for all student achievement. It includes all the teacher's actions taken to create an environment that supports and facilitates academic and social–emotional learning. (Evertson & Weinstein, 2006; Brophy, 2006).

2.1.1. Classroom management in Chile

As previously stated, classroom management is seen for most teachers as both a concern and a challenge. Although it represents the most significant difficulty to be overcome when a teacher first begins to teach (Marzano, 2003), it can be a problem even for experienced teachers (Okutan, 2005).

For Chilean teachers, perceptions are not different. According to the technical report of MIDE UC (Mahias, Rodríguez, Maira, González, Cabezas & Portigliati, 2016), the results of the portfolio of 750 teachers that have participated since 2002 in the program entitled *Asignación de Excelencia Pedagógica* identify the ability to manage the classroom as one of the main weaknesses.

Directly connected to the teacher's classroom management practices are two out of the four domains of the *Marco para la Buena Enseñanza*. One of them deals with the fostering of a favourable environment to learn, highlighting how important the quality of interactions within the classroom is, which contributes to display confidence and respect, thus, promoting constructive rules of behaviour and spaces of organized and enriched learning (Marco para la Buena Enseñanza, 2008).

The other domain related to classroom management points that teaching has to be intended to all students' learning. It is highly appreciated and expected the teachers' ability to plan interesting and productive contexts and situations taking

into account students' background knowledge that naturally elicits inquiry and meaningful learning. To achieve this parameter, it is also required that the teacher gets involved his/herself as a person and explains clearly what is expected from her/his students. In this domain it is also important that teachers monitor students' learning in order to be aware of their own practice and to make adjustments if needed (Marco para la Buena Enseñanza, 2008).

It is noticed then that classroom management is of high importance to the Chilean state since it is regarded as the main element to be present in an effective teacher. Therefore, it is expected that teachers fulfil these requirements in order to achieve bonuses and salary increases based on their performance in these and other aspects of their teaching practice.

2.2. Advantages of including classroom management in the teaching practice

Stronge (2002) states that effective teachers do not leave management to chance, but plan, prepare, and organize their classroom management with the same care that they give to the design of their lesson plans. Therefore, it can be inferred that an effective teacher does not only deal with preparing a good lesson plan but also with having a good classroom management environment.

According to Evertson & Weinstein (2006) effective teachers organize their classrooms in order to avoid most behaviour problems and, thus, do not have to worry about discipline very often. This demonstrates that a good reflection on practices and a carefully-prepared classroom management plan helps enormously in terms of treatment of behavioural issues that could arise. Furthermore, when teachers do not have a classroom management plan, lessons are clearly disorganized, affecting directly students' learning.

According to Edglossary.org (2014), "poorly designed lessons, uninteresting learning materials, or unclear expectations could contribute to greater student disinterest, increased behavioural problems, or unruly and disorganized classes".

2.2.1. Examples of classroom management techniques

There exists a wide range of techniques that a teacher can utilize for effective classroom management. However, not every teacher applies the same techniques when managing a classroom. Actually, nearly all teachers know how and when to use most of the classroom management techniques, but they can decide to use some more often than others.

Teachers make these decisions daily according to the type of students, the school context, the aim of the lesson, the type of activities and, more importantly, depending on their own beliefs. Below are some well-known techniques that every teacher has used at least once during his/her professional life.

2.2.1.1. Giving clear instructions

Giving clear instructions is the key in any effective teacher. Poor instructions can lead to misbehaviour, because students get confused and are not able to follow the tasks provided. Therefore, it is very important for any teacher to be clear and precise when giving instructions since clear and comprehensive instructions will highly reduce disruption and interruptions in the classroom (Rhalmi, 2010).

2.2.1.2. Concept check questions (CCQs)

After giving instructions, it is very important to check if students have understood what they have to do. In order to do it, CCQs exist so that the teachers make sure instructions have been clearly understood.

2.2.1.3. Modelling

Modelling consists of the teacher showing the students what they are expected to do in a certain task or activity. This can be done before the activity starts through a dramatization of the steps performed by the teacher him/herself, the teacher with a student (as for example, activities intended to be performed in pairs) or asking a student to demonstrate in front of the class how the activity should be done.

2.2.1.4. Monitoring

Monitoring refers to the observation of students learning to check if they are doing the task correctly in order to identify areas of strength and weakness (Darn, 2006).

2.2.1.5. Praising

Praising is about recognizing students' work and behaviour. This practice is very important when managing the classroom, because students feel motivated, participating more actively in the lessons (Scrivener, 2012).

2.2.1.6. Setting up the room for specific activities

Arranging the classroom according to the type of activities and aim of the lesson is a very useful technique that every effective teacher uses. It helps teachers to get student's attention and improves the classroom atmosphere (Scrivener, 2012).

2.2.1.7. Varying teacher positions

Teachers' position plays an essential role when managing a classroom. Among the benefits of changing positions in the classroom it is found: a better interaction with students and engaging and keeping students on task (Scrivener, 2012).

2.3. Teachers' beliefs and classroom management practices

According to Bandura (1986), an individual's decisions throughout his/her life are strongly influenced by his/her beliefs, and teachers are not the exception. Savasci-Acikalin (2009, p. 7) states that "teacher beliefs are mostly consistent with their practice". Therefore, it is possible to say that teachers behave inside a classroom working under their own sets of beliefs about learning. This behaviour, ruled by their beliefs, affects the classroom management techniques they use, and the likelihood they have of using them. According to Glickman & Tamashiro (1980), "teachers hold hypotheses about discipline, and […] they desire to behave toward students in ways to validate or reject their hypotheses" (p. 460).

However, according to research conducted by the same author Savasci-Acikalin (2009), it is stated that other elements may influence classroom management

practice when it is said that “teacher education and teacher background, school community including administrator, parent and student perspectives and other factors such as the need to cover curriculum and preparing students on exams are some of the possible factors that may influence teacher classroom practice as well as teachers’ beliefs about teaching and learning” (p. 8).

Despite the fact previously stated, and assuming the other factors mentioned above are relevant, it seems that teachers’ beliefs are the prime element which influences teachers’ actions regarding classroom management practices. Teachers’ beliefs determine what they do inside and outside the classroom. As the same author admits at the end of her work, “the relationship between teacher beliefs and practice is controversial; regardless, beliefs ultimately connect to teaching practice” (Savasci-Acikalin, 2009, p. 10-11)

2.4. Research on classroom management

Studies in the field started around 1950’s and 1960’s by researchers such as Flanders and Medley, and in the 1970’s and 1980´s by exponents such as Brophy (1979, 1981, 1983), Anderson, Evertson & Emmer (1980). They drew their conclusions based on observational research, aiming to identify predictors of teacher effectiveness. They found out that one of these predictors was “a set of behaviours and characteristics connected to the teacher’s ability to organize and manage time use, classroom activities, and student engagement” (Emmer & Sabornie, 2015, p. 4).

Later on, other researchers built on this basis and used both “systematic observation and a broader array of methodologies influenced by the qualitative research paradigm” (Emmer & Sabornie, 2015, p. 4), including observation of videotapes. Using this combination of research techniques, Kounin (1970), Gump (1982), and others recognized the effectiveness of group management and organizing and maintaining the classroom environment (Emmer & Sabornie, 2015). Other findings using this kind of research led to understand the importance of the teacher’s role at the beginning of the year and a multidimensional perspective on management tasks.

Other studies began to recognise classroom management as a school-wide concern where administrators, teachers, and other members of the school should be involved. Prevention would be the main element of effective management and intervention in the case of students whose prevention is insufficient. These ideas are connected with the findings of other researchers who consider children's social and emotional development as an important component of classroom management. The reason is stated by Emmer & Sabornie (2015, p. 5) by these words, "children learn communication skills, how to deal with emotions, and how to solve problems as part of their school's classroom management program".

More recent researchers study the influence on classroom management of teacher–student relationships, the use of intrinsic and extrinsic reinforcement, and teacher stress and anxiety (Pianta, 2006). Contemporary research is increasingly growing based on these last assumptions (Emmer & Sabornie, 2015).

For purposes of data gathering in studies of classroom management practices, questionnaires are one of the essential tools frequently used by researchers. Being aware of this need is that some researchers have created their own instruments of data collection or have used some designed by other stakeholders immersed in the field.

2.4.1. Historical review of classroom management questionnaires

The first attempt to measure classroom management practices was made by Willower, Eidell, & Hoy (1967) with the *Pupil Control Ideology* (*PCI*) scale. The *PCI* form, as described by Hoy (2001) is a 20-item Liker-type scale with 5 response categories for each item ranging from strongly agree to strongly disagree. This inventory is based on an ideological continuum going from custodial (more controlling; teacher does not attempt to understand student's misbehaviour) to humanistic (less controlling; teacher believes student can learn to be a self-regulating individual). This questionnaire aimed to measure the degree to which a teacher ideology is custodial or humanistic. Higher scores mean a more custodial tendency whereas lower scores mean a more humanistic attitude.

As evident, in the early stages of conceptualizing and measuring classroom management, the aspects related to discipline and rules were the predominant elements and the essential way of understanding it. Also, it was clear that teachers' beliefs were what determined teachers' actions and attitudes towards students.

Later on, Wolfgang & Glickman (1986) conceived another framework to explain teachers' beliefs toward classroom management, again, being its discipline dimension the one which predominated. This framework was the basis for the *Beliefs on Discipline Inventory* (*BDI*). It consists of three parts: prediction items (3 questions), forced choice items (12 questions) and self-scoring and interpretation (3 steps). This last part includes comparing results of the forced choice part with the predictions made in part 1. Similarly to the *PCI* form, it is based on a teacher-student control continuum which illustrates three approaches to classroom interaction: non-interventionists (low teacher control – high student control), interventionists (high teacher control – low student control) and interactionalists (equal teacher control – equal student control.) This instrument was intended for teachers to reflect on possible discrepancies between teachers' hypotheses regarding their own approaches to discipline shown in part 1 (prediction items) and their actual beliefs shown in part 2 (forced-choice items). Wolfgang & Glickman's (1986) assumption is that teachers believe and act according to the three models of discipline mentioned above, but usually one predominates.

At this stage, there has not been an attempt to broaden the construct of classroom management and to stop narrowing it down to just one aspect of it, namely discipline. So far, according to Martin & Baldwin (1993), "although a large body of discipline research using the *PCI* and the *BDI* exists, little has been done regarding the broader concept of classroom management" (p. 6). These same authors would change this view soon.

In 1993, Nancy Martin and Beatrice Baldwin presented a new questionnaire based on premises of the both previously described *Pupil Control Ideology* form and *Beliefs on Discipline Inventory*. It was called *Inventory of Classroom Management Style* (ICMS). It used the same *BDI*'s continuum from most non-

interventionist approach to most interventionist approach with a mid-point (interactionalist approach).

The *ICMS* has 48 Likert-type items and the idea of its format was taken from the *PCI* questionnaire, but with different descriptors (instead of strongly agree to strongly disagree, it goes from describes me very well to describes me not at all). The novelty of this instrument unlike its predecessors was the holistic point of view regarding classroom management, grouping items into three dimensions: Person, Instruction and Discipline. The focus was removed from discipline, considering classroom management as "multi-faceted construct […] a broad, umbrella term that includes, but is not limited to, discipline concerns" (Martin & Baldwin, 1993, p. 4).

Then, one year later, Nault (1994) created an inventory called *Questionnaire on Classroom Management in Early Childhood Education (QCME),* being not that general as the previously described questionnaires, but addressed specifically to teachers who teach young children. It is formed by 100 items distributed unequally within four dimensions related to planning, organization, intervention and evaluation. This instrument uses a Thurstone scale (from 0 to 10) which permits ten possible responses indicating different degrees of agreement and disagreement with the items formulated.

More than a decade later, Pearson Education Canada Inc. (2005) launched an updated version of *Beliefs on Discipline Inventory* with a quite similar name: *Beliefs about Discipline Inventory*. This questionnaire does not present the three parts that had its predecessor (*BDI*), but only one section which resembles part 2 of the earlier version of the inventory leaving just the part of forced choices, rewording the same 12 statements with dichotomous answer (a or b).

Jeana Fowler and Onur Sarapli developed a questionnaire in 2010 called *Preferred Teacher's Management Styles*, with 20 statements grouped unequally into two dimensions: intrinsic characteristics (emotional component) and extrinsic characteristics (discipline component) of the ideal classroom manager. The possibilities of responses range from not important to very important (Fowler & Sarapli, 2010).

More modern inventories include the one developed by Webster-Stratton (2012) to assess teachers' performance when applying a training program with young children. The *Teacher Classroom Management Strategies Questionnaire* has four sections with different scales for each one. It has very specific and comprehensive items intended to find out the usefulness and frequency of use of a variety of classroom management techniques, supposedly applied by teachers who are taking the course, especially those related to discipline, work with parents and planning.

The most recent instrument found is the one developed by Awad (2016). A simple 14-item questionnaire to measure teachers' views on their classroom management competencies and their views on the quality of their pre-service training and the in-service support from their schools. The Likert-type scale ranges from strongly agree to strongly disagree.

2.4.1.1. Appraisal of classroom management instruments

One of the weaknesses detected in some of the inventories analysed is the language used to formulate the items. Let us take the case of the *PCI* form. There are just 2 out of the 20 items which convey a positive sense when reading it. The remaining 18 items convey a quite negative message, almost violent when referring to student misbehaviour and persistently highlighting discipline and order, which obviously would not depict current views on classroom management. It may be evident enough for teachers what responses are expected from them, even though the questionnaire is anonymous, likely obtaining unreliable answers.

Like the *PCI* form, the *BDI* is highly focused on disciplinary aspects without taking into account that interaction with students implies a lot more than just that area. Noteworthy is the inventory's layout, especially part 2, where dichotomous statements force teachers to decide between two extreme views, leaving no room to intermediate positions. Another flaw is the absence of categories or dimensions. In some instruments there is not a guiding or logical thread within items. Meanwhile, inventories that do include these aspects do not have items organized into categories or dimensions, resulting in mixed questions, which

seem disconnected, as loose statements referring almost entirely to discipline aspects, leaving aside other important areas of classroom management. This is especially true in the case of instruments with few questions.

On the other hand, some of the modern instruments described, which make a contribution adding more characteristics than just the discipline area, suffer from being either too long – as it is the case of Nault's (1994) *QCME* inventory with 100 items – or too short – the most recent questionnaire found developed by Awad (2016) with just 14 items.

2.5. The need of an updated and modern questionnaire on classroom management practices

Life at school involves a variety of aspects. Classroom management, as it has already been said, involves almost all teachers' actions. Taking into account the historical background reviewed, it has made evident the need of a new instrument which depicts better our times and the current understanding of the classroom management construct.

In this research, ideas were taken from the analysis of the instruments described in the previous section, trying to bring out the best of each one and mixing some of their main characteristics. Likewise, other conceptualizations and techniques were obtained from specialized literature on the classroom management field.

In this study, it has been created a Likert-type questionnaire with a scale from rarely to usually and 60 items distributed equally within three main dimensions which, at the same time, have two subdimensions each. This model was inspired by the *Inventory of Classroom Management Style*'s structure (Martin & Baldwin, 1993), which includes a modern and broad view on classroom management reflected on the division of its dimensions (Person, Instruction and Discipline).

The number of items was decided in the premise of what seemed feasible in terms of turnaround times. The questionnaire had to be neither too long nor too short. Considering that one of the questionnaires analysed has 100 items and other as few as 12, it was decided that 60 items was reasonable. Items have been chosen from multiple sources as it is explained later. Some of them have been

adapted, others reworded, and others have been created based on the introduction of new technologies, Internet and social networks into the classroom (not included in none of the instruments examined).

2.5.1. The structure of the *Classroom Management Questionnaire* (*CMQ)*

The three dimensions and subdimensions that comprise the structure of the Classroom Management Questionnaire are described explaining the rationale that supports the choice of every one of them.

2.5.1.1. Discipline dimension

The Discipline dimension entails those actions that teachers decide to use to set standards for behaviour and to enforce those standards. In addition, discipline involves students submitting to practical and procedural rules that ensure the order necessary for learning to occur (Martin & Baldwin, 1993; MacAllister, 2013). Discipline is an essential element of schools around the world, and effective discipline practices are necessary to maintain classroom order, promote student learning, and ensure the safety of students and teachers (Mayworm & Sharkey, 2014). This dimension covers:

2.5.1.1.1. Inside the classroom

Discipline inside the classroom deals with rule setting and the acknowledgement for appropriate and inappropriate behaviour. On the one hand, rule setting is related to who sets the rule, the importance of rules and rule negotiation. On the other hand, the acknowledgement for appropriate and inappropriate behaviour deals with handing of non-compliance, disruptions and types of praising and rewards (Martin & Baldwin, 1993). Effective classroom management requires the creation of a classroom culture in which both teachers and students cooperate and accept responsibility for individual and group behaviour (Edwards, 1993).

2.5.1.1.2. Outside the classroom

Meanwhile, the idea of discipline outside the classroom, deals mostly with teacher-parents communication. Practices consistent with parents appear to have the potential to expose students to the values, behaviours and skill sets that are needed to comply with schools' standards of behaviour. For example, students not only learn but also have an opportunity to practice reasoning, negotiation and problem solving skills. In addition, they gain confidence from interacting with authority figures (Milne & Aurini, 2015).

Additionally, outside the classroom also involves practices such as assigning students to other stakeholders of the school community in order to deal with misbehaviour.

2.5.1.2. Teaching and learning dimension

The Teaching and Learning dimension incorporates what teachers do to enable students to learn, such as the establishment and maintenance of classroom routines, physical room arrangement, and the use of time (Martin & Baldwin, 1993). This dimension covers:

2.5.1.2.1. Organization of the lesson

The organization of the lesson is divided into physical environment and time. Physical environment includes territory, seating arrangement and materials, while time involves how to allocate the time and diversions from tasks (Martin & Baldwin, 1993).

2.5.1.2.2. Interaction during the lesson

Interaction during the lesson is divided into (1) classroom routines and transitions, (2) monitoring learning behaviour, which involves keeping students on task, circulating and giving feedback on performance and (3) choosing of learning topic and the purpose of homework (Martin & Baldwin, 1993).

2.5.1.3. Personal dimension

The classroom is not only a setting that provides academic learning but it is an arena in which personality, beliefs concerning one's self-esteem, and values and beliefs about human relationships, are constructed (Dreikurs, Cassel, & Ferguson, 2004).

The Personal dimension includes what teachers believe about students as persons and what they do to enable students to develop as individuals. This includes teacher's perceptions of the general nature of students' abilities, as well as the overall psychosocial climate (Martin & Baldwin, 1993; Soheili, Alizadeh, Murphy, Bajestani & Ferguson, 2015). This dimension covers:

2.5.1.3.1. Teacher-student personal communication

The teacher and student personal communication is an essential element for teacher and learning to occur. Positive student-teacher relationships lead to positive social and academic performance in students (Hamre & Pianta, 2001).

Birch & Ladd (1997) identify a positive student-teacher relationship as an important aspect of a positive classroom environment. According to Pianta (1999), “relationships with teachers are an essential part of the classroom experience for all children and a potential resource for improving developmental outcomes" (p. 21). Such relationships are defined by two types of attributes: conditions, including frequent exchanges, knowledge of student abilities and interests, high expectations, and caring; and results, including trust and emotional bonds (Pieratt, 2011). Leitao & Waugh (2007) summarize these attributes stating that "positive teacher-student relationships are characterized by mutual acceptance, understanding, warmth, closeness, trust, respect, care and cooperation" (p. 3).

2.5.1.3.2. Psychological and social classroom environment

Students and teachers establish relationships and experience community rules in a microcosm of the larger world (Korkmaz & Gumuseli, 2013). The classroom environment is comprised of both physical and psychological aspects, and the psychological one, which includes the classroom atmosphere and community

climate, has been found to have a major influence on what students learn and achieve (Anderson, 1991). The psychological element involves students' perceptions of the classroom environment. Students bring their past experiences and concepts with them to school (Soheili, Alizadeh, Murphy, Bajestani & Ferguson, 2015) and thus have different and idiosyncratic phenomenological reactions to what appears to be a common objective surrounding. For instance, one student may experience a classroom as warm and encouraging, while another experiences it as cold and discouraging (Anderson, 1991).

According to Baek & Choi (2002), the use of students' perceptions while assessing a classroom environment is rooted in Lewin's (1936) *Field Theory* and Murray's (1938) *Needs-Press Model*, which stated that behaviour is a function of reciprocal interactions between a person, such as a student, and an environment, such as a classroom. Indeed, students' perceptions of the classroom environment have a great effect on their academic achievement, satisfaction, and self-regulated learning (Baek & Choi, 2002; Sunger & Gunggoren, 2009).

Chapter III: Research design

3.1. Type of study

This is a non-experimental and descriptive study. It is also cross-sectional, because the data was collected in one specific period of time.

3.2. Objectives

3.2.1. General objective

- To design a questionnaire on the use of classroom management techniques (*Classroom Management Questionnaire [CMQ]*).

3.2.2. Specific objectives

- To validate the *CMQ* using two member checking techniques (Delphi and Fleiss' Kappa).

- To estimate the *CMQ* internal consistency, using Cronbach's Alpha.

- To describe participants' views on classroom management techniques once applied a pilot test of the *CMQ*.

3.3. Research variables

Within this study, classroom management is the main variable and it is understood as *all the educational decisions teachers make* (Marzano, Marzano & Pickering, 2003), including discipline aspects, enablement of effective teaching and learning, and the relationships inside and outside the classroom (teacher–student, student–student and teacher–parents) (Martin & Baldwin, 1993; Hamre & Pianta, 2001; Pieratt, 2011).

3.4. Research participants

3.4.1. Demographic information

The *Classroom Management Questionnaire* was applied to 31 teachers of English. Figure 1 shows the age range of the participants who answered the questionnaire during the application of the pilot test. Meanwhile, Figure 2 provides the number of participants belonging to each one of the age ranges.

Figure 1: Age range of participants

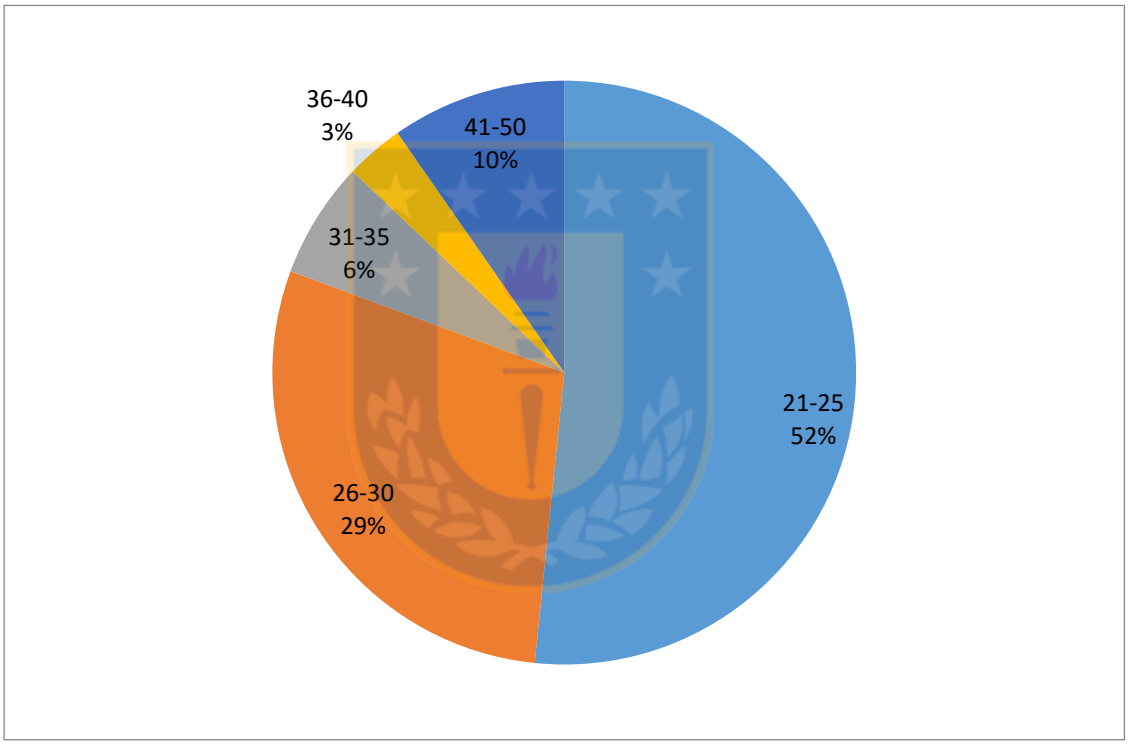


Figure 2: Number of participants for each one of the age ranges

Age Range	N. of participants
21-25	16
26-30	9
31-35	2
36-40	1
41-50	3

As can be noticed, most of the participants do not exceed the thirty years of age, with 81% of them being under that age. A high percentage of the teachers belongs to the first age range, from 21 to 25 years old (teachers recently graduated and those doing their professional practicum). Figure 3 and Figure 4 show participants' sex from a total of 31 subjects.

Figure 3: Participants' sex

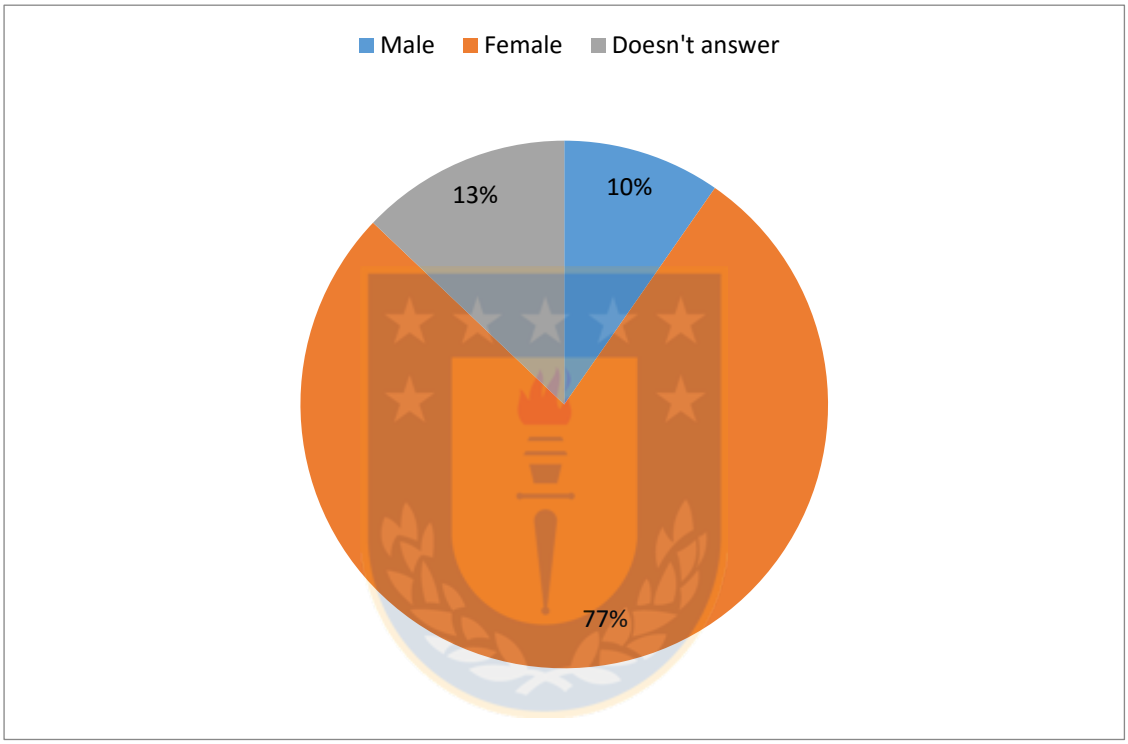


Figure 4: Number of participants by sex

Male	3
Female	24
Doesn't answer	4

Among the total of 31 participants, it is rather noticeable the predominance of female subjects, with 77% of the participants being women.

Figure 5 shows the percentages of school grades in which research participants teach. Most of the subjects who answered the *CMQ* teach in secondary school education. A few of the participants work in two different school levels.

Figure 5: Grade levels in which participants teach

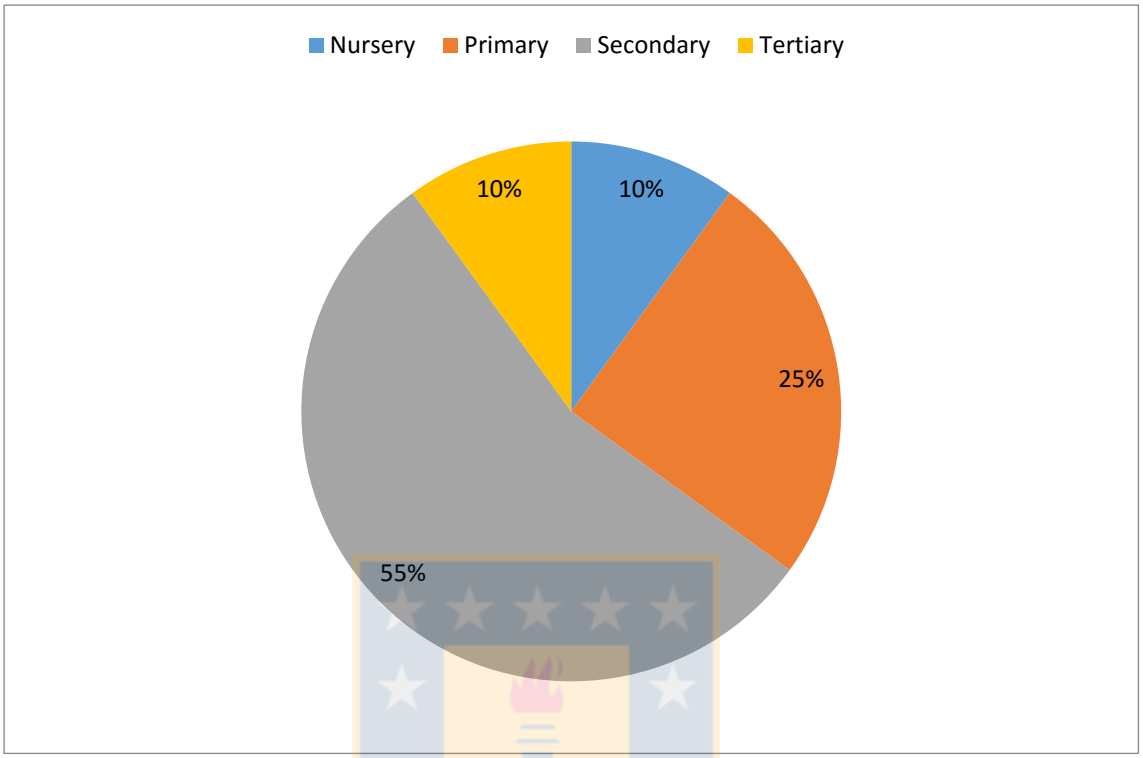


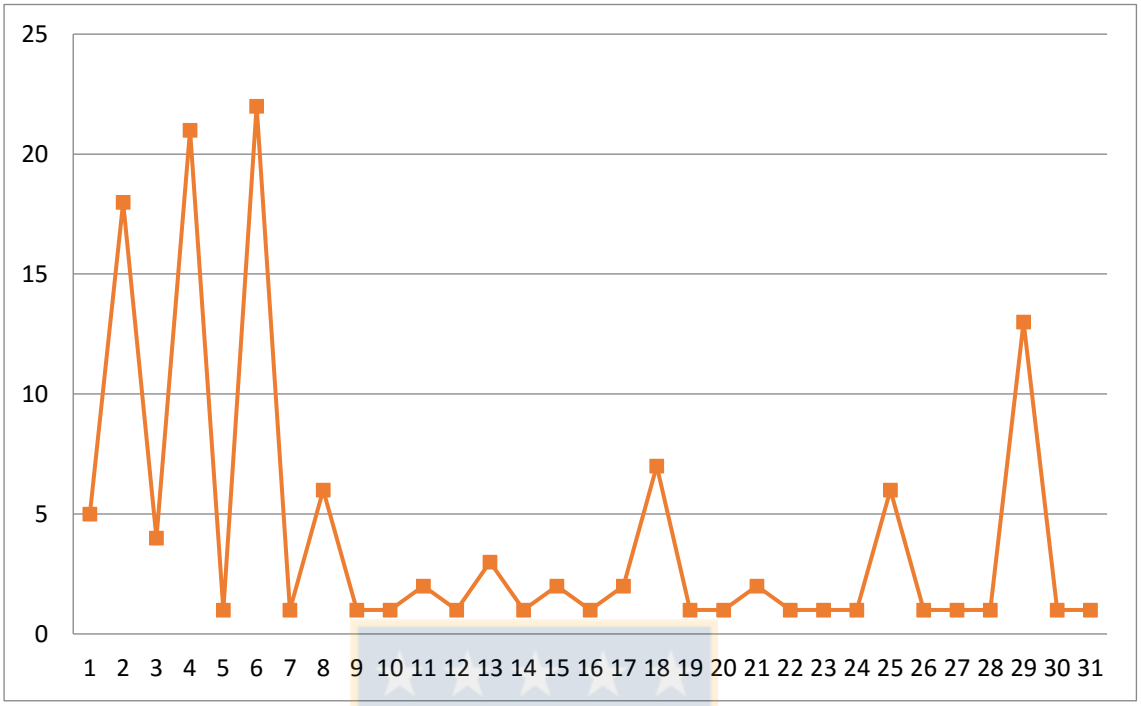
Figure 6 shows the type of school in which participants teach. Most of the subjects work at public schools.

Figure 6: Number of participants by type of school

Public	14
Semi-private	9
Private	8

Figure 7 shows the years of experience the teachers who answered the *CMQ* have. Of the 31 subjects represented in the horizontal axis, only 4 of them exceed 10 years of teaching experience. A big number of participants have a teaching experience below 5 years. However, as mentioned before, it is important to notice that most of the subjects who participated in the study were teachers doing their professional practicum or recently graduated. This information is also related with participants' ages.

Figure 7: Participants' years of experience



3.5. Instrument

The instrument has 60 items splitted into 3 Dimensions: *Discipline, Teaching and Learning* and *Personal.* Each dimension is made up of 20 items. Items were written based on statements adapted or reworded and ideas collected from four different sources. Two of them were questionnaires addressed to teachers who teach young learners. The other two were frequently used classroom management books. Below there are the four sources used in the design of the *CMQ*:

1) Questionnaire on Classroom Management in Early Childhood Education (QCME). (Nault, 1994).

2) Teacher Classroom Management Strategies Questionnaire. (Webster-Stratton, 2012)

3) A Handbook for Classroom Management that works. (Marzano, Foseid, Foseid, Gaddy & Marzano, 2005)

4) Classroom Management Techniques. (Scrivener, 2012)

Every statement, idea or concept that was found relevant or essential to be added in the questionnaire was registered. Some statements which were exclusively applicable to young students were adapted and reworded to make them more general.

3.6. Procedure

At the moment of creating the CMQ researchers followed the steps listed below:

- ✓ Researchers determined the purpose of creating the questionnaire, decided what to measure and stated who they should ask to complete the questionnaire.
- ✓ Researchers determined the appropriate data collection method: face to face and online (social networks).
- ✓ Researchers selected an institutional review board before implementing the questionnaire with the participants.
- ✓ Researchers checked the reliability of the questionnaire, using Delphi and Fleiss' kappa technique.
- ✓ Researchers rewrote the questionnaire, based on the feedback provided by the institutional review board.
- ✓ Researchers applied the questionnaire to the participants.
- ✓ Researchers collected the questionnaires.
- ✓ Researchers checked the validity of the questionnaire using Cronbach's Alpha technique.

3.7. Type of statistical analysis

Validity and reliability are two fundamental elements in the evaluation of a questionnaire. *Validity* is the extent to which an instrument measures what it is intended to measure. *Reliability* is intended to test the overall consistency of an instrument (Tavakol & Dennick, 2011). For this study three statistical techniques were used and are briefly described below.

3.7.1. Delphi technique

The Delphi technique is a widely used and accepted method for gathering data from respondents within their domain of expertise. Three characteristics provided by the use of the Delphi technique are (1) the ability to provide anonymity to respondents, (2) a controlled feedback process, and (3) the suitability of a variety of statistical analysis techniques to interpret the data.

Basically, consensus on a topic can be reached if a certain percentage of the votes fall within a specific range. The major statistics used in Delphi studies are measures of central tendency (means, median, and mode) and level of dispersion (standard deviation and inter-quartile range).

The use of mean scores, based on a Likert-type scale, is strongly favoured. The mean appears to be inherently best suited to reflect the resultant convergence of opinion. It has been suggested that at least 70 percent of Delphi subjects need to rate three or higher on a four point Likert-type scale and *the mean has to be at 3.25 or higher* to reach a consensus on a topic (Hsu & Sandford, 2007).

3.7.2. Fleiss' Kappa technique

Fleiss' Kappa evaluates the concordance or agreement between *multiple raters*. It is a measure of the degree of agreement that can be expected above chance. Agreement can be thought of as follows; if a fixed number of people assign numerical ratings to a number of items, then the kappa will give a measure for how consistent the ratings are.

Landis & Koch (1977) provided one of the most widely used benchmark scales to value the degree of agreement between raters in function of Kappa. Other authors such as Gwet (2012) have supported this benchmark scale.

Figure 8 describes the benchmark scale that Landis & Koch (1977) proposed. It follows from this scale that the extent of agreement can be qualified as *Poor, Slight, Fair, Moderate, Substantial*, and *Almost Perfect* depending on the magnitude of Kappa.

Figure 8*:* Landis & Koch (1977) Kappa's Benchmark Scale

Kappa	Interpretation
< 0	Poor agreement
0.01 – 0.20	Slight agreement
0.21 – 0.40	Fair agreement
0.41 – 0.60	Moderate agreement
0.61 – 0.80	Substantial agreement
0.81 – 1.00	Almost perfect agreement

3.7.3. Cronbach's Alpha technique

This technique is a measure of internal consistency of tests or inventories in order to validate their reliability. It is commonly used in questionnaires with multiple Likert questions whose answers are neither correct nor incorrect, but each surveyed chooses the alternative which best depicts his or her own views on the construct intended to explore. Cronbach's Alpha requires only a single test administration to provide a unique estimate of the reliability for a given test.

Internal consistency refers to the extent to which a set of items in a questionnaire measures the same concept or construct which is intended to measure and therefore it is connected to the inter-relatedness of the items within the test. If the items in an inventory are correlated to each other, the value of Alpha is increased. These values range between 0 and 1 in which 0 means no reliability at all and 1 means total reliability. The closer to 1 is the Alpha value the higher the inventory's reliability.

Figure 9 represents the values more commonly accepted and it is the assessment ranges that have been chosen to be used in this study. According to George & Mallery (2003, p. 231) "the Cronbach's alpha values should be evaluated as indicated below".

Figure 9*:* George & Mallery's (2003) scale.

Alpha	Internal consistency
α ≥0.9	Excellent
0.9> α ≥0.8	Good
0.8> α ≥0.7	Acceptable
0.7> α ≥0.6	Questionable
0.6> α ≥0.5	Poor
0.5> α	Unacceptable

Chapter IV: Data analysis and discussion

4.1. Results by specific objectives

4.1.1. Specific objective 1: To validate the CMQ using two member checking techniques (Delphi and Fleiss' Kappa)

4.1.1.1. Delphi technique applied to the CMQ

The instrument was evaluated by a total of 12 language experts who rated the *clarity, coherence*, and *relevance* of each one of the statements from one to four points in a Likert-type scale. Each classification is understood as follows: *Clarity*: the item is easily understood, that is, its syntax and semantic are appropriate. *Coherence*: the item shows a logic relationship with the aim or indicator it is measuring. *Relevance*: the item is essential or important, that is, it has to be included in the instrument.

The statements were assessed by the raters under the following categories: (1) does not meet the criterion, (2) low level, (3) moderate level and (4) high level, as shown in Figure 10:

Figure 10: Sample of *Rúbrica de Evaluación de Pares*

Ítem	Claridad				Coherencia				Relevancia			
Discipline Dimension: Inside the Classroom	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
1. Involve students in establishing rules and procedures.	1	2	3	4	1	2	3	4	1	2	3	4

The instrument was separated into three dimensions: Discipline, Teaching and learning and Personal in order to analyse it through the Delphi technique.

4.1.1.1.1. Discipline dimension analysis

Figure 11 shows the mean score of the answers provided by the subjects for the items belonging to the Discipline dimension. Figure 11 presents every item with its corresponding result under three different categories: clarity, coherence and relevance.

Figure 11: Mean score per item for the Discipline dimension

#	Item	Clarity mean	Coherence mean	Relevance mean
1.	Involve students in establishing rules and procedures.	3,92	4	4
2.	Share with students the rationale behind the disciplinary approach(s) I use.	3,75	3,83	3,75
3.	Provide special privileges (e.g. special helper, extra computer time, tangible rewards) to students for appropriate behavior.	3,67	3,58	3,58
4.	Warn of consequences for misbehavior (e.g. loss of privileges).	3,75	3,83	3,75
5.	Use class meetings to reflect on bad behavior with students as a group.	3,83	3,92	3,75
6.	Reprimand bad behavior on the spot in a loud voice.	3,58	3,27	3,27
7.	Ignore misbehavior that is non-disruptive to class.	3,75	3,75	3,5
8.	Use short verbal cues to stop misbehavior.	3,67	4	4
9.	Use nonverbal signals to stop misbehavior.	3,67	3,92	3,92
10.	Use self-assessment forms for students to evaluate their own behavior.	3,92	3,83	3,75
11.	Communicate to parents about classroom expectations.	3,58	3,83	3,75
12.	Call parents to report bad behavior.	3,83	3,58	3,5
13.	Call parents to report good behavior.	3,83	3,83	3,83
14.	Send home Teacher-to-Parent Communication letters or newsletters regarding positive and negative aspects of their children's behavior.	3,92	3,83	3,67
15.	Send a student home for aggressive or destructive behavior.	3,63	3,18	3
16.	Send a student to Principal's Office for misbehavior.	3,9	3,45	3,18
17.	Collaborate with parents on a home-school behavior plan.	3,92	3,67	3,67
18.	Teach parents activities to do with students at home to reinforce good behavior at school.	4	3,92	3,67
19.	Inform parents about the policies regarding the use of mobile phones at school.	4	3,83	3,75
20.	Inform parents about how social networks work and their correct use.	3,9	3,45	3,18

As stated previously, the suggested mean for an item to be accepted as appropriate (clear, coherent, relevant) is 3.25 or higher. Therefore, every item was considered as appropriate by the specialized subjects, with the exception of items #15, #16, #20. These three items measured *under the suggested mean* had to be revised in order to fulfil the characteristics of a properly written item. Item #16 and #20 were relocated to enhance the coherence among items within this dimension in order to follow a thread as the participant is reading the questionnaire. Items that narrowly surpassed the suggested mean were also rewritten, as in the case of Item #6. The changes made followed comments and suggestions given by the specialized raters. Most of them suggested writing the pronoun *I* before every item instead of having the pronoun at the introductory statement at the beginning of each dimension, as it was in the first version of the *CMQ*. These changes are illustrated in Figure 12.

Figure 12: Changes made to items #6, #15, #16 and #20

Item	Original statement	Revised statement
#6	Reprimand bad behavior on the spot in a loud voice.	I redirect inappropriate behavior on the spot, using a loud voice.
#15	Send a student home for aggressive or destructive behavior.	I send students home for aggressive or disruptive behavior.
#16	Send a student to Principal's Office for misbehavior.	I send students to the Principal's office for misbehavior (relocated as Item #20).
#20	Inform parents about how social networks work and their correct use.	I inform parents about social networks and their correct use (e.g. "Facebook", "Twitter", "Instagram") (relocated as Item #17).

4.1.1.1.2. Teaching and learning dimension analysis

Figure 13 shows the mean score of the answers provided by the subjects for the items belonging to the Teaching and learning dimension. Figure 13 presents every item with its corresponding result under three different categories: clarity, coherence and relevance.

Figure 13: Mean score per item for the Teaching and learning dimension

#	Item	Clarity mean	Coherence mean	Relevance mean
21.	Take into account different learning styles when preparing the lesson.	4	3,92	3,92
22.	Take into account students' previous knowledge to plan the activities based on their level.	4	3,92	4
23.	Start the day by giving students an opportunity to set their own learning goals.	3,67	3,83	3,42
24.	Arrange my classroom in a variety of ways depending on the type of activity students are assigned to do.	3,75	3,75	3,75
25.	Make sure that the learning goals for the class are clearly stated on the board for students to understand them.	3,83	3,9	3,5
26.	Establish procedures for group work.	3,83	3,83	3,75
27.	Keep different actions oriented toward fulfilling the objectives of the lesson.	3,63	3,72	4
28.	Prepare students for transitions between one activity and another with predictable routines.	3,75	3,92	3,9
29.	Create activities for students to work when they have completed their primary work.	3,72	3,72	3,63
30.	Assign advanced students as assistants to help weaker learners in the completion of their tasks.	3,75	3,92	3,92
31.	Start a lesson in an unusual manner to catch student's attention (e.g. telling an amusing story or personal anecdote; starting in a very quiet or low voice, etc.).	4	3,92	3,83
32.	Model the task to demonstrate what students are expected to do (e.g. demonstrating the task, role playing the task with a student, assigning a student to demonstrate the task, etc.).	4	3,92	3,92
33.	Use check questions to make sure instructions were understood.	3,92	3,92	3,92
34.	Use gestures to make instructions understandable.	4	4	3,92
35.	Keep language simple and clear, trying to pronounce every word well, at a good speed level.	3,58	4	4
36.	Monitor students' work spending equal amounts of time in all quadrants of the classroom.	3,83	3,83	3,83
37.	Respond to students' answers using verbal praising (e.g. "Brilliant!", "Great!", "Nice job!").	3,92	4	3,92
38.	Respond to student's incorrect answers validating student's participation.	3,42	4	4
39.	Offer students guidelines and suggestions to report the group about their completed work.	2,75	3,54	3,54
40.	Finish the class asking student to write a reflection about the lesson.	3,72	3,72	3,63

As stated above, the suggested mean for an item to be accepted as appropriate (Clear, Coherent, Relevant) is 3.25 or higher. Therefore, every item was considered as appropriate by the specialized subjects, with the exception of item #39. The item, which was measured under the mean suggested in terms of clarity, had to be revised in order to fulfil the characteristics of a properly written item. The changes made followed comments and suggestions given by the specialized subjects.

Figure 14: Changes made to item #39

Item number	Original statement	Revised statement
Item #39	Offer students guidelines and suggestions to report the group about their completed work.	I give students instructions on how to report their completed work.

4.1.1.1.3. Personal dimension analysis

Figure 15 shows the mean score of the answers provided by the subjects for the items belonging to the Personal dimension. Figure 15 presents every item with its corresponding result under three different categories: clarity, coherence and relevance.

Figure 15: Mean score per item for the Personal dimension

#	Item	Clarity mean	Coherence mean	Relevance mean
41.	Attempt to be “Me” rather than the “Teacher” to make students feel I am approachable.	3,54	3,72	3,72
42.	Interact with students as individuals.	3,75	3,8	3,8
43.	Use eye contact with students to make them feel I care about what they say and do.	3,92	4	3,92
44.	Learn about the needs of different types of students in my classes.	3,83	4	4
45.	Incorporate personal interests of students into teaching.	3,83	3,92	4
46.	Encourage creativity and self-expression in students.	3,92	4	4
47.	Learn students’ names to recognize them as individuals.	3,92	4	4
48.	Talk with students’ previous teachers to gather information about students.	3,67	3,67	3,58
49.	Notice individual accomplishments and important events in students’ lives.	3,33	3,67	3,67
50.	Call a student after a depressive or anger episode to demonstrate I am personally interested in him/her.	3,67	4	4
51.	Begin the day with activities to reinforce a sense of community among students.	4	3,9	3,9
52.	Encourage students to treat each other with courtesy and respect.	3,92	3,92	3,92
53.	Coach positive social values (e.g. helping, sharing, being patient).	3,92	4	4
54.	Encourage students to reach an agreement through conversations to resolve any issue.	3,92	3,92	3,67
55.	Teach students how to work together cooperatively toward academic goals.	3,83	3,92	3,92
56.	Use problem solving scenarios with students to develop their problem solving skills.	3,75	4	3,92
57.	Incorporate ideas about what responsibility is into my classroom practice.	3,45	3,7	3,7
58.	Promote respect for cultural differences in the classroom.	3,83	3,92	3,83
59.	Help my students to develop metacognition about their inner self.	3,58	3,83	3,58
60.	Train students how to develop assertive behavior to make decisions by themselves.	3,58	3,75	3,67

As stated above, the suggested mean for an item to be accepted as appropriate (Clear, Coherent, Relevant) is 3.25 or higher. Therefore, every item was considered as appropriate by the specialized subjects.

4.1.1.2. Fleiss' Kappa applied to the CMQ

The instrument was evaluated by a total of 12 experts who rated the *Clarity, Coherence,* and *Relevance* of each one of the statements from one to four points in a Likert-type scale. The statements were classified by the raters under the following categories**:** (1) does not meet the criterion, (2) low level, (3) moderate level and (4) high level. The instrument was separated into three dimensions: Discipline, Teaching and learning and Personal in order to analyse it through the Fleiss's Kappa coefficient.

4.1.1.2.1. Discipline dimension analysis

Figure 16 shows the results Fleiss' Kappa coefficient applied to the Discipline dimension. Figure 16 presents every item with its corresponding result under three different categories: Clarity, Coherence and Relevance.

Figure 16: Fleiss' Kappa coefficient results for the Discipline dimension

#	Item	Clarity Kappa	Coherence kappa	Relevance Kappa
1.	Involve students in establishing rules and procedures.	0,83	1	1
2.	Share with students the rationale behind the disciplinary approach(s) I use.	0,59	0,69	0,68
3.	Provide special privileges (e.g. special helper, extra computer time, tangible rewards) to students for appropriate behavior.	0,56	0,46	0,46
4.	Warn of consequences for misbehavior (e.g. loss of privileges).	0,68	0,69	0,59
5.	Use class meetings to reflect on bad behavior with students as a group.	0,69	0,83	0,68
6.	Reprimand bad behavior on the spot in a loud voice.	0,46	0,33	0,43
7.	Ignore misbehavior that is non-disruptive to class.	0,68	0,68	0,54
8.	Use short verbal cues to stop misbehavior.	0,56	1	1
9.	Use nonverbal signals to stop misbehavior.	0,56	0,83	0,83
10.	Use self-assessment forms for students to evaluate their own behavior.	0,83	0,83	0,68
11.	Communicate to parents about classroom expectations.	0,56	0,69	0,59
12.	Call parents to report bad behavior.	0,83	0,56	0,59
13.	Call parents to report good behavior.	0,83	0,83	0,83
14.	Send home Teacher-to-Parent Communication letters or newsletters regarding positive and negative aspects of their children's behavior.	0,83	0,69	0,56
15.	Send a student home for aggressive or destructive behavior.	0,56	0,34	0,28
16.	Send a student to Principal's Office for misbehavior.	0,83	0,45	0,33
17.	Collaborate with parents on a home-school behavior plan.	0,83	0,56	0,56
18.	Teach parents activities to do with students at home to reinforce good behavior at school.	1	0,83	0,83
19.	Inform parents about the policies regarding the use of mobile phones at school.	1	0,69	0,68
20.	Inform parents about how social networks work and their correct use.	0,83	0,46	0,37

As stated above, a Kappa value between 0.41 and 0.60 indicates a moderate agreement level, while ranges of values (0.61 - 0.80) and (0.81 to 1.00) indicate substantial and almost perfect agreement levels respectively. Therefore, according to the Fleiss' Kappa Coefficient applied to the instrument, there exists either a moderate agreement, substantial agreement or almost perfect agreement among raters in every item, with exception of items #6, #15, #16 and #20 which were rated with a fair agreement among experts.

4.1.1.2.2. Teaching and learning dimension analysis

Figure 17 presents the Fleiss' Kappa coefficient results of each item of the Teaching and learning dimension. Figure 17 shows the degree of agreement between raters under three different categories: Clarity, Coherence and Relevance.

Figure 17: Fleiss' Kappa coefficient results for the Teaching and learning dimension

#	Item	Clarity Kappa	Coherence kappa	Relevance kappa
21.	Take into account different learning styles when preparing the lesson.	1	0,83	0,83
22.	Take into account students' previous knowledge to plan the activities based on their level.	1	0,83	1
23.	Start the day by giving students an opportunity to set their own learning goals.	0,51	0,69	0,40
24.	Arrange my classroom in a variety of ways depending on the type of activity students are assigned to do.	0,68	0,68	0,68
25.	Make sure that the learning goals for the class are clearly stated on the board for students to understand them.	0,69	0,83	0,60
26.	Establish procedures for group work.	0,69	0,69	0,59
27.	Keep different actions oriented toward fulfilling the objectives of the lesson.	0,51	0,68	1
28.	Prepare students for transitions between one activity and another with predictable routines.	0,68	0,83	0,56
29.	Create activities for students to work when they have completed their primary work.	0,68	0,68	0,56
30.	Assign advanced students as assistants to help weaker learners in the completion of their tasks.	0,68	0,83	0,83
31.	Start a lesson in an unusual manner to catch student's attention (e.g. telling an amusing story or personal anecdote; starting in a very quiet or low voice, etc.).	1	0,67	0,83
32.	Model the task to demonstrate what students are expected to do (e.g. demonstrating the task, role playing the task with a student, assigning a student to demonstrate the task, etc.).	1	0,83	0,83
33.	Use check questions to make sure instructions were understood.	0,83	0,83	0,83
34.	Use gestures to make instructions understandable.	1	1	0,83
35.	Keep language simple and clear, trying to pronounce every word well, at a good speed level.	0,46	1	1
36.	Monitor students' work spending equal amounts of time in all quadrants of the classroom.	0,69	0,69	0,69
37.	Respond to students' answers using verbal praising (e.g. "Brilliant!", "Great!", "Nice job!").	0,83	1	0,83
38.	Respond to student's incorrect answers validating student's participation.	0,37	1	1
39.	Offer students guidelines and suggestions to report the group about their completed work.	0,22	0,56	0,56
40.	Finish the class asking student to write a reflection about the lesson.	0,59	0,68	0,54

In this dimension, there exists a moderate agreement, substantial agreement or almost perfect agreement among raters in every item, with exception of items #38 and #39 with a fair agreement among experts.

4.1.1.2.3. Personal dimension analysis

The results of Fleiss' Kappa coefficient of the Personal dimension are displayed in Figure 18. Each item has its corresponding result under the Clarity, Coherence and Relevance category.

Figure 18: Fleiss' Kappa coefficient results for the Personal dimension

#	Item	Clarity kappa	Coherence kappa	Relevance kappa
41.	Attempt to be "Me" rather than the "Teacher" to make students feel I am approachable.	4,49	0,59	0,59
42.	Interact with students as individuals.	0,68	0,83	0,83
43.	Use eye contact with students to make them feel I care about what they say and do.	0,83	1	0,83
44.	Learn about the needs of different types of students in my classes.	0,69	1	1
45.	Incorporate personal interests of students into teaching.	0,69	0,83	1
46.	Encourage creativity and self-expression in students.	0,83	1	1
47.	Learn students' names to recognize them as individuals.	0,83	1	1
48.	Talk with students' previous teachers to gather information about students.	0.56	0,56	0,56
49.	Notice individual accomplishments and important events in students' lives.	0,36	0,56	0,56
50.	Call a student after a depressive or anger episode to demonstrate I am personally interested in him/her.	0,56	1	1
51.	Begin the day with activities to reinforce a sense of community among students.	1	0,83	0,83
52.	Encourage students to treat each other with courtesy and respect.	0,83	0,69	0,83
53.	Coach positive social values (e.g. helping, sharing, being patient).	0,83	1	1
54.	Encourage students to reach an agreement through conversations to resolve any issue.	0,83	0,83	0,69
55.	Teach students how to work together cooperatively toward academic goals.	0,69	0,83	0,83
56.	Use problem solving scenarios with students to develop their problem solving skills.	0,68	1	0,83
57.	Incorporate ideas about what responsibility is into my classroom practice.	0,54	1	1
58.	Promote respect for cultural differences in the classroom.	0,83	0,83	0,83
59.	Help my students to develop metacognition about their inner self.	0,46	0,69	0,68
60.	Train students how to develop assertive behavior to make decisions by themselves.	0,46	0,59	0,68

In the case of the Personal dimension, there exists a moderate agreement, substantial agreement or almost perfect agreement among raters in almost every item. There is just one exception in item #49 where the agreement level among raters is considered as fair.

4.1.2. Specific objective 2: To estimate the CMQ internal consistency using the Cronbach's Alpha technique

4.1.2.1. Cronbach's Alpha applied to the CMQ

The data collected was computed using the SPSS Statistics Program created by IBM. As stated in Chapter 3, a Cronbach's Alpha value higher than 0.90 indicates an *excellent* internal consistency level, while values ranging between 0.90 and 0.80 indicate a *good* level of internal consistency. The reliability statistics yielded a Cronbach's Alpha of 0.904 in the instrument as a whole, which indicates that the questionnaire has an *excellent* internal consistency and it is, therefore highly reliable, as shown in Figure 19.

Figure 19: Internal consistency of CMQ (overall instrument)

Reliability statistics (overall instrument)	
Cronbach's Alpha	N of items
,904	60

The instrument was also analysed with the Cronbach's Alpha technique separated into its three dimensions: Discipline, Teaching and learning and Personal.

4.1.2.1.1. Discipline dimension analysis

Once analysed the 20 items composing the Discipline dimension with the SPSS Program, results showed a good Cronbach's Alpha. The results shown in Figure 20 represent what is considered as a good Cronbach's coefficient.

Figure 20: Internal consistency of CMQ per dimension (Discipline)

Reliability statistics per dimension (discipline)	
Cronbach's Alpha	N of items
,811	20

4.1.2.1.2. Teaching and learning dimension analysis

When the Cronbach's Alpha was calculated considering the 20 items forming the Teaching and learning dimension, the results showed a quite good value for the dimension. These results are presented in Figure 21.

Figure 21: Internal consistency of CMQ per dimension (Teaching and learning)

Reliability statistics per dimension (teaching and learning)	
Cronbach's Alpha	N of items
,860	20

4.1.2.1.3. Personal dimension analysis

Having calculated the corresponding alpha to the Personal dimension, it was obtained what is considered as a good vale for the dimension. The results obtained are shown in Figure 22.

Figure 22: Internal consistency of CMQ per dimension (Personal)

Reliability statistics per dimension (personal)	
Cronbach's Alpha	N of items
,884	20

4.1.2.1.4. Cronbach's Alpha analysis per item

Some interesting values were found while performing the item-per-item analysis. According to Gliem & Gliem (2003), the minimum score for an item to be considered correlated with the total test score is between 3.5 and 4 The values which are below this score have a low level of correlation (see Figure 23).

Figure 23: Correlation of CMQ's Items

Item-Total Statistics				
Item	Scale Mean If Item Deleted	Scale Variance If Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha If Item Deleted
1.	178,65	422,395	,509	,901
2.	178,96	414,838	,540	,900
3.	178,50	423,860	,420	,902
4.	178,38	430,006	,288	,903
5.	179,00	423,360	,428	,902
6.	178,92	456,954	-,360	,911
7.	179,46	453,058	-,272	,910
8.	178,38	464,726	-,615	,912
9.	178,15	456,535	-,486	,909
10.	180,19	411,922	,663	,899
11.	179,65	414,875	,558	,900
12.	179,50	426,100	,277	,904
13.	179,88	416,026	,528	,901

14.	180,19	415,762	,650	,900
15.	180,08	410,154	,646	,899
16.	178,96	422,198	.318	,904
17.	179,88	426,506	,267	,904
18.	180,31	427,262	,382	,902
19.	180,50	434,100	.249	,904
20.	179,85	431,975	,198	,904
21.	178,31	428,382	,373	,903
22.	177,92	434,794	,493	,903
23.	178,65	420,955	,497	,901
24.	179,69	414,942	,511	,901
25.	178,50	424,820	,362	,903
26.	178,00	435,840	.334	,903
27.	178,69	423,022	,412	,902
28.	179,04	418,358	,525	,901
29.	179,15	418,535	,553	,901
30.	179,38	405,206	,767	,898
31.	178,92	418,474	,571	,900
32.	178,19	435,842	.266	,904
33.	178,42	439,774	.040	,905
34.	178,08	432,634	,391	,903
35.	178,08	438,234	,138	,904
36.	178,35	437,355	,141	,904
37.	177,96	440,678	,051	,905
38.	178,23	432,505	,294	,903
39.	178,69	423,982	,374	,903

40.	179,31	411,662	,599	,900
41.	178,54	431,458	,275	,903
42.	177,96	436,198	,268	,904
43.	178,00	433,200	,493	,903
44.	177,88	436,346	,311	,903
45.	178,88	413,226	,635	,899
46.	178,38	421,206	,595	,901
47.	178,31	428,782	,421	,902
48.	179,04	410,278	,591	,900
49.	178,35	424,555	,394	,902
50.	178,46	423,618	,529	,901
51.	179,19	411,442	,674	,899
52.	177,85	440,775	,096	,904
53.	178,04	432,758	,401	,903
54.	178,23	432,185	,305	,903
55.	178,38	426,646	,360	,903
56.	179,27	421,965	,440	,902
57.	178,19	426,402	,511	,902
58.	178,00	435,440	,289	,903
59.	178,46	425,298	,349	,903
60.	178,23	431,465	,364	,903

According to the results obtained and shown in Figure 23, the correlation item–test works well in general terms. However, there are a significant number of items which are below the minimum value of 3.5 (Gliem & Gliem, 2003) to be considered correlated with the total test score. Items below 3.5 are #4, #6, #7, #8, #9, #12, #16, #17, #19, #20, #26, #32, #33, #35, #36, #37, #38, #41, #42, #44, #52, #54 and #58.

In spite of these figures, it is important to notice the last column of Figure 23, showing the Cronbach's Alpha value, if the low-value items are deleted. Only removing items #6, #7, #8, #9, #33 and #37, the Alpha coefficient would increase significantly. Such is the case of item #8 which, if deleted, the Cronbach's Alpha would increase to 0,912. As seen, only removing 6 out of 60 items, the Alpha coefficient would increase at some degree. Nonetheless, that does not mean that these items should be deleted. One of the factors that may have influenced these figures is the fact that research participants were mainly novice teachers with little teaching experience. This is evidenced especially in techniques that have to do with the Discipline dimension, where the lower ranges are obtained.

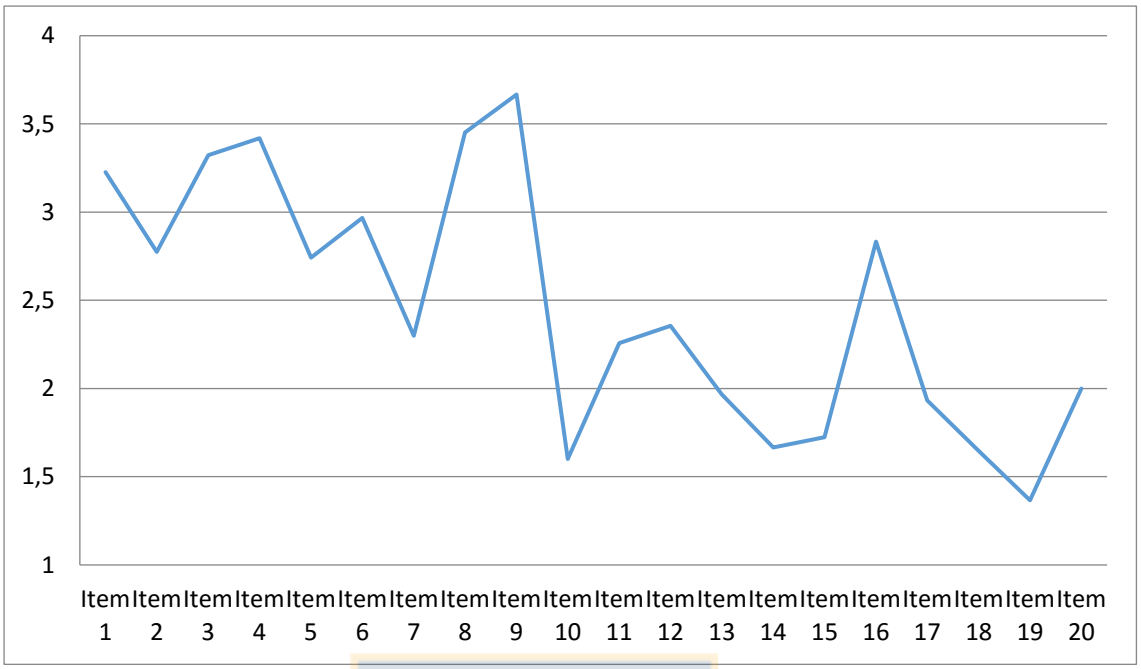
4.1.3. Specific objective 3: To describe participants' views on classroom management techniques once applied the pilot test of the CMQ

4.1.3.1. Mean scores and standard deviation (SD)

4.1.3.1.1. Discipline dimension

Figure 24 shows the mean score for each one of the items belonging to the Discipline dimension.

Figure 24: Discipline dimension mean score for the CMQ



The mean score for the Discipline dimension has the lowest averages. Most of the participants evidenced a low tendency to use discipline-related classroom management techniques. The lowest rated items correspond to the sub-dimension *Outside the classroom*. It is important here to notice again that most of the subjects who participated in this study were teachers in their professional practicum, which could partially explain their tendency to *rarely (1)* or *sometimes (2)* use the techniques under this dimension. Figure 25 shows the relationship between the mean and standard deviation for this dimension.

Figure 25: Mean and standard deviation scores for the CMQ (Discipline dimension)

Discipline dimension	
Mean 2,467980296	*Standard Deviation* 1,241832273

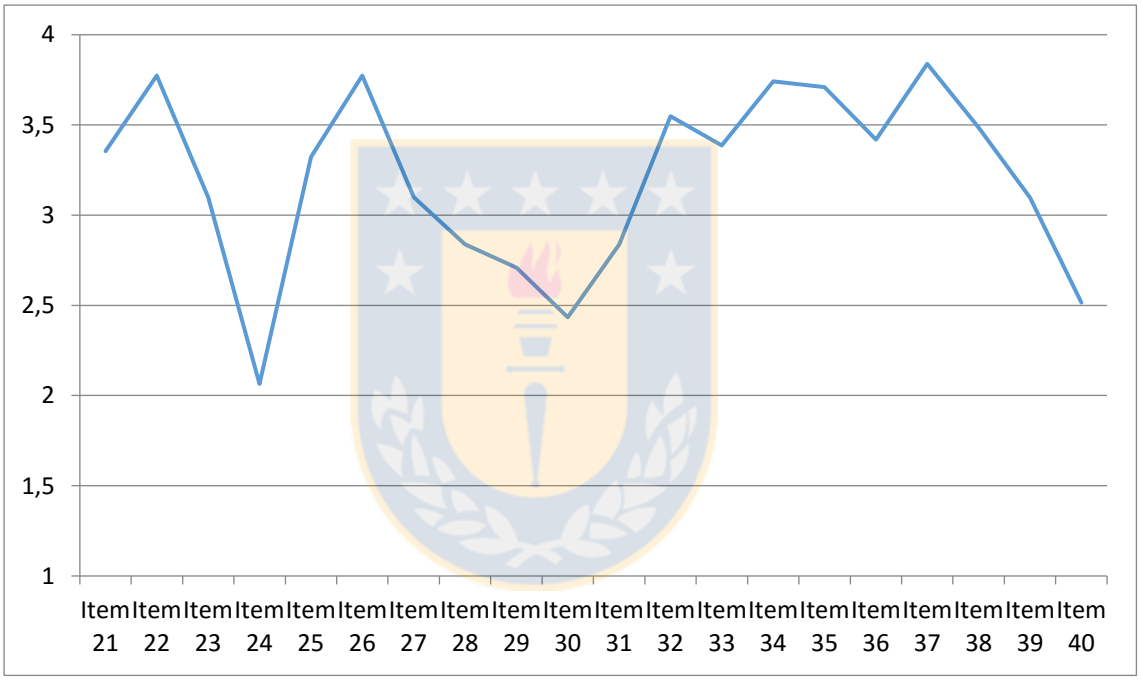
As shown in Figure 25, it is found the highest dispersion for the responses of the three dimensions, as it is noticeable observing the standard deviation which is more than 1. The mean score evidences teacher's tendency to demonstrate the action indicated in these items *rarely (1)* or *sometimes (2)*. As was explained above, it is quite probable that the reason behind these results is due to the fact

that most of the individuals of the sample population were novice teachers in their professional practice. Therefore, most of them rarely had contact with parents and thus, they were not able to apply the techniques described in these items.

4.1.3.1.2. Teaching and learning dimension

Figure 26 shows the mean score for each one of the items belonging to the Teaching and learning dimension.

Figure 26: Teaching and learning dimension mean score for the CMQ



The averages for the responses corresponding to the Teaching and Learning dimension tend to be higher, showing a higher frequency of usage of this type of classroom management techniques. Responses for Item #24 differ significantly from the rest of the items in this dimension. Figure 27 shows the relationship between the mean and standard deviation for this dimension.

Figure 27: Mean and standard deviation scores for the CMQ (Teaching and learning dimension)

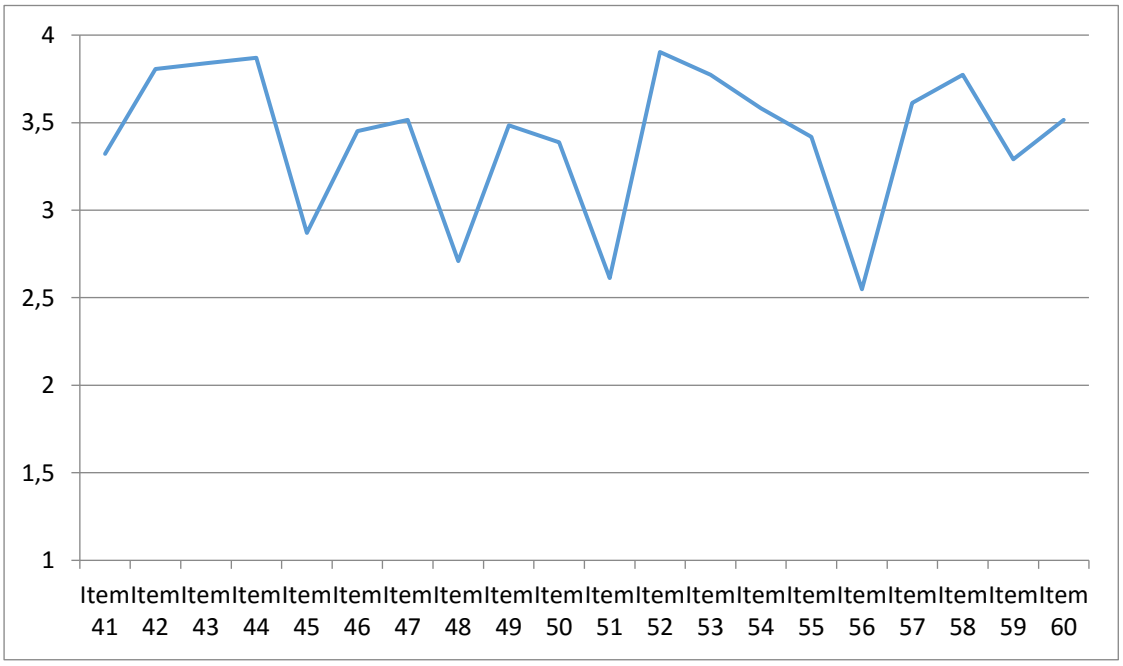
Teaching and learning dimension	
Mean 3,203883495	*Standard Deviation* 0,988024468

In this case, it is noticed the standard deviation is close to 1, which demonstrates that there was less dispersion in responses than the previously examined dimension. The mean score was a little more than 3, which demonstrates that the main part of the sample group often (3) evidences the classroom management techniques described in this dimension. It is important to notice though that there are 3 items (#24, #31 and #40), which significantly vary within the sample group with a tendency to rarely use the kind of classroom management techniques described in these items.

4.1.3.1.3. Personal dimension

Figure 28 shows the mean scores for each one of the items belonging to the Personal dimension.

Figure 28: Personal dimension mean score for the CMQ



This dimension shows the highest averages of responses, with most of the participants pointing their tendency to use the classroom management techniques oriented to the students as persons *often (3)* or *usually (4)*. Figure 29 shows the relationship mean–standard deviation for this dimension.

Figure 29: Mean and standard deviation scores for the CMQ (Personal dimension)

Personal dimension	
Mean 3,414516129	*Standard Deviation* 0,871806987

This dimension is the one which had the least variability in responses, moving away from 1 and close to 0, a little more than the previously described dimension, with a tendency to *often (3)* or *usually (4)* apply the classroom management technique described in these items.

Chapter V: Conclusions

The purpose of this study was to create and validate a questionnaire to identify classroom management techniques used by teachers of English. Researchers decided to use the Delphi and Fleiss' Kappa techniques in order to fulfil the first specific objective, the validation of the *CMQ*. The Cronbach's Alpha technique was used to comply with the second specific objective aimed to estimate the reliability of the CMQ through its internal consistency coefficient. The third specific objective was to describe participants' views on classroom management techniques once applied a pilot test of the *CMQ*, comparing the mean-standard deviation relationships. Therefore, the conclusions of this research are focused on the results obtained after an assessment of the CMQ items performed by an institutional review board of expert teachers in the field and a pilot test applied to teachers of English and preservice teachers.

Firstly, Delphi and Fleiss' Kappa technique were applied in order to accomplish the first specific objective, which was to validate the questionnaire. These two member checking techniques were applied after an institutional review board of 12 expert professors evaluated the questionnaire. On the one hand, after the Delphi technique was applied, it was concluded that almost every item of the questionnaire was considered *appropriate* by the raters in terms of clarity, coherence and relevance, with the exception of items #15, #16, #20 and #39; only 4 out of 60 items. Consequently, such items were properly rewritten and/or relocated. On the other hand, once the Fleiss' Kappa technique was applied, it was concluded that there exists either *a moderate agreement, substantial agreement* or *almost perfect* agreement between raters, with exception of items #6, #15, #16 and #20 pertaining to the Discipline dimension; items #38 and #39 belonging to the Teaching and learning dimension, and item #49 from the Personal dimension; in total, 7 out of 60 items in which raters reached a *fair agreement* regarding the clarity, coherence and relevance of such items. After applying these two member checking techniques, researchers concluded that the first specific objective was achieved. The modifications suggested were made and it was obtained a revised version of the *Classroom Management Questionnaire*. Therefore, the *CMQ* was considered valid.

The second specific objective was to estimate the CMQ internal consistency using the Cronbach's Alpha technique. This technique was applied after the

questionnaire was answered by 31 teachers of English and teachers to be who participated in the study. In this section, researchers used the SPSS program for statistical analysis which helped to simplify the calculation. Once Cronbach's Alpha results were obtained, it was concluded that, overall, the questionnaire had an *excellent* internal consistency and it is, therefore, *highly reliable.* In the item-per-item analysis was found that a significant number of items do not have a good level of correlation from the total score. However, that does not mean that those items should be deleted. Only removing items #6, #7, #8, #9, #33 and #37, 6 out of 60, the Alpha coefficient would increase at some degree. One of the factors that influenced these figures was the fact that research participants were mainly novice teachers with little teaching experience, especially using techniques that have to do with the Discipline dimension.

Finally, once the analysis was conducted, the research group had the opportunity to discuss the results obtained after applied the pilot test, fulfilling the third specific objective which was to describe participants' views on classroom management techniques. Consistent with the results of the Cronbach's Alpha coefficient, the lowest mean scores were found in the Discipline dimension due to the high number of novice teachers participating in the study. Therefore, most of them did not have enough time to display a wider range of classroom management techniques related to discipline and had rarely contacted with parents during the short period they did their internship. Thus, they were unable to apply the techniques described in these items. The dimension which showed the highest mean scores was the Personal dimension with less variability in responses and a tendency to usually use the techniques mentioned within this dimension. Analysing these results, we concluded that the type of participant definitely influences the variability of responses within each dimension.

Overall, once the study was conducted, researchers considered the three specific objectives fulfilled. The questionnaire complies with the requirements to be a reliable and valid tool, which can be used for future research studies on classroom management.

5.1. Limitations

Most of the time, researchers face limitations when carrying out their investigations. Some of these are solved, whereas others impede the continuation of the study. Fortunately, in this case, the limitations that arose did not stop the continuation of the research process.

The first problem faced was the number of participants. Researchers counted on the participation of only 31 teachers of English or preservice teachers. This affected directly the results of Cronbach's Alpha, the technique used to validate the questionnaire.

Secondly, the researchers found the lack of experienced teachers participating in answering the questionnaire as a second limitation. Most of the subjects who participated in the study were teachers doing their professional practicum or recently graduated. Consequently, just 4 out of 31 subjects surpassed the 10 years of teaching experience while the rest of the participants have a teaching experience below the 5 years. This limitation affected specially the answering of the questionnaire, with some of the items being answered in a similar manner because of the subjects' background. The type of participants influenced in the variability within responses.

Finally, as the questionnaire created by the researchers was applied just as a pilot test, there was no feedback given to the teachers who participated. To do so, it is necessary that every researcher should provide a scale with result interpretations according to his/her own beliefs and classroom management tendencies and assign positive or negative values to every item within the three dimensions according to what is intended to investigate.

5.2. Further research

This questionnaire could help teachers of English to reflect on their practices and identify weak areas which could be improved in order to have a better performance when to be assessed by the *Evaluación del Desempeño Docente*.

Another way to use de CMQ is for teachers to compare their beliefs with others' perceptions of their behaviour. A teacher would first complete the Inventory

according to the directions. Then an observer – the teacher's supervisor, principal or another teacher – would complete the questionnaire according to how the observer had seen the teacher in action. Based on the findings of this study, some further research can be outlined.

- To apply the questionnaire to more participants, especially to more experienced teachers and analyse the different classroom management techniques used by them.

- To apply the questionnaire and give feedback to the participants (creating an interpretation scale).

- To apply the questionnaire to identify teachers' beliefs.

- To apply the questionnaire to teachers working in different types of school and compare the classroom management techniques they use.

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Appendix