



**The teacher-student relationship in one-to-one singing lessons: a
longitudinal investigation of personality and adult attachment**

By

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Table of Contents

Title page	i
Acknowledgements	v
Papers presented at conferences	vii
Table of contents	xix
List of Tables	xv
List of Figures	xix
List of Appendices	xxv
Abstract	xxvii
CHAPTER 1. INTRODUCTION	1
1.1. Introduction to thesis	1
CHAPTER 2. THE RELATIONSHIP BETWEEN TEACHER AND STUDENT (LITERATURE REVIEW)	5
2.1. Introduction	5
2.2. Research contextualization	5
2.2.1. General types of relationships	5
2.2.2. Relationship setting in music research	6
2.2.3. Sources for teaching	15
2.2.4. Combination between teacher and student	16
2.2.5. The studio setting	19
2.2.6. Representative Descriptive Research	22
2.2.7. Components of the relationship in Music	26
2.2.8. Teaching techniques	48
2.2.9. Categories of lesson observation	58
2.3. Summary and Discussion	63

CHAPTER 3. EXPECTATIONS AND REALITIES FACED BY SINGING STUDENTS (INQUIRY SURVEY)	65
3.1. Introduction	65
3.2. Methods	65
3.2.1. Aims	65
3.2.2. Procedure and Materials	65
3.2.3. Participants	67
3.2.4. Statistical methods	69
3.3. Descriptive Analysis	69
3.3.1. Students' age distribution	70
3.3.2. Gender distribution	70
3.3.3. Students' Countries	72
3.3.4. Language	73
3.3.5. Starting Age	74
3.3.6. Number of learning years	75
3.3.7. Number of Teachers	76
3.3.8. Changing Teacher	77
3.4. Results related to studies' 1st stage	78
3.4.1. Wish to change singing teacher	78
3.4.2. Students' satisfaction levels towards former singing experiences	81
3.4.3. Students' relationship with former singing teacher	83
3.4.4. Sequence of events in singing lesson	85
3.4.5. Eye focus during singing lesson	87
3.4.6. Student's expectations for teaching techniques with new singing teacher in comparison to former teacher	87
3.4.7. Students' expectations for most emphasised matters with new singing teacher in comparison to former teacher	89
3.4.8. Student's expectations for personal characteristics with new singing teacher	90
3.4.9. Students' beliefs regarding singing lessons	91
3.5. Results from Second Questionnaire	101
3.5.1. Qualitative comparison between questionnaire 1 and 2	101
3.5.2. Students' perception of development	102
3.5.3. Re-evaluation of beliefs	104

3.5.4. Comparative analysis of beliefs	106
3.5.4. Paired samples for beliefs in questionnaire 1 and 2	107
3.6. Discussion and conclusions	109
CHAPTER 4. OVERVIEW FOR SINGING VIDEO OBSERVATION	111
4.1. Context	111
4.2. Methods	111
4.2.1. Participants	111
4.2.2. Proceedings	117
4.2.3. Statistical methods	117
4.2.4. Qualitative methods	119
CHAPTER 5. THE PERSONALITY OF SINGING TEACHER AND STUDENT	121
5.1. Introduction	121
5.2. The test Neo FFI-R PI-R	125
5.3. Methods	127
5.3.1. Aims	127
5.3.2. Procedure and materials	127
5.4. Descriptive analysis	129
5.4.1. Characterisation	129
5.5. Results	135
5.6. Discussion	143
CHAPTER 6. ADULT ATTACHMENT SCALE OF SINGING TEACHERS AND STUDENTS	145
6.1. Introduction	145
6.2. Contextualization of attachment theory	145
6.3. Methods	156
6.3.1. Aims	156
6.3.2. Procedure and materials	156
6.3.3. Participants	158
6.4. Descriptive analysis	159
6.4.1. Characterisation	159

6.5. Results	160
6.6. Discussion	164
CHAPTER 7. SINGING STUDIO OBSERVATION	165
7.1. Introduction	165
7.2. Methods	165
7.2.1. Aims	165
7.2.2. Procedures and materials	166
7.3. Descriptive analysis	169
7.3.1. After lesson report	170
7.4. Results for time management in singing lessons	172
7.4.1. Total timings	172
7.4.2. Partial timings	175
7.4.3. Most Focused aspects of singing	191
7.4.4. Piano Accompaniment	192
7.5. Results of qualitative video observation	193
7.5.1. Teaching techniques	194
7.5.2. Singing communication	204
7.6. Discussion and conclusions	237
CHAPTER 8. THE FINGERPRINT CHARACTERISTICS OF SINGING TEACHERS: THE CONFLUENCE OF ALL MEASURES	243
8.1. Introduction	243
8.2. Methods	244
8.2.1. Aims	244
8.3. Procedure	244
8.4. Results	245
8.4.1. Personality	245
8.4.2. Adult attachment	257
8.5. Discussion and conclusions	261
CHAPTER 9. GENERAL CONCLUSIONS	265
9.1. General conclusions	265

9.2. Methodological discussion	269
9.3. Implications	272
9.4. Future research	273
References	275
Appendices	291

List of Tables

TABLE		PAGE
1	Mean, median mode and Standard deviation for starting age of students	74
2	Frequencies for multi-choice replies regarding the order of events in a singing lesson	85
3	Frequencies for multi-choice replies regarding the students' preferred order of events in singing lesson	86
4	Order and preferred order of events by students in the singing lessons	86
5	Descriptive statistics of cases ordered from higher mean rate to lower mean rate of students' beliefs in questionnaire 1	92
6	Mean comparison (standard deviation) of students' beliefs according to the studying location in questionnaire 1	98
7	Descriptive statistics of cases ordered from higher mean rate to lower mean rate on singing students' perception about development with new singing teacher	103
8	Descriptive statistics of cases ordered from higher mean rate to lower mean rate on students' beliefs in Questionnaire 2 (part 2)	104
9	Descriptive statistics of cases ordered from higher mean rate to lower mean rate on students' beliefs in questionnaire 2 (part 1)	106
10	Questionnaire 1 and 2 paired samples for beliefs in two-tailed Mann-Whitney test with confidence level of 95%	107

List of Tables

TABLE		PAGE
1	Mean, median mode and Standard deviation for starting age of students	74
2	Frequencies for multi-choice replies regarding the order of events in a singing lesson	85
3	Frequencies for multi-choice replies regarding the students' preferred order of events in singing lesson	86
4	Order and preferred order of events by students in the singing lessons	86
5	Descriptive statistics of cases ordered from higher mean rate to lower mean rate of students' beliefs in questionnaire 1	92
6	Mean comparison (standard deviation) of students' beliefs according to the studying location in questionnaire 1	98
7	Descriptive statistics of cases ordered from higher mean rate to lower mean rate on singing students' perception about development with new singing teacher	103
8	Descriptive statistics of cases ordered from higher mean rate to lower mean rate on students' beliefs in Questionnaire 2 (part 2)	104
9	Descriptive statistics of cases ordered from higher mean rate to lower mean rate on students' beliefs in questionnaire 2 (part 1)	106
10	Questionnaire 1 and 2 paired samples for beliefs in two-tailed Mann-Whitney test with confidence level of 95%	107

11	Sample distribution regarding the number of students for each teacher in video collection nr 1	112
12	Sample distribution regarding the number of students for each teacher in video collection nr 2	113
13	Sample distribution regarding the number of students for each teacher in video collection nr 3	113
14	Participants' list (teachers and students) regarding video collections, personality Inventory (NEO PI-R), adult attachment scale (AAS-R), after lesson report (teacher and student)	115
15	Socio-demographic characteristics for NEO PI-R (Costa & McCrae, 1992) distributed by teacher (n=8) and students (n=27)	129
16	Comparison between combined mean scores and standard deviation of English normative group and the singers group in the NEO PI-R (Costa & McCrae, 1992) for adults. Significant differences ($p \leq 0.05$) in bold. *N= 1000, **N= 13	131
17	Comparison between combined mean scores and standard deviation of Portuguese normative group and the singers group in the NEO PI-R (Costa & McCrae, 1992) for Adults. Significant differences ($p \leq 0.05$) in bold. *N= 1557, **N=18	133
18	Comparison between combined mean scores and standard deviation of participants from Portugal and United Kingdom's normative group with the singers group for the NEO PI-R (Costa & McCrae, 1992) in adult age. Significant differences ($p \leq 0.05$) in bold. *N=18, **N= 13	134

19	Domain and traits' scores for neuroticism in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages	137
20	Domain and traits' scores for extroversion in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages	138
21	Domain and traits' scores for openness in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages	139
22	Domain and traits' scores for agreeableness in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages	140
23	Domain and traits' scores for conscientiousness in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages	141
24	Distribution of participants according to the 5 personality domains of NEO-PI-R (Costa & McCrae, 1992)	142
25	Review of the most important instruments used for attachment measurement	152
26	Socio demographic characteristics for NEO FFI-R distributed by teachers (n=9) and students (n=26)	159
27	Representation of teachers' style in comparison to their students' attachment style	163
28	Number of participants and percentages according to socio demographic variables	169

29	Total time of singing lessons according to maximum (longer lesson) and minimum (shorter lesson) to each of the teachers (letters A to L) in percentages	172
30	Mean and standard deviation percentage for all lessons in accordance to the teacher	174
31	Gestures associated with technical indications by teacher	206
32	Recommended scoring in accordance to behaviours experiences in the present research	254
33	Comparative analysis of behaviours in teachers with secure and dismissive avoidant attachment	259
34	Comparative analysis of behaviours in students with secure in comparison to other styles of attachment	260

List of Figures

FIGURE		PAGE
1	Percentage of participants' age in 1 st and 2 nd questionnaires	70
2	Percentage of respondents' distribution by gender	71
3	Percentage of respondents' distribution by country for 1 st and 2 nd questionnaires	72
4	Percentage of students studying abroad and percentage of students using their mother tongue in singing lessons	74
5	Percentage of students' distribution according to their learning experience in years	75
6	Percentage of students' distribution according to the number of previous singing teachers	76
7	Percentage of students' distribution by number of teachers, grouped by studying years	77
8	Percentage of students who wished to change singing teacher and students who changed singing teacher	78
9	Percentage of students perceived freedom to change singing teacher	80
10	Percentage of perceived freedom to change teacher according to students' country	80
11	Percentage of respondent's satisfaction levels towards former singing experiences	81

12	Percentage of respondents' satisfaction levels towards former singing teacher	82
13	Percentage of students identifying missing elements in singing studio	82
14	Percentage of student representation of the relationship with former singing teacher in comparison to preferred relationship	83
15	Percentage of students' multiple-choice perspective on teachers' professional problem solving in comparison to preferred	84
16	Percentage of students' multiple-choice perspective on teachers' personal problem solving in comparison to preferred	84
17	Percentage of Students' visual placement distribution during singing lesson	87
18	Multi choice percentages of replies for most used teaching techniques regarding former singing teacher and expectations for new singing teacher	88
19	Percentage of most emphasised matters from lesson regarding former singing teacher	89
20	Percentage of most emphasised matters of lesson expected for new singing teacher	90
21	Percentage of expected characteristics for new singing teacher	91
22	Percentage of respondents' satisfaction levels towards present singing teacher	101

23	Adaptation of initial characterisation of attachment theory components by Bowlby (1988, 3)	146
24	Model of attachment styles distributed according to score tendencies	148
25	Working model of adult attachment according to positive or negative thoughts of self and others. Adapted from Bartholomew (1990) & Canavarro (2006)	150
26	Distribution by style of Adult Attachment Scale-R (Collins & Read, 1990) in percentages	160
27	Percentage comparison between styles of Attachment AAS-R according to the Country for singing teachers and students	161
28	Percentage comparison between styles of Attachment AAS-R according to gender for singing teachers and students	162
29	Distribution of all teachers according to time management for all matters in percentages	176
30	Time management by teacher for general conversations in percentages	177
31	Longitudinal distribution of general conversations for teachers who completed all stages, in percentages	178
32	Time management by teacher for directed conversations in percentages	179
33	Longitudinal distribution of directed conversations for all teachers in percentages	179
34	Time management of technique in percentages according to each teacher	180

35	Longitudinal distribution of technique for each teacher in percentages	181
36	Time management by teacher for repertoire in percentages	182
37	Longitudinal distribution of repertoire for each teacher in percentages	182
38	Time management by teacher for language coaching in percentages	183
39	Longitudinal distribution of language coaching for each teacher in percentages	183
40	Time management by teacher for musicality in percentages	184
41	Longitudinal distribution of musicality for each teacher in percentages	184
42	Time management by teacher for interpretation in percentages	185
43	Longitudinal distribution of interpretation for each teacher in percentages	185
44	Time management by teacher for breathing support in percentages	186
45	Longitudinal distribution of breathing support for each teacher in percentages	186
46	Time management by teacher for body exercises in percentages	187
47	Longitudinal distribution of body exercises for each teacher in percentages	187
48	Time management by teacher for bibliographic references in percentages	188

49	Longitudinal distribution of bibliographic references for each teacher in percentages	189
50	Time management by teacher for break in percentages	189
51	Longitudinal distribution of break for each teacher in percentages	190
52	Time distribution according to each category of time management in lesson in percentages	191
53	Singing teachers' distribution according to piano playing level	193
54	Hierarchical representation of traits' contribution for the singing teacher-student relationship	256
55	Distribution of participants (teachers and students) according to style of adult attachment scale (Collins & Read, 1990)	257

List of Appendices

APPENDIX	PAGE
A Tables of comparative analysis from chapter 3	291
B Description of domains and traits according to according to Costa & McCrae (1992) and Costa & McCrae (2000)	295
C Comparison between combined mean scores and standard deviation of English normative group and the Singers group in the NEO PI-R (Costa & McCrae, 1992) for college age	299

Abstract

This research investigates the longitudinal implications of the teacher-student relationship in one-to-one singing lessons. The thesis consists of two parts: in the first part the expectations and realities faced by singing students are evaluated; in the second part, a longitudinal observation of teacher-student relationship is made and complemented with personality and adult attachment psychological scales.

For part one, 64 students completed qualitative and quantitative questionnaires before meeting their singing teachers and 40 students completed the study (six months after meeting that same teacher) by returning questionnaires regarding the relationship. A comparison of the students' expectations and experiences of student-teacher interactions reveal high levels of satisfaction in regard to relationship and overall singing experiences. Students' descriptions indicated that teachers are generally seen as friends which consequently increases trust and confidence bringing benefits for students' personal as well as musical development.

In the longitudinal study of part two, the participants were 11 singing teachers and 54 students United Kingdom and Portugal. The study had three stages where participants were video recorded during their one-to-one singing lesson. These recordings were complemented with the psychological questionnaires NEO PI- R (Costa & McCrae, 1992) and Adult Attachment Scale (Collins & Read, 1990) to evaluate personality and attachment respectively. The longitudinal observation indicated that the relationships developed into becoming more personal and often included elements from the personal lives of both teacher and student. The interaction between teacher and student include a wide list of variables: personality combination, the individual background, style of attachment and many other singing aspects, suggesting that the relationship with the student could have major impact on other aspects of singing.

This research has implications for practitioners concerned with matching and improving student-teacher relationships, and for researchers interested in the longitudinal factors in effective musical teaching and learning.

1. Introduction

**Relationships between teachers and pupils are central to learning
(Hallam, 2001: 69)**

1.1. Introduction to thesis

The characteristic solitude of one-to-one instrumental lessons based on two elements confined to work over time together implies a strong adaptation to one another in order for the student to benefit and ultimately gain artistic individuality, maturity and independence. Although each teacher and student brings into the lesson a history of teaching and learning, a new setting always implies an adaptation from both elements.

Singing, possibly more than any other instrument, seems to have clear personal approaches that indicate a necessity to regard the relationship in different ways: being body oriented, the use of lyrics, and the interpretation of character. In this type of lesson, the otherwise normal barrier of the instrument is not applicable and singing teacher and student are ‘confronted’ directly in a face-to-face interaction (both having the instrument incorporated). For all these reasons, the voice seems to be an instrument that demands a closer observation and a different approach in pedagogical terms.

The relationship between teacher and student, which in most cases extends over several years, should ideally be a source not only of musical knowledge but also inspiration, motivation and psychological growth. In a ‘healthy’ relationship there is space for all attributes to be developed and grown whereas in relationships without solid compatibility, the student’s development might be compromised. So the choices of matching singing teachers and students should be considered with accuracy. Heads of department, teachers and students seem to establish combinations which are in most cases based in pure intuition. Research using psychological background instruments, which may contribute towards providing relational quality for students and teachers, is of great importance and yet such work is scarce.

The curiosity towards this research theme emerged from my own experience as a singing student by noticing that singing teachers’ personal approaches seemed to have

crucial importance for my development. Although in several cases the technical and professional skills seemed similar, the relational quality provided either fast development or, in another case, led me to lack motivation and development which consequently made me move to another teacher. Later, as a singing teacher, I also became aware of the adaptive skills required to provide quality teaching to students, and became interested in promoting appropriate measurement instruments to provide that quality. In the current thesis I shall investigate topics associated with relational quality and instruments associated with personal profiling of teachers and students.

Singing lessons are characterized by a multiplicity of technical, musical, linguistic, personal, and aesthetic activities, which characterise the type of teaching taking place. Identifying the differences between approaches may bring added clarification to the otherwise hidden singing studio. This research analyses the singing setting in a multidirectional perspective giving voice to both teachers and students in order to: i. contextualize the singing teacher-student relationship; ii. explore the expectations of singing students and realities faced; iii. profile personality and adult attachment characteristics in singing teachers and students; iv. report longitudinal characteristics of the relationships; v. distinguish functional from dysfunctional singing teacher-student relationships; vi. indicate the usefulness of using personality and adult attachment instruments for understanding the singing relationships.

This research is unique in the sense that it identifies personality and adult attachment between teachers and students in individual singing lessons adding a longitudinal consistency to the observed behaviours.

The present thesis is constituted by 9 chapters each contributing towards the above aims. The next chapter presents most relevant published research in instrumental and vocal teaching and establishes interceptive points between previous research and the present thesis. Then, chapter 3 gives voice to singing students' perceived expectations and realities, regarding former and present singing teachers in a longitudinal perspective, through inquiries exploring preferences of student by means of quantitative and qualitative analysis. The next part (chapter 4) contextualizes the research methods and proceedings for the qualitative and quantitative research used for all subsequent chapters (5, 6, 7, 8 and 9) and its results.

The chapters 5 and 6 have similar characteristics in concern the two distinct psychological instruments used to profile the participants' personality and attachment respectively. Both chapters are divided in an initial presentation of previous studies in the field followed by the participants' results, which identifies the scoring for personality domains and traits and adult attachment styles. These two parts characterize the sample by defining which characteristics are quantitatively identified in the singers.

Chapter 7 reports a detailed longitudinal observation of behaviours between teacher and student in terms of timings, communication, feedback, teaching techniques, relationship and personal characteristics. This observational part provides the description of singing practices in relational terms, which sets the differentiation between different singing teachers and their students. Chapter 8 targets the confluence of all other measures used previously: observation, personality and adult attachment in order to identify consistency between measurement and observation.

Finally, the last section of the thesis (chapter 9) concerns a general conclusion of the results presented in previous chapters, provides a discussion of contribution for the research in singing teacher-student relationship and includes suggestions for future research.

2. The relationship between teacher and student (Literature review)

2.1. Introduction

The impact of relationships in the outcome of each individual is an important matter studied through social psychology theories. The satisfaction in work place, family set and love life depends greatly on how we relate to other people (Dwyer, 2000: 1). Likewise, a successful relationship between teacher and student in a one-to-one instrumental/ singing setting may impact the performing outcome of the student in a sense that by developing a healthy relationship the learning processes may benefit (Kennell, 2002: 244).

As mentioned in the previous chapter this research will focus on the personal interactions and the relationship established between the singing teacher and the singing student in a longitudinal perspective. In order to contextualize that relationship, this chapter provides an overview of the existing literature regarding psychological and musical demands of the relationship occurring in the singing studio setting.

2.2. Research contextualization

2.2.1. General types of relationships

Through the course of life, humans establish a wide range of relationships: friendship, (a free choice of relation); family (group that enables the growth of individuals, establishes the rules and identity); romantic (normally associated with commitment, intimacy and love/ passion); professional (group with associated interests of a profession). The relationships are most often established when people have common interests such as professional, educational, financial or emotional (Dwyer, 2000: 6). The existence of common interests helps the mutual liking and defines the compatibility between people after the initial communication and contact from where all relationships start and may develop into getting to know how the other person is (Argyle, 1988 in Dwyer, 2000: 122).

The styles of social behaviour were categorised by Argyle (1972), who grouped and combined sequences of elements of person's interactions into larger units called social behaviour. The elements analysed by Argyle included: 'physical-proximity, certain kinds of bodily contact, eye-contact, smiling, tone of voice, topic of

conversation, facial expressions, posture' (Argyle, 1988: 90-92). Each type of relationship is associated with a type of posture, expectation and communication shaped by interpersonal interactions that mould the lives of each person. Dwyer (2000) argues that the internal and external motivation to establish relationships depends upon personality and circumstances that lead individuals to seek another person (p. 7). Although situations dictate a certain behaviour, some people are always more likely to seek company than others (Dwyer, 2000: 9). All interactions with people seem to be associated with feelings, beliefs, reactions based on the individual experiences that might determine how we connect to each other. People who are empathic (naturally or by developing that skill) are more aware of social signals that indicate the needs of other people and are consequently better professionals in fields such as teaching (Goleman, 1995: 43).

The styles of social behaviour and types of interactions above were adapted with different purposes in previous studies (for instance, Gaunt, 2008) and will also represent part of the observational components of the observational study (chapter 7). This research will examine the differences and resemblances between different types of interactions in the singing setting based on the overall social behaviour and other instrumental settings and possibly contribute to clearer understanding how social behaviours are implied in singing lessons.

2.2.2 Relationship setting in music research

Instrumental tuition has become a hidden and almost secret activity that goes on privately behind closed doors (Rostvall & West, 2003: 214).

One-to-one setting

The majority of instrumental lessons take place in a one-to-one setting (Daniel, 2006: 191; Hallam, 1998a: 241), hidden from the overall views of other student and teacher colleagues. The existing literature does not have a consensus in what concerns the ideal setting for instrumental/ singing lessons. One reported problem concerning the one-to-one setting is the fact that teachers are isolated (Mills, 2006: 373; Rostvall & West, 2003: 214; Young *et al.*, 2003: 140) which does not encourage the overall social environment and direct competition between student peers; and that this type of setting is also known to be financially demanding for institutions (Kennell, 2002: 245).

Daniel (2006) when evaluating the differences between group lessons and individual lessons reported that students in one-to-one settings are very teacher dominated and that the interactions between students in group lessons may be of great importance as it allows exchange of information and therefore contribute for the learning development (p. 205). The observational characteristics of a master-class may be of great importance for future teachers as it would allow a perception of how to work with different types of voices, how teachers change strategies between students and simply listening to how other students interpret different repertoires. These benefits are lost when working in the one-to-one setting.

Another negative characteristic of one-to-one lessons' isolation is the fact that teachers may be lead to work over trial and failure with students until accomplishing their own successful teaching (Purser, 2005: 298). These processes are not usually observed externally. Although some institutions started implementing peer observation (Purser, 2005: 287) the personal interactions taking place in the studio are kept mostly between the two elements. The one-to-one setting is mostly kept between the teacher and the student with few exceptions of lessons where there is an accompanist or another student (normally from previous or post lesson).

On the other hand, the student centred personalised teaching, here called one-to-one, may be beneficial to students as it provides the ideal environment for the development of expressivity (Woody, 2000: 20) and fulfilling the specific necessities of the student. In the study by Presland (2005) students defended the one-to-one instrumental setting as more efficient and enjoyable as it provided the full attention of teacher, an easier and open relationship, and defended that the relationship developed into becoming more intimate and lead into the teacher knowing what repertoire would be more appropriate for each student by discovering their personality (p. 242). The isolation from one-to-one may be positive in letting the student learn at its own pace, fulfilling the necessities of the instrument (voice) by allowing teacher and student to freely explore sounds that are less comfortable to produce in company of others or opening gaps for extensive conversations regarding matters that otherwise would not be raised.

Types of relationship in instrumental lessons

The right type of relationship serves many functions, including raising the potential of the student; providing the appropriate base for succeeding in a demanding environment such as conservatoire/ college; and emotionally preparing students for professional life by creating a base of confidence for performance (Presland, 2005: 237). The one-to-one relationship may be compared to parental, as the experiences of that relationship may get as personal as other relationships of the students' personal life (Jones, 1975: 46); the same parent-child relationship analogy has previously been defended as the development of that relationship often becomes intense (Jones, 1975 in Kennell, 2002: 244; Kennell, 2002: 251).

Accordingly, Gaunt (2008) defined different relational approaches to one-to-one musical lessons by considering the following categories: parental, as teachers would guide, support and shape the student; friendly, because the relationships would get close and informal; collaborative, by working through curiosity with less personal aspects; consulting, when the teacher is the person who provides the information for the other almost as in a doctor patient relationship. Gaunt (2008) defended that often the above categories mix between them (Gaunt, 2008: 230-231). These categories reinforce the fact that teachers behave differently and that teaching is strongly based on personal actions, choices and experiences.

A good teacher is often classified through a wide range of characteristics as the following authors suggested:

- the capacity to envision students' talents and potential and being able to help in the self learning process rather than doing the learning for the student (Cencer, 2007: 31);
- to have a range of flexible, interrelated behaviors that adapt to each situation depending on the need (Berliner, 1986: 9);
- to control the student/ teacher interaction, have precise presentation and correction to student with keeping in a enthusiastic manner (Madsen & Geringer, 1989: 90);
- to facilitate the students development of musical autonomy (Swanwick, 1999, 2008);

- to know how to relate to pupils and others, be organized, prepare students for their future lives, have self-esteem, have sense of humor, and be a complete person (Boag, 1989 in Hallam, 2001).

Teachers are expected to have the above (inter) personal characteristics and furthermore have the professional, performative, and pedagogical appetencies to successfully lead the student. Music teachers may be compared to sport coaches by raising the potential of the students to its higher standards. The differences between teachers' personal style, knowledge, and accuracy of delivery as well as classroom management are also important components of teaching effectiveness (Colwell, 1995: 6) and it seems obvious that the ideal characteristics of a teacher will always depend on each person's perspective.

Mills and Smith (2003) examined 134 instrumental teachers (from a wide variety of instruments) through questionnaires aiming to identify what is considered to be a good teacher and how much of previous instruction is reflected in their teaching. The teachers reported an ideal teacher to include characteristics such as being enthusiastic, positive, accomplished, organized and have good communicative skills. Some of the teachers also explored the necessity for adaptation to the pupils in order to respond to their individual needs. Good teaching also included a focus on using technique and developing the individual voice of students (Ibid.: 21).

Teachout (1997) examined the opinions of preservice in comparison to experienced music teachers in regard to the behaviours and skills considered by them important in the first three years. From a list of forty given behaviours and skills on a questionnaire to teachers, the 7 top-ranked items were all related to approach and behaviour instead of artistic, technical skills: be mature and have self-control; be able to motivate students; possess strong leadership skills; Involve students in the learning process; display confidence; be organized; employ a positive approach (adapted from Teachout, 1997: 45).

Less selected skills were: 'possess proficient piano skills' and 'possess excellent singing skills' ranked at the bottom of the list indicating that for a teacher the most considerably important skills for successful teaching was on the personal approach

rather than the artistic one (pp. 48-49). Those findings highlight the importance of exploring relational and personal behaviours in instrumental/ singing lessons.

An observation of the personal characteristics and interactions taking place in one-to-one lessons seems essential to understand how it influences the musical learning/ teaching process. The relationship taking place between two people in isolation does not provide a clear and detailed image of how it starts, develops and finishes and as it normally is set for a long period of time (often several years) it may develop over different stages. The influence of teachers on students seems to be immeasurable and may permanently change a person. So, a teacher should primarily be a reliable source for students.

Presland (2005) presented results indicating that the same teacher had different attitudes towards different students regarding the type of contact established. That suggestion led Presland to conclude that the contact was dependent on the students' attitude (as it was the variable element) and not the teacher (p. 241) and that each relationship between instrumental teacher and student is unique (p. 245).

The partnership between the two elements is based on a range of musical and personal involvement of both teacher and student and the students' expectations may be an important factor of that relationship (Presland, 2005: 237). A measurement on the students' expectations towards the teachers will be made on the next chapter 3).

Relationship evaluation

The measurement of teacher-student relational success may be viewed when elements are observed interacting. However, traditionally the success of that relationship is evaluated through the artistic outcome. The final musical product in the form of performance is normally used for the evaluation of effective learning and teaching but that evaluation should be viewed through the perceived context of learning (Reid, 2001: 25-26). In most cases the measures used to evaluate the outcome of students is based on the technical, musical and interpretative stage performance. However, a complete (well build) performer must have developed other skills that are not visible on stage but will reflect on the overall capacity to have a sustainable career: the capacity to be an independent interpreter, practice alone, make right choices, accept

the appropriate roles, know how to deal with other performers/ stage partners or be socially integrated in the professional class. Most of these competencies are not taught in theoretical classes or books but rather from the personal experiences of the teacher that are passed from teacher to student, from generation to generation.

Music has the possibility of developing in students more than the capacity to perform but also the personal development (Hallam, 2001: 74). The examination's assessment normally measures the technical and musical aptitudes of the performer but lacks in evaluating how that performance was achieved: by the way it was taught or the way it was learned and how much was dependent of the students' talent (Hallam, 2001: 72). The learning/ teaching processes seem to be complex and include many factors that may come from the teacher or the student. A good teacher may never be able to transmit enough if the student is not capable of receiving that information. Several factors (mentioned above) regarding the transmission and reception of information may be the variables of this complex learning/ teaching process. The processes of learning and teaching in singing lessons will be defined later in chapters 4 and 7 with particular emphasis on the personal variables that constitute the development of a student.

In order to examine the relationship between teacher and student in conservatoire level, Presland (2005) interviewed 12 piano teachers and students and reported that regarding the way the relationship is developed all students identified the need for gradual adaptability of the professor in accordance to the students' development as well as a behavioural differentiation between students from undergraduate and postgraduate level (p. 240). The relationship was viewed by students as interactive as student could have time to question and teachers tend to have developmental strategies instead of delivering information to be processed by students. Each relationship was viewed as having different levels of emotional involvement that seemed to depend on the students and not on teachers.

No matter how positive the overall learning environment, the role of the teacher is central. Teachers have different conceptions of the nature of the teaching and learning process which affect the way that they teach (Hallam, 2001: 68).

The above review draws the present research into focusing on the most human side of the lessons' interactions. The human nature of the relationship in one-to-one lessons, particularly in music, is strong and seems to be an important motor for the learning process. The one-to-one learning setting allows the teacher to adapt the teaching style into the needs and personality of the student which seems to be of great importance taking that the matter being developed is artistic and that each singer/player needs to develop his/ her own identity. The way instrumental teaching is carried out may determine the outcome (Kennel, 2002: 243).

The relationship that often is extended over several years may be a source of inspiration, motivation, life-lasting knowledge, and friendship that may last even after the singing learning ends, as the friendship, complicity and closeness developed between the two elements may prevail. Teachers are an important influence on the psychological and musical development. Whenever the relationship works positively, the outcome most often will be productive but when this relationship does not work the learning outcomes may be severely affected (Burland & Davidson, 2002: 136; Pitts & Davidson, 2000: 78). Burland and Davidson (2002) studied the transition between graduation and professional life of 18 'specialist' musicians and concluded that the students who had a good teacher made the transition into becoming professional more easily (as they were more supported), than those who reported the opposite (p. 123) indicating the impact that the personal side of this relationship may have on the young musicians.

The instrumental teaching/ learning setting may depend on many variables associated with the student, the teacher or both elements. An exact characterisation of the setting seems impossible to achieve. Campbell (1991) attempts to picture this type of relationship through the following description:

The making of a performance musician in the West is the result of events that transpire between student and teacher in the private studio lesson. For a period of thirty minutes or an hour each week, the student has the undivided personal attention of the teacher. As transmitters of their own musical heritage, teachers shape the musicianship of their students,

demonstrating through their own performance the standards for tone quality and technique. They listen to student and respond to their individual needs, they offer ways to improve students' literacy skills, they recommend methods of practice, advise means of memorizing a work, and suggest opportunities for the creative expression and interpretation of a piece. Teachers are the musical agents, the models, and the motivating forces for their students (p. 276).

This characterisation of the teacher's multi task characteristics transcribes the complexity of being an instrumental teacher. In that lesson several elements of other matters are taken into consideration for the production of the ideal performance. The teacher gives directions on notation (score reading), history of music (for the production of style), body movement, acting, and many other aspects that are taught with other college teachers and that should be combined in the model that the instrumental teacher needs to be.

The one-to-one relationship may be beneficial as it allows the teacher to better understand a wide range of characteristics of the students' lives. On the other hand are the cases where this relationship is taken into the extreme: Gaunt (2008) reports a teacher who even feels responsible for the life of students and faces this interaction with the student as a 'Big Commitment' (p. 225) but reported having most of other teachers so focused into the content of the lessons that often leave the interpersonal communication unaccounted (p. 229). Teachers seem to be located in a scale that goes from highly dedicated to neglectful regarding the relationship with student. The important measure seems to be allocated in the specific needs of each dyad without getting into any of the extremes.

In a positive relationship the isolation normally means positive outcomes but whenever the relationship is difficult, isolation may result on negative and irreversible life long defects on the students' careers. Consequently, when students become teachers, and knowing that most teachers behave in regard to the relationship they had with their previous teachers, the consequences may be larger and enduring (Woody, 2000: 20). The institutions do not seem to have the necessary structures for counselling the teachers in case of relational problems and teachers often seem to recur to the heads

of department and be distant from the other teachers of the same discipline (Gaunt, 2008: 236; Rostvall & West, 2003: 214). The counselling for instrumental teachers seems to be a matter needing further exploration, analysis and reflection.

Teachers' backgrounds

Another problem addressed in the existing literature reports that instrument players become instrumental teachers coming from diverse backgrounds. Many teachers did not initially plan teaching as part of their career and report their own experiences as learners to the students (Gaunt, 2008: 220). Teaching is sometimes implemented as a way to stabilize the performing career or results from the success made as a performer and the requests to teach (Gaunt, 2008: 238). Like Gaunt (2008), Mills (2004) observed the backgrounds and motivations of teachers in becoming instrumental teachers: she reported some teachers who had turned to an educational career because they were not good enough as performers, while other teachers who were still successful performers regarded teaching as an opportunity to improve their own playing through their search for practicing and playing strategies for their students (Ibid.: 254-255, 259). Teachers who pursued performance and instead became teachers may not be the ideal source for teaching and their teaching may often result in a lack of long term structured objectives (Karlsson & Juslin, 2008: 329; Persson, 1996: 33). However, the performing teachers may be an important source of information for the students: students may easily identify elements requested by teachers by observing the teachers on stage (Presland, 2005: 242); teachers have clearer notions of how it feels to perform certain pieces; and by internally feeling the difficulties of certain passages be closer from understanding the vocal stages of the student. It is not uncommon to find singing teachers who returned to singing after a period of time for developing their voice. Often the search is a reflection of the need for inner feeling in order to deliver sensations to the students.

Another positive element of this performer/ teacher duality may be that teachers have clearer ideas and experiences of how it feels to be on stage and therefore bring students into a closer complicity relationship as well as giving demonstrations and career advisement. Teachers may include in lessons their own stage experiences (working with great performers and conductors) beyond the classroom that may be an important element for advanced students nearly entering the professional world.

2.2.3. Sources for teaching

For some teachers their own experiences drive their singing lessons. Other teachers, however, build over the knowledge that has been transmitted to them and develop further into a more effective teaching (Cencer, 2007: 33) but that does not seem to be an easy task as traditional types of teaching instruments seems to have strong legitimating roots (Karlsson & Juslin, 2008: 329; Nerland, 2007: 399; Rostvall & West, 2003: 215). The oral transmission of knowledge seems to be well implanted in instrumental/ singing lessons. Often important elements of the learning processes are not notated and are only revealed by the verbal descriptions of the teacher. Examples of this are scales, vocalises, improvisations, and specific instruction of how the notation should be made ex: drills, appoggiaturas and cultural background of the pieces (Kennell, 2002: 250). The observation of these elements will be included in a small part of the observational study in chapter 7.

When students who reported having modeling as the most used type of teaching were asked what technique would they prefer to use in the future professional lives as teachers, the same method was also preferred (Woody, 2000: 20). Schmidt (1998) analyzed through observation and interviews instrumental student - teachers and reported that the teaching practices were a reflection of their own past experiences as students and the memory of previous teachers instead of reporting to pedagogical learned principles. Mills and Smith (2003) examined the previous experiences of teachers as students and reported that almost all teachers felt influenced by their previous teachers although other aspects (books, courses, other teachers) have played a role in transforming their teaching (p. 22). So often, students when becoming teachers behave in regard to the previous experiences they had. The adoption of those teaching behaviours may impose limitations in their career development that teachers seem to be unaware of (Rostvall & West, 2003: 215).

The differences in teachers' backgrounds report lack of structured longitudinal objectives and strategies (Persson, 1996: 33) often reflecting on unconscious awareness for the interpersonal interactions taking place. Teachers educated in different backgrounds (performance/ educational) will automatically induce different learning processes in students and develop different types of relationships between teacher and student. Consequently those interpersonal interactions with students may be reflected in

the students' successful or unsuccessful outcomes (Hallam, 2001: 69). The lessons do not only depend on the past experiences of the teachers but also from the students' previous experiences that are brought into the learning situation (Hallam, 2001: 63). Those may be related to several fields: personal life, learning experiences, learning longevity, performance experiences. The story of both lives will add complexity to the relationship success or success.

2.2.4. Combination between teacher and student

The right combining between teacher and student may not be an easy task. The university/ college's head of department normally determines the combination of teacher and student but in most cases the teacher and student are questioned about their preferences (Presland, 2005: 237). Many students previously had the chance to meet the teacher in master classes or by self-proposing consulting lessons. If not before, consulting lessons are often encouraged by the institutions (after admission) to minimise the potential matching failure. A great effort is normally made to provide the best combination (Ibid.: 246). Presland (2005) provided a list of factors that are taken into consideration for the combination of teacher and student: 'technical proficiency, musical maturity, personal independence, age, nationality, command of language and general personality' (p. 246). The determination of that dyad may be influenced by personal motivations of teacher and student.

L'Hommidieu (1992) reported by evaluating case studies of three teachers that teaching effectiveness was dependent on: the choice of students, the expertise of the teacher, intuition and quality of instruction, teachers management of aspect of instruction (Kennell, 2002: 248). Teachers may search for quality of voice; the potential of the student in succeeding and therefore raising the teacher's popularity; by personal empathy; or by students' curriculum. The students on the other hand, may choose teachers by their career/ curriculum; popularity; type of voice; technical tendencies; personal affinity (kinder or demanding teacher).

The level of the students may determine the type of relationships that are expected from teachers. For instance, beginning students tend to seek more personal characteristics on teachers and advanced students may take less in consideration the personal part in regard to more artistically characteristics (Hallam, 1998a). Students'

characteristics 'goals, motivation, flexibility and quickness may also determine the relationship' success when matching the teachers (Kennell, 2002: 249). Although many measures are taken to consider the teacher / student matching, the combination does not always work. So, in the best interest of the students, the institutions should provide the freedom to change teacher in case the combination is not resulting. This matter will be examined in the participants of the present study in chapter 3 (Expectations and realities).

When the personal chemistry of the student/teacher relationship simply does not work... it is best if the student moves on to a different teacher (Purser, 2005: 292).

Although a big effort is made to set up good combinations of teachers and students, there are experiences that ultimately are determined to fail, as many characteristics may not be apparent at an initial stage. After the establishment of the human relationship the learning /teaching is ready to be developed and therefore is the base of all the forthcoming processes (Cencer, 2007: 32). So, Cencer (2007) considers the personal combination as the base for all learning processes after which all other stages (technical, musical, interpretative) may be established.

Other factors constitute the reasons for the (dis)satisfaction of students as the knowledge transmission from teacher to student may be complex. There are teachers who allow students to develop their own learning processes with freedom and teachers that make the learning process follow a certain teacher pre-established guideline. Persson (1996) in a case study analysis observed the imposition of interpretation into the students by one teacher, which automatically resulted in students without individuality in terms of interpretation (p. 33). So, although teachers need to have clear and strong ideas their malleability is necessary for succeeding with bringing up the best in students. The different ways that students learn was an indicator for Reid (2001) that strategies and techniques from teachers need to be modified and molded to each student (p. 40). However, music institutions are often characterized by their type of teaching / learning and specialization (Nerland, 2007: 399). Often there is a tendency to follow certain characteristics according to the type of course or institution and leaving the individual needs of students unattended. A balance between extreme practices seems to

be essential: on the one hand the teachers' characteristic teaching strengths and on the other the students' personal and learning needs. The essential element seems to be that teachers provide the essential conditions for students to progress by letting students think by themselves and discover their own views (Young, 2001). Students need to be given a certain freedom of choices in order to develop consciousness of requirements and independence (this matter will be approached in detail later in this chapter). However, the most required decision making is on the hands of the teacher who needs to guide the student to appropriate repertoire, what to correct, how to influence change and what to demand from one lesson to the next (Kennell, 2002: 250). Rostvall and West (2003) expressed almost in a caricature how instrumental teachers are often seen:

The teacher is regarded as a possessor of the tradition and if the student shows her/himself worthy of it, the master can share the tradition with him or her (Rostvall & West, 2003: 222).

The distance presented between teacher and student above will possibly not produce high standard results. The one-to-one instrumental/ singing setting implies the development of artistic sensitivity that is based on the emotional identity of both teacher and student. The highly personal interactions as 'sense of partnership' (Pitts, 2004: 84) that take place may make the relationship crucial to the success of learning. For instance, instrumental/ singing learning implies a degree of emotional exploration in order for the student to develop his/ her own artistic identity. Particularly in singing (where lyrics are included) a certain degree of personal confidence may be necessary to allow both teacher and student to share the personal interpretation of pieces and therefore develop their own emotional approach. The teacher may work as the mediator between the professional (future) life and the learning (present) student (Kennell, 2002: 254) in a healthy relationship.

Teacher dominated lessons seem to be the most traditionally seen type of interaction (Jørgensen, 2000; Persson, 1996). In that type of interaction, the teachers spend most of the time in charge of the lessons' content as well as the overall verbal activity. On the other hand, are the teachers that divide their contribution for the lesson with their students and allow the students to be active. Those more balanced lessons

between teacher and student have also been observed (Schön, 1987). The amount of lesson 'domination' may be a predictor of students' relational and learning success.

2.2.5. The studio setting

The studio where lessons take place may be an important indicator of the teachers' teaching characteristics. Several tools are required in a lesson to provide the necessary elements for the student: piano, metronome, recording devices (audio, video), music scores, recorded professional performances in audio/ video, a desk, computer, mirror. The teachers normally reflect with personal artefacts the type of person they are: by including informative posters or physiological representations (Kennell, 2002: 250). Obviously, the determination of the teachers' use of the studio may be conditioned by being in a private studio or working as part of an institution. In the colleges/ Universities the fact that several teachers share rooms will make their use less personalised. Often rooms are used for both singing and instrumental lessons with different requirements. For instance, the posters with the physiological descriptions have characteristics intrinsic for the singing and the room distribution may not be the ideal. In the most technologically developed studios the use of innovative tools may provide faster results: for instance, technologies of computer guided real-time feedback (Welsh *et al.*, 2005). In singing these new technologies (which are yet scarcely used) may provide computer images that report the vocal physiological behaviour taking place inside the performer. These tools indicate a type of feedback for students that may complement the teachers' feedback. Teacher feedback (which is related to the personal approach and therefore important for this study) will be discussed later in this chapter.

Instrumental vs. Singing (differentiation)

Singing lessons seem to have specific characteristics in comparison to other instrumental settings, which justify a closer observation. As Baldes-Zeller (2002: xiv) states:

Teaching voice and vocal performance is by nature a subjective and amorphous pursuit. Only singers and teachers of singing can really understand that.

Firstly, this instrument is not visible or touchable, which implies an imaginative approach is necessary for the teacher-student work. Secondly, physical contact, non-verbal communication, strong eye contact techniques are often used to reach the goal of singing development and are more evident when both persons do not have an instrument between them. Authors reporting the differences between the instrumental and singing lessons consider highly important the fact that student singers have to deal with interpretative and technical challenges related to text and at the same time, work the musical and emotional conditions of any other musician. (Burwell, 2006: 332; Emmons & Thomas, 1998: 182; Mason, 2000: 205). The meaning of the words is intensely worked in the vocal studio and the intentions of the lyrics are of central importance in the assessment of a singer as reported by Coimbra and Davidson (2004) when observing the assessors identification of 'heartfelt' interpretations in accordance to the text and the capacity of the singer to bring up those expressions through the own personality (p. 209). That expressivity is learned in different ways: Woody (2000) observed differences between the singing and instrumental learning processes of developing expressivity and found that instrumentalists use significantly more critical listening (listening to other performers' recordings) than did the vocal peers; that the instrumental students did recur less to words in order to explore expressiveness than singing students and that (on the other hand) the use of expressivity to explore technical achievements was higher in vocal students than instrumental (p. 19). Burwell (2006), in regard to the same matter, found that singing teachers tend to work less on interpretation and more on technique than instrumentalists (pp. 337-338) and singing teachers express more through metaphorical language (14.1%) in comparison to instrumentalist (5.1%) (p. 339). The higher technical investment in singing lessons may be associated with the fact that instrumentalists may use 'visual demonstrations' to 'learning psycho-motor skills' (Burwell, 2006: 344) and therefore the approaches to the musical, technical and interpretative skills have to be made in different ways. That approach may also be influenced by the fact that each student and teacher possesses a different and unique timbre.

The vocal identity of each student is highly related to the timbre and the physical characteristics of the singing student. Another exclusive characteristic of the singers is the fact that the instrument is their own body and that distinguishes them from other instrumentalists (Emmons & Thomas, 1998: 183). So, for each student there will

inevitably be a more personal approach to the instrument (including interpersonal aspects) than to any other instrument (Burwell, 2006: 334). The approaches used by vocal versus instrumental teachers are clearly different in performance studies (Burwell, 2006: 342) although the instrumental teachers often refer to the sensations of the vocal instrument to access inner natural feelings. Burwell suggests that both parts (instrumental and singing) have much to learn from each others lessons behaviour: vocal teachers and students by using more concrete musical terms and instrumentalists by approaching music in a more metaphorical way (Burwell, 2006: 343-344). The metaphoric type of teaching will be explored in more detail later on this chapter.

The extensive use of imagery in singing in comparison to instrumental lessons seems to be associated with the instrument being invisible or untouchable and that even technical skills depend on listening, feeling and remembering sensations to be repeated (Emmons & Thomas, 1998: 183). Since the instrument's movements for sound production cannot be seen, the perception is mainly based on sound results and the imaginary sense of what muscles are being used. In instrumental lessons the use of the instrument is visible to the teacher that may correct positioning instantly and therefore depend less on the inner physiological approach.

An additional challenge is brought by the fact that most of what is happening during vocal production is unconscious (Welsh & Sundberg, 2002: 265). As the voice is in the body of the player, every emotion of psychological processes will produce a sound related to that inner influence of tension or relaxation. The feelings brought with the student from external factors (of private life) will be a factor adding to the singing lesson. That automatic reflection of 'uncontrollable' sensations may constitute a challenge to the personal approach of the teacher. An example of this may be when students are depressed or crying that may not be able to sing. The personal approach to the emotional states of students will determine the outcome of the lesson. The psychological influences of inner state on instrumentalists may condition the playing quality but will possibly not interfere in the same decisive way as in singing. The psychological effects on the singing students are of higher importance to the production of sound and teachers are expected to have high sensitivity to the necessities of vocal students in order to unlock the students' voice (Mason, 2000: 204). Further

investigation in this field seems necessary to evaluate differences between instrumentalist and singers state of mind reflected in the performance.

Other aspects differentiate instrumental lessons from singing. Burwell (2006) observed the dialogues between teacher and student and reported that singing students (in comparison to instrumental) share many more aspects of their health with the teachers than instrumental students (Burwell, 2006: 345) indicating that the fact that the voice is used in other occasions of the students' lives will be considered in their lessons as the teacher may be a provider of advise on vocal care, health and conservation.

2.2.6. Representative Descriptive Research

The present research builds on earlier observational and descriptive studies by adapting techniques to maximize the 'effort to study the 'real world' of music' and the musicians' environment where they are in the real setting (Persson & Robson, 1995: 42). The biggest challenge of observational research lies in designing the categorisation of the most important behaviours of teaching into a checklist that will support the repeated viewings of data (Colwell, 1995: 8). Observation, however, enables teaching competencies, behaviours and interactions to be introduced, studied, analysed, categorised and developed in order for teaching, therapeutic, methodological competencies to be improved. The next part summarises the most significant descriptive studies on instrumental / singing teaching/ learning and the findings that derived. All the following researches have used the longitudinal characterisation that will be used in later in this thesis (chapter 7). Studies are presented with a list of findings that will be approached in a comparative analysis with the findings to be raised in this study.

Gipson made a longitudinal observation in 1978 and a categorisation of studio lessons was made to sustain the viewing of students working with different teachers. That study concluded that teachers place different emphasis in terms of instructional behaviour and that older students tend to use more verbal behaviour than younger students, teachers' musical behaviour decreases and teachers tend to diminish the negative feedback as students progressed (p. 168). The present study will observe the emphasis put into teaching different students particularly in regard to changes between different elements; Verbal behaviour will be examined and a longitudinal observation of musical behaviour will be made (chapter 7).

A 12 hours videotaped observational study by Gustafson (1986) used Sigmund Freud's theory of defence mechanisms of the personality to four Suzuki violin students working with four different teachers. Gustafson (1986) concluded that lessons are dominated by unconscious aims of both members of the lesson and that personality is an important tool to evaluate not only everyday life behaviour but also for educational interests.

Gustafson (1986) defended that the elements of the dyad that often are seen as different entities should by that research be seen as a dynamic couple and not separated (p. 138). Although the specific aims of each lesson is not one of the purposes of the present research, the personality factor will be analysed in regard to the behaviour of each participant and dyad of this thesis in chapter 7. The suggestion of using teacher and student as a dynamic couple instead of separated entities presents a challenge: observing teachers with several students allows a term of comparison whereas students working exclusively with one teacher may not be comparable and therefore behaviours are not known to be consistent.

The use of more than one student by teacher follows previous strategic selection. For instance, the observational analysis made by Hepler (1986) to 20 music teachers includes three students per teacher. That research used affective and cognitive elements of instruction and raised the following conclusions: teachers tend to dominate the music lessons with verbal statements; questioning represents a minor portion of those verbalisations; teachers use a proportion of three times more positive feedback in comparison to negative; less experienced students receive most emphasis on conceptual and technical aspects; students have little variances of behaviour which is dominated by performance with little verbalisations or body movement; conversations between teacher and student are normally short and with widely diverse themes (pp. 310-311). Verbalizations' timing and themes as well as questioning will be considered as an element of observation in regard to the relational behaviour. As questioning may constitute a way to develop self-evaluating mechanisms or a way for students to find their doubts answered a detailed observation to research in that field will be presented later in this chapter.

Persson (1996) investigated a case study of a piano teacher with her 9 students in an observational study of lessons (at least twice per student) and was complemented with interviews. The investigation concentrated its focus on the perception of teacher and students regarding each other's intervention on the lesson. The teacher felt that her lessons had about 50:50% distribution of active participation whereas the case of students viewed the teacher as using about 64% of lesson in contrast to the student with 36. Teachers had a balanced view of their participation but when compared to their students it was apparent that students aimed for more participation. From the different perspectives Persson (1996) concluded that these teachers were dominating (pp. 30-31) which is consistent with the findings by Hepler (1986) regarding teacher domination of lessons. That study also examined the type of interruptions occurring in the lessons and analysed perceived interruptions, perceived progress following these categories: 'technical, artistic, environment, potential, response' (p. 32). The overall conclusions of that study consist in the fact that there is a lack of progressive and developmental teaching strategy and that lessons are identifiable independent units reflecting in the students feeling lack of achievement (Ibid.: 33). The present observational study adds on this perceptive evaluation the measurement of interruptions, verbal domination and progressive adaptability between teachers and students.

Rostvall and West (2003) observed 5 hours of instrumental lessons' video recordings in combination with previous theories to examine patterns of interaction and how it affects the students' learning opportunities. Findings presented an application of the same methods independently of the levels of students, teachers lack on language developed based of scientific research. The use on this study of multi theoretical approaches enables the research to be better as it enlarges the possibility to answer not only the questions but also the *why* and *how* (p. 224). According to Rostvall and West (2003) the instrumental teaching setting is a 'Black Box' meaning that there is still little knowledge about it (p. 214).

Mills (2004) assessed the perspectives of teachers (instrumental and singing) in order to clarify standard aims and concerns of teachers in relation to their role as performer-teachers (in comparison to career teachers). With that purpose two longitudinal (six month interval) questionnaires were devised recurring to email posting. Mills (2004) extracted a list of matters, words, phrases and ideas influential to the role

of instrumental teachers: encourage a questioning mind, give own ideas to students, help student make personal choices intuitively, use analytical techniques, inspiration, encourage self-sufficiency, use discussion, enthusiasm, appropriate terminology, encourage spontaneity, giving confidence, leave them [students] to their intuition, think about what they are doing (adapted from Mills, 2004: 195).

The conclusions taken from that study included the fact that performer-teachers spend more time playing or singing and seek performance development continuity more than career teachers which may be positively reflected in their teaching. The motivations of performer-teachers go, beyond the financial, to personal levels of development and achievement (pp. 258-259). Mills (2004) suggests, as a final thought, that her study did not provide a comparison between what was believed (taken from questionnaires) in comparison with teaching practice. An attempt to relate beliefs and observational analysis will be made later in this thesis in chapter 7.

Burwell (2005) used descriptive and interpretative analysis to report the video recordings made to 67 individual lessons with 19 teachers from a wide range of instruments. Burwell (2005) concluded from observations that students bring into higher education several patterns of behaviour that will difficult the adaptation with new teachers. The previous behaviours (developed over several conservatoire years) will slow the integration process with new teachers; the students' dialogue contribution increases over the years and teachers questioning is a mean of helping that happen; more experienced students become increasingly aware of speech variations; the use of demonstrations is crucial for the development of artistry as verbal communication may not transmit experiences that imitation does; teachers should apply strategic kinds of questioning (exploratory and interlinking thoughts) in order to develop independent thinking to their students (pp. 212-214). The observation of previous experiences in regard to the present beliefs of students will be examined in chapter 3 (next) as an attempt to clarify which previous behaviour (referred here by Burwell, 2005) may influence the students' adaptation.

Zhukov (2007) observed 24 one-to-one lessons in higher education. The participants were 24 students with their 12 teachers (various instruments). Zhukov based the choice of various instruments on the assumption that learning styles are not

instrument based but rather broad. She identified 6 learning styles that are placed in a scale going progressively from frustrated until apologetic: 'Frustrated', 'Compliant', 'Serious', 'Extrovert', 'Disappointed' and 'Apologetic' (pp. 117-121). The description of teaching and learning styles seems to be of interest for young teachers in search for their personal approaches to teaching. A profile of each participant teacher, complementarily to the study of Zhukov (2007), that examined the students, will be made in chapter 8.

Karlsson and Juslin (2008) have examined 5 music teachers and 12 students through video recorded analysis. Results demonstrated, again, teachers' talk domination, expressivity and emotion in music was made with indirect strategies and most teachers lacked systematic patterns, unclear goals and tasks (p. 328). The systematic patterns of behaviours as well as expression of emotion in music teaching will be examined later in chapter 7.

The relational characterization presented above directs its foci to instruction emphasis and patterns, verbal behaviour, personality's importance, effectiveness, feedback (positive / negative), relational variances between teachers and students. Although some studies include singing, most refer exclusively to other instrumental lessons. The present observation will exclusively define singing lessons and attempt to characterize how the relationship evolves by using the above studied theories from instrumental lessons. This work does not attempt to compare the two settings but rather by defining the singing setting, allow a perception of possible differences.

2.2.7. Components of the relationship in Music

The present research builds on earlier observational and descriptive studies by adapting techniques to maximize the 'effort to study the 'real world' of music' and the musicians' environment where they are in the real setting (Persson & Robson, 1995: 42). In order to observe that real setting, an observational categorisation was build over existing literature that is presented in this chapter below.

Performing presents intellectual, technical, musical, communication, and expressive challenges, usually with the added complexity of working with others (Hallam, 2001: 62).

Adding to the complexity that may be found in the performance itself, the way people interact in the music setting may increase that challenge. So, beyond technical skills the students need to develop a wide range of competencies that will build a complete artist. Those competencies will not be brought up exclusively from the music itself but rather will depend greatly on the teacher and students' attitude, personality and interactions as observed by Reid (2001):

Developing students' understandings of artistic, social, political and cultural areas that are different from their previous experience may enable students to find their own views 'or find our own voice' (p. 40).

The development of a complete artist involves a wide range of components that are brought to the lesson from both the teacher and student and that goes beyond the present by bringing experiences from the past of teacher and student. The characteristics of a relationship may be viewed in several perspectives: psychological, personal, technical, methodological and pedagogical. The research outlined in this thesis describes ways in which vocal teachers and students related to each other and to support that evaluation an overall observation of relationships' components seems to be needed in terms of communication, trust, motivation, questioning, independence, teacher availability, support, feedback and creativity. Many other categories are crucial to the musical fomentation but the categories that underline the most purely musical work will not be considered in detriment of the relational perspective for this thesis. Surely, other categories from the relationship characterisation will be left untouched as they present characteristics that would require extensive further methods of evaluation. So, in order to contextualize background research for the methods presented particularly in chapters 3 (questionnaires for expectation evaluation) and chapter 7 (the qualitative longitudinal observation) the following categories were explored:

Communication

Communication is an important vehicle of information between teacher and student as it builds the transmission of knowledge. In the case of instrumental/ singing lesson, the teacher - student discourse may have unique characteristics both gestural and verbal that will specify the 'professional language' (Kennell, 2002: 251). The singing

lessons may include specific verbal utterances and gestures (Nonverbal) that are specific to those in that field or in that setting and are unknown to other people. How that language is developed may also be an important indicator of how relationships evolve.

Communication may be defined in two major categories: Verbal (communication made by the use of vocalized words) and Nonverbal communication (gestures, movements, head nods, inflections on verbal speech). Communication in the instrumental lesson also includes musical communication (Byrne, 2005: 302) in the sense that between the music teacher and the student there is a specific musical communications (sound and tempi inflections, conducting, sound modeling) that transmit indications to the students. Often these indications during students' performance are simple gestures, movements of hands, head/ facial expressions or played/sung expressivity.

In the study by Hamman, Lineburgh and Paul (1998) where the evaluation of social skills and teaching effectiveness were compared, findings suggested that the emotional expressivity (capacity to deliver nonverbal communication), emotional sensitivity (capacity to interpret the nonverbal communication of others) and social control (ability to attract others in socialization) were related to teaching effectiveness of teachers (pp. 96-99). Those capacities enable the participants of lessons to have awareness of self and others' behaviours. The quality of the communicative skills works as a factor that may facilitate the learning processes. When teacher express ideas clearly the response of the student may also be effective and the opposite is also possible. So, although teaching and learning depends on many variables, communication plays an important role in the development of a student. Byrne (2005) also expresses the importance of good communication:

Good teaching is essentially about good communication, which involves the teacher in thinking about how to prepare, plan, implement, and communicate lessons ideas and content in such a way that learning takes place (Byrne, 2005: 301).

Other than directly concerning the developments of a lesson, communication is also present in the relationship between teacher and student. The forms in which

communication takes place may be an indicator of the type of relationship taking place. For instance, formal or informal treatment towards the teacher (in languages where the second person may be addressed in different ways: German, Portuguese); or in the case of nonverbal communication the type of eye contact or touch indicating the distance or proximity of the relationship.

Verbal communication

The evaluation of verbalisations particularly directed to singing lessons have been studied previously by Burwell (2006), Henrich *et al.* (2007), Maxim *et al.* (2007) and Siebenaler (1997) with different purposes:

- Siebenaler (1997) in the observation of adult /children lessons reported that the use of conversations (verbal communication) between adult teacher and student are normally used to fill time of the lesson or for both elements to share similar interests (p. 18).
- Burwell (2006) made a full transcription of verbal dialogues during singing and instrumental lessons in order to evaluate differences between the vocal and instrumental lessons (p. 334). From that evaluation Burwell concluded that vocal students engage substantially more on 'off-task' (external matters to the task of singing) recurring to the teacher to share health and family problems than in instrumental students (p. 338). The reasons explained by Burwell (2006) through the post-lesson interviews with the teachers were that this instrument is in the body of the students and suffers with the daily changes of the person's life when compared to an external instrument (p. 339).
- Maxim, *et al.* (2007) studied the verbal descriptions of 11 French singing teachers. This study observed in particular the terminology used in expert singing lessons as well as word adjustment to specific strategies of teaching. The results presented: imitation of verbalizations using vocal effects, different approaches to describing the sound (from short to extensive verbalisations); verbalizations are divided in two types: linguistic and iconic depending on the musical or verbal expressions. Maxim, *et al.* (2007) pointed out the use of terminologically ambiguous expressions related to the voice; the differences of approaches towards students (using antonymous or imitations) depending on the

type of student or subject being worked on (interpretative, technical or personal).

- Gernier *et al.* (2007) analysed the extensive terminology associated with voice description in a longitudinal three yearlong study in order to categorize the different parts of vocal terms. The researchers had diverse backgrounds: vocal therapists, vocal pedagogy, acousticians, speech therapists, singers, singing teachers, choir directors that concluded having a consensus of respiratory and vibratory dynamics' perceptions but did not agree with vibrato and vocal placement. This experience lead to understanding terminology used by different groups and that depending on the type of work being done on voice, the verbalizations are different and not always understandable between groups.

According to the specific aims of this research, the observation of verbal behaviour will always be considered included in other categories: feedback, questioning that will provide elements of representing the relationship being studied later in chapter 7.

Feedback

Feedback is one of the recourses used by teachers to report (often verbally) an opinion. There are many ways in which a teacher may provide feedback regarding the performance of a student: facial expressions, vocalising an exaggerated imitation of the students' performance or verbally describing the positive or negative parts of the performance. The feedback may be considered as positive or negative depending on the teacher being emphasising what the student did well or wrong (Schmidt, 1989). The teachers may deliver positive feedback by verbally accentuating how well the student performed, by letting the student continue playing/ singing or use negative feedback by criticising the performance or giving indications on how to improve.

The bipolar observation of feedback has been used previously in diverse studies and a sub categorisation is often made:

- Schmidt (1989) evaluated feedback to observe the responses of students to previously established feedback of teachers. That study included the use of personality scales. The following categories were used: 'approvals, disapprovals,

approval/ disapproval ratio, reinforcement errors, teacher interruptions, teacher's performance, teacher talk and non-music activity' (Schmidt, 1989: 110). These categories improve the depth in which feedback may be delivered.

- Siebenaler (1997) was the reference for many other studies (including the next by Duke, 1999) and reported the relation between amount/ type of feedback and teachers' expertise indicating that more active teachers tend to give more feedback than less expert active ones (Siebenaler, 1997: 18).
- The categorisation of feedback was also examined by Duke (1999) and the timings of feedback given to Susuki students were included through positive / negative poles of verbal or nonverbal communication. Findings reported the use of higher amounts of positive feedback in comparison to negative in those classes (p. 305).
- Kostka (1984: 120) reported (in the observation of attentiveness and feedback in piano lessons) that most interruptions for feedback were characterised as negative feedback (p. 120). This evidence may be related to the fact that instrumental /singing teachers are constantly giving indications that will be considered into the negative feedback pole.

In sum, the evaluation of feedback may be based on how it is delivered, the frequency of positive vs. negative, amount of time used for each purpose, or evaluated in association to other aspects of teacher and student (such as experience, personality).

Feedback may be a limiting factor of the learning process as the emotional responsiveness to teachers' feedback (if inadequate) may lead to de-motivation (Hallam, 2001: 62-63). Also, regarding the feedback delivery, Cencer (2007: 32) defends the use of positive attitude towards the expression of bad aspects of performance but advises the balance between mentioning the strengths as well as weaknesses to students. Cencer (2007) also indicated the use of specific compliments towards the performance itself instead of the performer, in order to prevent egoism and, depending on the moment, compliments or constructive criticism is a most needed aspect of lessons (Ibid.: 32). As observed, the delivery of feedback includes a certain degree of personal involvement as the teacher has many options for delivering feedback. Dillon (1996) defends that the best way to deliver feedback is by first praising the student and then criticizing. She suggests that constant negative feedback is bad for the relationship and that positive

feedback is often insufficient, suggesting that positive feedback should be given every time improvement is noticed and before negative feedback to foment students' improvement. The emotional intelligence associated with how teachers deliver criticism to students may be a predictor of the relationships' (un) success.

As mentioned above, the observation of feedback may be done in regard to the frequencies in which the teacher interrupts the students' performance to correct, evaluate, and indicate alternative ways of playing/ singing or the way in which that feedback is done. The main difference between these two is the quantity or the quality of that feedback. The observation of quantity in a lesson may be an indicator of how the student is doing (well or not) in the performance or that the teacher tends to be demanding by using a lot of feedback, for instance. The measurement feedback frequencies may be quite inaccurate as often teachers do not stop the students' performances to deliver feedback but rather use verbalizations during the students' playing/ singing. On the other hand, the observation of how that feedback is delivered indicates how the teachers teach, may indicate certain tendencies of the teacher and be an indicator of how the relationship with the student is. Perhaps the best way to evaluate feedback efficacy may be by asking the students whether they understood the indications (verbal or not) of the teacher (Persson, 1996). However, the performative response to that feedback may be an indicator of good or bad delivered feedback as well.

The interpretation of feedback in vocal lessons may be quite ambiguous when working with complex vocal tasks as there is a higher probability of misinterpreting feedback between teacher and student (Welsh & Sundberg, 2002: 266). As students become more advanced the changes become increasingly 'microscopic' and the aspects to be worked and feedback will have to be adapted to that reality. So, the type and quantity of feedback delivered may change accordingly to the vocal development and the age of students (Kostka, 1984: 117).

The feedback process has also been observed as a cycle, which involves starting, developing and end. Most teachers do not complete the process of feedback 'teacher presentation- student response- teacher feedback' and develop into other aspects of the lesson. (Speer, 1994: 15; Yarbrough & Price, 1989: 185). The complexion of this cycle

may increase the probability of success in the performance. Teachers often believe that students understood each indication and move into other aspects without getting a performance response confirmation of what was just asked. Independently of the benefits of completing the feedback cycle, the time consuming factor may condition its permanent use.

Regarding the longitudinal adaptation of teacher and student to the use of feedback, Gipson (1978: 168) defends that the interventions of the teachers change over time, indicating that teachers musical behaviour and negative feedback decreases and the musical participation of student increases, possibly showing an adaptability to the teachers requests and independence development (p. 168). So, feedback cannot be seen as a static element of the teachers' characteristics but rather as something that evolves together with the development of student and the relationship. A longitudinal feedback observation will be done in chapter 7 where the feedback type, amount and way of delivering will be examined in the present research.

It seems quite uncommon for teachers to keep written records of the progress being taken in the singing development of the students. This could allow an in-depth of communication for the instrumental / singing setting (Gaunt, 2008: 230). That written transcription could also allow a more longitudinal perception of each student's development and organize the different strategies of both teacher and student. In the present research, the evaluation of feedback focuses on the message transmitted and how it is delivered to the student and less in regard to the efficiency of that transmission, as the aim of this study lays in the relationship.

Questioning

The one-to-one setting facilitates the requests of students and teachers to have their doubts answered in a faster and more effective way as the lesson is established only between two people. This easier/ faster question response encourages students to make more questions, become more effective in questioning and communicating clearer their ideas which develops independent thinking and interpretations (Cencer, 2007: 31). The same author suggests that the questions addressed to a teacher do not need to be answered in the immediate moment but rather several teachers find it better that questions where teachers are not sure of the answer should be left to the next lesson

where the amount of information and details often improves (Cencer, 2007: 31). Regarding teachers' questioning to students, Gaunt (2008) reinforces, teachers' reflection, that the use of questioning students is a facilitating strategy to develop students' independence (p. 225). By developing in the students the process of thinking for themselves and self-criticising the teachers are often encouraging the students' future capacity to survive the professional world by knowing how to respond with own interpretation of music and aspects of performance.

Young *et al.* (2003) defends that:

The nature of questions is crucial to the accurate indication of strategies employed, and casts significant light onto the dynamics of the relationship between pupil and teacher' (p. 150).

The use of questions has to be addressed with care as often teachers ask questions that are not to be answered (That's beautiful, isn't it?); that teachers' themselves reply (Is that accurate? Yes!); use questioning as a command for the next action (shall we play?). So, often questions are not actual questions but rather inflections of speech (Young *et al.*, 2003: 153). These merely rhetoric words may reinforce or divide ideas delivered in the lessons. The observation of lessons in terms of questioning seems to need sub categorisation indicating the type of questions used and its purposes.

Another factor indicating the types of relationship according to questioning is who questions: teacher or student. Siebenaler (1997) evaluated the direction (teacher to students or students to teacher) and the amount of questioning in children and adults. He reported that student to teacher questioning was almost an exclusively used indicator of adult lessons (p. 18). So, the addressing of questions to teachers seems to be an indicator of maturity. An evaluation of singing students' questioning teachers will be included in chapter 7.

Non-verbal communication

Communication skills are important attributes of teaching effectiveness and nonverbal techniques play a crucial role in overall communication ability (Kurkul, 2007: 330).

Through out communication there are many conscious and unconscious movements that people use to make themselves more understandable (by complementing language), reinforce (accentuate an idea) or social (to influence people's perspective of the speaker). All the above may be resumed as nonverbal communication.

Nonverbal communication may be present in gestures, head-nods, eye contact, speech timings, smiling, body movements, and body contact at different levels. It is also used in standard behaviours that report an attitude or a style. For example, there are groups of gestures and postures that are related to intimacy and others with formal relationships.

The use of Non-verbal communication may be as important in the course of a singing lesson as the verbal. As well as the verbal communication, nonverbal communication may be used for feedback delivery. Often a teacher' simple movement works as a fast transmitter to the student indicating muscle change (moving muscles as indication for changing position), interpretation (by showing facial expressions needed for the interpretation of a piece), what is happening write or wrong (approval or disapproval facial expressions, smiling or frowning) and other expressions that may be developed overtime between teacher and student and that seem to be related only to that group of people working together. The distance and positions between elements of the lesson may also be an indicator of the type of relationship occurring. Dillon (1996) in her book, regarding her own practice of singing teaching, describes the positions in which learning ideally should be set in regard to nonverbal communication:

I would rather stand than sit, as I am eye-to-eye with the pupil. There is a psychological point here: we are physically and mentally on the same

level, and if anything should go wrong, I can fix the pupil with a beady eye! (Dillon, 1996: 56).

So, when nonverbal communication is developed between teacher and student, minor gestures, movements and eye contact that are progressively developed and will indicate the teachers' thoughts to the student with minor effort for both, more effectively and less time consuming. The evaluation of nonverbal communication longitudinally building and adaptation will be made in chapter 7 of this research.

According to Argyle (1988) the major bodily contact occurs at the beginning and end of encounters and varies according to the cross-cultural differences. Cultural background seems to influence the levels of comfort in which actions are taken. For instance, individuals who were brought up in a distant bodily contact may feel discomfort when in a culture where this proximity is higher (Argyle, 1988: 78-79). The relation between culturally different countries and the bodily proximity was taken into consideration in the present research and will be investigated particularly in chapter 3. The levels of proximity in singing lessons will also be discussed in more detail later in this chapter, below.

A list of subcategories of nonverbal communication was extracted from Argyle (1988: 77-84) in order to constitute the basis of observation (later in chapter 7) and will be listed below:

Body posture

- The positions of the persons' body are expressive of the behaviour, stile of life, self-image and confidence, social position and often profession.
- The walking, seating and standing of each person is reflective of past and present experiences (some walking movements may even be inherited).
- The posture may show the state of the person towards the other: submissive/ superior, friendly /hostile, dominant/ dominated, tense/ relaxed.

Gestures or movements from other parts of body

The movements from hands, feet and other parts of the body may communicate:

- Emotional states – When the behaviour represents the state of mind of the person. For instance, the use of confused movements may indicate emotional arousal; the touch of face – anxiety; the scratching – blame; fist clenching aggression.
- Completing speech – gestures that help the representations of speech by ordering the words, pointing to something, illustrating or emphasizing the words.
- Replacing speech – group of gestures that are established to replace language (for instance under water, in noisy places or while singing is taking place).

Head-nods

These may represent the listeners' agreement, desire to talk, or encourage the speaker. In singing, head-nods may be an indicator for students to proceed singing as the teacher has nothing to say.

Facial expressions

The facial expressions are changes in the eyes, brows, mouth, and other parts of face. It is also possible to distinguish expressions from perspiration on the forehead and expansion of the pupils of the eyes. The use of facial expressions is a crucial element of singing lessons as it integrated a performative element of singing: interpretation. It also is an indicator of the teachers' feelings when students are singing (feedback, mood).

Eye movements

There are various types of eye contact: long, short, furtive, distant, open. Gazes intentionally or unintentionally represent a variety of meanings according to the facial expressions and the situation: amorous, friendly, aggressive, curious gaze. Gaze shows the levels of intimacy and interpersonal emotions, define the beginning and end of speech.

Appearance

Appearance may be influenced by the person's intentions to create an impact on the receiver of a message: hair, clothes and skin may be modified. The appearance on

the singing intervenient may be particularly important as the teachers often recommend to students what to wear in particular situations and in general.

Non-linguistic aspects of speech

The metrics, loudness, pitch, breathiness, speed, smoothness in voice quality used on speech may influence the interpretation of the speech. So, people may use the same words and give it different meanings by the way the word is inflected. Argyle suggests the following emotions as possibilities to direct emotions of the same words: 'admiration, affection, amusement, anger, boredom, cheerfulness, despair, disgust, dislike, fear, impatience, joy, satisfaction and surprise' (p.83). The use of speech and silence gives strong indications of the conversation. Also the use of 'ah's', 'eh's', 'Am' are present in many speeches and are normally created by anxiety or time to think.

All the above categories are applicable to the observation of the singing setting and will constitute the bases for distribution of nonverbal communication in chapter 7, later. The importance of measuring the nonverbal communication in lessons such as instrumental and particularly in singing is enormous. In singing the levels of eye contact are often higher than other instruments: both teacher and student are able to use eye contact and interpret the nonverbal communication of each other. Kurkul (2007) observed the non-verbal communication taking place in instrumental lessons and stated that the higher the ability for the teacher to decode nonverbal communication, the higher their lessons were rated for effectiveness by students and judges. Nonverbal communication, constituted by eye contact, smiling, touching, silence, vocal inflections, in that study, revealed to be of great importance to the course of instrumental lessons (Kurkul, 2007: 327–362). Another author related to the instrumental setting who observed nonverbal communication was Kostka (1984) who mentioned that eye contact and touching could be important measures for reinforcements and attentiveness (p. 120).

Although the nonverbal communication may be a difficult element to measure, it seems to constitute an important element of the communication between teacher and student which will describe the relationship taking place, the type of teaching and the styles of interaction of the intervenient of a lesson.

Musical Communication

Musical communication was defended as an independent type of communication by Byrne (2005: 30) because often in performative environments (rehearsals, lessons, performances) the communication goes beyond the purely verbal and non-verbal. The description of that kind of communication may be used in instrumental singing lessons in the form of demonstrations (teachers who demonstrate by singing are not verbalising or using purely nonverbal communication). So, these demonstrations that are transmitting an idea are considered as musical communication.

Beyond communication other aspects constitute important elements for the interpersonal relationship that will be analysed in singing lessons later in this thesis. The next sections will describe elements that are considered important in the interpersonal aspects of the relationship. Although some aspects listed below are not easy to measure from visualisation of videos, it was considered its inclusion, as they constitute important references to the type of relationship that may be found later. With that purpose, as description of existing literature is presented next.

Trust

Trust seems to be present in many of our life's relationships. In instrumental lessons this element seems to have an extra valorisation because students who do not trust in the work of their teacher may not follow their indications and therefore be conditioned in their development. In the case of singing, this element seems to have even higher importance as the instrument being studied and with which the singing teacher has to work is irreplaceable and unique.

Gaunt (2008) included 'trust' in the examination of one-to-one relationship in instrumental lessons as an important component of that interaction and reported that not only the students felt that necessity of trusting the teacher but that the other direction was also noticeable when teacher felt the collaborative necessity (Gaunt, 2008: 231-232). Teachers who feel that the students respond to their requests, and follow their indications will be more motivated to continue doing so, and may increase their teaching potential to higher levels. On the other hand, students who feel that their teachers are on their side giving write indications and increasing their development will also grow stronger. The trust developed between the two elements will be reflected in

their relationship and may reflect in the effectiveness of the teaching. The balance between trusting the teachers' opinions and the own individuality should be well balanced in order to be beneficial. The opposite could lead into extreme artistic castration. Supporting a student seems to be more associated with ultimately guiding the student to find the own singularity of being a player / singer.

The development of trusting towards another person should constitute an early element whenever that is possible, because trust is dependent on the teachers' ability to teach, the quality of the teaching, the former relationships of the student, and the personal characteristics of both elements. Dillon (1996) defends that students must develop feelings of trust in the teacher in order to allow judgment to be done and be guided through difficulties. She also remembers that all professional singers have in certain occasions to recur to teachers or coaches in order to obtain occasional vocal tuitions. Trust seems therefore an important element in the singer's life (p. 56).

The power that teachers have over the students may convey students' options into directions that would not be primarily chosen. Indeed, a balance between what the teacher imposes and what the student receives needs to exist in order for avoiding extreme submission relationships or the opposite. Teachers seem to develop trust in different ways: making the student understand the quality of their indications; by allowing the student to become closer in relational terms (for instance, by engaging in conversations to getting to know each other better); by showing previous results with other students or in their singing career. Trust does not seem to follow a unique strategy but rather be a reunion of several strategies and above all natural processes of getting to know each other.

Motivation

Motivation is important in any professional area. It seems to be associated with the environment where the individual is included and the interactions that take place in that setting (Hallam, 2001). As an element of teaching this aspect may be often misinterpreted, dangerous to approach and depend greatly from the balance between skill, ability and effort. Students who work hard may be seen as lacking ability, those who have the ability may believe they do not need to work and the students' unproductive effort may be little motivating. So, teachers have a hard task of balancing

elements as expectation, encouragement and task definition while ensuring that students succeed with tasks that are not over or under challenging (Hallam, 2001: 67).

Motivation seems to be an aspect of teaching that is quite personalized. Teachers have to adapt their teaching strategies permanently to each student in order to deliver the appropriate amount of negative feedback to lead the student to improving but not putting the student down; praising the student without increasing to much its levels of arrogance; keeping a close observation of the reactions of each student which are variable according to their personality and personal states. So, the balance of motivation levels and adaptability may require important personal skills from the teacher in order to succeed with each student.

Motivation should also be observed in a teachers' perspective, as it may be a factor for learning success. Teachers who are motivated automatically teach better and feel more positive towards their teaching, which develops into teachers becoming more confident. That self-confidence may also influence the relationship and the environment of lessons. The opposite can also happen: when motivation is low, lack of self-confidence develops and the outcomes may be affected which automatically will be reflected into the relationship and may lead into relational disruption (Hallam, 2001: 71; Tschannen-Moran in Hallam, 2001: 71). Motivation may also be a difficult element to quantify from an observational point of view but will be included whenever there is evidence of it in the singing lessons from chapter 7.

Independence

The importance of teaching independence is highlighted by several authors: Burwell, 2005; Gaunt, 2008: 210; Jørgensen, 2000. Independence in instrumental lessons may be defined as the development of the students capacity to work by him/herself, alone and defining its unique characteristics as an artist (often called individuality). Students who are taught to develop own skills following the learned self-discipline, self-confidence, appropriate skills and motivation may be more likely to succeed further more. Another element of independence may be observed by understanding how to deal with different teachers and environments beyond the school (Gaunt, 2008: 221).

The development of independence is particularly crucial at undergraduate years (Burwell, 2005). At that stage, students are technically and psychologically mature enough to explore their own tastes and self-expression at various levels but are adapting to new settings, colleagues and growing into professional artists. The self-concept and personal meanings through music seems to appear in the later years of education (Burland & Davidson, 2002: 135) or in later stages of knowledge acquisition (Reid, 2001: 29) and therefore within the group being studied in the present research for higher education.

One strategy used to develop the students' independence in terms of searching for sources of information outside the singing studio happens when teachers give reading (books, articles, dictionaries) or listening references (audio and video recordings) to students. The teachers are intensifying the curiosity and developing an independent knowledge seeking as an alternative to their teaching, which will (in most cases) end after the institutional settings. After all, singers and musicians are valued for the capacity to make musical interpretation their own, by discovering self-expression.

Although the artistry of becoming an independent/ unique artist seems to be mainly connected to the students' capacities, the teacher guidance may have interference in developing the critical independence. The one-to-one setting favors the development of specific necessities of each student but it also may inhibit the independence of each student as it creates a comfortable setting of defense for the student (Gaunt, 2008: 240). The comfort of having another person delivering each piece of information may be tempting and lead to accommodating behaviours.

Students should be tough to be independent while they still need the strong support of their teacher (Purser, 2005: 293).

Traditionally, instrumental teachers do not seem to foment the independency of the students. It is most normally seen in these type of lessons the delivery of information, indications and modeling to the students other than students exploring by themselves the type of interpretation, and self-initiative learning. The demonstrative character of instrumental lesson leads students into learning by imitation and reinforcing the most common master-apprentice type of relationship (Jørgensen, 2000: 68). The

balance between delivering information and leaving free space for the student to think for him/ herself seems to require demanding skills from the teachers. An evaluation of students who are more likely to be independent in contrast to more dependent students will be made in chapter 7.

Availability

The necessity that students have to feel that their teachers are available to listen, watch their performances, competitions, examinations and follow up their achievements and stages is here defined as availability (meaning teachers' availability to student). Availability is not here regarded solely in terms of time spent for the students' activities but rather the perception of students that the teacher cares for being in important moments of the students' career. Another type of availability may be felt in the singing lessons where the teacher may allow the lesson to flow naturally and give time for the student to express him/ herself or by focusing exclusively on the performance, not being available to the student.

The one-to-one setting provides the ideal scenario for conversations to occur. Some students seem to have the necessity to share their thoughts, intentions, career goals, fears and accomplishments with the person that in most cases is behind that success and who is a professional in that field. However, the timings of the lesson impose limits that may transfer that conversation to occur out side of the doors. Cencer (2007) defends the use of email and office hours to support the students because 'professors who have 'been there' serve as great mentors to their students' (Cencer, 2007: 32). So, availability is seen through using other means of communication, other than the lesson or the performances.

The singing lesson does not end between the walls of the singing studio but rather is present in many other places where the singing of student is presented. The teacher who is available in the development of a student seems to need to attend some of the students' public presentations, for instance. In those presentations the presence of the teacher may be of great importance, allowing the student to know how important for the teacher the performance is and challenging the student to make the best possible because the teacher is probably the person who better knows the students' capacities. The presence of the teacher may also provide support and allow the student to receive

feedback regarding the performance in order to develop from each public presentation made. This may also be called support, which will be explored in the next section of this chapter.

On the other hand, inviting students to be present at public performances of the teacher may also provide the participation of teachers in the life of students. This duality both being exposed to the same stage challenges may be beneficial for the relationship between teacher and student.

Rostvall and West (2003) elaborated a research in order to evaluate how different interactions in instrumental lessons affected the students' learning as well as the teachers. Rostvall and West (2003) reported that although individual lessons could have the potential for teachers' availability, individuality and questioning, there was little reflection or time spent on explaining aims for tasks. That research found that teachers would not explain short or long time goals, many situations of questioning were left unanswered and often students would need to start playing to focus teachers into the lesson. Another issue brought from that research was the fact that over several teachers the same methods were used regardless of the individual differences of the students. For the above reasons, Rostvall and West (2003) reported finding group lessons more effective because students could develop exchange of knowledge and teachers could distribute their attention in several tasks. The unstructured lessons without aims, complete cycles of feedback, and inappropriate question answering will ultimately reflect an unavailable teacher.

Another author examining availability was Presland (2005). In his study regarding the teacher-student relationship in conservatoire instrumental lessons it was reported the different types of availability according to the teachers' institutional relations. Most institutions had teachers as part-time working providers that are absent during the all week to their students and were generally seen as negative in terms of availability (p. 240). However, when students were asked, most did not seem to see that as problematic. The instrumental teacher's 'absence' (between weekly lessons) was generally seen as an opportunity to become independent (in personal and musical terms) and as a refreshing external element every time these teachers would visit the institution (p. 247). Although all students felt supported by their teacher through other means of

communication (email, text messaging, phone) some felt that it did not seem acceptable to interfere with the teachers' private space (Ibid.: 241) and therefore would use as little as possible those other ways of communication.

The availability of teachers towards their student may be an important matter of observation but would require extensive means of information collection. In the present study the students reflect their feelings towards the availability of their teachers in chapter 3 (through questionnaire designed collection) but a more extensive in-depth observation would be required for this matter to be fully covered.

Support

I have discovered that the best way for teachers to support their students is to first get to know them (Cencer, 2007: 32).

The personal relationship between the elements of an instrumental lesson clearly can serve as the background for many aspects that this dyad will face through the course of one or, in most cases, several years of learning an instrument. The interest in the students' hobbies, day-to-day lives and taste may provide important clues on how to deal with the student and show support. The teacher may also provide clues of support to students by questioning how the development of skills are going, how the practicing has been during the period between lessons or by letting the student know that they care about them when asking about their lives (if appropriate).

The support may be showed in many ways. Teachers who encourage students to do things write are positively providing support, but teachers who criticise may also be supporting that student because they are showing that they care. So, there are many ways for teachers to demonstrate their support but the way that support is received will be decisive to becoming support or not.

According to Reid the support of teachers in the learning process particularly in technical and musical elements may inhibit the students' notions of learning that ultimately may result in the students' lack of experimentation (Reid, 2001: 30). When

teachers are over supportive the negative feedback may be avoided and therefore students learning may be conditioned.

Support was examined in Presland's study (2005) that referred having the majority of students defending the benefits of the teachers' presence in concerts, examinations and other presentations (p. 241). The presence of a teacher in public presentations shows publically the importance that the students have in the life of a teacher (who has availability of time for their students). That presence may be seen as a positive energising element for the students' performance. After all, the positive or negative performance of the students may affect both elements and not only the student, as it is a conjunct work. Whenever possible, the presence of supportive behaviours will be identified in the longitudinal observation of the lesson.

Proximity

Proximity in the present context is related to the degree of intensity in interactions occurring between teacher and student. By the degree of interactions it should be intended as the relationship closeness and the elements that describe how the relationship between student and teacher is. The actual distance established between the teacher and the student may also define the relationship's proximity as close or distant as well as the use of touch and how often the teacher and student use touch. The proximity in singing lessons may depend on the type of teaching. Teachers who often use their hands to feel breathing, or to exemplify movements will have physical proximity not only at the beginning and end of lesson but also during the working processes. Other teachers who keep more distance with the students may never touch them. There may be teacher who use touch but are relationally distant and teachers who do not use any touching but are close to their students emotionally. So, the measurement of proximity may be doubtful if not considered in combination with other elements.

Another measure for proximity may be the levels of identification in artistic terms between teacher and student. The observation of the teacher as a performer may substantially help to increase that identification /proximity or reveal the type of singing practiced by the teacher (Presland, 2005: 242) and therefore be an element unifying the dyad.

The closeness of relationship between the teacher and student may also be affected and evaluated by the social interactions taken between teacher and student when meeting outside the singing studio. The limits of proximity in the relationship seem to be well defined in terms of limit as presented Gaunt (2008: 234), but the measurement may constitute a challenge in order to clearly define the scale between the extremes distant and close relationships. Although a distant and a close relationship may be somehow identifiable, the range between those two extremes may constitute a difficult task. Although it is understood the different types of proximity in the relationship between teacher and student, the challenges associated with the measurement imposed that the physical evaluation of proximity and the merely intuitive evaluation of the students (thought questionnaires) would be used for the present study (chapter 3).

Sequential patterns of teaching and the order of events

The events that take part in instrumental lessons all are intended to add skills to the students that ultimately may result in a fully capable player, both technically and artistically. The sequence in which the lessons are lead may reveal strategic points of differentiation between teachers:

Each technical aspect is broken down into smaller components which, once mastered, are added to each other (Reid, 2001: 29).

The use of smaller parts of the lesson in well structured subcategories is often used by teachers to identify elements in need for working that combined with other elements will increase the quality of the performance. An example of this is the technical part of singing lessons where several sub-elements of the voice, breathing, projection, interpretation and musicality are worked separately.

As well as fragmentation into sub-skills, the lessons often follow a certain pace of difficulty increase. An example of this is the technical workout of small elements of a score in merely physical terms to which musicality, phrasing and dynamics is added one by one until having a complete performance of a score. For instance, Siebenaler (1997) set a sequence of behaviours in piano lessons that may lead to effectiveness:

Simplifying components of performance task, repeating sub skill for mastery, and then putting sub-skill into context or moving on to a new aspect of the performance (p. 19).

So, more than fragmenting each aspect of the lesson, one component is important for the production of the next and so on constituting a linked process of adding components. The observation of sequences in instrumental lessons has been previously done with the purpose of evaluating the achievement, participation, and attitude of the students (Price, 1983; Siebenaler, 1997) or the combination and rating of patterns of lessons (Yarbrough, *et al.*, 1994).

Regarding the sequence of events, the teachers and students seem to have a notion of how things are better done. For instance, warming up before singing the repertoire. However, the tradition of doing things in a certain way imposes to teachers a pre-established behaviour that seems to be present in most lessons. In the study by Gaunt (2008: 226) the teachers used the same sequential patterns that made lessons quite similar and was seen as a way to increment development because it would facilitate the response feedback to students. The variances observed would be in smaller events rather than in the overall structure of the lesson. The reasons seen for this uniform shape was that tradition passed over the year from teacher to student that would adopt the same sequence and structure (Ibid.: 226).

Obviously, there are matters in the lesson that would be placed in a certain order but most matters of the lesson could be placed in different orders and still most teachers follow the same scheme of work. The sub-sections of matters and the sequence of events in the singing lessons of the present study will be observed in Chapter 3 in regard to the expectation of students and the realities faced by them and then in chapter 7 by observing the lessons.

2.2.8. Teaching techniques

Learning may depend on the students' capacity to absorb information but also from the teachers' capacity to envision the necessities of students. The strategies used should be planned in accordance to the level of each student in order for knowledge to be acquired Schuell (in Young *et al.*, 2003: 146). Teachers, as the most experienced

element, have the potential to adapt teaching strategies and techniques, by changing the teaching for each student (Reid, 2001: 40). That adaptability may be beneficial to serve the individual characteristics of each student and therefore help the learning processes. On the other hand, the students' ability to interpret the indications of the teacher may also be an important factor (Hallam, 1998b: 128). The learning success is dependent always on both elements of the lesson. Both teacher and student's capacities of teaching transmission and students' learning need to be balanced in order for development to happen. The analysis of adaptability to students and its possible effects will be discussed in chapter 7 and 8 of this thesis.

The transmission of knowledge in instrumental teaching may recur to interesting singular characteristics. The discovery of the student's innate expressiveness; technique or musicality may be a challenging process conditioned to the approach used by each teacher and vary from the response of each student. So, a teacher may have a tendency to use a certain type of approach but depending on the student may change it in order to get better or faster results, as mentioned above.

The teaching methods in music are traditionally passed from one generation into the next in an informal manner (Gaunt, 2008: 210; Schmidt, 1989: 110) and although it is a precious source of information, it also is subject to highly subjective theories of instruction (Schmidt, 1989: 110). Teaching that is based on merely oral transmission from generation into generation may lack scientific reliability and structural organization. The teaching may also be conditioned to the overall tendencies defined by each teacher. Gaunt (2008) observed that teachers tend to focus on either: skills for using the instrument and consequently getting future jobs; career - in order to become a soloist; bringing up and supporting the individuality of each student; overall view of classical music for educational future; a teaching focused on skills that provide the student with self-discipline and motivation (adapted from Gaunt, 2008: 220).

There is a tendency to divert the students into specific ramifications of instrumental teaching according to the future ambitions of the students, the type of course being taken, the performing capacities, or the tendency of the teachers' type of teaching. The teaching approach is also dependent on the instrument being taught

(Young *et al.*, 2003: 144) and previously identifying the teachers teaching style may be of great importance. (Ibid.: 152-153).

The approaches to instrumental teaching have been previously studied: Woody (2006) analyzed the use of different instruction types to transmit expressivity to piano students by using three approaches: Aural Modeling (consisting on listening directly to the teacher playing); Concrete Verbal Instructions (written of score or verbalization of instructions as *crescendo*, *ritardando*, etc); verbal instruction (using metaphoric/imaginary instruction). The results expressed that students for the Aural model would imitate the teachers, for the concrete verbal induced to a lot of repetitions therefore was inefficient and metaphor/ imaginary verbal instruction produced defined changes but the direction of those changes were not controllable (pp. 32-33). So, Woody (2006) concluded that most music teachers use various proportions of several instructional modes that may be the key for successful teaching (p. 34).

Gaunt (2008) in the analysis of one-to-one tuition presented the teaching strategies used by teachers of several instruments, including singing. The teachers reported the following strategies of teaching: 'exploring of extremes of musical sound and style'; 'establishing language' for 'technical aspects of playing', 'singing or conducting music to playing together', 'asking student questions to justify one's own artistic decisions'; 'giving feedback on students' performance' or 'making video or audio recording of their performance and asking student to comment', 'working with breath, posture, movement or physical flow to improvising' (adapted from Gaunt, 2008: 225-226). The categories of teaching strategies seem to serve specific necessities of the instrument learning. Gaunt (2008) found dominant patterns of practice with alterations between students. The above categories will be considered in the present study in more detail (chapter 7).

The impact of strategies in the learning may be enormous and completely change the direction of students' learning processes and future teaching options. Young *et al.* (2003) stated:

Netter understanding how different strategies can have an impact on the quality of teaching, and therefore learning, could provide a clear

foundation upon which to build models for effectiveness in music teaching (Young *et al.*, 2003: 142).

The importance of developing models of teaching that would serve the specific needs of teachers and consequently students will be approached and models based on the identification of teachers participating in the present study will be attempted in chapter 8, later.

Another point of view have the teachers who leave the students free to choose their learning roads and work as simple mediators. An example of this type of teaching was expressed by Nerland (2007) that observed types of strategies implied in one-to-one orchestral instruments instruction and concluded that teachers are mostly a 'supporter and mediator of history, whereas the student is free to making personal choices and judgments' (p. 412). This type of teaching may have limitations according to the stages of development of students.

Hallam (2001) presented the following combination of strategies for assisting students:

Teachers can assist pupils in developing their metacognitive skills by modeling particular learning processes, encouraging discussion of process and available strategies, encouraging the development of problem-solving skills, and providing opportunities for open evaluation of composition and performance of both student and professional work. (Hallam, 2001: 65)

Hallam (2001) also categorized approaches and styles of learning in a global perspective where music pupil fit one or more categories. That categorization presents not only the definition for but also transcribes the musical application as presented below:

Approaches to learning

- deep approach – musical emphasis
- Surface approach – technical emphasis
- Achieving approach – outcome focused

Convergent / Divergent thinking	- Convergent thinker – analytical - Divergent thinker – artistically creativity - All rounders – both the above
Impulsive /reflective Style	- Impulsive learners – learn mistakes in music - Reflective learners- are for performance quality
Verbalisers / imagers	- Verbalisers – work music through words - Imagers – Work music through images
Serialist / Holistic/ versatile	- Serialist – step-by-step, intuitive music learning - Holistic – convey range of music ideas plan to study - Versatile learner – both above strategies

(Adapted from Hallam, 2001: 66)

The approaches and styles in Hallam (2001) were considered in a learning perspective and the analysis leads into finding what outcomes are expected from each of the categories. In the present thesis a categorization will be made concerning the approaches and styles on a teaching perspective. These categories will be part of the definition of teachers later in chapter 8 when focusing on the teachers' most personal approaches to teaching and its common outcomes with the students.

Taking that teachers intentionally or unintentionally use different types of strategies to achieve their goals with students, as seen through different authors above, the next section will present sub-categories of teaching strategies and the existing literature related to each category that will be used in the observational chapter 7.

Demonstrations

Demonstrations are strongly used in music pedagogy. As a performative matter all instrumental teachers should have acquired the skills in order to perform and demonstrate to students how pieces are played. In singing, there are several conditionings to following the teachers' voice:

- The timbre, which is unique for each human voice. Several students end their studies sounding like an imitation of their teachers that, is not the

objective of artistry but rather finding the unique characteristics of each voice.

- Secondly, the type of voice (Soprano, Mezzo, Contralto, Contra Tenor, Tenor, Baritone, Bass, between other subgroups). Teachers may be from one range and work with students of any other type.
- Thirdly, the age which for any other instrument, independently of the age of the performer the instrument does not change with age. In the case of the voice, the age has huge effect on the sound, so a young student might find it difficult to follow the demonstration of the teacher and identify certain points of differentiation.

For all the above reasons it seems important that demonstrations may be complemented with clear verbal explanation of the teachers' intentions. However, as the relationship develops an overtime accumulation of reciprocal knowledge seems to develop and much less needs to be said before each demonstration as the student already might understand the requests of the teacher through other means (nonverbal communication, vocal inflections).

Demonstration may be effective, however, when teaching style, technique, and other 'non-visible' and non-quantifiable matters it may be a useful way to transmit to the student how satisfactory it can be to perform and serve as a way for students to develop respect and admiration for the teachers' abilities and knowledge. However, the reasons for using demonstrations in the lessons should go beyond the students' admiration towards the teachers' vocal abilities but rather knowing before hand what the purpose of listening and make that method as effective and precise as possible.

Although this method may have limitations it seems to be a commonly used method as it was found to be one of the most used teaching techniques in Woody's study (2000: 20). However, Siebenaler (1997) observed that the amount of demonstrations varied significantly according to students (p. 17) again showing that there may be a wide adaptability of teachers between different students and different levels of learning.

Woody (2000) reported, from his study with 46 undergraduate music majors, that conscience of expressivity in music performance is mostly considered during the higher education years. This type of development seems to be at that stage the most important element of their musicianship development. Modelling seems to be the most used teaching technique to approach expressivity (p. 20) as it provides direct exemplification of how the sound is produced.

Imitation

One artistically dangerous aspect of using demonstrations is the fact that it may lead into students using imitation of teachers to achieve vocal development. So, the use of demonstrations may easily be confused as imitation. Studies with observation into imitation field have concluded that this learning conducts students into also becoming limited from exploring their own expressivity (Persson, 1996; Woody, 2006). Ideally, students should listen to the certain aspects of voice without leaving their own vocal identify. The conscious listening of a teachers' demonstration is normally based on pre-existing knowledge, expectations, and preferences that might interfere with the hearing (Lisboa *et al.* 2005; Woody, 2006).

The identification of student with the master would drive the learning into imitation and seems to be out of use Presland (2005). The application of demonstrative methods of teaching will be examined in chapter 7, however the imitation levels occurring from those demonstrations will not be explored in depth as it does not constitute the focus of this research. However, further research seems to be needed in that field.

Physiological terms

The use of scientific basis on instrumental lessons and particularly in singing seems to be of great importance. After the entire instrument is located in the body of the singer and will need conscious use in order to be healthy. Although in singing lessons there are high references to health problems Burwell (2006: 338) and solutions, scientific bases of physiological terms are often not used. Schmidt (1989: 110) confirmed a lack of scientific basis used in instrumental lessons. The referencing to physiological terms and scientific background on singing lessons of the present study will be in chapter 7 and through questionnaires devised to students on chapter 3.

Verbal Transmission of own experience

As referred above, previous studies inform that students when becoming teachers normally use former learning experiences. As former-learning experiences may influence the teaching it is not surprising that teachers use references of former teachers or their own experiences as students to their present students (Purser, 2005: 295). This transmission is normally associated with a wide variety of experiences that may range between stage experiences, anxiety management, vocal health, and other professional experiences. The use of verbal example that addresses to former experiences of the teacher as a teaching method will also be examined in chapter 3 and 7.

Trying out examples

Trying out examples consists in consecutive repetition of an exercise to develop fluency and to acquire the necessary freedom to increment another point for development as a trial in the search for a write aspect of sound production.

As in any other instrument the trial and repetition in the search of appropriate performance, Reid (2001) defined trial learning processes as the teacher and students' experimentation of musical meaning (p. 34). This category will be included in chapter 7 in a broader view of experimentation.

Examples of Famous singers

This category refers to the indication given by singing teachers for listening to other performers and extracting through observation of expressive, technical, musical and interpretative matters. This category may also be identified in literature as modelling learning (when associated to the teachers' exemplification performance) but not as mimic. Woody (2000) analysed the different approaches to teaching expressivity and reported that the use of recordings was lower in vocal students who apparently value the visual elements of facial, physical and body movements in order to acquire and access important elements of performance (Woody, 2000: 21).

Young *et al.* (2003) exemplifies the use of references to recordings as 'shared strategy' as it links the teacher and the student to be in the same side of listeners (p. 155). The critical listening in singing lessons seems little used. However, references to

famous singers are given to students in the form of outside listening or homework. The listening/ observing of other performers is also reported for musical style purposes as in the case of orchestral instruments reported by Purser (2005).

Although the listening/ observation of other performers may induce young students to learn by imitation and therefore limit their artistic capacities, it also enables the development of structural, basic skills that ultimately will help in the development of own choices.

Self-reflective learning

This teaching strategy consists on the students' self-evaluation of performance under the guidance of the teacher. The teacher works as the mediator of correct or incorrect students' verbal evaluation. This type of teaching strategy may develop in the student a strong sense of self-discipline although it requires certain maturity for the process to work effectively.

Young *et al.* (2003) called this type of strategy as self-check strategy as the student is the responsible for the evaluation of performance (p. 155). This strategy is likewise related to the indications of the teacher for the students' self-observation and listening that may develop the students' independence for future strategic individual studying (Purser, 2005: 292). This type of teaching seems to always need to be complemented with other types of teaching.

Metaphorical

If we accept that music is essentially metaphorical – a fragment of our imaginations! – Then perhaps all teachers of performance should be able to employ a vocabulary which exploits the metaphorical, experimental and emotional appealing to the imagination of students as they learn to become expert performers (Burwell, 2006: 345).

This type of strategy consists on the verbal description of images that will produce in the student a sound effect. The use of metaphorical examples has previously been observed by Persson (1996) in a case study of one piano teacher with 9 students in

individual piano lessons). That study concluded that this method may be confusing for several students, indicating the use of this strategy only when students are known to be able to digest it properly or have the capacity to produce its effects on music (p. 33).

Although metaphoric teaching may be confusing for students, Lindström *et al.* (2003) in a study of metaphor applied to music teaching reported this strategy as the most effective teaching to achieve expressivity (p. 38). So, the use of this technique may be conditioned to its specific purposes: expressivity, interpretation and musicality but it may also be applied to technical means.

Callaghan (1998), when observing the singing pedagogy in Australian higher education institutions reported that teachers who use imaginary and metaphorical strategies to achieve technical development belonged mainly to the 'traditional' type of singing teaching in accordance to the training used in the 1940's and 1950's. The singing traditions may provide important clues to which direction each teacher tends into. For instance, in the vocal traditions used in the eighteenth century studied by Mason (2000) the tendency of experienced teachers to use metaphorical images is a way of discovering the physical access to muscles instead of directly indicating the physiology of the voice. The scientific physiologic indications to students were applied into the singing teaching/ learning later in the twentieth century but are still reported to be lacking in the majority of singing lessons (Burwell, 2006; Schmidt, 1989: 110).

Burwell (2006) evaluated the metaphorical language used in singing lessons in comparison to instrumental and reported that in vocal lessons, teachers recur significantly more to this metaphorical teaching than teachers in instrumental lessons. The metaphors were mostly used to serve interpretation and less for technical purposes (p. 340). However, in what concerns the expression, vocal teachers use significantly more (around four times more) discussion of that matter in regard to instrumental teachers who seem to focus more on discussion of the music it self (p. 342). Due to the 'invisible' nature of the voice, the use of mental exercises to achieve feelings seems to be a strong tool in vocal lessons.

The use of metaphorical examples in singing/ instrumental lessons for students who have imaginative limited skills may lead students into feeling frustrated due to not

clearly understanding the intentions of the teacher. Woody (2000) suggests a clear and more direct verbal instruction of musical directions is needed and that verbal approaches would be more effective (p. 21). Furthermore, Burwell (2006) observed the type of verbalizations of singer in comparison to instrumentalists and reported that the vocal teachers use much more metaphorical and therefore give more subjective indications than instrumentalists (p. 345). The adequate amount of metaphorical examples delivered to students seems to depend on the personal characteristics of the student. Whereas there are students who transform well the information, others will not develop into producing the required effects. This teaching skill will be examined in chapters 3 and 7.

The teaching/ learning processes seem to evolve several different strategies in order to provide the student with the appropriate tools for developing. The use of each strategy seems to depend on the students' capacities. Each of the above teaching types will be discussed, examined and compared between teachers and students of the present study in order to understand its use and applications serving the learning processes.

2.2.9. Categories of lesson observation

Timings, pace and sequence

The content of a lesson is the main indicator of the type of learning taking place. However, for the present study the smaller events happening and its order was also considered for observation as well as its timings and pace.

The timings and pace of instruction seems to be a matter of extensive research within the instrumental/ singing studio (Duke *et al.*, 1998; Siebenaler, 1997: 11; Speer, 1994: 15). The purpose of evaluating the timings and the order of events seems to be mostly associated with testing teaching effectiveness. Findings from previous research suggest that performance time does not positively relate to effectiveness (Siebenaler, 1997: 11; Speer, 1994: 15) but rather high levels of interaction between teacher and student that result in quality raise (Siebenaler, 1997: 11). This leads into the present research that intends to evaluate how those interactions take place.

On another perspective of effectiveness associated with timings, authors defend the use of time quantifying techniques observed positive outcomes from the

distribution, timing and pace. Reid (2001, 29) used time measurement in order to establish the levels of improvement to become an instrumentalist. The timings and measurement were also defended by Duke (1999) as an important procedure to describe teaching (Duke, 1999: 295; Duke *et al.*, 1998: 268). The sequence of instruction may also be considered as an interference factor (L'Hommidieu, 1992: 307) on learning. Timing, pace and sequence will be considered in chapter 7 within sections from lessons. The pace of interactions between teacher and student will be considered in chapter 3 and 7 as well as the sequence of each major event occurring in lessons.

Categorization

The next section will present studies where the methods of observation included the division of lesson in smaller categories that later will be used as the base for observation methods of the present research.

Kostka (1984) followed the categories below to observe 96 private piano lesson with the purpose of evaluating time use, attentiveness and interruptions: 'nonmusic activity, Performance of the student, performance of the teacher talk by student, talk by teacher, students' performance interrupted by teacher' (p. 115). The above components represent major activities that take place in lessons. These will be used for evaluating time and interruptions and therefore identify the teachers style of teaching in chapter 7.

Speer (1994) presented behavioural components of sequential patterns in order to investigate verbal behaviours in private piano lesson. The following main components were used:

- **Teacher Presentations (academic musical presentation, direction, social task presentation, off-task)**
- **Student response (performance, Verbal)**
- **Teacher reinforcements (verbal approval, verbal disapproval, specific feedback, non-specific feedback)**
- **Sequential patterns (Complete/ Incomplete)**
- **Modelling (playing or singing from teacher)**
- **Coaching (simultaneous explanation of teacher over students' playing)**

(Adapted from Speer, 1994: 18)

The above categories were used in order to measure time spent and frequencies for each part, and the categorisation of complete/ incomplete sequences of patterns of behaviour.

Siebenaler (1997) scheduled sets of behaviours in piano teachers to apply in video observations aiming to identify characteristics of effectiveness:

- Teacher Behaviours – Clap/ sing, Play, Play / Talk
- General Directive vs. Specific Directive
- Questions
- Music Talk
- Feedback: Specific Approval, General Approval, Specific Disapproval, General Approval, Approval mistake, Disapproval Mistake
- Off-task
- Inactive
- Students behaviours – play/Talk, Play, Clap/sing
- Verbal response
- Questions

(Adapted from Siebenaler, 1997: 8-10)

All the above tasks of students were rated with a mark that evaluated the performance of students after teachers request and consequently the students' musical progress. So, the above categories were used not only to characterise the lessons but also to assess the teacher's effectiveness. In that study, the duration and pace of teachers' behaviour contributed for the characterisation of teachers by distinguishing the more active and consequently more effective (p. 18). For the present study the use of these categories will mainly serve as quantifiers of each teachers characteristics of teaching and students' learning types.

Duke (1999) implemented a systematic observational procedure build in order to assess the behaviours of teacher - student (and parent) in the private string lessons' setting. Duke (1999) resorted to 13 expert string teachers for a total of 246 lessons observed. The observation of lessons was made through the selection of parts with 8 to

12 minutes where the teacher and students were seen working on a piece (Ibid.: 297).

The considered categories regarded:

- Teacher and student behaviour (talking, movement, Performance, other non-verbal communication)
- Teacher's verbal and nonverbal communication (information, directive, questions, positive verbal feedback, negative verbal feedback, positive nonverbal feedback, off-task talking)
- Student behaviour (talking, performance, nonverbal communication)
- Student verbal communication (on-task talking, question, off-task talking)

(Adapted from Duke, 1999: 301)

In the above adaptation it was excluded all categories regarding parents, as it did not relate to the present study. The above categories are considered important to the observational part of this study, as they seem to represent clear parts of the musical one-to-one setting.

In order to sustain the prior research that the teaching influences learners environment and the teachers' methods (Hallam, 2001: 63), the present research will describe differences between teachers' approaches to singing as well as a description students characteristics that may be influential for that relationship. Considering the 'dynamic model of the factors affecting learning in music' by Hallam (2001: 73) several components used in that model were observed in the present study regarding:

- the learner characteristics: 'age', 'gender', 'learning approaches and styles', 'motivation'
- learning environment: 'institutional characteristics', 'teaching environment', 'teacher characteristics'
- process of learning: 'learner strategies (task or person oriented)'

(Adapted from by Hallam, 2001: 73)

Although the 'dynamic model of the factors affecting learning in music' by Hallam (2001) is constituted of many other components that reflect the learning factors,

for the present study only the aspects that concern directly to the relationship were considered for adaptation. The included elements for the model of observation will be used for expectation evaluation (in chapter 3) and longitudinal observation (chapter 7) of this research.

Although the study by Ginsborg *et al.* (2006) does not directly relate to singing teaching, the categories used to report how a singer rehearsed of Stravinsky cantata overtime included categories that related to the observation in singing lessons. The categories used in that study were:

- Basic (Pronunciation, stress of music)
- Structure of music, interpretation
- Basic/structural performance cues
- Interpretative performance cues
- Joint performance cues

(Adapted from Ginsborg *et al.*, 2006: 173-178)

The above categories were inserted into categories of language coaching, Interpretation and musicality form chapter 3 and 7 in a detailed analysis.

Gaunt (2008) used categorization within instrumental lessons in order to describe the teacher-student relationship. The following categories were included:

- Typical structures of lesson: Chat, warm-ups, breathing and posture, aural work, musical concepts, technique, and performance
- Type of transmission: Demonstration, explanation, metaphor, reflection
- Feedback: Motivation, self-determined directions
- Relationship: Ethical considerations, physical contact
- Communication

The categories observed in the study of Gaunt (2008) were reorganized at the present research for observational categorization rather than for interview purposes. Each of the above will be considered separately in order to observe its occurrence, order and purposes within the lesson and in regard to the relationship taking place with the teacher. The order of events may also provide clues to reinforce or not the previously

raised problem of lesson conduction, planning and development of musical identity by Gaunt (2008: 216-217).

2.3. Summary and Discussion

The existing literature provides a limited and almost inexistent approach to the singing teacher-student relationship. Although several studies have reported into different aspects of relationships in music and many authors reinforce its importance, its repercussions into actual research are scarce. The existing research on one-to-one relationships reports mainly to piano or violin and although some studies include singing the specific nature of the singing instrument is normally not explored. Most other studies in singing have essentially its focus on one technical perspective and not on teacher and student.

Existing research explore technical, pedagogical, interpretative aspects of singing while others use descriptive the actual setting where lessons take place. A joint observation of the above aspects seems to be needed in order to combine different characteristics that may help developing a more accurate idea of singing teacher-student relationship and its positioning in the singing setting as well as describing how it may interfere with the more technical, musical and interpretative aspects of singing.

The present research is built mainly on the video observation of lessons and complemented with instruments of other nature: personality tests and adult attachment test. The personality was measured through the test NEO-PI-R by Costa and McCrae (1992) and the adult attachment scale using the Adult Attachment Scale-R by Collins and Read (1990). A literature review on personality and attachment will be presented in chapter 5 and 6 to contextualize each of those themes.

The next chapter of this thesis will present students' expectations regarding their new singing teachers in regard to the previous student- teacher relationship in order to contextualize the setting and the relationships.

3. Expectations and realities faced by singing students - (Inquiry Survey)

3.1. Introduction

The identification of students' expectation in singing lessons may contribute towards a more accurate knowledge of the setting. Hallam states that 'expectations that pupils have of their teachers change as they get older' (Hallam, 2001: 68): in addition, different learning stages/ experience, gender and countries of origin may highlight the necessity of adjustment in teachers' teaching strategies.

Taking into consideration that instructional strategies are normally dominated by the teachers' talking (Young, *et al.*, 2003: 147), the observational part (chapters 4 until 9) of the present research was focused on both elements (teacher and student) and the reported part (through questionnaires, in the present chapter) given word to student. It is hoped that the answers provided through this questionnaire lead to clarify the singing setting as expressed through the aims of this chapter, next.

3.2. Methods

3.2.1. Aims

The aim of this chapter is **i.** to explore the perceptions of singing practices by characterizing the setting; **ii.** identify cross-cultural differences between countries; **iii.** other factors influencing singing relationship and **iv.** to assess the expectations and the realities of singing students through longitudinal comparative analysis.

3.2.2. Procedure and Materials

Questionnaire development and design

Two quantitative and qualitative questionnaires were devised to ascertain the expectations of singing students concerning their teachers, and the realities faced in one-to-one singing lessons. The questionnaires were designed and piloted with eight singing students and three singing teachers from Universidade Católica in Portugal and University of Sheffield in the United Kingdom and translated into French, Portuguese and English by native speakers of each language before distribution to participants.

The experimental design of the questionnaire was largely influenced by extracting elements of interviews to the above-mentioned three singing teachers. These teachers had diverse backgrounds, taught singing as the main instrument and were from both pedagogic and performative backgrounds. A list of key words were extracted and included in the questionnaires that were then piloted in 8 singing students and several topics were extracted from pre-existing literature (Mills, 2004: 247; Young *et al.*, 2003: 143, 147-152).

Questionnaire implementation

The first questionnaire was given to students at the beginning of the academic year before meeting the new singing teacher or up to two singing lessons after meeting the new singing teacher. This allowed the students to retain strong memories of their former teacher and avoid the influence of the new teacher, which could distort those memories. The second questionnaire was administered six months after the first allowing time for students to get to know their new singing teacher.

Both questionnaires explored three aspects of student experiences (a-c below); the first questionnaire included a part regarding expectations (b); and the second questionnaire included a section for development report (d).

- a. Former singing teacher
 - i. Singing experiences
 - ii. Location of singing
 - iii. Language used in the lesson
 - iv. Singing teachers' characteristics (pedagogical and personal)
 - v. Structure of lesson
 - vi. Organization of time
- b. Expectations for future singing teacher
 - i. Singing teachers' characteristics (pedagogical and personal)
 - ii. Structure of lesson
- c. Students' beliefs about teacher-student relationship
- d. Singing development as felt by singing students

3.2.3. Participants

The heads of vocal studies of higher education institutions (certified colleges or universities) from United Kingdom, Portugal, Canada, Australia and United States of America were contacted through a written letter summarising this research and requesting permission and collaboration to apply this survey to students from the institutions they directed. Just over half universities replied to the letters (56%). From these, 83% agreed to participate in the survey and 17% did not accept. Most colleges that declined mentioned having the students under several surveys.

The requirement for choosing the institutions listed below was having singing as main course and being representative institutions within the field. The survey was made in several countries to allow a variety of cultures that might enrich the study. Initially, the following institutions were contacted through their head of vocal studies:

United Kingdom

- a. Guildhall School of Music and Drama
- b. Royal Academy of Music
- c. University of Sheffield – Music Department
- d. Royal College of Music
- e. Royal Northern College of Music
- f. Royal Scottish Academy of Music and Drama

Portugal

- g. Universidade de Aveiro – Departamento de comunicação e arte
- h. Universidade Católica do Porto - Escola das Artes
- i. Escola Superior de Música e das Artes do Espectáculo do Porto
- j. Escola Metropolitana de Lisboa
- k. Escola Superior de Música de Lisboa

Canada

- l. University Laval

Australia

- m. Sydney Conservatorium of Music

United States of America

- n. University of Indiana - School of Music**
- o. The Julliard School**
- p. University of Rochester - Eastman School of Music**
- q. New England Conservatory**
- r. Manhattan School of Music**

From the above list, the institutions a, c, d, g, h, i, j, k, l, m agreed to submit their students to this study. Institutions b and f declined to participate in the study and institutions e, n, o, p, q, r did not reply to the requests.

After the agreement to participate in the study, the heads of vocal studies were asked to distribute the questionnaires to singing students who would fulfil the following requirements:

- i. Be registered in that higher educational institution.**
- ii. Be studying for a degree (undergraduate or post graduate).**
- iii. Have singing as their main instrument (performance or pedagogy)**
- iv. Have had a singing teacher before.**
- v. Have changed singing teacher at the moment of the questionnaire reply.**
- vi. Reply to the questionnaire before starting with the new singing teacher or until two lessons after starting with the new singing teacher, for the above mentioned reasons.**

The questionnaire was circulated to a number of 85 students, of who 64 (75%) returned responses. In that questionnaire students were requested to express their acceptance to continue the study. From the 40 students who accepted to proceed to the second stage, 25 (62.5%) actually returned the questionnaires. The first questionnaire was returned through the head of vocal studies and the second questionnaire was distributed using the same method and returned directly to the researcher through self-addressed stamped envelopes.

3.2.4. Statistical Methods

The analysis of the data was made through the statistical software SPSS® (*Statistical Package for the Social Sciences*) v16.0.1 for Mac. At an early stage, both questionnaires were submitted to a descriptive and exploratory analysis according to the used variables (nominal, ordinal and interval/ratio). The following measures were calculated: absolute frequencies (number of valid cases – N); relative frequencies (percentages of valid cases - %); Central tendency descriptive statistics (Mean); Dispersion (standard deviation); asymmetry and Kurtose; and extreme values (minimum and maximum). The numeric exploration of data was complemented, when appropriate, with graphical representations.

After a descriptive presentation, the questionnaires were subject to exploratory analysis. A factorial analysis was made as an attempt to create dimensions and a group of variables completed the requirements for factorial grouping. However, for the majority of variables validation was not possible because not all the needed requirements of this technique were validated due to the second questionnaire's small number of respondents. Considering both questionnaires as one single study and according to (Hair *et al.*, 1998) this technique was not applied and simple variable observation was made.

For the comparison between independent/non-related variables the *Kuskal-Wallis* test was used whenever more than two groups of comparison were presented (for instance, the variable country (Portugal, United Kingdom, Other). When significant differences were found, a paired comparison was applied through the *Mann-Whitney* Test. When two groups were presented (i. e. gender: male, female) non-parametric *Mann-Whitney* test was applied. All tests were applied with a confidence level of 95%.

3.3. Descriptive Analysis

A descriptive characterisation of participants will be presented next regarding matters that establish the participants in terms of the age, gender, singing experience, countries of origin, language used and freedom to change between singing teachers in order to allow a better understanding of the forthcoming results.

3.3.1. Students' age distribution

As mentioned above, the first questionnaire was completed by 64 participants and the second questionnaire by 25 students. The participants from the second questionnaire were the same as the first in order to allow a longitudinal observation.

Figure 1 (below) shows the students' distribution according to their age. In the first questionnaire the mean age was 22.6 with $Sd = +/- 5.2$ years and in the second questionnaire the mean age was 24 and $Sd = +/- 6.7$ years. The age of the 2nd questionnaire respondents are presented because although this is a longitudinal study where the respondents are the same, only a part of the initial students answered the 2nd stage.

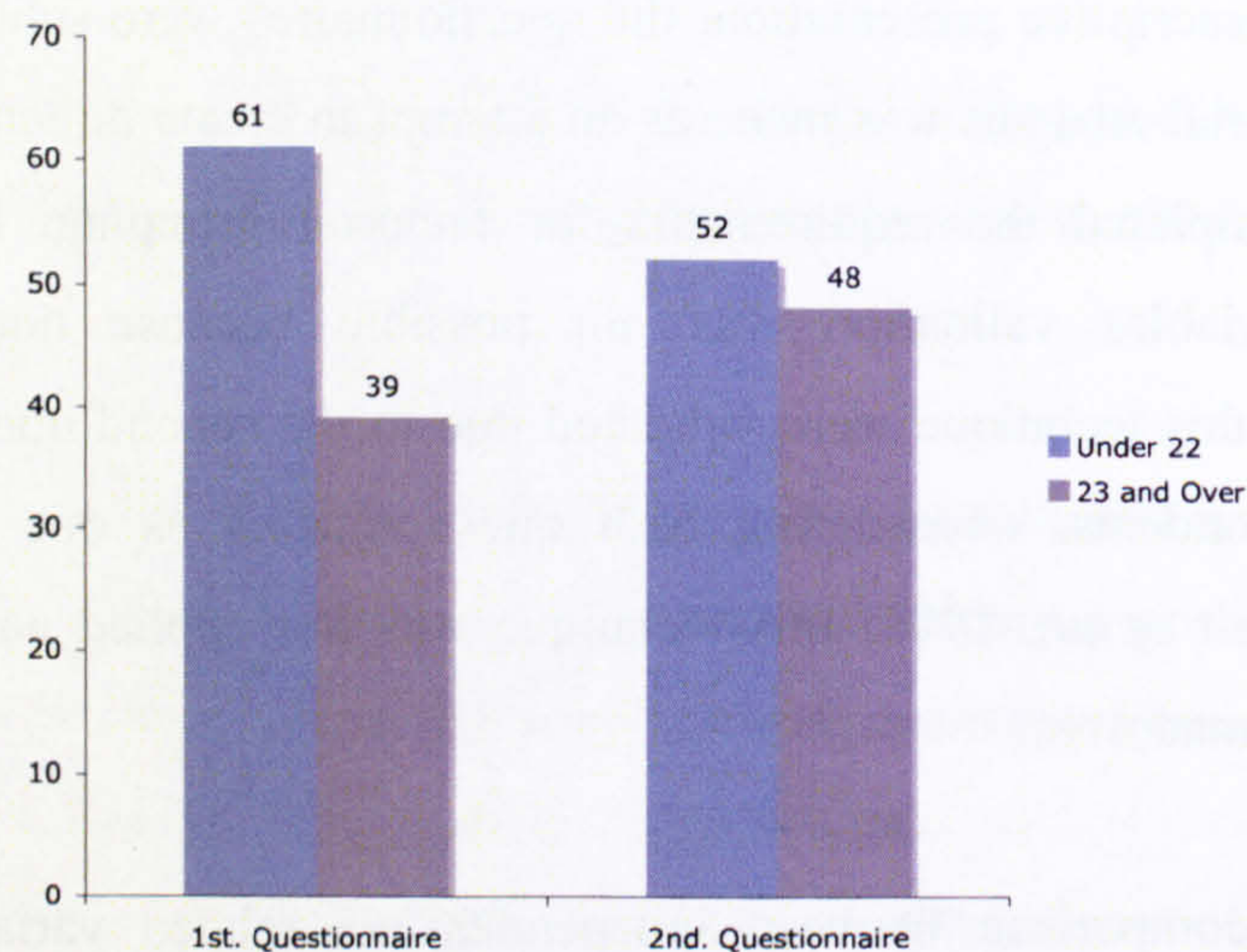


Figure 1: Percentage of participants' age in 1st and 2nd questionnaires

The ages were divided in two groups. The majority of students (39 students) were taking a bachelor's degree and were under 23. From the students with 23 years old or more (25 Students) the majority were undertaking postgraduate courses.

3.3.2. Gender distribution

In terms of gender (please see figure 2, below), this study had more female than male students. This discrepancy did not seem problematic taking into consideration the fact that the singing students' population seemed normally represented with the same characteristics (according to the heads of vocal studies).

Although in the second data collection the sample was reduced, the ratio between female and male students represented in the replies was kept: 1.st questionnaire (23% male and 77% female) and 2nd questionnaire (24% male and 76% female).

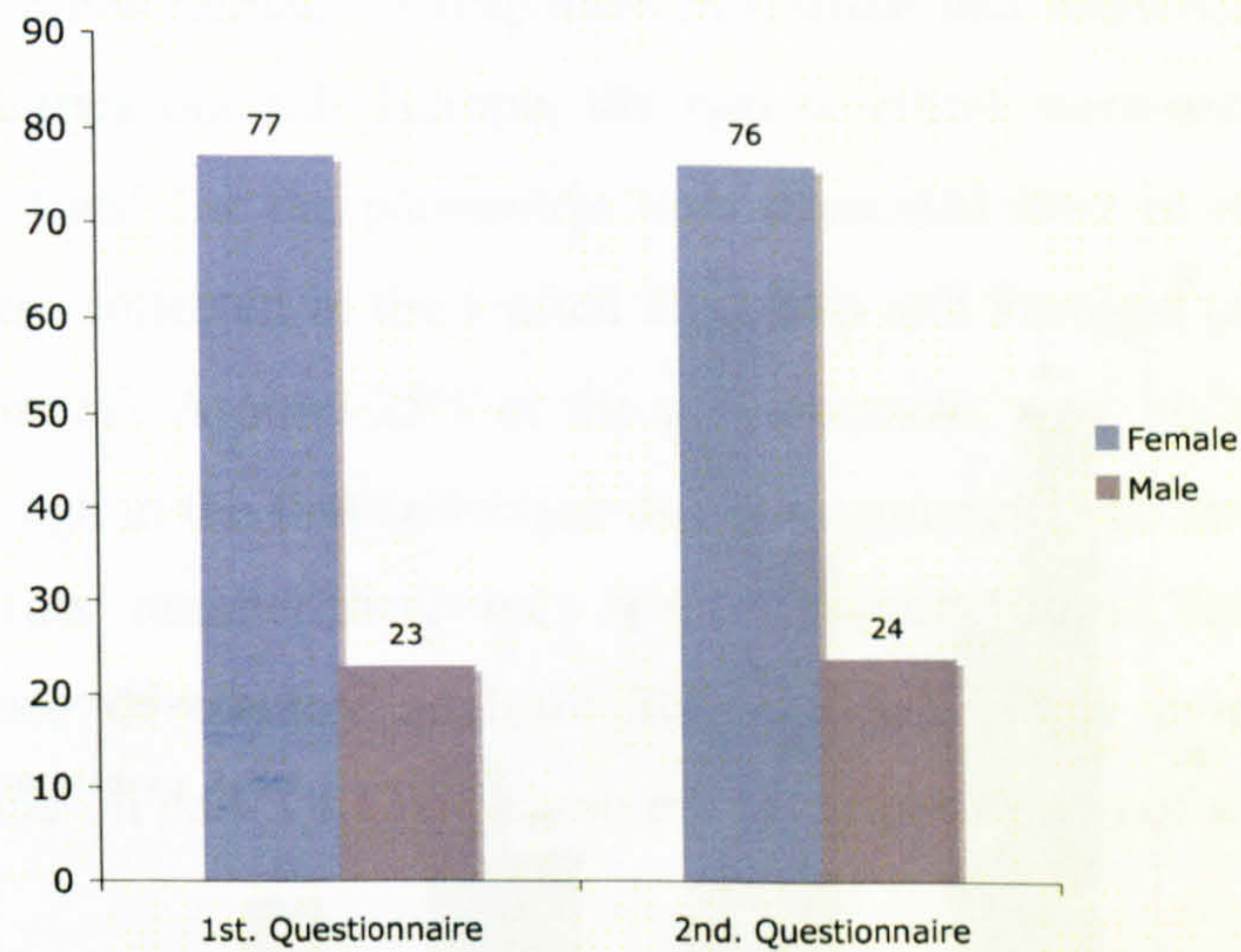


Figure 2: Percentage of respondents' distribution by gender.

In both questionnaires, most respondents were female under 23 years old. The male students were generally older and fewer than the female peers. The 1.st questionnaire had 49 (77%) female and 15 (23%) male and the 2nd questionnaire had 19 (76%) female and 6 (24%) male students. This study seems representative of a normal singing students' population where most female students are younger than their male peers (according to the heads of vocal studies).

3.3.3. Students' countries

As mentioned above, the questionnaire responses for this study were collected in colleges and universities from Australia, Canada, Portugal and United Kingdom. The distribution of respondents was made as follows in figure 3:

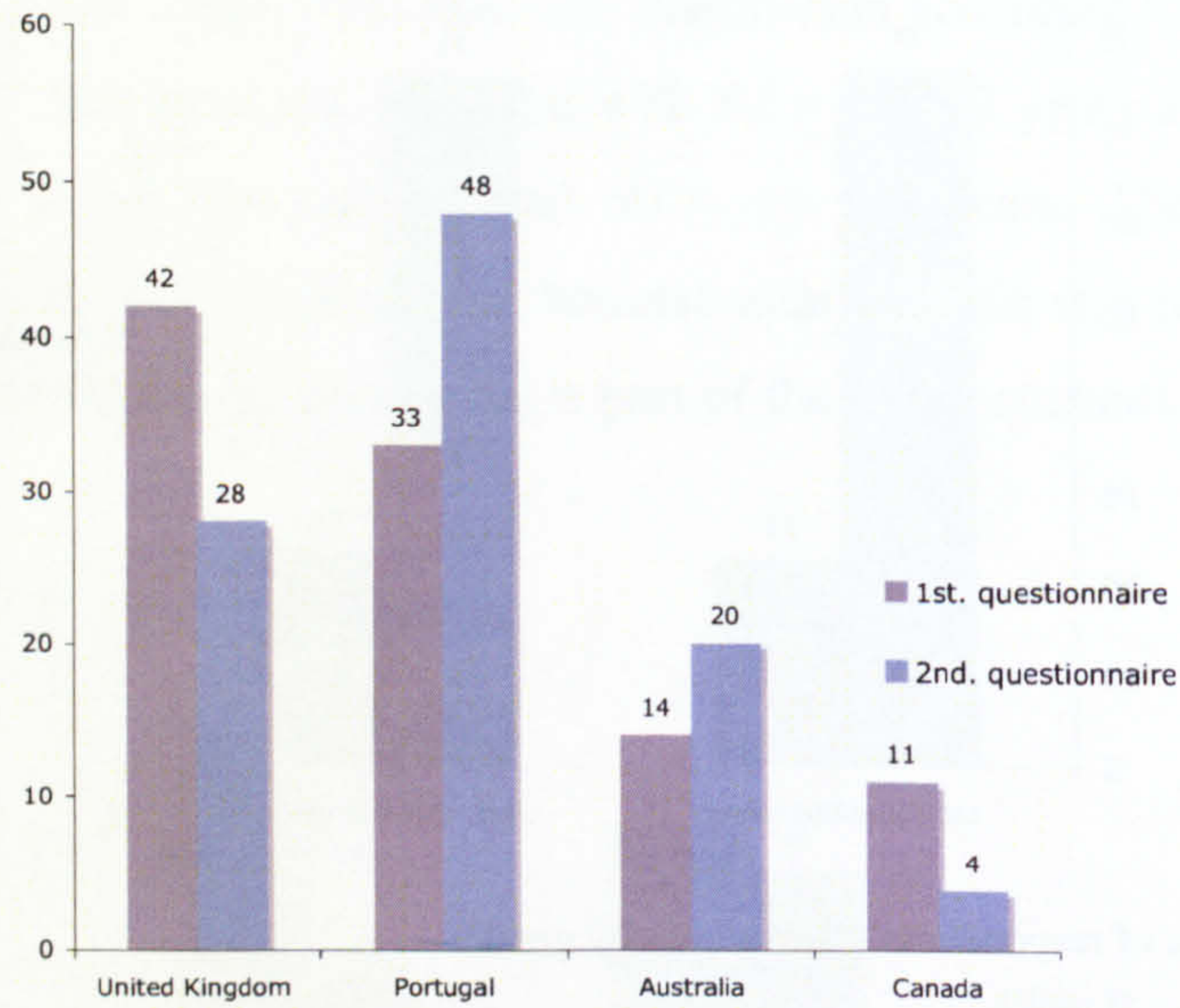


Figure 3: Percentage of respondents' distribution by country for 1st and 2nd questionnaire.

The 1st questionnaire had 27 respondents from the United Kingdom; 21 respondents from Portugal; 9 respondents from Australia and 7 respondents from Canada. The 2nd questionnaire had 7 respondents from the United Kingdom; 12 respondents from Portugal; 5 respondents from Australia and 1 respondent from Canada. Due to the low number of responses in Canada and Australia and considering that both are countries out side Europe, the two countries were put in one category called 'other countries' for the parametric tests presented later in this chapter. Most questionnaires were collected in the United Kingdom and Portugal (around 75% in 1st and 2nd questionnaires). Around 25% of the questionnaires were collected in Australia and Canada; although in the first collection the two countries were almost equivalent in terms of respondents' number there were fewer responses from Canada in the second stage. The purpose of country analysis not only will show evidence of cultural differentiation (later on part 3.4.13) but also allow the perception of students' migration (Figure 4).

3.3.4. Language

The evaluation of language used in singing lessons was considered as variable as students who move to another country might have verbal 'barriers' to overcome. Those verbal communication difficulties might interfere with the relationship between teachers and students. In this research, 55 students were studying in their native country and 9 students of the students were studying abroad (figure 4).

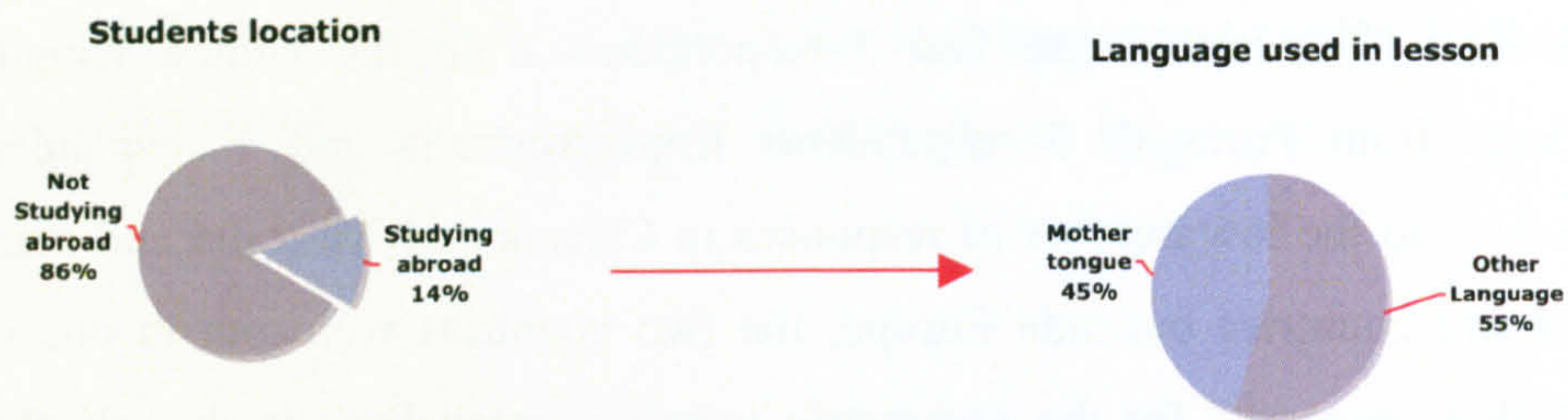


Figure 4: Percentage of students studying abroad and percentage of students using their mother tongue in singing lessons.

From the students who were studying abroad, 4 students were using their mother tongue in singing lessons and 5 students were using another language in the lessons. In general, students using a foreign language in their singing lesson were very satisfied or satisfied with their knowledge of that language. Due to the low number of students who were studying abroad, no further connections were made between this variable and others and further research could be addressed towards that specific group of students.

3.3.5. Starting Age

In order to evaluate the range of experience from the students in the sample, the students were asked the age with what they started singing lessons (table 1):

Table 1: Mean, median mode and standard deviation for starting age of students

	Mean	Median	Mode	SD	Minimum	Maximum
Students' starting age	17.0	17	15	4.41	4	32

The surveyed students started having singing lessons at a mean age of 17 years old (± 4.41 years). The student who started having singing lessons earliest was 4 years old and the oldest age of starting was 32.

3.3.6. Number of learning years

Figure 4 (below) shows how long students had singing lessons: given categories were 0 – 3 years, 4 – 6 years, 7 – 10 years and more. These categories were chosen according to a preliminary observation with the pilot group: students who were initiating college/ university singing previously between 0 – 3 years; students who were at the middle of the course the course were in the second category between 4 – 6 years; students at post graduate level had often studied previously between 7 to 10 years and few who started earlier had studied for more than 10 years. The experience of students in categories was used in previously studied, for instance, by Speer (1994). Differences in studying longevity seemed important to the present study as it differentiates the levels of experience between students.

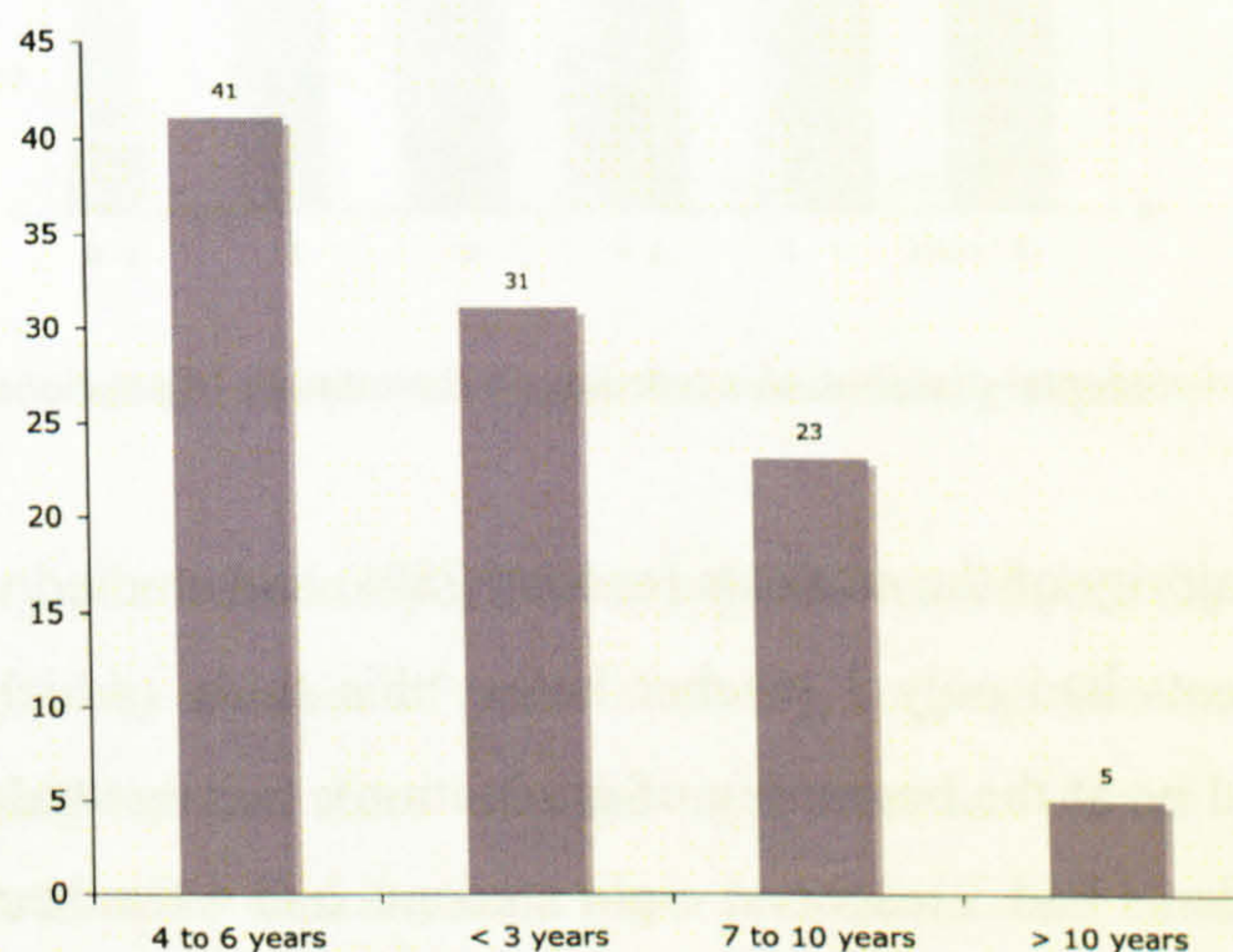


Figure 5: Percentage of students' distribution according to their learning experience in years.

The vast majority of students (72%) had singing lessons for less than 6 years. Most students had singing lessons for between 4 and 6 years (26 students); 20 students had lessons for less than 3 years; 15 students had lessons between 7 to 10 years of singing and a minority of 3 students is undertaking a course after 10 years of singing instruction. The sample presented some consistency by the majority of students having approximate experience longevity.

3.3.7. Number of Teachers

Taking into consideration that the purpose of this study is to evaluate the student - teacher relationship, the number of teachers with whom the students had studied was also considered as a factor of experience, independent from studying longevity. The number of singing teachers may be an indicator of how well students will be able to evaluate a new singing teacher-student relationship.

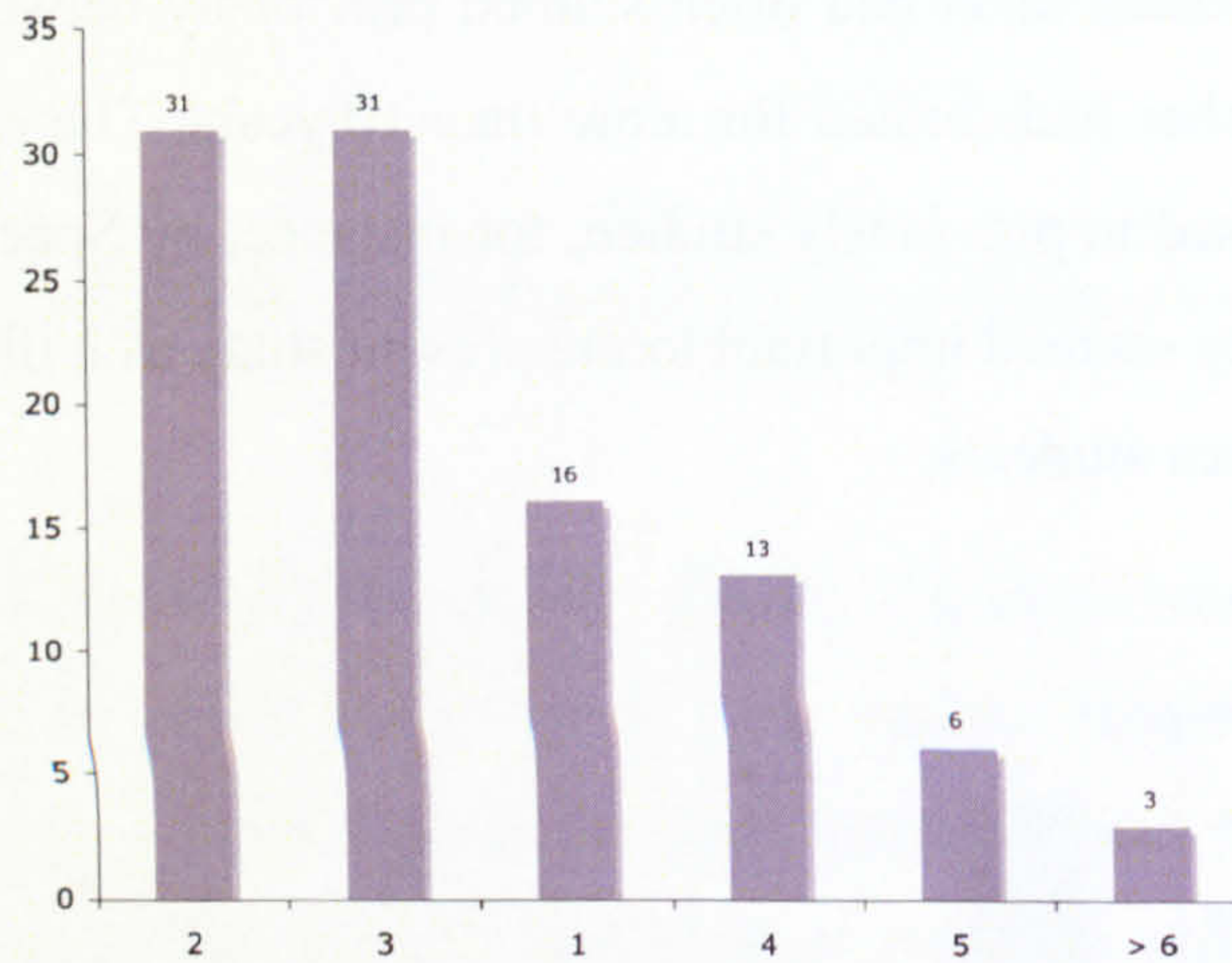


Figure 6: Percentage of students' distribution according to the number of previous singing teachers.

The vast majority of the students (around 78%) had studied with no more than 3 teachers. Ten students had only 1 teacher before this study (which indicates students who possibly would be at the beginning of graduation); twenty students had 2 teachers; another twenty students had 3 teachers; eight students had 4 teachers, four students had 5 teachers, two students had 6 or more teachers before this research. The above description indicates most students with moderate relational experience by having between 2 or 3 teachers.

3.3.8. Changing teacher

For a clearer understanding of students' changes between singing teachers, the variables 'how long students had singing lessons' (3.3.6, above) and 'how many teachers each student had' (3.3.7, above) were cross-referred in relation to each other and presented in the histogram of Figure 7 (below).

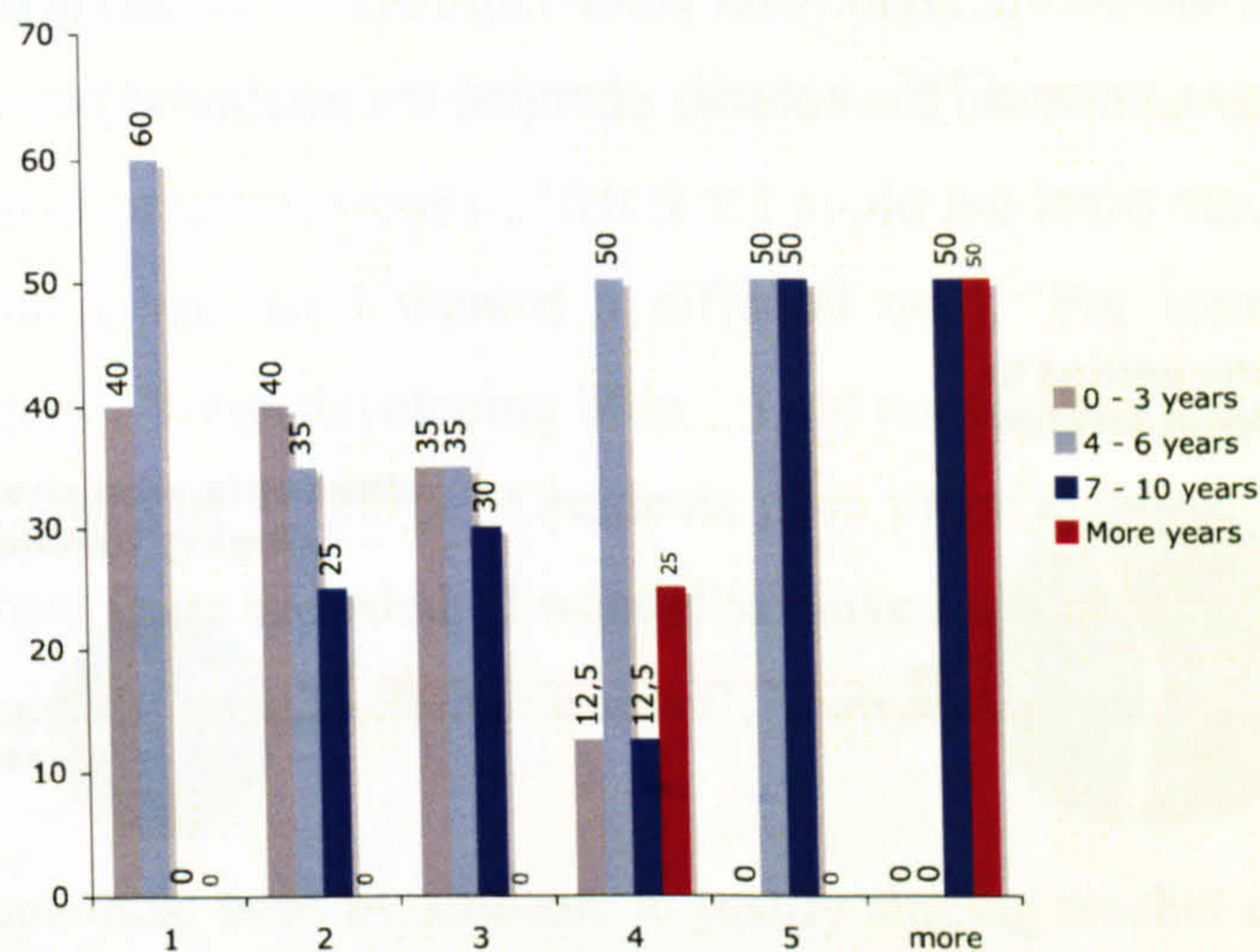


Figure 7: Percentage of students' distribution by number of teachers, grouped by studying years.

The majority of students reported having had reasonable distributions of singing teachers according to the number of years studying singing. For instance, students who only had one singing teacher were also the ones who had fewer years of experience. Cases with less predictable distributions were 2 students with '4 to 6 years' of singing who had already studied with 5 teachers, indicating changes of more than one teacher per year or changing every year and 5 students who reached their '7th to 10th year' with only 2 singing teachers.

The teacher distribution is revealing of instrumental learning' variety of backgrounds. In instrumental lessons and particularly in singing (where students have too many different backgrounds) students may have completely different experiences as seen here with the number of previous teachers. Also, the freedom that is given to singing students to chose, change, adapt and experience new teachers seems important for the focus on the main target of development. The following section presents students who were in the situation of changing teacher by their own initiative and those who did not feel free to step out of that unwanted teachers-student relationship.

3.4. Results related to studies' 1st stage

3.4.1. Wish to change singing teacher

Students were asked to express if they ever wished to change singing teacher before this present change. Although most students never wished to change singing teacher (60%), a reasonably significant percentage (40%) already wished that change to happen. From these, around 76% actually changed the teacher as presented in figure 8:

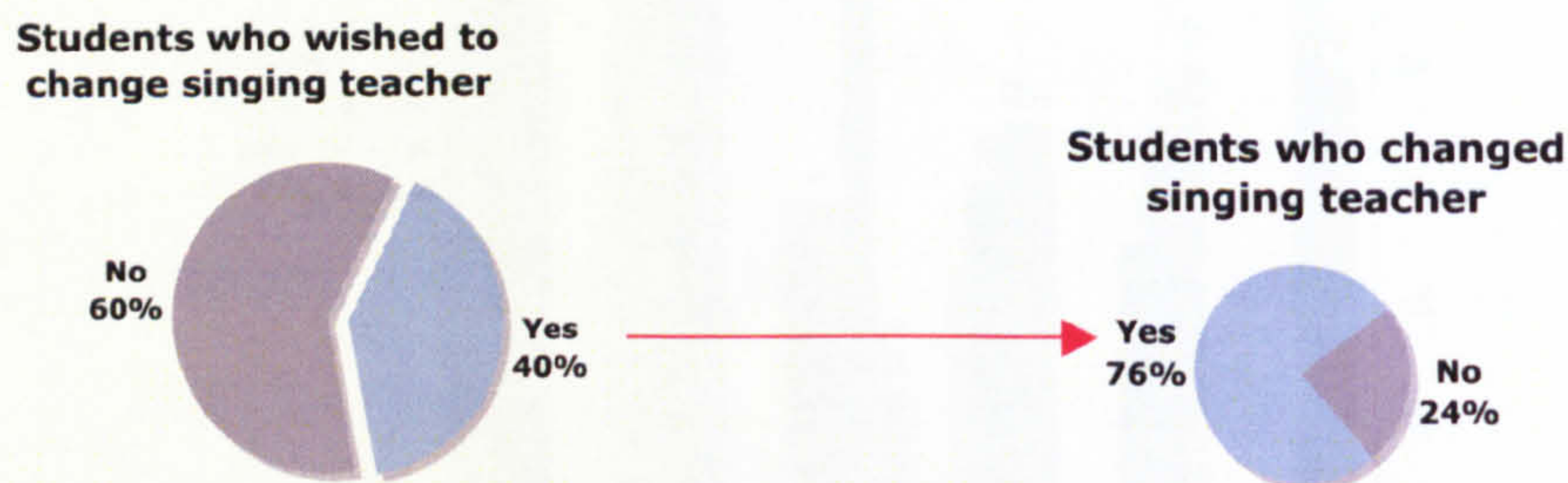


Figure 8: Percentage of students who wished to change singing teacher and students who changed singing teacher.

Although the majority of students actually changed teachers when they felt the need, 24% of students who wished to change did not make that step. Later analysis will present results related to this matter in relation to age, gender, country, singing experience or number of teachers.

From the students who wished to change singing teacher, 92% presented the reasons for that. The students' justifications were grouped in 4 main categories:

- i. Personal/ Relational – 37.5% of students presented reasons that were grouped into this category: 'No interest by teacher', 'The encouragement was practically inexistent', 'Teacher forced me to sing a lot of songs I didn't enjoy', 'The teacher was very absent', 'I changed to meet other points of views in singing', 'Experience other ways of teaching in order to find my own way', 'No comprehension at all', 'Not challenging enough', 'I felt that we had been together for too long (6 years) and still the relationship of teacher and teenager pupil, rather than two adults', 'I've been with the same teacher for too long, I wanted to change'.

- ii. Technical - 28% of students justified the teacher change with technical reasons: 'I was not feeling physically comfortable with my singing', 'It seemed important to find a teacher with a technique that I would identify more', 'the technique used did not lead me to good results', 'to discover other techniques that would use more my body for singing'.
- iii. Developmental – 22% of students justified their wish to change teacher as follows: 'I needed someone who would lead me into further development', 'Lack of practical results', 'felt that I could not learn much more from the teacher I had, so I wanted a different one', 'For some time I felt no progress', 'I was developing little', 'I did not feel any development'.
- iv. Other reasons – 12.5% of students gave other justifications for changing teacher. These included: 'I wanted to move from the city I was to London', 'I've just wanted to change teacher', 'Low pedagogical quality'.

The reasons most used by students to justify singing teacher change were inter personal or relational. Students seem to value this matter even higher than the vocal development itself. The type of teaching, effort and encouragement seems to be most valuable to students. In second place, technical reasons were evoked: the self-identification with the used technique. The development of the voice interestingly was not such a strong reason but students reported lack of results or the need to get information from another point of view that would lead into development.

The present study is in agreement with previous research by Presland (2005: 246) where most cases of wishing to change teacher were fulfilled. However, a full comparison of values was not possible as Presland's (2005: 246) study regarded a rate of 5% of students per year whereas in the present study regard all past experiences on wishing to change the teacher.

The students also expressed their freedom to change teachers in a 5 point *Likert* scale using 1 as 'strongly disagree' until 5 as 'strongly agree'. The following results emerged, figure 9 below:

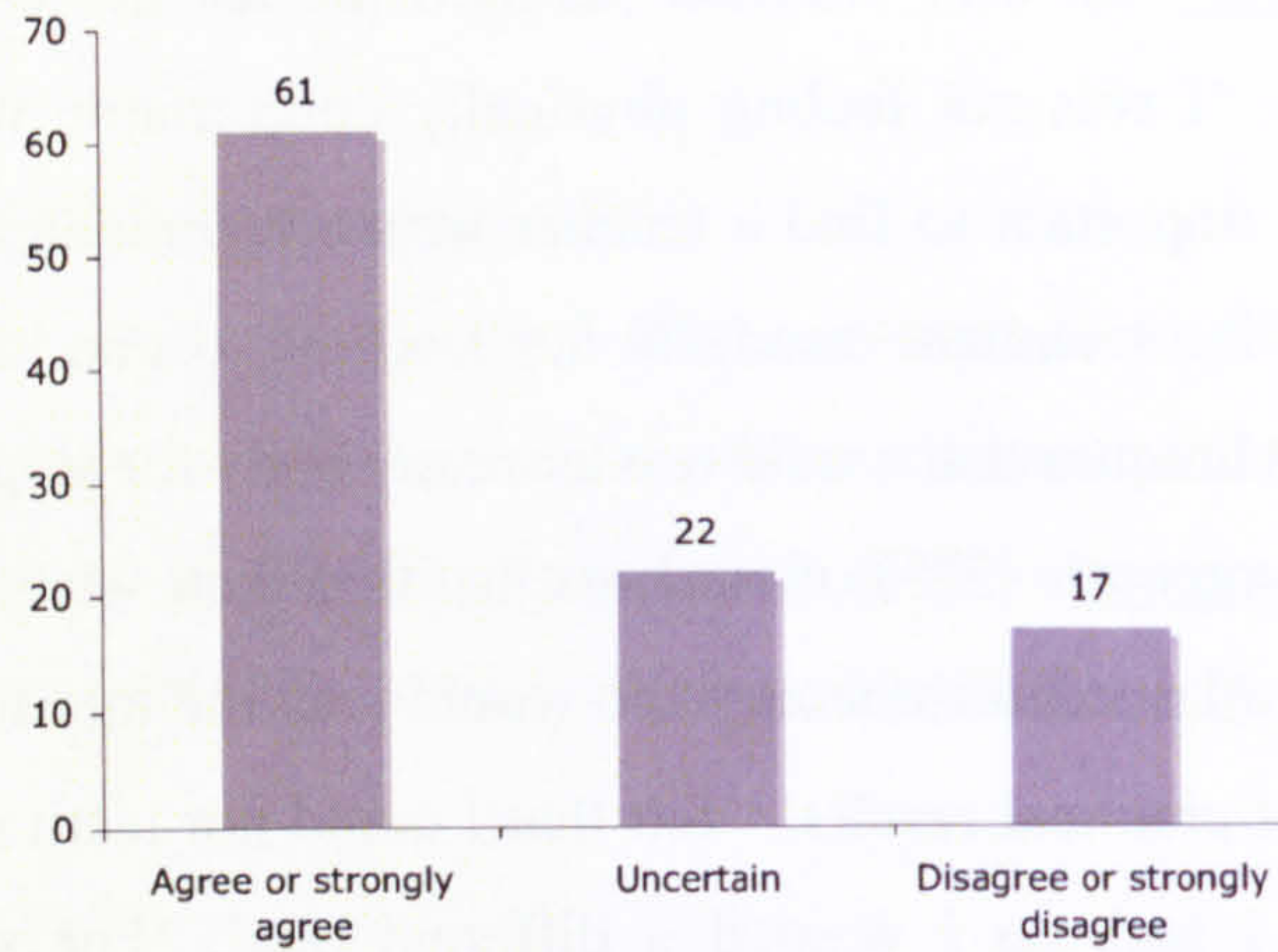


Figure 9: Percentage of students perceived freedom to change singing teacher.

Most students (39) agreed or strongly agreed that they feel free to changing singing teacher, 14 students were uncertain and 11 students disagreed and strongly disagreed that they would feel free to changing singing teacher again confirming students' mobility. A in-depth observation of data lead to separating results by country as figure 10 presents:

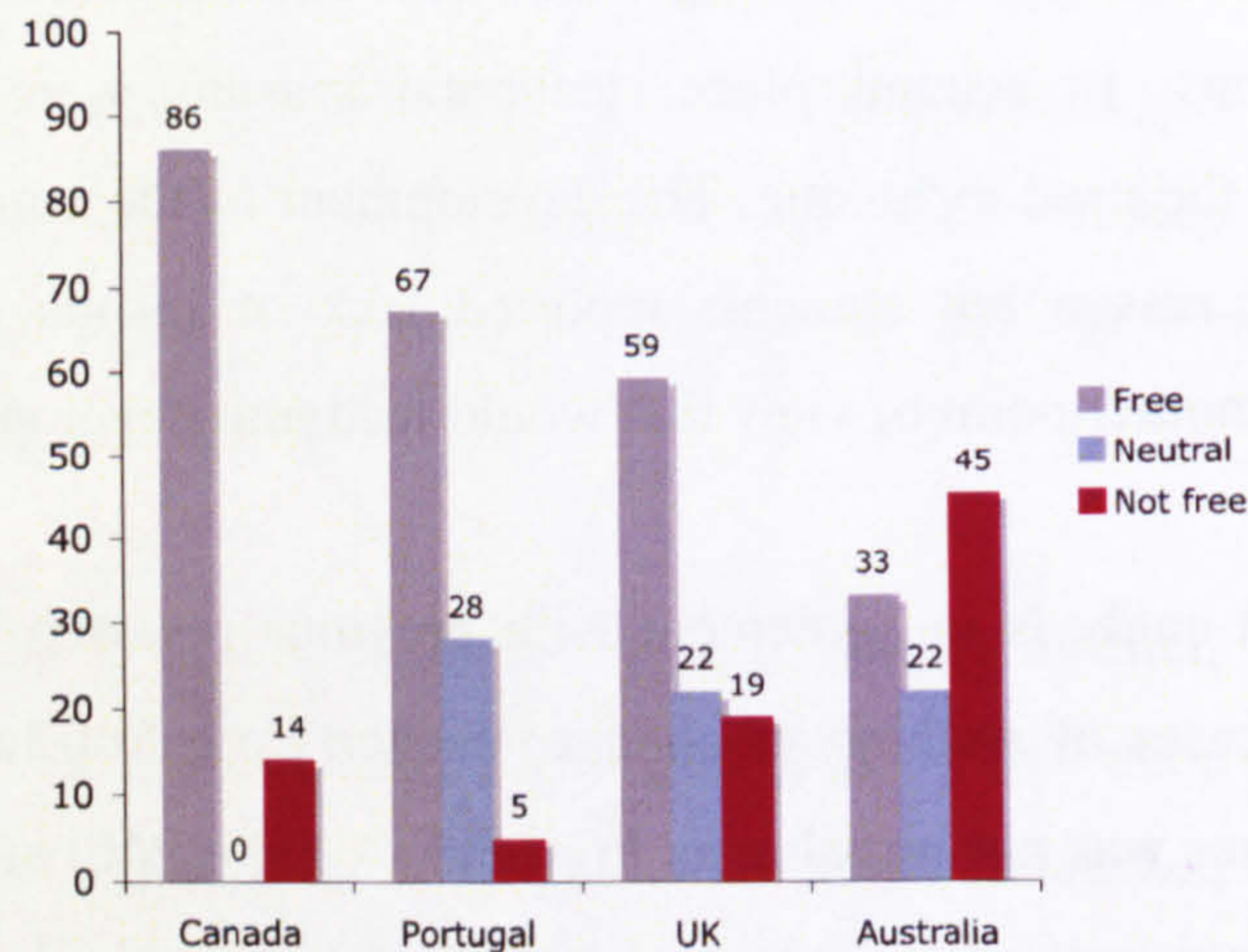


Figure 10: Percentage of perceived freedom to change teacher according to students' country.

Most countries (Canada, Portugal and United Kingdom) presented positive results regarding perceived freedom to change between singing teachers and the majority of respondents from Australia expressed not feeling free to change singing teacher. The sample from Canada showed clear positive/ negative tendencies whereas the other countries had students preferred to use central measures to reply neutrally. Due to the reduced number of respondents particularly in Australia and Canada, no

statistically significant differences were found as will be seen in table 13 (later in this chapter).

3.4.2. Students' satisfaction levels towards former singing experiences

Due to all students being in a transition between singing teachers, the present study observed (1) past experiences (2) present beliefs and (3) expectations. This section presents the former experiences of students with the purpose of comparing between experiences and expectations. Students replied the questions using a 5-point Likert. The ordinal variable was re-categorised for a perception of positive/ negative tendencies.

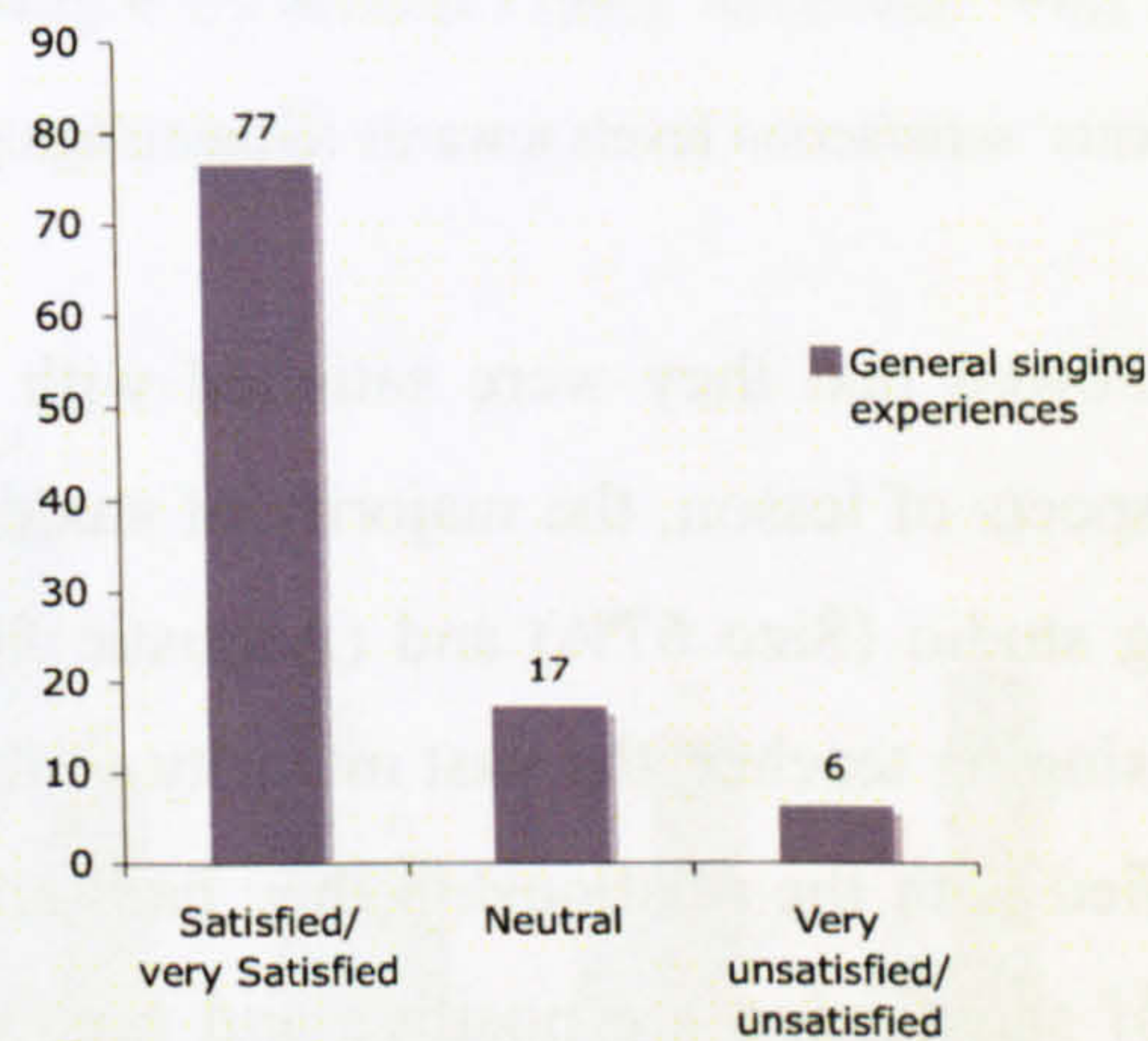


Figure 11: Percentage of respondent's satisfaction levels towards former singing experiences.

Students reported high levels of satisfaction: 77% of students were either satisfied or very satisfied with their singing experiences in the past. The students were then asked to express how they feel towards external factors related to their former singing teacher. The students' responses were grouped into the following categories:

- i. Elements from singing studio, singing studio's size and acoustic.
- ii. Personal factors regarding the relationship with the teacher
- iii. Professional factors related to the teacher's abilities, teaching strategies and development.

The results are presented as follows (figure 12, below):

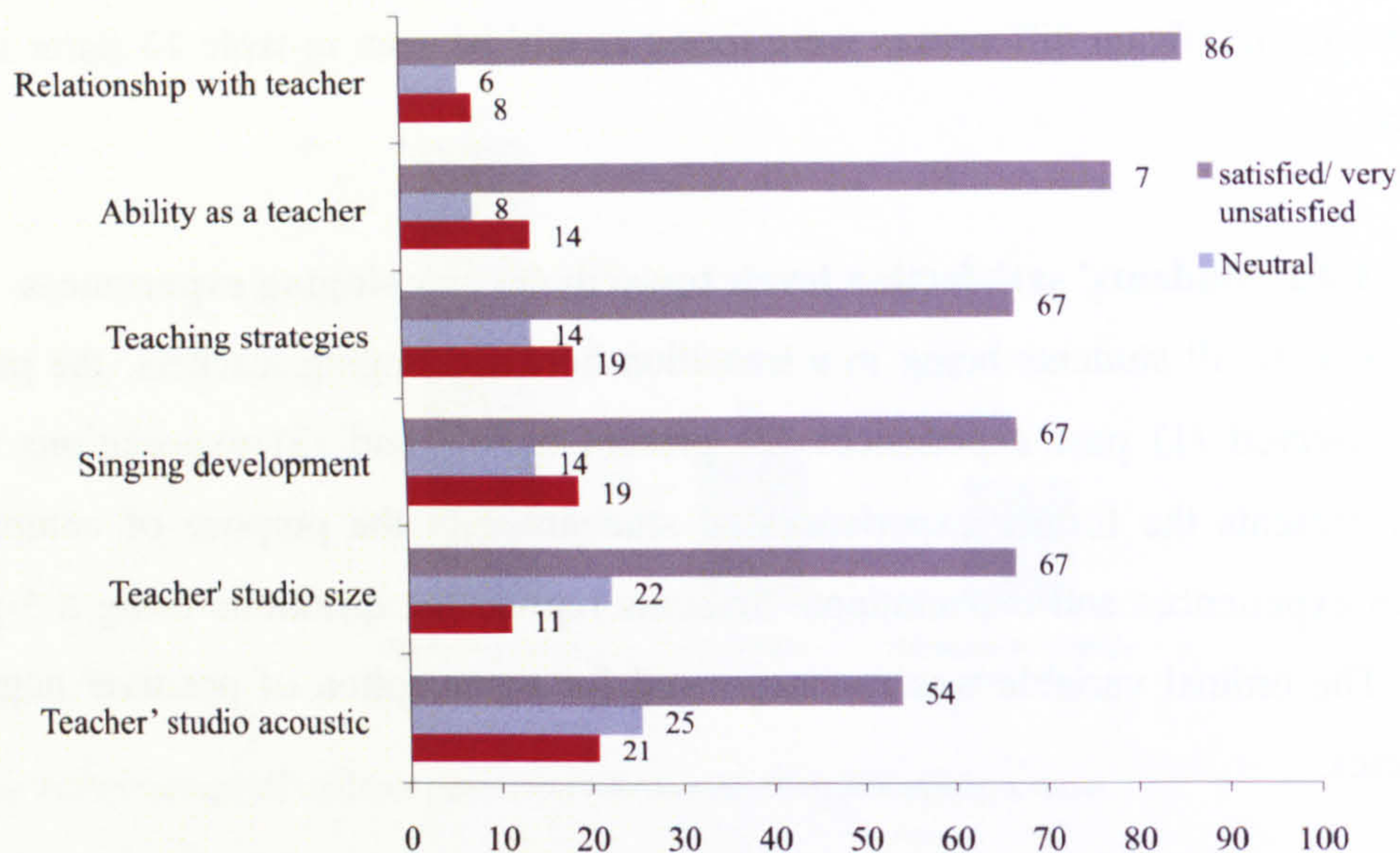


Figure 12: Percentage of respondents' satisfaction levels towards former singing teacher.

Students generally showed that they were satisfied with their former singing teachers: i. in the external aspects of lesson, the majority of students are satisfied with the conditions in the singing studio (Size 67%) and (Acoustic 54 %); ii. in terms of relationship with the former singing teacher, the vast majority of the students (86%) are either satisfied or very satisfied with the relationship they had; and iii. in professional terms, the student's levels of satisfaction are positive and ranged between 67% and 78% satisfied or very satisfied.

The students were asked for relevant elements from the singing studio that could be missing in order to characterize the setting and also explore what elements are considered important beyond the singing (Figure 13, below).

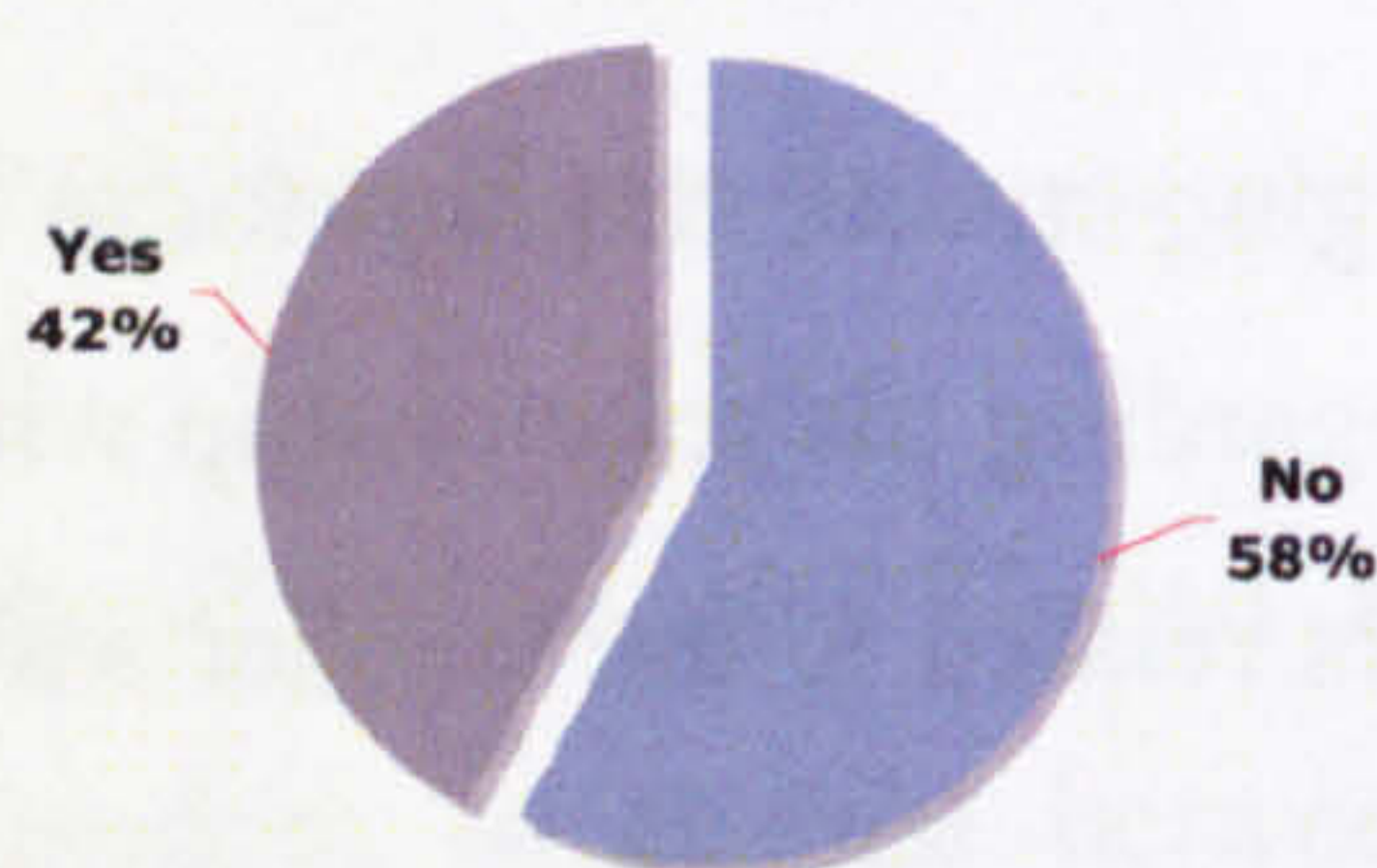


Figure 13: Percentage of students identifying missing elements in singing studio.

Fifty eight percent of students stated that the singing studio where they have singing lessons included all the necessary elements and 42% expressed having something they consider important missing in the vocal studio. The following elements were mentioned: ‘mirror’, ‘window’, ‘more scores’, ‘an accompanist’, ‘a tuned piano’ and ‘water’. Further analysis was made considering these elements of a singing lesson in chapter 7 particular regarding the piano accompaniment.

3.4.3. Students’ relationship with former singing teacher

Firstly, the students were asked to choose 3 adjectives that most represent the relationship with their singing teacher. Then, students were asked to choose adjectives to show the relationship they would rather have had with their former singing teacher. The following results emerged:

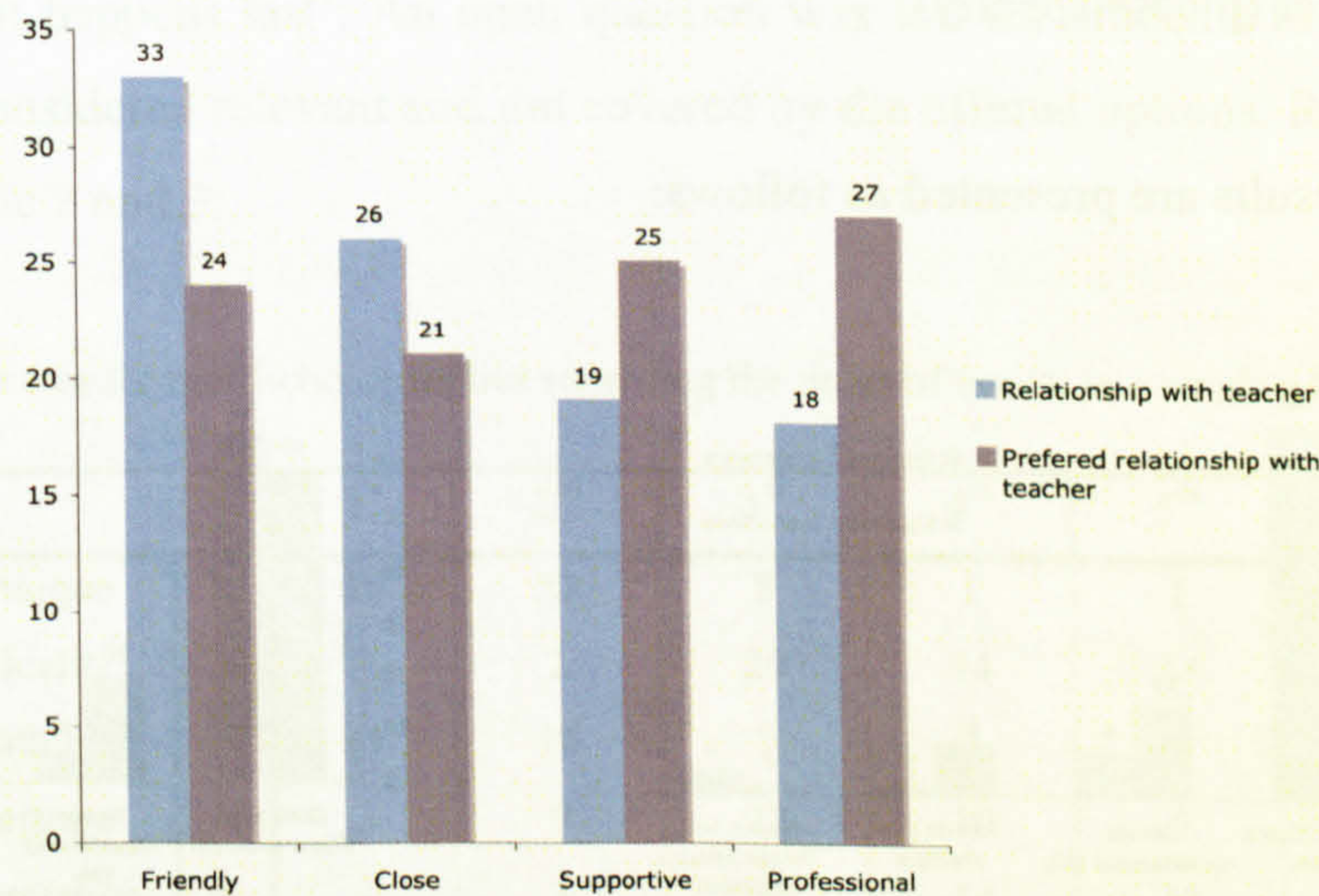


Figure 14: Percentage of student representation of the relationship with former singing teacher in comparison to preferred relationship.

For the relationship students had with their teachers, ‘friendly’ (33%) and ‘close’ (26%) were the most referred followed by supportive (19%) and professional (18%). Other mentioned adjectives included ‘cold’, ‘inconsistent’, ‘empathic’, ‘distant’ and ‘aggressive’. Regarding the relationship students preferred to have had, results shown that students would like their teachers to have been ‘professional’ (27%), ‘supportive’ (25%), ‘friendly’ (24%) and ‘close’ (21%), followed by other words with smaller significance in statistical terms: ‘happy’, ‘consistent’, and ‘sympathetic’.

There was a clear inversion between the personal and professional side of the characterization of relationship, as students preferred to have had a more professional teacher and less friendly, possibly indicating less satisfaction in professional terms, associated with the singing.

The students were asked to express how their singing teachers normally reacted to professional problems (related to the students' singing) and personal problems (related to the students' private lives). Four options were given and an open reply (where students could present other options) was included:

- i. Dialogue / share the problems
- ii. Makes me forget about them
- iii. Never experienced this
- iv. Avoids them
- v. Other (please specify)

The results are presented as follows:

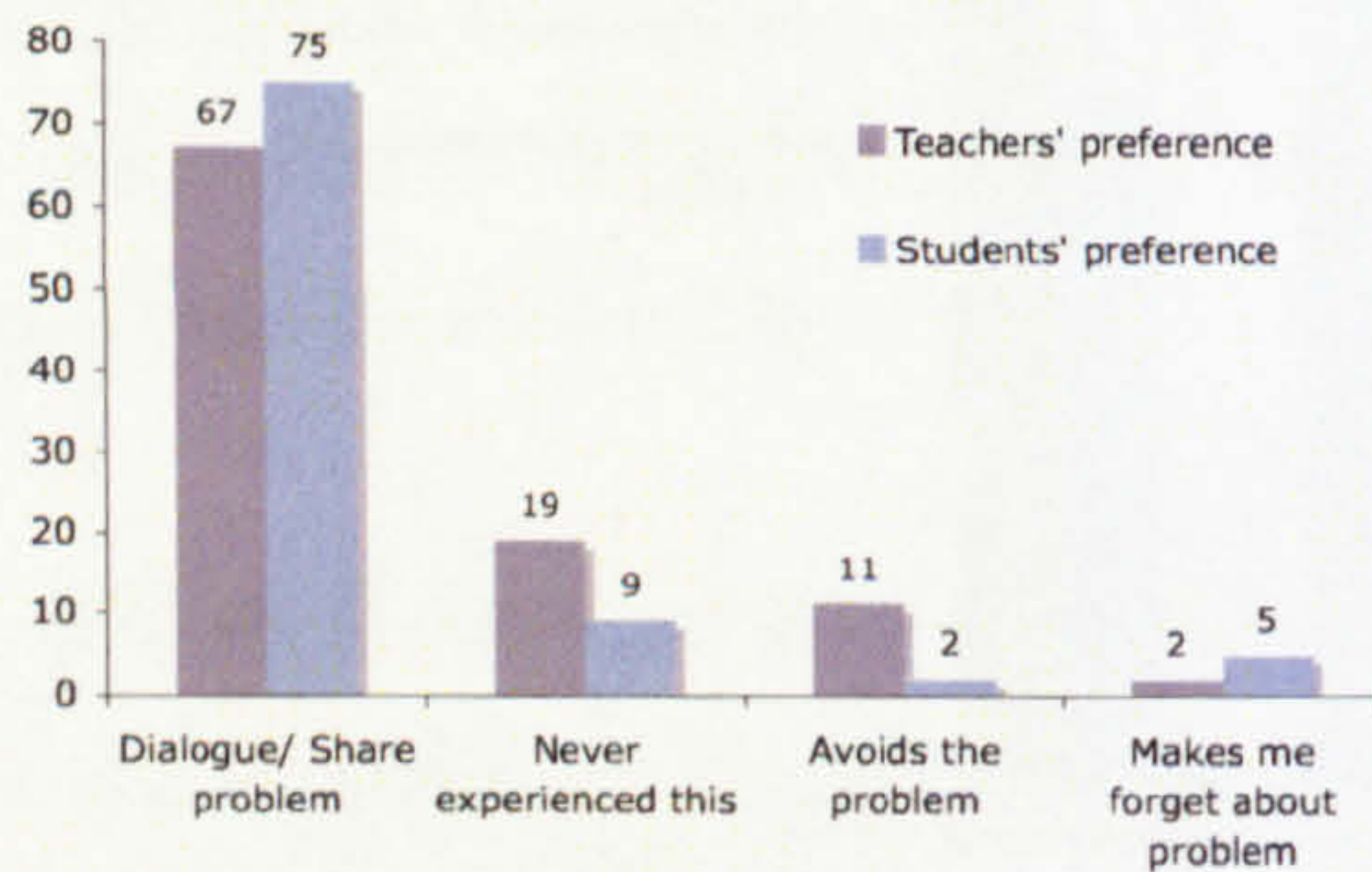


Figure 15: Percentage of students' multiple-choice perspective on teachers' professional problem solving in comparison to preferred.

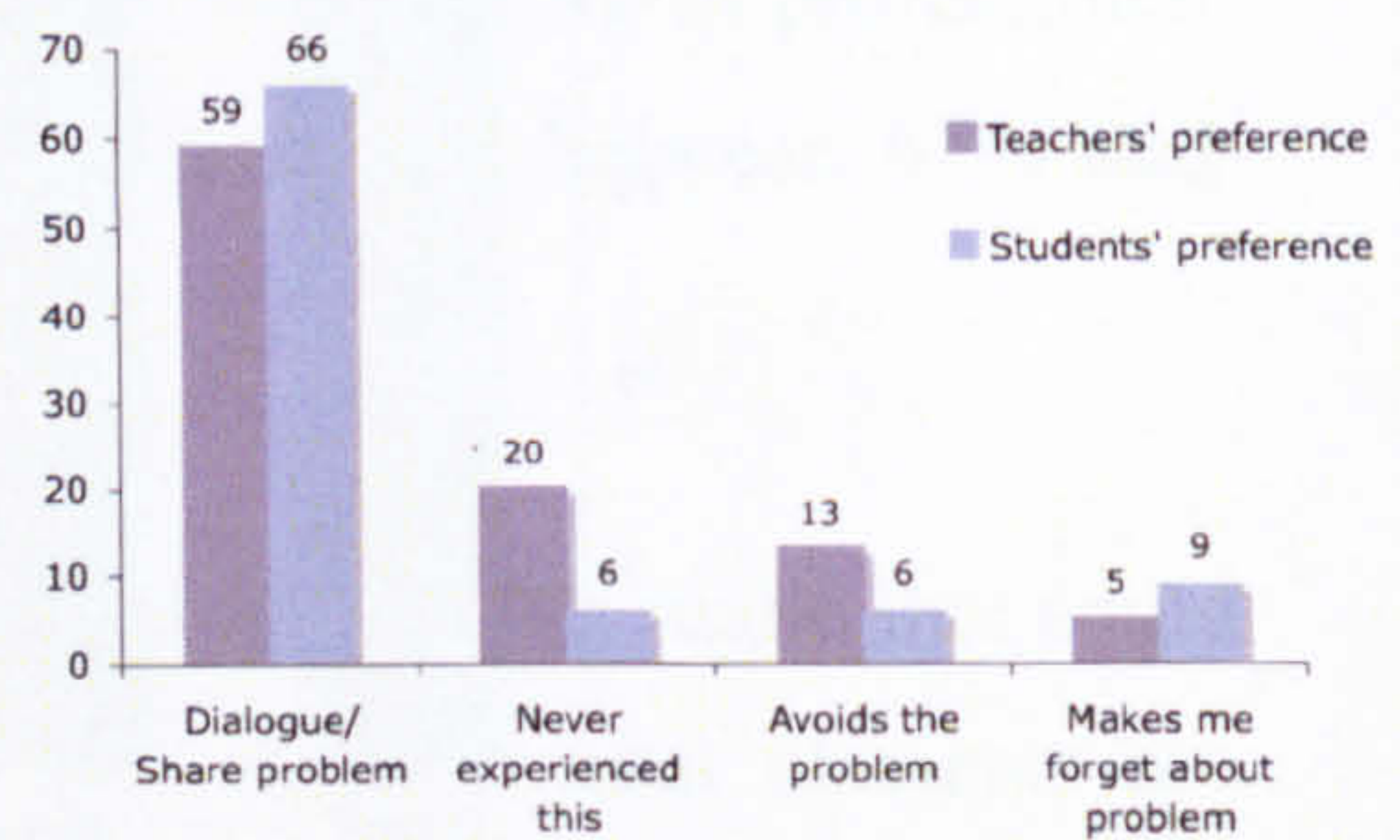


Figure 16: Percentage of students' multiple-choice perspective on teachers' personal problem solving in comparison to preferred.

Table 3: Frequencies for multi-choice replies regarding the students' preferred order of events in singing lesson.

		1 st	2 nd	3 rd	4 th	5 th	6 th
Technique	N	16	36	7	2	2	-
Musicality	N	1	1	12	14	22	12
Breathing	N	41	12	2	3	3	2
Repertoire	N	1	5	26	11	9	11
Interpretation	N	1	4	7	15	14	22
Language	N	-	2	12	21	15	13

Students presented a wide distribution of replies, however, frequencies emerged highlighting the following resumed in table 4 (below):

Table 4: Order and preferred order of events by students in the singing lessons.

Usual order of events	Preferred order of events
1. Breathing	1. Breathing
2. Technique	2. Technique
3. Repertoire	3. Repertoire
4. Musicality	4. Language
5. Language	5. Musicality
6. Interpretation	6. Interpretation

The order of major event occurring in the singing lessons represented no differences whereas smaller events had a slight (non significant) variation, indicating satisfaction regarding this matter.

3.4.5. Eye focus during singing lesson

With the purpose of evaluating the levels of eye contact between teacher and student which may reflect the relationship, the students were asked to identify the places where they mainly fix their eyes during singing lessons. Students presented the following distribution from a list of given options (figure 17, below).

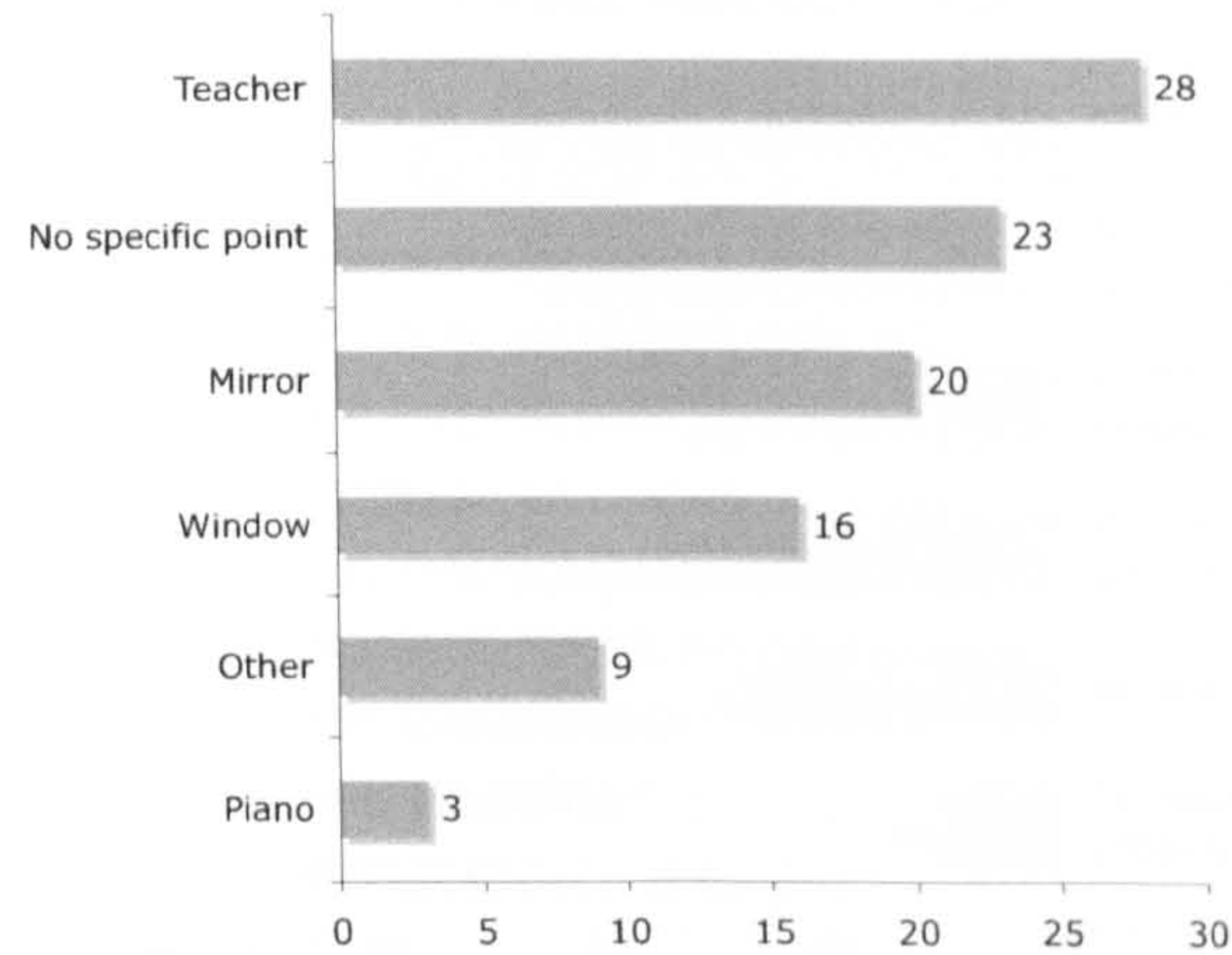


Figure 17: Percentage of students' visual placement distribution during singing lesson

Most students, around 28% reported facing the teacher frontwards, followed by no specific point and then by a mirror. The mirror seems to be an instrument of work for the singing lessons: used for posture and movements' correction, and identification of interpretative expressions. Earlier in this chapter, the mirror was already mentioned as an important element of these classes. The rather important relational element of this question was the fact that students face the teacher in the lessons, which indicated high levels of proximity required.

3.4.6. Students' expectations for teaching techniques with new singing teacher in comparison to former teacher teaching techniques

The teaching strategies/ techniques used by the singing teachers was evaluated with two perspective: firstly to evaluate the satisfaction of students and then to serve as background analysis for the observational chapter.

As mentioned earlier (in chapter 2) the selection of teaching techniques based on previous studies by Hallam, 1998a; Henrich *et al.*, 2007 and Gernier *et al.*, 2007. Students were asked to cross the 3 most appropriate answers from a list of given. Figure

18 shows the percentage of multi-choice values for the most used teaching techniques as perceived by singing students represented in percentages.

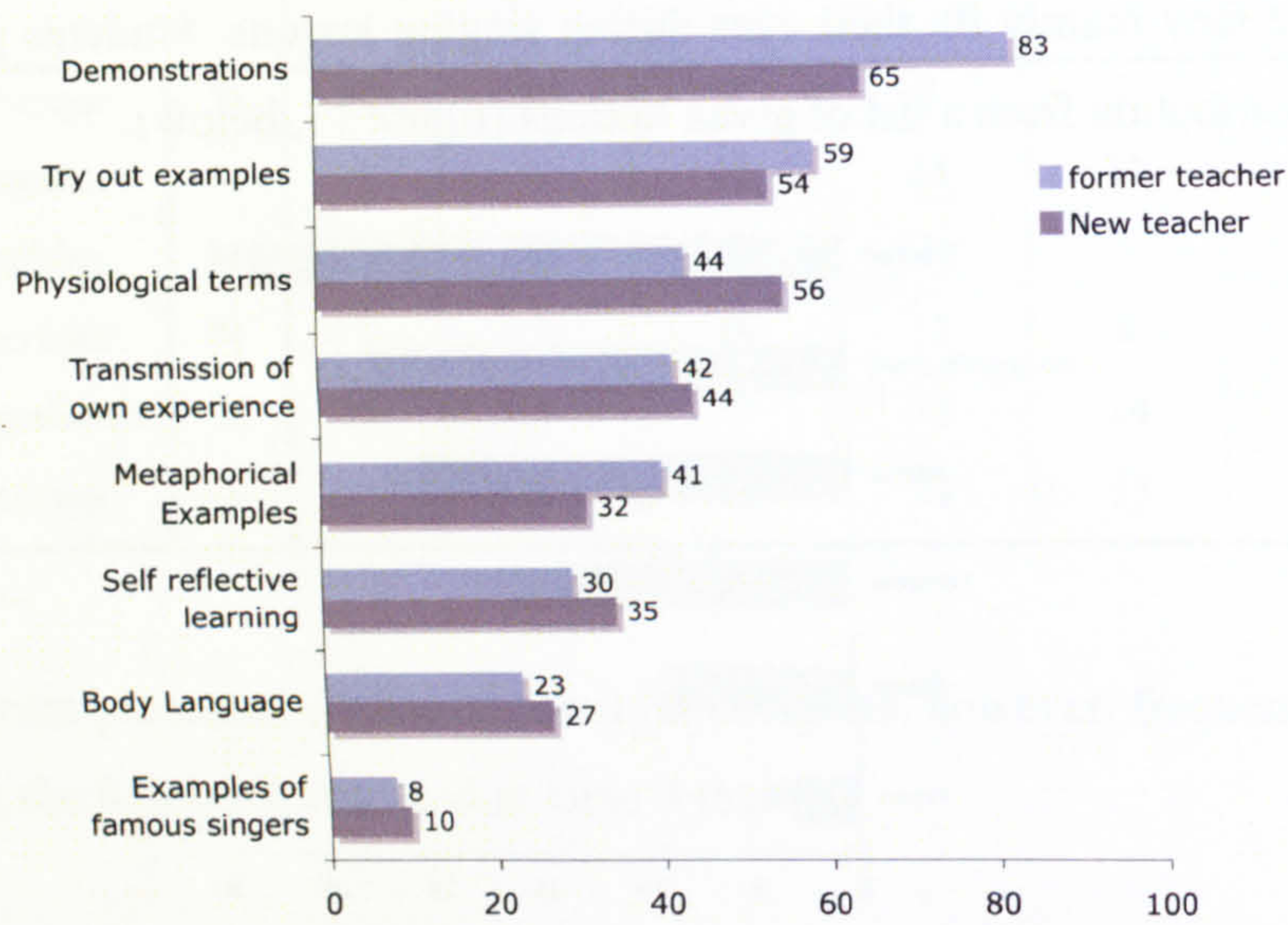


Figure 18. Multi choice percentages of replies for most used teaching techniques regarding former singing teacher and expectations for new singing teacher. Note: total percentages within each category may be more than 100% since some teaching techniques for each teacher may occur simultaneously.

Regarding teaching techniques, students clearly identified demonstrations (82.8%) as mostly used followed by trials (59.4%). Comparatively to the teaching techniques preferred by the students, demonstrations were again mostly chosen (65.1%) followed by ‘Physiological terms and examples’ (55.6%). Students demonstrated satisfaction towards the teaching technique chosen by their teachers but reinforced the use of more physiological examples in the lessons.

3.4.7. Students' expectations for most emphasised matters with new singing teacher in comparison to former teacher.

Former singing lesson

Students were asked to identify most prominent matters in their former singing lessons. A list of aspects parts used in singing lessons was given to students as presented in figure 19, below:

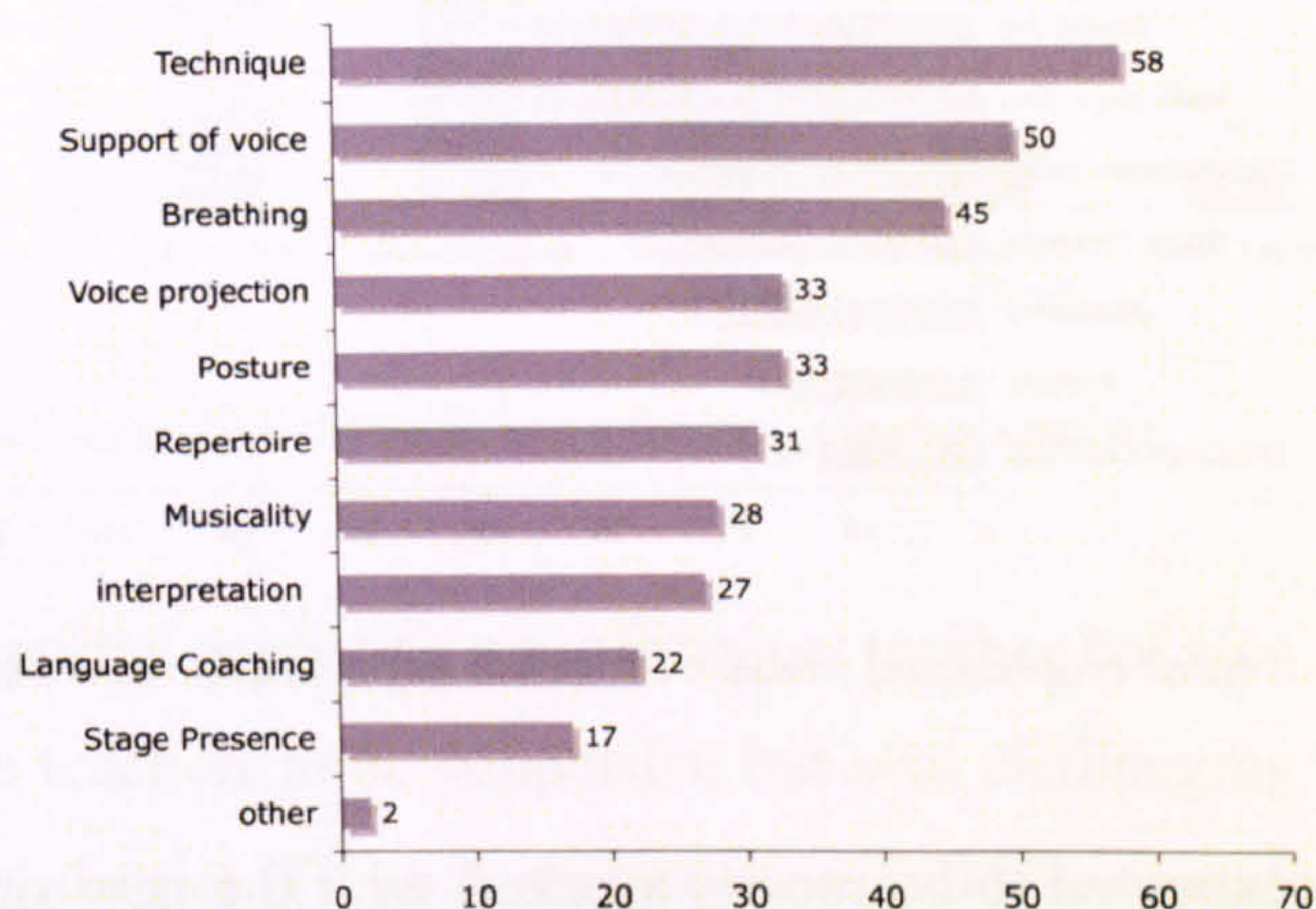


Figure 19. Percentage of most emphasised matters from lesson regarding former singing teacher.

Students reported as the most emphasised singing matters in the following order: technique, support of voice, breathing, voice projection, posture, repertoire, musicality, interpretation, language coaching and stage presence. All most chosen matters regard technical aspects of voice.

Expectations for new singing lesson

The same question was addressed regarding the expectation towards the new singing teacher in order to compare with the most worked matters from former singing teacher, shown in figure 20, below.

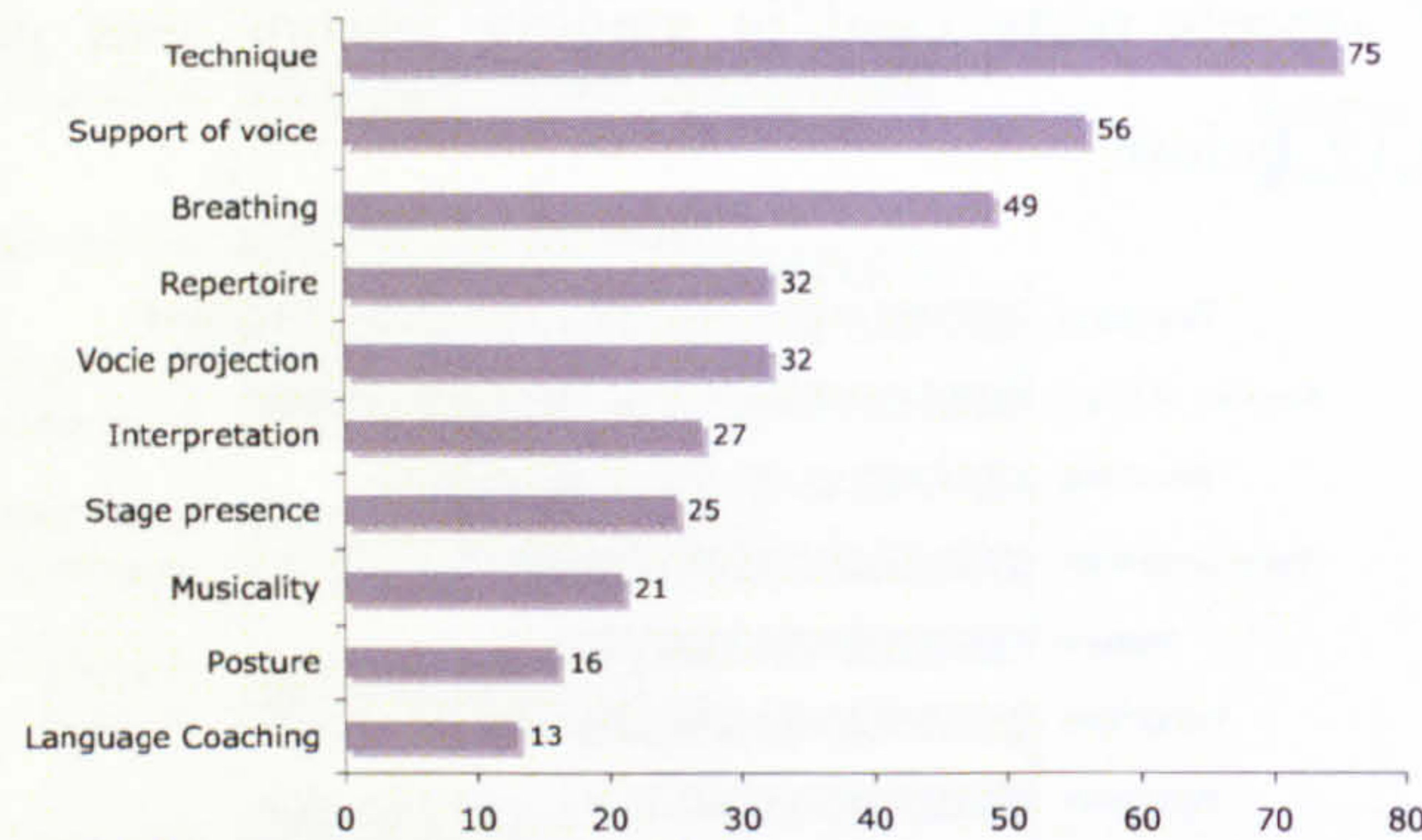


Figure 20: Percentage of most emphasised matters of lesson expected for new singing teacher.

The matters expected to be mostly worked with the new singing teacher is also related with technical matters, reinforcing perhaps the students' concerns towards that matter. The above results will be compared by the lessons observed in chapter 7.

3.4.8. Students' expectations for personal characteristics with new singing teacher

Personal Characteristics

The students also described the personal characteristics expected in their new singing teacher. Figure 21 presents the most chosen characteristics expected

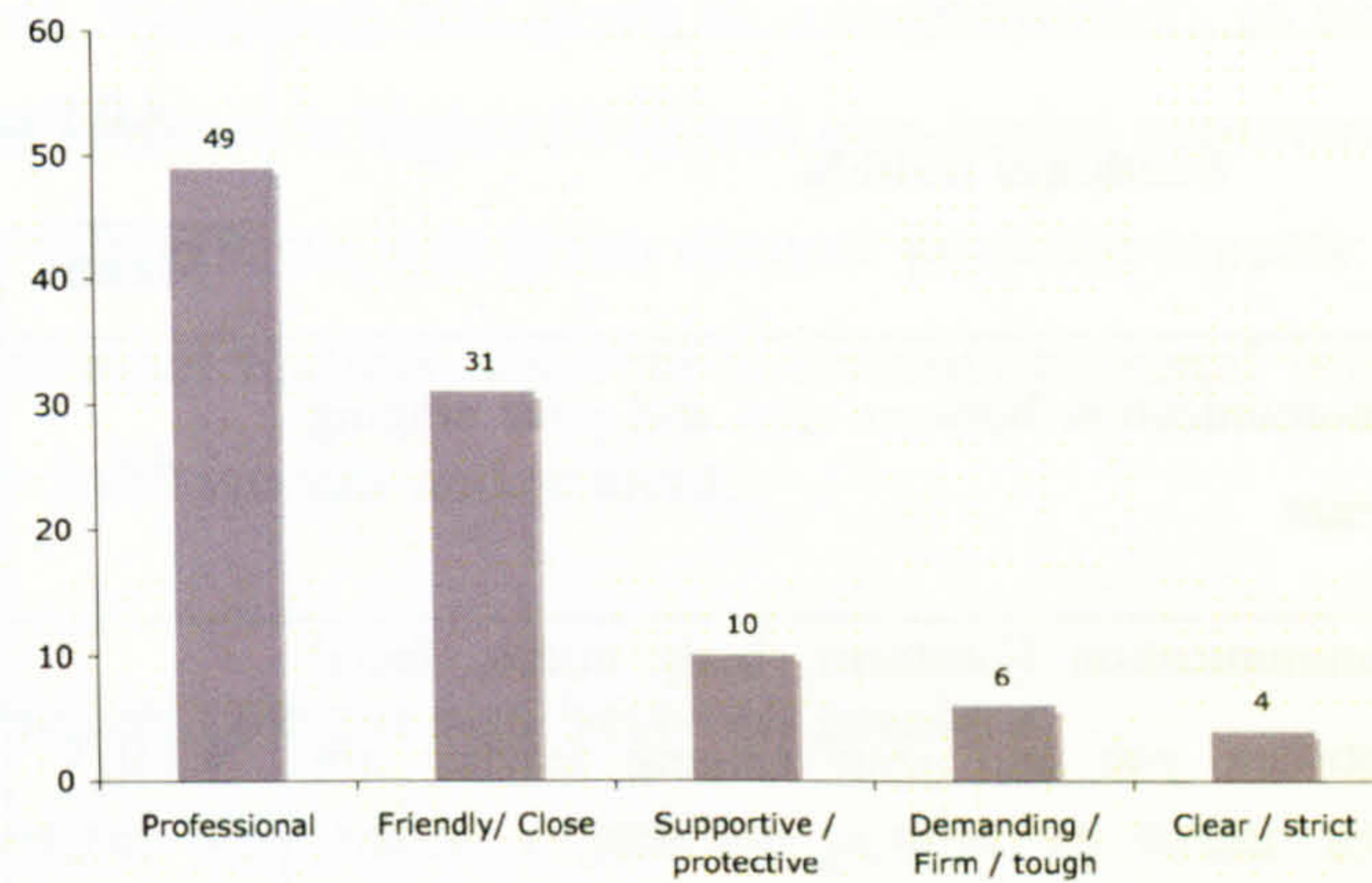


Figure 21: Percentage of expected characteristics for new singing teacher.

Students reported expecting a professional teacher but also friendly/ close. Then, students expect the teachers to be supportive but also challenging by being demanding, firm, tough, clear and strict. These characteristics could be considered ‘negative’ but for these students these characteristics seemed to be positive and interpreted as helpful and wanted. Additionally, the adjectives enthusiastic, positive organized were used.

3.4.9. Students’ beliefs regarding singing lessons

The enquired students were asked to express their beliefs regarding the relationship with their singing teachers using a 5-point *Likert* scale running from ‘1 – strongly disagree’ through ‘3 – uncertain’ to ‘5 – strongly Agree’. To all affirmations/ beliefs non-parametric tests were applied in relation to the variables: gender, starting age, number of singing teachers, singing longevity, country, and age. The next section will present the most representative results according to the above variables. Due to the large amount of tables, a resume of results is presented next (table 5) with mean, standard deviation, minimum and maximum, and subsequent results regarding gender, starting age, number of teachers and starting age are presented in appendix A.

Table 5: Descriptive statistics of cases ordered from higher mean rate to lower mean rate of students' beliefs in questionnaire 1.

Students Beliefs	All Participants (N=64)			
	Mean	SD	Min.	Max.
Clear verbal communication between you and your singing teacher is important	4.6	0.5	3	5
Non verbal communication (Gestures, body codes, facial expressions) between you and your singing teacher are important.	4.2 ii, v	0.7	2	5
My behaviour adjusts over time.	4	0.7	2	5
Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	4	1	1	5
A singing teacher needs to have personal empathy.	4 iii	0.7	2	5
Theoretical approach in singing lessons is important.	3.8 ii,v	0.7	2	5
My singing teacher has an awareness of professional issues	3.8	0.9	1	5
My personal problems are reflected in the way I sing.	3.7	1	1	5
The teacher's behaviour adjusts over time.	3.6 iii	0.8	1	5
The teacher-student relationship interferes with the development of the student.	3.6 i	1.5	1	5
I feel free to change my singing teacher if I am not happy with his/her work.	3.6	1	1	5
I avoid discussing Professional issues in my singing lesson.	3.5	1.2	1	5
I avoid discussing personal issues in my singing lesson.	3.4	1	1	5
My singing teacher explores the interaction between professional and personal issues related to my singing	3.4 iv	0.9	1	5
My singing teacher has an awareness of personal issues	3.2	0.9	2	5
A singing teacher should be tough to get results from student.	3.1	1.1	1	5
A teacher of the same gender is more likely to make me more comfortable.	3 i	1.2	1	5

i Statistically Significant Values according to Gender ;

ii Statistically Significant Values according to the Age of singing lessons start

iii Statistically Significant Values according to the Number of teachers

iv Statistically Significant Values according to How long students had singing lessons

v Statistically Significant Values according to Age

Students clearly demonstrated a positive tendency as all answers have mean values of 3 and over. Relevance was given to communication, as being the higher rated subject: verbal communication higher (4.6) and non-verbal communication (4.2). Lower relevance in these affirmations was given to more personal aspects: interaction between personal and professional matters, awareness towards personal issues, toughness from teacher, and gender from teacher and student.

Students' beliefs comparison between genders

An observation was made regarding gender in order to assess statistically significant differences between male and female students' beliefs. Mean and standard deviation comparison regarding beliefs between genders was made and according to Two-tailed *Mann-Whitney* test with confidence of 95% (appendix A). Although in the report of all the respondents, gender was not highly rated as an issue of relevance. A closer observation revealed statistically significant differences ($p < .01$), for teacher-student relationship interfering with the development of the student. Female believe significantly higher ($M=3.9$; $SD=1.5$) than male ($M=2.7$; $SD=1.5$) students that relationship interferes with their development.

Significant differences (.05) between genders were also found regarding teachers of same or different gender. Female ($M = 3.2$; $SD=1.2$) believe stronger than male ($M=2.4$ $SD=0.8$) students that a teacher of the same gender is more likely to make the student more comfortable. In order to evaluate these differences, one open question was included for students to express their reasons.

The following list of affirmations was reported as experiences that make students believe (or not) in gender differences between teacher and student. Several affirmations report to the same feelings. So, responses were grouped and one of the students' phrases was chosen. Before each affirmation is presented the number of students who reported the same kind of feelings and whenever grouping was not possible the single sentence was included in the list below:

- 16 – 'I did not find differences between having teacher of same or different gender' (male and female students)
- 2 – 'It depends on the teachers and not in the gender itself' (Female students)

- 4 – ‘Same gender matters because having a teacher of same gender means more experience in same repertoire’ and ‘feeling voice the same way (Female students)
- 2 – ‘A teacher of the same gender makes me feel more comfortable’ (Female Students)
- 1 – ‘My teacher was a man and physical contact in lessons would have made me uncomfortable’ (Female Student)
- 1 – ‘A female teacher can touch areas such as the stomach (diaphragm) without awkwardness’ (Female Student).
- 1 – ‘I prefer a teacher of the opposite gender’... ‘it makes me feel better’ (female)
- 1 – ‘It was sometimes restricting and embarrassing to have the teacher (male) feeling the support of voice in my body’ (female student).
- 1 – ‘I am afraid of male teachers because my first singing teacher (male) was repulsive’ (female student).

Most students (18) reported that having a teacher of the same gender or different gender is equal. For these students there were not experiences that would justify gender preference. However, other students (9) presented justifications for gender preferences among teachers. It seems interesting to notice that all students who presented justifications and indeed believe that gender is an issue in singing lessons are female students and the justifications are mainly related to the physical contact implied in the evaluation of support and breath. Some students included past experiences as the reason for their choice and other students actually feel better studying with teachers of the opposite gender.

A small group of students (4) did not relate gender preference to (dis)comfort but rather defended that gender had a strategic role to play in their singing lesson as teachers of same gender would probably have sung the same repertoire and would have the placement and physiological feeling of voice in the same positions; two of the students defended that the (dis)comfort depended on the person than gender. With some teachers this may be true and with others that comfort or discomfort might not happen.

Gender preference seems to be a very personal choice and different from student to student according to their past experiences, preferences, ambitions, strategies or personal choices. Particularly, it was highlighted in this observation that female students are the ones who most value gender differences when related to physical contact and movements implied in the singing production.

Students' beliefs comparison between groups with different starting ages

In order to assess whether significant differences existed in students' beliefs of different starting ages, a Two-tailed *Mann-Whitney* test was applied to students who started studying singing in two groups of ages. The age groups were divided into these categories 'Under 18' and '18 and over' to distinguish students who possibly started at an relatively younger age from students with a late initiation into singing (appendix A).

Statistically significant differences ($p < .05$) were found in the affirmations regarding the importance of theoretical approach. Students who started singing aged 18 years old and over give more importance to theoretical approach ($M=4.0$; $SD=0.8$) than students who started at a younger age ($M=3.7$; $SD=0.7$).

Regarding non-verbal communication, students who started singing lessons at a later stage also rate this matter stronger ($M = 4.5$; $SD = 0.6$) than students who started singing earlier ($M = 4.0$; $SD = 0.8$) with statistically significant values ($p < 0.01$). All other matters did not present significant differences for these groups.

It seems that students who started having singing lessons at a younger stage of their lives became less interested in theoretical matters and non-verbal communication possibly because these matters became an integrated part of their singing. Students at an older stage have to concentrate on all aspects of singing to achieve faster improvement and so their awareness of nonverbal communication and theoretical approaches will be higher.

Students' beliefs comparison between groups of students with different number of singing teachers.

In order to assess significant differences in students' beliefs, a non-parametric two-tailed *Mann-Whitney* test was applied for students who had different number of singing teachers, divided in two groups (students who had until 2 singing teachers and students who had 3 or more singing teachers) according to the previous exploration of data (Figure 7, above, in '3.3. characterisation') where the students shown a fairly even distribution: 'until 2 singing teachers' = 47% and '3 teachers or more' = 51% (appendix A).

Results showed statistically significant differences ($p < .05$) in two variables: personal empathy and behavioural adjustment where students with less singing experiences (until 2 singing teachers) valorise significantly higher these matters than more experienced students (with 3 or more singing teachers)

Students' beliefs comparison between groups with different singing learning longevity

To assess whether there are significant differences between students of different singing longevity, a non-parametric *Mann-Whitney* test was performed. Sample was divided in two groups: students with until 3 years of singing lessons (less experienced) and students with 4 and more years of singing lessons (more experienced).

Regarding the students' singing studying longevity, the observation of results demonstrated, statistically significant differences ($p < .05$) in students who are more experienced (4 years and over) in comparison to less experienced (until 3 years of learning) regarding the exploration of interaction between personal and professional issues. More experienced students seem to believe stronger ($M=3.6$; $SD=0.8$) in the advantages of using the interaction between professional and personal issues related to singing than less experienced students ($M=3.0$; $SD=1.0$). The use of personal and professional interactions may be beneficial particularly when students have to explore their feelings for the interpretation of certain roles of characters.

One the other hand, personal issues may interfere negatively in the singing lessons when not used for the right purposes. For the evaluation of this matter, students

were asked (in an open question) what strategies they use to separate personal issues from being reflected in the students' lessons. Responses were grouped in order to clarify visualisation as several affirmations report to the same strategies. Before each affirmation is presented the number of students who reported the same kind of strategy and whenever grouping was not possible the single sentence was included in the list below:

3 – 'Meditation and concentration'

3 – 'Never experienced this'

8 – 'Technical exercises, breathing and singing helps me forget problems'

2 – 'Music is above anything else'

1 – 'I use those problems to be expressive in my singing. It affects positively my voice colour'

1 – 'Humour and cleaning my head before lesson'

1 – 'Professionalism'

1 – 'My teacher and I discuss everything with a view to using personal issues to redirect energy'

1 – 'I think this is difficult to do, specially as a young singer, since my voice is a pure reflection of myself and how I am within my own skin'

More than using the personal experiences for interpretation, students and teachers seem to use the students' life to 'redirect energies' and modify vocal tonality. Others students, explore meditation, concentration, humor and singing itself to avoid personal matters from interfering in the singing. However, as one student mentioned, sometimes it might be difficult as a young singer to hide that mood from the voice.

Students' beliefs comparison between groups of different countries

In order to assess whether there are significant differences between countries, a non-parametric *Kuskal-Wallis* test was applied. For the variables that presented significant differences, a paired comparison was applied through *Mann-Whitney* Test.

Table 6: Mean comparison (standard deviation) of students' beliefs according to the studying location in questionnaire 1

Students' Beliefs	Country			
	Portugal N=21	United Kingdom N= 27	Other Countries N=15	
	Mean (SD)			<i>p</i> *
The teacher–student relationship interferes with the development of the student.	4.4 (1.0) a	3.1 (1.6) b	3.4 (1.7) a,b	0.028
The teacher's behaviour adjusts over time.	3.6 (0.7)	3.8 (0.7)	3.3 (0.9)	n. s.
My behaviour adjusts over time.	4.0 (0.5)	4.0 (0.8)	4.1 (0.7)	n. s.
A teacher of the same gender is more likely to make me more comfortable.	3.1 (1.2)	3.1 (1.3)	2.8 (1.2)	n. s.
Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	4.2 (0.7)	3.8 (1.0)	4.1 (1.0)	n. s.
My personal problems are reflected in the way I sing.	4.0 (0.8)	3.4 (1.1)	3.9 (1.0)	n. s.
I avoid discussing personal issues in my singing lesson.	3.8 (0.7)	3.1 (1.1)	3.3 (1.2)	n. s.
I avoid discussing Professional issues in my singing lesson.	3.4 (1.1) a	1.8 (0.8)c	2.4 (1.0) b	.000
My singing teacher has an awareness of personal issues	3.0 (0.8)b	3.0 (0.9)b	3.7 (0.9) a	.04
My singing teacher has an awareness of professional issues	3.3 (0.8)b	3.9 (0.9) a	4.2 (0.9) a	.002
My singing teacher explores the interaction between professional and personal issues related to my singing	3.1 (0.8)	3.5 (0.8)	3.6 (1.1)	n. s.
I feel free to change my singing teacher if I am not happy with his/her work.	3.7 (0.9)	3.5 (1.0)	3.4 (1.3)	n. s.
A singing teacher should be tough to get	2.4 (1.1)b	3.4 (0.9) a	3.5 (1.0) a	.002

results from student.				
A singing teacher needs to have personal empathy.	4.0 (0.7)	3.8 (0.7)	4.3 (0.6)	n. s.
Theoretical approach in singing lessons is important.	4.0 (0.8)	3.6 (0.7)	4.0 (0.5)	n. s.
Clear verbal communication between you and your singing teacher is important	4.6 (0.6)	4.6 (0.5)	4.8 (0.5)	n. s.
Non verbal communication (Gestures, body codes, facial expressions) between you and your are important singing teacher.	4.2 (0.9)	4.2 (0.7)	4.3 (0.6)	n. s.

a, b, c – Homogeneous groups according to *Mann-Whitney* test with confidence level of 95%

The variable country was the one in which most significant results between groups were presented. It seems that indeed there are cultural differences in terms of singing teaching between countries. Regarding the teacher-students relationship, there are statistically significant differences ($p < .05$) between Portugal and United Kingdom but not between other countries (Canada and Australia). Students in Portugal believe significantly higher than the students from United Kingdom that the relationship between teacher and student may interfere in the singing development stronger than the students at United Kingdom. No significant differences were found between Other Countries and Portugal or between Other Countries and the United Kingdom.

Highly significant differences ($p = .000$) were expressed for the affirmation 'I avoid discussing professional issues in my singing lesson' between all countries being the Portuguese the ones who most avoid professional issues significantly higher than other Countries and United Kingdom. Significant differences were also found between countries regarding the awareness of teachers on professional and personal issues being other Countries that most believe the teachers are aware of both matters (professional and personal).

Countries also presented significant differences regarding the use of toughness by singing teachers to achieve better results. Students from Portugal believe less that a teacher should be tough to get results from students than students from United Kingdom and other Countries. No differences were found between United Kingdom and Other Countries.

For professional issues significant differences were found for Portuguese students when related to United Kingdom and Other Countries. Students from Portugal reported feeling that teachers are aware of professional issues but not as much as students from United Kingdom or from other countries.

For the awareness of teachers regarding personal issues, no differences were found between students from Portugal and the United Kingdom. However, between these and other Countries significant differences were presented. Other countries shown that students believe in the awareness of teachers regarding their personal issues stronger than Portugal and United Kingdom.

Regarding the relationship with the singing teacher, students' beliefs are significantly different in matters such as discussion of professional problems, the awareness of professional and personal issues and concerning the need for a teacher to be tough to obtain results.

Particularly in Portugal, students gave significantly high importance to avoiding the discussion of professional issues and shown to believe in a closer relationship but not valorising toughness from teacher to get developmental results where deep discussion of problems related to singing seems to be mostly avoided. Other countries believe that teachers have strong awareness in terms of personal and professional issues, particularly in personal terms and that the use of toughness is valuable for the development.

All the differences concerning the variable country relate to the approach from teacher to student. The technical, artistically and theoretical aspects of the teacher student interaction are not significantly different from country to country. The approach, the relationship and the awareness are the most different values between the studied countries.

3.5. Results from Second Questionnaire

Based on the results presented on the first questionnaire, the second questionnaire was built with the following structural differences:

- i. Fewer open replies – students had higher response level (in the first questionnaire) to direct questions than open questions. This was an indicator that most matters were being covered in given items so open questions were reduced.
- ii. More direct questions – based on the first questionnaire’s preliminary analysis and results, questions were changed from multiple choices to sentences.
- iii. Beliefs - affirmations regarding beliefs were kept the same to allow a longitudinal comparison with six months earlier.

3.5.1. Qualitative comparison between questionnaires 1 and 2

In order to evaluate differences between singing students in two different stages, a comparative observation was made. The following table presents the satisfaction levels of students concerning the teachers’ strategies, personality mood, marks, commitment to teaching, student’s development and knowlege of language.

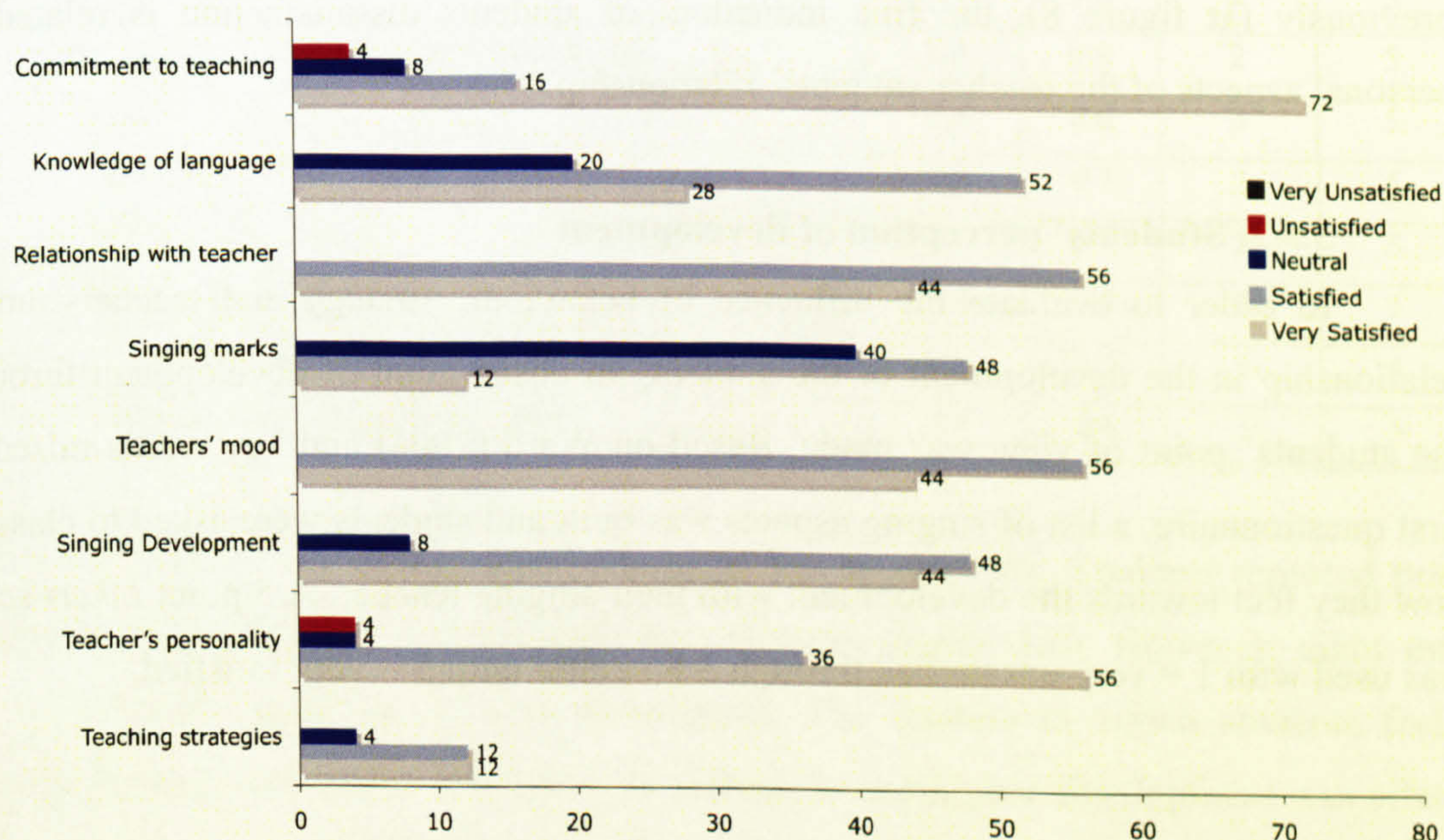


Figure 22: Percentage of respondents’ satisfaction levels towards present singing teacher.

In the first questionnaire (figure 12, earlier in this chapter) students show high levels of satisfaction towards former singing teacher. In the second questionnaire (figure 22) students reported even higher values for same questions (relationship, teaching

strategies and singing development). Regarding teachers' strategies and singing development around 19% of students reported negative values for first questionnaire and at a second stage all was reduced to none of the students reported being unsatisfied or very unsatisfied.

At the second questionnaire other aspects (teachers' personality, teacher's general mood, students' singing marks, teachers' commitment to singing) were included. For the generality of these matters, students reported being satisfied or very satisfied. However, for students' marks, 40% of students answered neutrally. It is possible that at this stage of the academic year, students would not have had yet any formal evaluation and that is why almost half of students did not present an answer tendency. For the teachers' commitment to teaching, the majority of students (72%) reported being very satisfied.

Students generally reported being satisfied with their teachers. The issues that most bring unsatisfactory levels are related to the teachers' personality and commitment to singing. Again, and following the same indications that the students reported previously (at figure 8), the first indicators of students dissatisfaction is related to personal aspects of the teacher students' relationship.

3.5.2. Students' perception of development

In order to evaluate the influence of behaviour, strategy and teacher-student relationship in the development of the student, an observation of development through the students' point of view was made. Based on Ward (2004) and key words raised at first questionnaire, a list of singing aspects was built and students were asked to classify how they feel towards the development with their singing teacher. A 5 point *Likert* scale was used with 1 = very unsatisfied through 3 = neutral until 5 = very satisfied.

Table 7: Descriptive statistics of cases ordered from higher mean rate to lower mean rate on singing students' perception about development with new singing teacher.

Students' perception of development	All Participants (N=25)			
	Mean	SD	Min.	Max.
Musicality	4.2	0.4	4	5
Tone quality	4.2	0.5	3	5
Voice projection	4.1	0.6	3	5
Phrasing	4.1	0.6	3	5
Communication of emotion	4	0.7	3	5
Vocal Individuality	4	0.7	3	5
Overall knowledge of scores	4	0.7	3	5
Enjoyment as performer	4	0.7	3	5
Voice placement	4	0.8	2	5
Commitment to music	4	0.5	3	5
Unification (evenness of voice throughout the range)	4	0.8	2	5
Diction	3.9	0.7	3	5
Technical accuracy	3.9	0.8	2	5
Breathing and breath support (appoggio)	3.9	0.9	2	5
Singing interpretation	3.8	0.6	3	5
Appropriate style	3.8	0.7	2	5
Audience enjoyment	3.8	0.6	2	5
Presence on stage	3.8	0.7	2	5
Projection of structure	3.6	0.5	3	4
Projection of composer's intention	3.6	0.6	2	5

Table 7 shows the development as felt by students. Students reported positive levels of satisfaction towards their development (mean>3.6). However, eight matters were voted negatively by few participants. The matters in which students feel that development was lower are related to technique and higher development was related to interpretative matters. As shown before students emphasize technical aspects over other matters by feeling that these have not developed as much as interpretative and musical matters.

3.5.3. Re-evaluation of beliefs

For the second part of this study, an adaptation of questions was made in order to clarify tendencies from students. This part of the questionnaire was not made with the purpose of relating to first part but rather as a complementary descriptive section.

Table 8: Descriptive statistics of cases ordered from higher mean rate to lower mean rate on students' beliefs in Questionnaire 2 (part 2).

Other Beliefs from Students	All Participants (N=25)			
	Mean	SD	Min.	Max.
I expect my singing teacher to be Professional	4.6	0.6	3	5
My singing teacher uses demonstrations during lessons	4.4	0.7	3	5
My singing teacher is an understanding person	4.3	6.8	3	5
My singing was an enjoyable experience this academic year	4.3	1	2	5
I feel that I have a friendly relationship with my singing teacher	4.2	0.7	3	5
My singing teacher fulfils my initial expectations	4.2	0.8	2	5
My singing teacher uses his/her own singing experience when teaching	4	1	1	5
I understand the non-verbal communication used by my singing teacher	3.9	1.1	1	5
My singing teacher uses physiological terms and examples for teaching	3.7	1.1	1	5
I regard my singing teacher as a close person to me	3.7	1	2	5
My singing teacher makes me try out examples as a way of development	3.6	1	1	5
I maintain a personal relationship with my singing teacher when we meet outside the singing studio	3.5	1.3	1	5
I feel protected by my singing teacher	3.4	1	1	5
My singing teacher concentrates a lot on the repertoire	3.3	1.1	1	5
My singing teacher deals with my personal problems through dialogue	3.2	1.4	1	5
I feel that my singing teacher works most on technique	3.2	1.2	2	5
My singing teacher imposes his/her opinion	2.9	1.2	1	5
My singing teacher gives me examples of famous singers (Recordings)	2.6	1.3	1	5
I find my singing teacher distant	1.5	0.9	1	5

I wished to change this singing teacher	1.3	0.9	1	5
I experienced aggressiveness from my singing teacher	1.2	0.5	1	3

At the top of rating students valued professionalism and demonstrations used by the singing teacher. Once again students report to the same results given in the first part of the study by stating that professionalism and demonstrations are their preference concerning the teachers' behaviour and teaching technique. Also at the top of these beliefs, students presented relational matters as their priority in the student-teacher's relationship (understanding person, enjoyable experience, friendly relationship, expectation fulfilment). So, students showed that they actually are satisfied with the relationship and teaching techniques of their singing teachers.

3.5.4. Comparative analysis of Beliefs

Regarding the same beliefs of first questionnaire, a comparative observation was made. The observation method used for a paired comparison was applied through *Mann-Whitney* and *Wilcoxon* tests. All tests were applied with a confidence level of 95%. The used affirmations for comparison applied with *Mann-Whitney* were fewer than the first questionnaire as only questions that would maintain the same parameters were used. All affirmations that would not present this requirement were excluded from this analysis and were observed separately in the qualitative analysis.

Table 9: Descriptive statistics of cases ordered from higher mean rate to lower mean rate on students' beliefs in questionnaire 2 (part 1).

Students Beliefs	All Participants (N=25)			
	Mean	SD	Min.	Max.
Clear verbal communication between you and your singing teacher is important	4.3	0.5	4	5
The teacher-student relationship interferes with the development of the student.	4.1	0.9	2	5
My singing teacher has an awareness of professional issues	4	0.8	3	5
A singing teacher needs to have personal empathy.	4	0.9	2	5
My behaviour adjusts over time.	3.6	1	2	5
The teacher's behaviour adjusts over time.	3.5	1	2	5
I feel free to change my singing teacher if I am not happy with his/her work.	3.3	1.6	1	5
Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	3.2	1	1	5
Non verbal communication (Gestures, body codes, facial expressions) between you and your singing teacher are important.	3.2	1.1	1	5
Theoretical approach in singing lessons is important.	3.1	0.8	1	4
My personal problems are reflected in the way I sing.	3	1.2	1	5
A singing teacher should be tough to get results from student.	2.6	1.4	1	5
My singing teacher has an awareness of personal issues	2.4	1.2	1	5

Students reported positive levels of replies. The two sentences where this does not happen is justified by the use of inverted meaning. The previous table will be explored in details in comparison to the first questionnaire in the next table (10).

3.5.4. Paired samples for beliefs in questionnaire 1 and 2.

Results from (table 9, above) presented simple variables. The next table explores the statistical significant differences of values (table 10) between the two stages (questionnaire 1 and 2) of the study and its development.

Table 10: Questionnaire 1 and 2 paired samples for beliefs in two-tailed *Mann-Whitney* test with confidence level of 95%.

Pair			N	Mean	SD	Mean Differences	<i>p</i>
1	The teacher–student relationship interferes with the development of the student.	<i>Q1</i>	25	3.6	1.5	-0.6	n. s.
		<i>Q2</i>		4.1	0.9		
2	The teacher’s behaviour adjusts over time.	<i>Q1</i>	25	3.7	0.5	0.2	n. s.
		<i>Q2</i>		3.5	1		
3	My behaviour adjusts over time.	<i>Q1</i>	25	4	0.5	0.3	n. s.
		<i>Q2</i>		3.6	1		
4	Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	<i>Q1</i>	25	3.9	0.7	0.7	.09
		<i>Q2</i>		3.2	1.1		
5	My personal problems are reflected in the way I sing.	<i>Q1</i>	25	3.8	1	0.8	.038
		<i>Q2</i>		3	1.2		
6	My singing teacher has an awareness of personal issues	<i>Q1</i>	25	3.5	0.8	1.1	0
		<i>Q2</i>		2.4	1.2		
7	My singing teacher has an awareness of professional issues	<i>Q1</i>	25	3.6	0.9	-0.4	n. s.
		<i>Q2</i>		4	0.8		
8	I feel free to change my singing teacher if I am not happy with his/her work.	<i>Q1</i>	25	0.7	1	0.1	n. s.
		<i>Q2</i>		3.3	1.6		
9	A singing teacher should be tough to get results from student.	<i>Q1</i>	25	2.8	1.1	0.2	n. s.
		<i>Q2</i>		2.6	1.4		
10	A singing teacher needs to have personal empathy.	<i>Q1</i>	25	4	0.7	0	n. s.
		<i>Q2</i>		4	0.9		
11	Theoretical approach in singing lessons is important	<i>Q1</i>	25	3.8	0.7	0.7	.001
		<i>Q2</i>		3.1	0.8		
12	Clear verbal communication between you and your singing teacher is important	<i>Q1</i>	25	4.6	0.6	0.3	n. s.
		<i>Q2</i>		4.4	0.5		
13		<i>Q1</i>	25	4.2	0.8	1	.002

Non verbal communication (Gestures, body codes, facial expressions) between you and your singing teacher are important	Q2		3.2	1.1		
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Questionnaire 1 and 2 Paired Samples for beliefs in Two-tailed *Mann-Whitney* test with confidence level of 95%.

Statistical significant differences ($p < .05$) were found for several variables meaning that students' opinion developed into different directions and indeed (as statistically significant differences were found) changed over time. Students reported that regarding the all aspect of relationship with their singing teacher (interfering with development, behaviour adjustment, freedom to change teacher, toughness and personal empathy) there are no significant differences and that the students still have the same beliefs regarding this matter. However, regarding the relationship, students agreed stronger that the relationship may interfere with the development of the students more in a second stage than in the first. The comparison between the two questionnaires revealed that students changed their opinion related to physical contact, personal problems, theoretical approach and nonverbal communication. For physical contact, students at the later stage reported less feeling that physical contact may be helpful for the development of their singing.

Regarding the personal problems, students reported they also believe less in the interference of the problems in their singing and that their present singing teacher is considerably less aware of those problems than their former singing teacher. Interestingly, students did not present significant differences regarding the awareness between teachers related to professional problems. At the second stage, students actually reported that teachers are more aware of those particular problems related to their singing. Regarding the use of theoretical approach students did not value this matter as in the previous observation of beliefs and rated significantly lower these methods of learning. Concerning the verbal and nonverbal communication, students presented approximate values for verbal communication but reinforced the importance of nonverbal communication in singing lessons.

Generally students lowered their ratings in all the statistically significant changes and increased the values in several sentences without leading into significant changes.

3.6. Discussion and conclusion

This longitudinal inquiry allowed a perception of students' expectations and satisfaction in regard to the relationships with their teachers as well as the more practical aspects of lessons that may ultimately interfere with relationship. The initial contextualization of participants allowed a perception of their backgrounds, indicating a wide range of previous experiences although a pattern emerged: the majority of students presented similar numbers of teachers according to the studying singing longevity by staying with the same teacher for longer than 2 years. This element may be considerably important as it supports the appropriateness of matching teachers and students for relationships that last long periods of time.

Most students also reported feeling free to move to different teachers when they were not satisfied. However, a quarter of students indicated having wished to change teachers but not having actually done that, indicating that dissatisfaction to be mostly associated with relational problems. Students reported having as main precursor for moving into another teacher the lack of encouragement, interest, and comprehension from teachers as well the absence of teacher for long periods of time. The availability as an important contributing element for the relationship will be presented and discussed later in chapter 8.

Other themes emerged regarding factors influencing the singing learning that will reflect in the observational awareness for chapters 7 and 8. Students reported being satisfied with teachers' teaching approaches but reported wishing for more physiological examples; reported expecting new singing teachers to be professional and friendly but also be demanding, firm, tough, clear and strict, indicating a wish for challenge; students also reported that the gender of teacher seemed to affect the teaching outcomes, as teacher of different vocal ranges tend to feel voice in different ways; the eye interactions between the teacher and student were also reported a constant element of the lesson. Regarding the teaching techniques used by singing teachers, students valorise sung demonstrations from teachers, as the preferred teaching technique and that seems to be the most used way of teaching.

In terms of gender analysis, statistically significant differences were found between female students scoring significantly high that teacher-student relationships

interfere with the development of students, and that a teacher of same gender makes the students more comfortable than male students. Analysis of students' beliefs also indicated that more experienced students (in number of years) value significantly more the use of theoretical approaches and nonverbal communication, and feel less behavioural adjustment from their teachers than less experienced students indicating that approaches' preferences vary according to different ages in agreement with previous research by Hallam (2001). Regarding students' experience in terms of number of teachers each student had, statistically significant differences were also found between less experienced students, who value more personal empathy and feel more behavioural adjustment from their teachers, than more experienced students.

Overall students evaluated positively their singing teachers in terms of: teaching ability, strategies, personality, mood, commitment and relationship with the teacher, the environment in which the lesson takes place (studio size, acoustic), overall experiences related to singing (development, knowledge of language, singing marks) and seem to clearly know what they are looking for in a singing teacher, the aspects implied in this relationship.

This chapter attempts to strategically divide sections and identify relevant parts of student-teacher relationship for a closer observation through recordings later in chapter 7 and 8. The next in chapter 4 provides an overview of common research methods and proceedings for subsequent chapters.

4. Overview for methods for singing video observation

4.1. Context

The present chapter will introduce the forthcoming chapters 5, 6 and 7, in which an overall perspective of instruments, methods and proceedings is used to evaluate the development of the singing teacher-student relationship in a longitudinal perspective. Each of those chapters will individually analyse the participants' personality and attachment in order to provide a background for the analysis of lessons.

Considering the possibilities of qualitative analysis as defended by Livingston (1987), the use of video recordings would be the most appropriate way to follow, organize and structure people's behaviour in situ. In this study, the use of recordings of lessons seemed of great importance to register, repeat and re-evaluate the behaviours in more detail.

For this study, a group of teachers and students, described below, participated in the following collection of information: video recordings of one-to-one singing lessons, personality tests, adult attachment test, questionnaires regarding how these individuals felt during the recorded lessons, and informal interviews. This chapter presents the methodology: participants, proceedings and statistical methods that later will be described in more detail in each of the chapters 5, 6, 7 and 8.

4.2 Methods

4.2.1. Participants

The required conditions for selection of participants for this research were:

- i. Teaching/ studying in a higher education institution (college or university).
- ii. Having singing as the main instrument of study for each student.
- iii. Having regular singing lessons with the teacher being observed.

Teachers

Six higher education institutions (universities and colleges) from the United Kingdom and Portugal were contacted through their head of vocal studies. These two countries were chosen to allow a wider range of comparison and a diverse cultural

environment. The heads of vocal studies were asked to choose several singing teachers who were seen (randomly) as being different or contrasting in relational terms for a longitudinal video collection. Eleven teachers were available to participate in the study. Seven teachers were females and four male.

Students

The eleven teachers were asked to choose at least two contrasting students that would follow these differences: i. being from different ages, ii. academic year, iii. levels of development and/ or iv. that the teachers would feel they relate in different ways, v. students that teachers felt approached differently in their teaching. No reference to gender was stipulated. At the first data collection participants were distributed as follows:

Table 11: Sample distribution regarding the number of students for each teacher in video collection nr 1.

Teachers	with →	Students	Total
	3	2	6
	3	3	9
	2	4	8
	1	6	6
	2	8	16
11 teachers (7 female and 4 male)		-	45 Students (33 female and 12 Male)

Although the number of selected students varied widely from 2 up to 8 students for each teacher, all of these were accepted as it could bring to the study an extra view of diversity between students of the same teacher. This first round of video collections was complemented with a brief questionnaire (After Lesson Report - ALR) designed to evaluate altered behaviours due to the presence of the camera. The questionnaire was administered to both teachers and students. The exploration of this questionnaire will be presented in chapter 7.

The second data collection had the following distribution:

Table 12: Sample distribution regarding the number of students for each teacher in video collection nr 2.

Teachers	with →	Students	Total
	1	1	1
	1	2	2
	6	3	18
	1	4	4
	1	6	6
10 teachers (6 female and 4 Male)		-	31 Students (21 female and 10 Male)

In this second video collection four of the teachers excluded students from the first data collection and included students that were observed in the third data collection. The reasons for those changes in most cases were due to timetable arrangements and the fact that two of the students reported being voiceless. Teacher A had to be away for several months due to career appointments and students were diverted to another singing teacher that agreed to be included in the third collection. The inclusion of these students seemed important because although the study's main objective was to observe the singing teacher relationship in a longitudinal perspective, the comparison of the same students with two different teachers seemed also interesting. This second video collection was complemented with the personality test NEO PI-R by Costa and McCrae (1992), which will be presented in chapter 5 (next) and explored in chapter 8.

The third data collection had the following distribution:

Table 13: Sample distribution regarding the number of students for each teacher in video collection nr 3.

Teachers	with →	Students	Total
	3	2	6
	5	3	15
	1	4	4
	1	5	5
10 teachers (5 female and 5 Male)		-	30 Students (22 female and 8 Male)

In this data collection, one of the teachers (D) that participated in the last two stages had personal problems that did not allow her to be teaching for several weeks and could not finish the study. Throughout the year, most teachers found it more convenient to present 3 students for observation. So, several teachers who started with fewer students increased the number of observed elements to 3 and others who had a bigger number of students decreased them throughout the year. At the end of these last video collection teachers and students filled an Attachment questionnaire: *Adult Attachment Scale-R* (AAS-R) by Collins and Read (1990) that will be presented in chapter 6 and explored in chapter 8.

The study was initiated with a relatively large number of participants, considering the amount of video observation hours and the complementary instruments; this was because it was expected that the number of participants could oscillate throughout the study. As predicted, the number of cases that completed the 3 stages of observation decreased significantly from 45 (initiated) to 16 that actually fulfilled the 3 stages of observation. In the analysis of data, the cases where the three stages were collected were prioritised according to the longitudinal characteristics of this study. Cases where one or two collections were made, were considered secondary but integrated in the study in order to compare teachers' behaviours with different students. Table 14 (below) illustrates all the collections of data.

Table 14. Participants' list (teachers and students) regarding video collections, personality Inventory (NEO PI-R, Costa & McCrae, 1992), adult attachment scale (AAS-R, Collins & Read, 1990), after lesson report ALR (teacher and student):

				NEO FFI-R	AAS-R	ALR	
	I	II	III			Student	Teacher
A			M	✖	✖		
	1			✖	✖	✓	✓
	2			✖	✖	✓	✓
	3		3	✖	✖	✓	✓
	4		4	✖	✖	✓	✓
B				✓	✓		
	5	5	5	✓	✓	✓	✓
	6					✓	✓
	7			✓	✖	✓	✓
	8		8	✖	✖	✓	✓
	9			✖	✖	✓	✓
	10			✖	✖	✓	✓
		46	46	✓	✓		
		47	47	✓	✖		
C				✖	✓		
	11	11	11	✓	✓	✓	✓
	12	12	12	✓	✓	✓	✓
	13	13		✖	✖	✓	✓
		48	48	✓	✓	✓	✓
			49	✓	✓		
	14			✖	✖	✓	✓
D			**	✖	✖		
	15	15	**			✓	✓
	16	16	**	✓		✓	✓
	17	17	**			✓	✓
E				✓	✓		
	18	18	18	✓	✓	✓	✓
	19		19	✖	✓	✓	✓
F				✓	✓		
	20	*	20	✖	✖	✓	✓
	21	21	21	✓	✓	✓	✓
		50		✖	✖		
		51	51	✓	✓		

				NEO FFI-R	AAS-R	ALR	
	I	II	III			Student	Teacher
G				✓	✓		
	22			✗	✗	✓	✓
	23	23		✓	✓	✓	✓
	24	24	24.	✓	✓	✓	✓
	25	25		✓	✓	✓	✓
	26	26	26	✓	✓	✓	✓
	27		27	✗	✗	✓	✓
	28	28	28	✓	✓	✓	✓
	29	29	29	✓	✓	✓	✓
H				✓	✓		
	30	30	30	✓	✓	✓	✓
	31	31	31	✓	✓	✓	✓
	32		32	✓	✓	✓	✓
I				✓	✓		
	33			✗	✗	✓	✓
	34		34	✓	✓	✓	✓
		52		✗	✗		
		53	53	✗	✓		
		54		✗	✗		
J				✓	✓		
	35	35	35	✓	✓	✓	✓
	36	36	36	✓	✓	✓	✓
	37	37	37	✓	✓	✓	✓
L				✓	✓		
	38	38	38	✓	✓	✓	✓
	39		39	✗	✗	✓	✓
	40			✗	✗	✓	✓
	41	41		✗	✗	✓	✓
	42			✗	✗	✓	✓
	43			✗	✗	✓	✓
	44	44	44	✓	✓	✓	✓
	45			✗	✗	✓	✓

Legend: * Student was unable to sing due to vocal illness, ** teacher unable to teach temporarily due to personal problems; letters represent teachers; numbers represent students; I - first data collection, II - second data collection, III - third data collection.

All teachers and students were interviewed before or after at least one of the singing lessons. The moments where other complementary instruments were delivered,

explained or received were chosen in order to facilitate the access to teachers and students.

4.2.2 Proceedings

The eleven singing teachers were contacted to participate in the video collection. Two of those teachers did not agree with the collection of videos but allowed the observation of their lessons and the necessary notes to be taken. One of the teachers allowed the first stage to be recorded and for the second and third stages requested observation only. The other eight teachers allowed full recordings in the singing studio.

The variation between observed and recorded lessons did not seem to be problematic as observation tables were built previously and information was schematised. However, the video observation had a valorisation over the solely observed lessons in terms of phrase transcription, repetition and amount of details. All timings and behavioural quantifications as well as descriptions were made during the lesson and longitudinal comparisons were made after the lesson took place. The data collections were made during one entire academic year, in three different stages as follows:

1st – November / December

2nd – February/ March

3rd – May /June

In November, February and May the data collection was made in the United Kingdom and in December, February and June the collection was made in Portugal, all with the approximate interval of 12 weeks.

4.2.3. Statistical Methods

Quantitative methods for ALR, NEOPI-R and AAS-R

The analysis of the data was made through the statistical software SPSS® (*Statistical Package for the Social Sciences*) v16.0.1 for Mac. At an early stage, all questionnaires were individually submitted to a descriptive and exploratory analysis according to the used variables (nominal, ordinal and interval/ ratio). The following measures were calculated: absolute frequencies (number of valid cases – N); relative frequencies (percentages of valid cases - %); central tendency descriptive statistics (mean); dispersion (standard deviation); asymmetry and kurtose; and extreme values

(minimum and maximum). The exploration of data was complemented, when appropriate, with graphical representations.

In a second approach, a factorial analysis was made in order to create common dimensions for interpretation for the after lesson reports and a group of variables completed the requirements for factorial grouping. An exploratory factor analysis was applied recurring to the main components method in order for items to be reduced into common factors. The validation of these factorial analyses was verified through: i. the quality of correlations between variables, using *Kaiser-Mayer-Olkin* (KMO) coefficient; ii. *Bartlett Sphericity* ($p < .05$ reporting a probable correlation between the samples' population) and iii. anti-image main diagonal correlations ($MSA_i > .5$ with $i = 1, \dots, n$, showing the adequacy of using the group of variables (Pestana & Gageiro, 2003). The internal consistency of each factor was tested recurring to *Cronbach's Alpha* (α) and the values were determined through factor's mean scores. (Pestana & Gageiro, 2003). After the evaluation of asymmetry and kurtose (recurring to coefficients), factor normality (recurring to non-parametric test *Kolmogorov-Smirnov-K-S*, with *Lillieford's* correction), non-parametric tests had to be applied as normality requirements did not occur (Bryman & Cramer, 2008; Hair, *et al.*, 1998).

For the comparison between independent/non-related variables the *Kruskal-Wallis* test was used whenever more than two groups of comparison were presented. When significant differences were found, a paired comparison was applied through the *Mann-Whitney Test*. For dependent or related variables, the same proceedings were used with non-parametric tests *Friedman* and *Wilcoxon*, respectively. Additionally, an analysis of correlation between considered more interesting variables was made by applying the *Spearman Correlation* and when two groups were presented (i. e. Gender: Male, Female) non-parametric *Mann-Whitney* test was applied (Pestana & Gageiro, 2003; Reis, 1997).

Particularly for NEO PI-R (Costa & McCrae, 1992) and AAS-R (Collins & Read, 1990) non-parametric tests had to be used in accordance to statistical references (Hair, *et al.*, 1998) as the number of singer participants was small ($n=35$) and normality was not verified after following the above indicated proceedings. An exploratory subsequent analysis was made recurring to non-parametric *Kruskal-Wallis* test to

explore the differences between the kinds of attachment styles and the personality domains. All tests were applied with a confidence level of 95%. The results will be presented in chapters 5 and 6 regarding personality and attachment, respectively.

4.2.4. Qualitative Methods

The qualitative analysis of this research (videos, annotations, reports, after lesson report and informal interviews) were regarded from a multilateral point of view in order to provide a wide perspective of observation and cover the relational setting not only from the observations (videos) but also including the perspective of participants involved in the relationship itself (questionnaires). This qualitative analysis was then complemented with the psychological reports (personality and attachment) that provided an identification of scale and styles ideal in combination with this qualitative research. So, it was expected that the relationships identified (what happened), included possible reasons of that behaviour (why) and the consequences of that behaviour (effect) which was provided through the questionnaires. An in-depth analysis of personality will be presented next in chapter 5.

5. The personality of singing (teacher and student)

Teaching skills are often regarded in terms of the teacher's personality and individual aptitude as well as musical talent. (Rostvall & West, 2003: 215).

A singer is instrument and performer all in one. The pupil's ability to exploit the instrument's quality in performance depends largely on his or her personality and background (Dillon, 1996: 49).

5.1. Introduction

As presented in the above statements, the implications of personality in teaching/ learning and performance attitudes are well known. Of all types of psychological studies, personality has proven strong relevance in the approach to music by profiling the self and groups where people belong professionally. Certain professions are considered in literature to fit a personality type that helps identifying them: for instance, pilots, brain surgeons present similar personality traits (Kemp, 2004: vii). Therefore, the measurement associated with singing teachers' personality, may prove to have its effective considerations in relation to their students' singers and in comparison to other groups of teachers. Although the purpose of this study is not to compare teachers of different instruments, the profiling of singing teachers in regard to their students may also prove personality pattern tendencies and help identify predispositions for more effective relationships.

Taking that personality has previously been approached in most areas, the next part will focus on the studies that are directly associated with musical fields and that served as a precursor for the present personality observation used on the participants of this research. In music, personality has been studied in regard to skill identification, talent prediction, musical preferences, and musical sub-grouping identification (according to different instruments), as may be seen in more detail in the following sections.

Personality & Music preference

Possibly one of the most analysed matters on music research related to personality involved the measurement of correlation between personality and music preferences. Indeed, correlations were confirmed in several studies indicating a tendency of choosing music and tendencies towards specific kinds of music related to personality traits. (Cattell & Saunders, 1954; Delsing *et al.*, 2007; Dollinger, 1993; Glasgow, Cartier & Wilson, 1985; Little & Zuckerman, 1986; Pearson & Dollinger, 2004; Rawlings & Ciancarelli, 1997; Rentfrow & Gosling, 2003; Schwartz & Fouts, 2003).

Personality & Music response

Another field of personality studies associated with personality was music response (Crickmore, 1968; Lewis & Schmidt, 1991). Both studies concluded that eventual relations between the personality types and music appreciation did not seem to exist and that music appreciation was dependent on too many factors non-related to personality.

Personality & Instrument group

Another field of personality investigation is the relations between personality types and the instrument played. Several studies identified common characteristics on instrumentalists according to their instrument, suggesting that there may be a personality grouping factor (Bell & Creswell, 1984: 91; Kemp, 2004). The same personality correspondence, of different patterns of variations according to the instrument and repertoire played, was later confirmed by Kemp (2004) in orchestral instrumentalists. These instrumentalists were identified as having common characteristics whereas singers, performance pianists, organists and conductors who were non-orchestral had higher levels of individualism, imagination and low levels of conservatism (p. 166).

Personality between instrument and singers' group

In what concerns the singers' groups, various factors may contribute to differences being identified between the singers groups and instrumentalists' groups. The instrument itself may be a provider of information because whereas instrumentalists may have a more protected posture towards an audience, the solo singers face their performances frontwards without other elements between. This may constitute a contribution towards developing extroversion in higher levels than orchestral players,

for instance (Kemp, 2004: 173). According to Kemp (2004: 173) singers are also projected as being more extroverted (associated to the capacity for performing solo) and the fact that they do not spend as many hours isolated (which potentiates introversion) as instrumentalists do, due to the natural limitations of vocal overuse. Singers are also shown to have higher adjustment, sensibility and independence as they work in different settings where those characteristics are more likely to be developed than other instrumental players. In sum: 'Viewed in its total, the musician without an instrument appears to attract a very different type of person' (Kemp, 2004: 175).

Singer personality characteristics

Focusing further within the singers' types of personality, Wilson (1984) found that tenors and sopranos are within the singers group the most extroverted and that characteristic was associated with vocal pitch with sopranos being more extroverted than mezzo-sopranos and contraltos having less emotionality than singers of other voice types. The pattern (of most extroverted in the higher voices) was repeated regarding the male group of tenor, baritones and basses (Wilson, 1984 in Kemp, 2004: 176).

Singers are also portrayed as being more anxious and sensitive than other instrumentalists reflecting a more unsure teaching approach to their instrument based on sensations, identified to match the teachers' requests which may be more demanding than other visible and touchable instruments and more likely to produce effect by visual means (Howard, 1982 in Kemp 2004: 174). Another characteristic identified by Howard (Ibid.) is that singers' tend to depend strongly more on their teachers. That dependency was justified by the fact that singers do not hear the sound of their instrument as other instrumentalists do and that the instrument requires added sensation search in order to produce the appropriate sound.

As in singing, the teaching of singing may be associated with the intrinsic characteristics of the instrument. Literature gives particular relevance to the above 'sensitivity' that seems to be necessary and shared with the teacher during learning of singing. That sensitivity has been described as related to the singers' use of body as the instrument (Kemp, 2004: 177). So, the approach of the teacher may constitute an important contributor to the characteristics of students' singer. The next section will identify studies where the effects of personality were evident in music teaching.

Personality & Music teaching

The study of personality has been associated with music teaching. Kemp (2004) raised the questions about what skills are required of music teachers and whether the right competencies are actually being evaluated when selecting teachers. Teachers, according to Kemp (2004: 217), tend to be appointed in terms of 'professional experience, approach and accomplishments' translated in how that person relates to others, teaches with imagination, adaptability, musical skills enthusiasm, interest, flexibility that may lead into good results in students' exams. Those skills may be more accurately used in the description of the teacher's personality.

Teachers have been analysed in regard to the matters taught as well as the extent of their career. Kemp (1982) identified differences between the musicians (who spend large amounts of time in isolation) and music teachers who after that initial instrumental closure move into teaching perspectives and develop openness (Kemp, 1982: 73). So, according to Kemp's study, not only musicians and teachers may have different personality characteristics and also their activities may be influencing their personality. However, in opposition to those findings, Wubbenhorst (1994) concluded that there are many similarities between music educators and music performers with music being the possible common factor for those similarities, refuting the previous distinctions between music professionals examined by Kemp (1982).

In a more detailed level, research was developed into music teaching effectiveness. In this field, Teachout (2001) based his studies in previous models of vocational theory by Holland (1992), who profiled vocational tendencies characteristics, and by using personality testing concluded that although personality and music teaching were related, they were not indicative of teaching effectiveness (Teachout, 2001: 189). Again, in opposition to previous research, Hamann, Lineburgh & Paul (1998) identified personality as a strong predictor of teacher effectiveness for music teachers in training (Hamann *et al.*, 1998) and Lutz reinforced happiness as a strong predictor of teaching success (Lutz, 1964 in Pembroke & Craig, 2002: 796).

In regard to music teaching feedback, Schmidt (1989: 118-119) concluded that personality might influence the delivery of feedback, for extroversion and introversion

are variables that may determine the interaction with the students and the amount and of explanatory behaviour of teachers towards students. The teaching itself, as well as the relationship between teacher and students, may be influenced by the personalities of teacher and student.

Personality raised other differences found when comparing music teachers of young children ('extroverted, sensing, feeling and judging') in comparison to music teachers of older students who presented characteristics such as 'introversion, intuition, thinking and perceptive' (Kemp, 2004: 232). In general, extroverted music teachers tended to be more attentive and deliver more feedback, while judging types tend to take teaching further into more difficult points.

The discussion around personality variables and music teaching is extensive but does not seem to have a consensus. Several authors consider personality as the most important element of teaching effectiveness (Pembrook & Craig, 2002; Schechtman, 1989; Wink, 1970; Young, 1990) whereas other authors defend a weak relation between successful teaching and personality (Davidson, Moore, Sloboda & Howe, 1998; DeNovellis & Lawrence, 1983; Goodstein, 1987; Wubbenhorst, 1991).

The present study may contribute to the research on teaching and personality by using personality as a means through which the relationship between teacher and student may be better described, examined and therefore contribute towards its better comprehension.

5.2. The test NEO PI-R (Costa & McCrae, 1992)

The personality test NEO PI-R (Costa & McCrae, 1992) is an instrument that has strong and well-established roots in psychological assessment and within music research (Chamorro-Premuzic *et al.*, 2009; Jäncke & Sandmann, 2010; Kemp, 2004; Moss, *et al.*, 2006). The NEO PI-R (Costa & McCrae, 1992) according to the authors have two meanings: the initials of the three initially created dimensions N (neuroticism), E (extroversion), O (openness to experiences) and also was a reference the innovative character of the questionnaires (NEO = New) and PI-R stands for personality inventory revised.

This instrument provides a dimension and trait description of each individual meant to allow a comparative analysis between individuals. The evaluation of personality, unlike attachment (presented in chapter 6, next) does not provide a classification of style. Rather, the results presented are in scales from where participants (teacher or student) may be compared as being more or less characterized by a certain characteristic of their personality. The NEO PI-R (Costa & McCrae, 1992) is constituted by 5 domains and 6 traits (for each of the domains). The dimensions provide a resume of underlining traits, which are subgroups of more specific elements of personality describing 'emotional, interpersonal, experimental, attitudinal, and motivational styles' (Costa & McCrae, 1992: 14).

The traits are presented on a scale (converted in percentiles, provided by the authors' normative tables) where most individuals tend to score near the middle of scale. Some traits may be located on either extreme providing therefore the interpretative meaning of the individuals' personality (Costa & McCrae, 1992: 13). All scales or converted scales are separated according to age (college-age / adults) location (country pre-established normative scales) and gender (man/ woman) of participants following the authors and previous research validity tables (Costa & McCrae, 1992: 14, 43). The personality measurement may be used for pathological reasons, but it also is applied on 'normal' individuals to many non-medical and non-psychological research: vocational applications, educational research.

The characterization of domains and facets is in most literature characterized as high or low scoring (as presented in the table of appendix B). However, other sub scoring is possible and indicated according to the purpose of each study (Costa & McCrae, 1992: 16). Costa and McCrae (1992) also suggest that the results summary may be provided on the same five point *Likert* scale used to score the test in order to provide a more refined characterization. That summary characterization was used to provide a feedback personality description to all participants of the present research individually.

In terms of comparative analysis, and due to the nature of the present research, a three field distribution of 'high', 'medium' and 'low' scores was adopted to characterize each participant (later on this chapter). This option was taken according to the indication

that most individuals are located on a middle range of scale and that extremes of scale are the best providers of information. A description of each facet and domain that constitute the participants' personality is summarized in appendix B according to Costa and McCrae (1992) and Costa and McCrae (2000).

5.3. Methods

5.3.1. Aims

Given the above, the aims of this chapter are to explore **i.** what personality domains and traits are common to singing students and teachers in comparison to normative groups; **ii.** what differences, if any, may be found between singing teachers and students' personalities from different countries; **iii.** whether the personality characteristics of singers' group are different within the group and if so, to what extent; **iv.** and to contextualize the personality profile of each participant that will serve for later comparative analysis with behaviours, in chapter 7 and 8.

5.3.2. Procedure and materials

The singing teachers and students, observed for video collection during their weekly singing lesson, were asked to respond to a personality test by the second stage of observation. The test NEO PI-R (Costa & McCrae, 1992) was administered directly to students and teachers immediately after the second video collection took place. The choice of NEO PI-R (Costa & McCrae, 1992) between the most used personality tests was due to the following:

- The test offered a description of personality that seemed ideal in accordance to the characteristics of this study.
- It presents the big 5 dimensions of personality that allow a comprehension in a resumed perspective the individual being studied over his/ her characteristics of emotion, attitude, motivation, relational, experimental and interpersonal type.
- This test allows a perception not only of the dimensions in which each participant fits but also gives a scale of values that allows comparison between individuals with same dimensions.

- The NEO PI-R (Costa & McCrae, 1992) presents under layers of characteristics (traits) within the major factors that seem to be useful when observing behaviors in recorded singing lessons.
- It is a validated instrument in use for several decades, including for music studies (Chamorro-Premuzic *et al.*, 2009; Jäncke & Sandmann, 2010; Kemp, 2004; Moss, Garivaldis & Toukhsati, 2006).
- The NEO PI-R (Costa & McCrae, 1992) is a validated instrument in both United Kingdom and Portugal, where the observational study took place.

The collected data was inserted into statistical software SPSS® (*Statistical Package for the Social Sciences*) v16.0.1 for Mac, as presented earlier in chapter 4. The syntax of facets, inverted items and dimensions was applied in order to identify each of the participant's ratings. The categorisation for each participant was converted from raw score into percentiles recurring to the tables for English/ Portuguese and adult /college age participants as this personality inventory makes a separation between young adults person (17-20 years old) and adults (21 or over). All evaluation of personality tests was validated with a professional psychologist. All participants were offered a report of their own personality results.

A weak point of the research could have been that respondents from UK colleges are not all British and are being evaluated by a NEO PI-R (Costa & McCrae, 1992) scale for British citizens. However, coincidentally, none of the foreign students (French, Lebanese, Swedish, Spanish or Italian) returned the personality or the attachment questionnaires. So, all questionnaires used in this study are indeed being answered by British participants and evaluated through the British scale and all Portuguese participants are indeed Portuguese and evaluated through the Portuguese scale.

The comparative analysis of dyads' personality (presented later in chapter 8) will be made based on existing literature on marital relationships. This choice was made in order to base the present study on principles of personality combination existing in psychology (Shiota & Levenson, 2007). The existing studies present different perspectives that mostly are associated with examining the existence of a direct impact of similar / contrasting type of personality identified through domains and traits. A simpler way of expressing this comparative analysis would be the popular belief in

'opposites attract'. Indeed, psychological studies indentifying contrasting personality traits between couples, confirm a tendency to have longer and more satisfying relationships by partners with contrasting personalities in comparison to similar personalities (Dryer & Horowitz, 1997; Shiota & Levenson, 2007)

5.4. Descriptive analysis

5.4.1. Characterisation

As said before (in chapter 4) all participants from the video collection were asked to participate in the personality inventory. From the 52 given questionnaires a 67.5% rate was returned (66.6% return rate from teachers and 67.5% return rate from students). Although the same participants constitute the sample in use, only one part of the group returned the personality inventory. So, a brief description of participants' characteristics is presented next:

Table 15. Socio-demographic characteristics for NEO PI-R (Costa & McCrae, 1992) distributed by teacher (N=8) and students (N=27).

Socio-Demographic Variables	Teacher		Student	
	N	%*	N	%*
Gender		(N=8)		(N= 27)
Male	3	37.5	7	25.9
Female	5	62.5	20	74.1
Age		(N=8)		(N= 27)
19 to 25	0	0	19	70.4
26 - 36	0	0	8	29.6
37-50	5	62.5	0	0
62-74	3	37.5	0	0
Mean	53.62 (\pm 11.88) Years		24.89 (\pm 4.89) Years	
Age Range	From 38-74		From 19 to 36	
Country		(N=8)		(N= 27)
Portugal	5	62.5	15	55.6
United Kingdom	3	37.5	12	44.4

* Percentages for valid cases.

Comparison between the scores of singers and their normative groups from both Portuguese and English population

Following the existing references for the personality inventory (Costa & McCrae, 1992) the normative reference group for general population was used in comparison to the singers' group in order to assess what differences might exist between the singers and the normative group. A comparison between the Portuguese and English participants was also done in order to assess whether there were significant differences between the two samples using the two existing normative references.

As the sample for college age (under 21 years old) group seemed residual (N=4, 10%), all results concerning these 4 students are presented as appendix C. After extraction of college age students, the sample is constituted of 31 elements (statistically small sample). So, it was necessary to verify whether the comparison group follow a normal distribution. Due to some groups from sample not having a normal distribution and the sample having two kinds of normality, non-parametric tests were used (Hair *et al.*, 1998).

In order to allow a more accurate evaluation of personality, according to the professional personality manual by Costa and McCrae (1992), the adult normative population is presented next in table 16, below.

Table 16: Comparison between combined mean scores and standard deviation of English normative group and the singers group in the NEO PI-R (Costa & McCrae, 1992) for adults. Significant differences ($p \leq .05$) in bold. *N= 1000, **N= 13

Adults NEO PI-R (Costa & McCrae, 1992)	English					
	Normative group*		Singers group**		z	p
	M	SD	M	SD		
N: Neuroticism	79.1	21.2	118.5	9.2	15.41	0.00
n1: Anxiety	14.3	5.3	18.7	6.2	2.55	0.03
n2: Angry hostility	12.4	4.6	24.2	2.9	14.42	0.00
n3: Depression	12.3	5.4	21.5	4.6	7.22	0.00
n4: Self-Consciousness	14.3	44.4	22.2	2.6	10.72	0.00
n5: Impulsiveness	15.8	44.4	17.9	4.1	1.86	0.09
n6: Vulnerability	10.0	3.9	14.2	4.6	3.28	0.01
E: Extroversion	109.4	18.4	108.8	10.1	-0.20	0.85
e1: Warmth	22.9	4.0	19.2	5.6	-2.36	0.04
e2: Gregariousness	16.5	4.8	23.4	4.1	6.09	0.00
e3: Assertiveness	15.8	4.7	18.2	4.9	1.78	0.10
e4: Activity	17.6	4.4	15.3	6.0	-0.14	0.20
e5: Excitement- Seeking	16.4	4.9	17.5	7.0	0.59	0.57
e6: Positive Emotions	20.2	4.5	15.2	4.3	-4.25	0.00
O: Openness	110.6	17.3	125.5	10.9	4.92	0.00
o1: Fantasy	16.6	4.9	24.5	3.8	7.46	0.00
o2: Aesthetics	17.6	5.3	23.6	2.9	7.40	0.00
o3: Feelings	20.3	4.0	20.2	5.8	-0.09	0.93
o4: Actions	16.4	3.7	17.6	5.9	0.74	0.47
o5: Ideas	19.0	5.0	20.8	3.6	1.85	0.09
o6: Values	20.7	4.1	18.8	4.2	-1.65	0.13
A: Agreeableness	124.3	15.8	111.5	8.9	-5.23	0.00
a1: Trust	21.3	4.2	17.8	4.4	-2.85	0.02
a2: Straightforwardness	21.2	4.4	17.9	4.6	-2.56	0.03
a3: Altruism	23.6	3.5	19.0	6.0	-2.78	0.02
a4: Compliance	18.9	4.0	18.2	3.9	-0.61	0.55
a5: Modesty	18.9	4.2	19.5	5.6	0.36	0.72
a6: Tender-Mindedness	20.5	3.5	19.0	4.3	-1.25	0.24
C: Conscientiousness	123.1	17.6	113.3	8.6	-4.10	0.00
c1: Competence	22.2	3.5	15.3	6.2	-4.04	0.00
c2: Order	19.0	4.2	13.7	4.9	-3.93	0.00
c3: Dutifulness	23.2	3.9	24.3	3.1	1.27	0.23
c4: Achievement Striving	19.5	4.0	23.2	2.3	5.81	0.00
c5: Self-Discipline	21.8	4.3	21.7	3.7	-0.11	0.92
c6: Deliberation	17.5	4.1	15.1	4.7	-1.87	0.09

Significantly different mean scores were found in all dimensions and on most facets shown in bold in table 16, which is in agreement with previous literature (Coimbra, 2004: 167) although several facets differed within the dimensions of openness (O) and agreeableness (A). Those differences may be associated to the fact that on the present study students had a higher age range (positioning them within the adult personality normative comparison) whereas in Coimbra's (2004) study the analysis was made with students of college age.

Table 17: Comparison between combined mean scores and standard deviation of Portuguese normative group and the singers group in the NEO PI-R (Costa & McCrae, 1992) for adults. Significant differences ($p \leq .05$) in bold. *N= 1557, **N=18

Adults NEO PI-R (Costa & McCrae, 1992)	Portuguese					
	Normative group*		Singers group**		z	p
	M	SD	M	SD		
N: Neuroticism	77.8	10.2	115.7	9.9	6.19	0.00
n1: Anxiety	19.1	4.7	19.4	4.9	0.30	0.77
n2: Angry hostility	14.5	4.2	22.2	5.3	6.08	0.00
n3: Depression	16.1	4.9	20.2	4.5	3.93	0.00
n4: Self-Consciousness	16.2	4.4	18.6	4.1	2.44	0.03
n5: Impulsiveness	15.9	4.0	21.3	2.9	7.92	0.00
n6: Vulnerability	12.9	4.3	13.9	5.7	0.78	0.45
E: Extroversion	109.2	16.7	110.2	13.8	0.31	0.76
e1: Warmth	21.7	3.8	16.1	5.6	-4.31	0.00
e2: Gregariousness	16.5	4.8	25.5	2.9	13.19	0.00
e3: Assertiveness	13.9	3.9	21.2	4.0	7.64	0.00
e4: Activity	17.0	3.2	17.8	6.6	0.50	0.62
e5: Excitement- Seeking	17.6	4.6	14.3	6.4	-2.21	0.04
e6: Positive Emotions	18.2	4.2	15.4	4.9	-2.38	0.03
O: Openness	108.1	19.6	124.6	11.8	5.91	0.00
o1: Fantasy	17.0	4.7	23.4	3.0	9.01	0.00
o2: Aesthetics	19.8	5.0	24.2	3.9	4.79	0.00
o3: Feelings	19.4	3.9	24.1	3.9	5.06	0.00
o4: Actions	16.1	3.7	17.8	5.1	1.40	0.18
o5: Ideas	17.0	5.4	17.7	3.3	0.94	0.36
o6: Values	17.5	3.5	17.4	3.6	-0.13	0.90
A: Agreeableness	123.3	16.5	115.7	13.5	-2.40	0.03
a1: Trust	18.5	4.3	20.5	9.9	0.85	0.41
a2: Straightforwardness	19.0	4.1	20.6	3.0	2.27	0.04
a3: Altruism	21.9	3.7	16.9	4.7	-4.50	0.00
a4: Compliance	18.8	4.5	17.4	3.7	-1.56	0.14
a5: Modesty	20.0	4.1	19.9	6.0	-0.04	0.97
a6: Tender-Mindedness	21.2	3.3	20.3	3.3	-1.20	0.25
C: Conscientiousness	129.3	15.7	112.3	8.0	-8.98	0.00
c1: Competence	20.0	3.5	17.6	3.9	-2.59	0.02
c2: Order	18.9	4.4	11.7	4.4	-7.01	0.00
c3: Dutifulness	22.8	4.0	23.1	3.9	0.28	0.79
c4: Achievement Striving	19.9	3.9	20.3	4.0	0.41	0.69
c5: Self-Discipline	19.2	4.2	21.8	3.1	3.55	0.00
c6: Deliberation	18.3	4.6	17.9	4.1	-0.42	0.68

Significantly different mean scores were again found in all dimensions and most facets for the Portuguese singers' group in comparison to Portuguese normative population, shown in bold in table 17. In order to establish a comparative analysis between the English and Portuguese singers' group results the *Mann-Whitney* test was applied and results are presented below in table 18.

Table 18: Comparison between combined mean scores and standard deviation of participants from Portugal and United Kingdom's normative group with the singers group for the NEO PI-R (Costa & McCrae, 1992) in adult age. Significant differences ($p \leq .05$) in bold. *N=18, **N= 13

NEO PI-R (Costa & McCrae, 1992)	Country		p-value
	Portugal*	UK**	
	Mean (sd)	Mean (sd)	
N: Neuroticism	115.67 (±9.92)	118.54 (±9.23)	0.227
n1: Anxiety	19.44 (±4.94)	18.69 (±6.22)	0.718
n2: Angry hostility	22.17 (±5.35)	24.15 (±2.94)	0.257
n3: Depression	20.22 (±4.45)	21.46 (±4.58)	0.457
n4: Self-Consciousness	18.56 (±4.09)	22.15 (±2.64)	0.015*
n5: Impulsiveness	21.33 (±2.91)	17.92 (±4.11)	0.011*
n6: Vulnerability	13.94 (±5.68)	14.15 (±4.56)	0.748
E: Extroversion	110.22 (±13.84)	108.85 (±10.11)	0.779
e1: Warmth	16.06 (±5.56)	19.23 (±5.60)	0.143
e2: Gregariousness	25.50 (±2.90)	23.38 (±4.07)	0.129
e3: Assertiveness	21.17 (±4.03)	18.23 (±4.94)	0.054
e4: Activity	17.78 (±6.58)	15.31 (±6.02)	0.388
e5: Excitement- Seeking	14.28 (±6.38)	17.54 (±6.97)	0.118
e6: Positive Emotions	15.44 (±4.91)	15.15 (±4.28)	0.629
O: Openness	124.56 (±11.82)	125.46 (±10.90)	0.748
o1: Fantasy	23.44 (±3.03)	24.46 (±3.80)	0.304
o2: Aesthetics	24.17 (±3.87)	23.62 (±2.93)	0.386
o3: Feelings	24.06 (±3.90)	20.15 (±5.84)	0.065
o4: Actions	17.78 (±5.09)	17.62 (±5.91)	0.825
o5: Ideas	17.72 (±3.27)	20.85 (±3.60)	0.026*
o6: Values	17.39 (±3.60)	18.77 (±4.23)	0.331
A: Agreeableness	115.67 (±13.49)	111.46 (±8.86)	0.411
a1: Trust	20.50 (±9.94)	17.85 (±4.38)	0.601
a2: Straightforwardness	20.61 (±3.01)	17.92 (±4.61)	0.055
a3: Altruism	16.89 (±4.73)	19.00 (±5.97)	0.166
a4: Compliance	17.44 (±3.70)	18.23 (±3.94)	0.419
a5: Modesty	19.94 (±6.01)	19.46 (±5.61)	0.718
a6: Tender-Mindedness	20.28 (±3.25)	19.00 (±4.34)	0.219
C: Conscientiousness	112.33 (±8.01)	113.31 (±8.62)	1.000
c1: Competence	17.61 (±3.91)	15.31 (±6.16)	0.296
c2: Order	11.67 (±4.38)	13.69 (±4.87)	0.244
c3: Dutifulness	23.06 (±3.93)	24.31 (±3.15)	0.397
c4: Achievement Striving	20.28 (±3.95)	23.23 (±2.31)	0.026*
c5: Self-Discipline	21.83 (±3.15)	21.69 (±3.66)	0.968
c6: Deliberation	17.89 (±4.11)	15.08 (±4.68)	0.121

Results according to Mann-Whitney test with 95% confidence (* $p < 0.05$; ** $p < 0.01$)

Statistically significant differences between Portugal and United Kingdom were found for the traits self-consciousness (n4), impulsiveness (n5), ideas (o5) and achievement striving (c4), which confirms the consistency between the two groups ($p < .05$). The participants from the United Kingdom presented significantly higher values for the facets self-consciousness ($p = .015$), ideas ($p = .026$) and achievement striving ($p = .026$) and the participants from Portugal scored significantly higher for the facet impulsiveness ($p = .011$).

Due to the nature of this study, where singers' personality was not the central objective, no further statistical analysis was performed. The statistical categorisation made through the domains and facets extraction seemed sufficient as the base for qualitative analysis (in chapter 8). A description of personality domains and traits regarding the singers group will be presented next.

5.5. Results

The previous part describes all the returned personality tests. The results presented next will exclusively report to the students and teachers that will be analyzed qualitatively in chapter 8 and that were chosen by having completed all video collections and complementary reports: NEO PI-R (Costa & McCrae, 1992), AAS-R (Collins & Read, 1990), and after lesson report.

In accordance to the five point *Likert* scale that the respondents followed, a central tendency (in percentages) are observable between 40 and 60%, high values/ higher range considered over 60% and low values/ lower range below 40%. This distribution is in accordance with that used by the authors of this personality test (Costa & McCrae, 1992). Values where respondents score close to median values (and in accordance to the posterior qualitative approach) will be approached without exclusion. For instance, in cases where one element score 58% and another 62% according to the range distribution would be defined, the first, at the medium range and, the second, at higher range. However, its proximity will be taken into consideration in regard to the other element of the dyad. Although many dyads may accomplish the same number of traits in the same or different range levels, the personalities may clearly be different as only the traits' scoring will provide the most evidence of how the person tends to

behave. That tendency will be analyzed in regard to the lessons collected later in chapter 8.

The tables below show the raw scoring of each participants as well as percentiles. The raw scoring was converted in order to allow a comparative perception following one of the main assumptions of personality being related with gender, and age. Also, taking that this study was done in more than one country; the normative table of each country was applied respectively. So, to establish that comparative analysis, the following tables (19 to 23) present a raw scale for each trait and the corresponding percentage taking the gender, age and country of each participant extracted from authors' tables (Costa & McCrae, 1992: 87-91; Costa & McCrae, 2000: 54-55). The results of domains in raw score correspond to the total of raw score for traits. However, in the case of total percentage, another table of correspondence is considered following the authors' indication and pre-existing reference tables (Costa & McCrae, 1992: 60-61; Costa & McCrae, 2000: 86). The above conversion procedures (into percentiles) allow an accurate comparative analysis between participants. A more detailed comparative analysis will be made in the qualitative chapter (8) to which the present chapter serves a base.

Table 19. Domain and traits' scores for neuroticism in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages.

	N1		N2		N3		N4		N5		N6		Neuroticism Total	
	RS	%	RS	%	RS	%	RS	%	RS	%	RS	%	Raw Score	%
B	12	43	27	98	18	90	24	99	19	89	6	20	106	88
B5	25	98	26	98	14	78	21	95	19	89	11	69	116	94
C11	19	84	25	97	22	98	22	99	17	84	12	87	117	96
C12	18	80	22	88	18	93	18	96	22	96	14	92	112	85
E	14	53	22	91	19	91	24	99	23	97	19	98	121	95
E18	31	99	27	98	23	99	20	94	16	78	21	99	138	99
F	20	86	26	98	27	99	21	95	20	91	14	87	128	98
F21	21	88	20	86	16	86	24	99	23	97	13	79	117	95
G	12	10	24	99	23	95	20	80	26	99	11	50	116	90
G24	25	80	23	97	23	90	9	4	20	80	20	90	120	80
G26	17	20	24	97	17	50	20	75	24	97	9	10	111	75
G28	20	50	23	97	26	97	23	90	19	75	10	20	121	80
G29	25	80	24	97	13	20	20	75	24	97	15	60	121	80
H	20	70	15	60	14	40	15	50	20	80	19	90	103	75
H30	13	20	24	99	19	80	22	95	22	95	10	30	110	80
H31	14	10	23	97	22	80	21	80	20	80	11	25	111	75
J	17	50	25	99	16	60	23	96	22	95	8	20	111	80
J35	20	70	20	90	17	60	22	95	20	80	18	90	117	90
J36	13	20	26	99	21	90	23	96	23	96	5	3	111	80
J37	27	95	26	99	29	99	15	40	21	90	22	96	140	98
K	25	80	23	97	22	80	20	75	24	97	20	90	134	97
K38	22	60	23	97	18	60	16	40	24	97	8	10	111	75
K44	19	40	25	98	26	97	19	70	15	40	19	90	123	90

The raw scale and percentiles presented for the traits according to each participant allows a perception of variance between elements. It is visible from table 19 that the levels of neuroticism from this particular group are high (all are over 75%). This may be indicative at various levels of a tendency to have difficulties feeling satisfied and controlling emotions of nerves. The anxiety has previously been indicated as a trait that strongly characterizes the singers' group (Coimbra, 2004; Kemp, 1982). For one particularly important trait (self-consciousness) which reports the discomfort at being in the presence of others, all teachers scored high, perhaps indicating the isolation developed over time in working in one-to-one settings, as indicated previously by Kemp (1982).

Table 20. Domain and traits' scores for extroversion in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages.

	E1		E2		E3		E4		E5		E6		Extroversion Total	
	RS	%	RS	%	RS	%	RS	%	RS	%	RS	%	Raw Score	%
B	20	13	20	58	26	96	16	38	9	16	10	3	101	29
B5	25	54	15	21	27	98	24	91	21	94	11	4	123	70
C11	19	23	17	56	20	64	10	12	19	86	18	57	103	42
C12	18	20	22	82	21	71	12	23	17	75	15	35	105	25
E	15	3	25	88	18	54	16	38	14	61	20	63	108	42
E18	27	77	25	88	9	7	13	18	28	99	17	34	119	61
F	22	25	28	98	15	29	17	44	22	96	24	88	128	77
F21	9	1	24	84	17	47	21	79	18	82	11	4	100	29
G	18	20	27	98	19	80	19	70	10	3	18	50	111	60
G24	13	2	24	95	25	99	18	60	17	50	18	50	115	75
G26	25	80	25	96	24	99	27	99	8	3	18	50	127	95
G28	15	95	27	98	21	98	12	5	16	40	12	10	103	50
G29	24	70	28	99	19	95	30	99	22	90	14	20	137	98
H	9	1	21	80	23	97	21	90	16	25	11	4	101	40
H30	17	10	18	60	17	70	22	95	9	2	22	80	105	50
H31	15	3	26	97	22	99	24	99	13	20	13	10	113	75
J	23	60	25	95	24	98	15	25	12	10	13	10	112	60
J35	14	2	27	98	26	99	16	40	13	10	9	1	105	50
J36	11	1	23	90	15	50	14	20	8	1	22	80	93	20
J37	17	10	29	99	21	98	13	10	30	99	15	20	125	90
K	17	10	30	99	21	98	20	80	17	50	22	80	127	95
K38	21	40	28	99	28	99	24	99	7	2	16	30	124	90
K44	23	60	24	95	23	99	7	1	9	5	15	20	101	50

The distribution of results from extroversion present a less uniform tendency than regarding neuroticism. All singers had high levels of neuroticism but in terms of extroversion the group oscillates from low values as 25% of extroversion until as high as 95%. Most participants were located in the medium (N=11) or high (N=9) groups.

Table 21. Domain and traits' scores for openness in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages.

	O1		O2		O3		O4		O5		O6		Openness Total	
	RS	%	RS	%	RS	%	RS	%	RS	%	RS	%	Raw Score	%
B	25	96	27	97	27	97	10	10	18	51	24	86	131	89
B5	18	84	26	96	25	90	20	84	19	61	14	10	122	79
C11	27	99	27	99	16	31	17	72	17	29	22	77	126	87
C12	19	85	21	84	21	76	18	83	21	51	17	34	117	60
E	25	96	21	80	20	51	15	46	19	61	18	44	118	76
E18	31	99	21	80	8	1	30	99	27	95	11	2	128	86
F	27	99	25	94	27	97	24	99	26	93	21	66	150	96
F21	24	95	23	91	24	89	16	52	23	83	20	63	130	89
G	25	90	26	90	22	70	10	3	15	30	20	75	118	70
G24	25	95	22	60	26	95	19	75	22	80	20	75	134	90
G26	21	80	29	96	28	99	17	60	20	75	24	95	139	95
G28	24	90	25	80	19	50	21	90	20	75	21	80	130	80
G29	24	90	27	90	23	80	22	95	12	20	16	30	124	80
H	20	75	24	80	22	70	16	50	16	40	10	1	108	50
H30	21	80	24	80	26	95	13	20	17	40	14	20	115	70
H31	22	80	21	50	28	99	12	10	21	80	14	20	118	75
J	24	90	23	75	28	98	14	10	17	60	16	40	122	75
J35	24	90	22	70	23	80	21	90	15	30	16	30	121	75
J36	21	80	22	70	23	80	9	2	16	40	20	75	111	60
J37	31	99	29	96	24	80	24	98	23	90	22	90	153	99
K	26	97	25	80	30	99	17	60	20	75	14	20	132	90
K38	25	95	27	90	29	99	19	75	18	60	17	50	135	90
K44	28	99	23	70	18	40	21	90	17	50	18	60	125	80

Regarding the domain openness participants presented a tendency for medium (n=3) and high (n=20) values as all participants are between 60 and 99%. Although it is possible to observe high differences of values between participants' traits, the importance of those differences, in the present research, will only be considered in relation to the other element (teacher or student) of the dyad. However, the results highlight the characterization of these participants as being more imaginative, sensitive, creative and involved in fantasy, which seems importance and of great relevance for the singing interpretative necessities.

Table 22. Domain and traits' scores for agreeableness in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages.

	A1		A2		A3		A4		A5		A6		Agreeableness Total	
	RS	%	RS	%	RS	%	RS	%	RS	%	RS	%	Raw Score	%
B	19	16	18	19	19	7	13	19	14	14	24	89	107	16
B5	26	87	17	16	17	4	19	52	15	16	29	98	123	32
C11	21	37	17	19	22	37	20	63	23	81	23	87	126	45
C12	21	37	13	6	13	3	15	28	20	56	20	60	102	35
E	14	4	20	25	22	21	9	3	18	34	14	5	97	7
E18	21	28	17	16	28	82	20	62	13	10	16	11	115	23
F	14	4	13	4	23	33	15	26	21	57	18	23	104	12
F21	18	14	26	73	12	1	20	62	27	92	16	11	119	24
G	19	50	20	60	13	2	22	80	27	96	16	10	117	50
G24	20	60	28	98	17	10	17	30	25	90	25	80	132	75
G26	24	90	20	50	13	1	23	80	22	60	21	40	123	50
G28	17	30	18	40	22	50	21	60	24	80	23	70	125	50
G29	22	80	20	50	13	1	12	10	16	10	20	25	103	20
H	18	50	21	70	17	10	11	4	10	2	16	10	93	10
H30	18	50	24	90	10	1	22	80	24	80	21	50	119	50
H31	17	30	24	80	17	10	18	40	23	70	20	25	119	50
J	14	20	17	40	20	30	20	60	13	10	19	25	103	20
J35	20	60	18	50	16	10	15	20	23	80	22	60	114	50
J36	20	60	17	40	21	40	12	1	21	60	15	5	106	25
J37	9	2	22	70	28	95	15	20	27	96	23	70	124	50
K	24	90	24	80	15	2	19	50	25	90	18	20	125	50
K38	24	90	22	70	10	1	18	40	24	80	24	80	122	50
K44	13	10	21	60	24	70	18	40	9	1	19	20	104	20

Regarding the domain agreeableness, most participants are located on the medium (N=10) and lower (N=12) tendency of the scale (below 50%) except for student G24 that scored High (75%) for this domain. A tendency was identified through the observation of the above traits for participants to be self-centered.

Table 23. Domain and traits' scores for conscientiousness in NEO PI-R (Costa & McCrae, 1992) raw scale and percentages of participants completing all video stages.

	C1		C2		C3		C4		C5		C6		Conscientiousness Total	
	RS	%	RS	%	RS	%	RS	%	RS	%	RS	%	Raw Score	%
B	19	6	11	3	27	75	23	77	24	56	20	47	124	28
B5	20	8	14	10	25	54	22	68	22	34	19	38	122	21
C11	14	1	11	5	28	76	27	95	28	83	10	2	118	21
C12	15	3	12	6	23	32	19	35	21	33	18	21	108	43
E	10	1	12	4	22	17	23	77	25	67	13	7	105	6
E18	12	1	22	72	21	13	26	92	18	14	11	3	110	7
F	15	2	9	1	27	75	19	35	21	26	16	17	107	6
F21	23	24	16	2	25	54	23	77	21	26	22	66	130	39
G	21	60	8	1	24	60	23	75	24	80	17	40	117	50
G24	20	50	18	50	20	20	28	98	22	75	22	75	130	70
G26	21	60	9	1	25	70	23	80	16	20	17	40	111	30
G28	17	20	12	4	24	60	23	80	23	80	16	30	115	40
G29	16	20	13	10	23	50	18	30	25	90	21	70	116	50
H	20	40	13	3	11	1	15	10	23	80	18	50	100	20
H30	23	75	6	1	24	60	18	30	21	60	22	80	114	40
H31	23	80	10	2	25	70	14	10	20	60	17	40	109	25
J	16	10	7	1	22	40	22	70	25	90	14	20	106	25
J35	13	3	12	10	24	6	21	60	22	70	24	80	116	50
J36	18	25	5	1	24	60	27	95	21	60	14	20	109	40
J37	11	1	16	20	27	80	25	90	21	70	14	20	114	40
K	23	80	9	1	21	25	17	20	25	90	16	30	111	30
K38	17	20	12	4	25	70	19	40	28	98	22	75	123	50
K44	15	10	16	20	29	95	18	30	20	60	8	2	106	20

For the domain conscientiousness, the participants had similar scoring to agreeableness by presenting all values on a medium (N=10) and low (N=12) scoring all equal or below 50% except for student G24 who again scored high (70%) for this domain. The participants' characterization of within this domain reported persistency high aspirations at high levels and spontaneous tendencies of behaviour.

Table 24 (below) resumes all domains and the participants' distribution according to rating (high, medium and low) as suggested in NEO PI-R scales (Costa & McCrae, 2000: 60).

Table 24. Distribution of participants according to the 5 personality domains of NEO PI-R (Costa & McCrae, 1992).

		Score		
		High	Medium	Low
Personality Domains	Neuroticism	B, B5, C11, C12, E, E18, F, F21, G, G24, G26, G28, G29, H, H30, H31, J, J35, J36, J37, K, K38, K44		
	Extroversion	B5, F, G24, G26, G29, H31, J37, K, K38,	B, C11, E, E18, G, G28, H, H30, J, J35, K44	C12, F21, J36,
	Openness	B, B5, C11, E, E18, F, F21, G, G24, G26, G28, G29, H30, H31, J, J35, J37, K, K38, K44	C12, H, J36,	
	Agreeableness	G24,	C11, G, G26, G28, H30, H31, J35, J37, K, K38,	B, B5, C12, E, E18, F, F21, G29, H, J, J36, K44
	Conscientiousness	G24,	C12, G, G28, G29, H30, J35, J36, J37, K38,	B, B5, C11, E, E18, F, F21, G26, K44H, H31, J, K,

The results regarding the participants' domains of personality present an exclusively high score for neuroticism, which follows existing literature where the same tendency is presented in musicians (Dews & Williams, 1989: 45; Roe, 1958) and particularly in singers (Kemp, 2004: 93-94). The results also demonstrate high scoring to openness, an approximate distribution between high and medium for extroversion and clearly low scoring for agreeableness and conscientiousness. The domain correspondence between teacher-student's dyad presents a complete match for dyads B5, G28 and K38 where both teacher and student had all domains within the same score characterisation. Regarding the traits, which indicated further detailed components of the personality, the correspondence was in all of those (3) cases approximate with dyads matching approximately half the traits within the same range scale. The elements provided by the combination of personality traits between teacher and students indicate the multiplicity of possible combinations.

5.6. Discussion

The results presented in this chapter indicated singers as having clear scoring tendencies in most domains: neuroticism, openness, agreeableness and conscientiousness. The hypothesis raised from the above results indicated singing teachers as being more involved in isolative activities (perhaps reflected in the teachers one-to-one isolation). Teachers and students were also characterised as sensitive, imaginative which seems relevant for the interpretative characteristics of singing through lyrics, reflect self-centred behaviours, high ambitions and being spontaneous.

The results highlight statistically significant differences between the normative (Portuguese and English) population and the singers group for all domains except extroversion, indicating the singers as perhaps clearly distinctively characterised as a professional group. The specific characterization of professional groups was defended by Kemp (2004) and the present results are strongly in agreement with specific characterization of singers having patterns of personality.

Very few (4 traits) statistically significant differences were identified between the traits of Portuguese and English singers' group. These results highlight the consistency of the singers group in the professional characterisation mentioned above and provides the validation means for using both countries in the same sample for qualitative interpretation. The differences identified between the two countries concern self-conscientiousness, impulsiveness, ideas and achievement striving which may be translated in the Portuguese participants being more controlled, limited and less ambitious.

The singers' personality results showed a strong consistency within group, which sets the scenario for the later observational comparative analysis, in chapter 7 and 8.

6. Adult Attachment Scale of Singing Teachers and Students

6.1. Introduction

The relationships of adults seem to always bring a 'package' of social experiences, expectations, intentions and emotions that pre-define the subsequent relationships and social capacities and also affect the attachment between individuals (Collins *et al.*, 2004: 196).

The previous chapter presented several music studies where personality contributed to clarify its importance in other fields than psychology. The present chapter will also approach a psychological test adult attachment scale (Collins & Read, 1990), which is based on adult attachment theory. This theory explored, in fields other than pure psychology and psychiatry, does not seem to yet have raised points of interception with music research. The choice of including attachment theory in the present study, beyond the fact that it had not been previously used, had a complementary purpose. By using the personality tests the observation of participants had a comparative but rather individualistic approach whereas the attachment theory has the potential to identify the participants' style of relation with another person.

Since adult attachment seems to not have been applied to music studies, an overall contextualization of attachment theory and its development will be presented next as well as the instruments that were built to define attachment and the justification for the use in the present research.

6.2 Contextualization of Attachment theory

The theory of attachment was initiated by John Bowlby around 1940 as a consequence of his work as psychiatrist (Holmes, 1993: 39). Bowlby observed repeatedly in problematic teenage patients a similar pattern of mother-child privation or disruption and concluded that this relationship was an indicator of later psychopathology (Cassidy, 1999).

Bowlby based his studies on ethology, cognitive science, control systems science, biology, and human behaviour, and aimed to dispel previous theories by Freud

that associated the basis of emotional relationships with infant feeding and/or care giving, comfort and pleasure (Cassidy, 1999; Dias, 2007). The initial theory of attachment proposed by Bowlby was described as the ‘lasting psychological connectedness between human beings’ (Bowlby, 1969: 194) that had a survival character as a basic component of human nature. The initial theory presented the four main characteristics represented in figure 23:

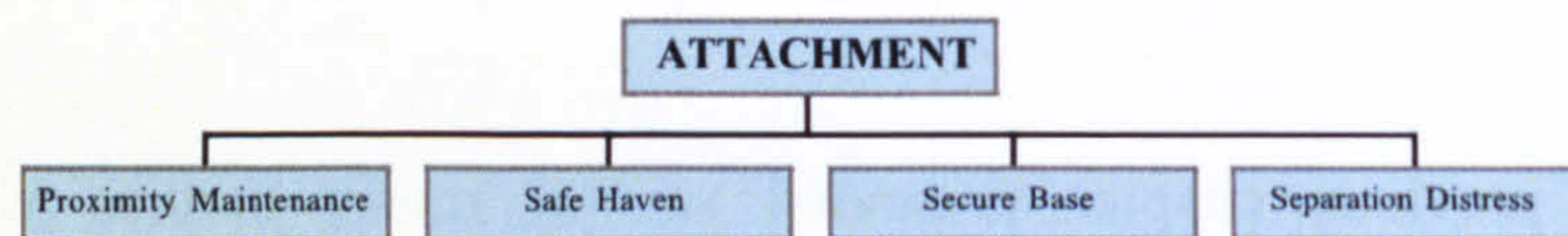


Figure 23: Adaptation of initial characterisation of attachment theory components by Bowlby (1988, 3).

The above attachment was characterised by proximity maintenance defined as the desire to be close to the person of attachment; safe haven, seek comfort and safety in the attachment figure when faced with threat of fear; secure base, the child explores surrounding environment with the attachment figure working as a safe base; separation distress, anxiety experienced when the attachment figure is absent. Initially, the theory of Bowlby contemplated the human survival and protection from danger as well as how the proximity from an adult figure would make the child more capable of facing dangerous situations. This initial stage of theory establishment did not include adult-to-adult relationships.

Besides Bowlby, Mary Ainsworth (a member of Bowlby’s research team) developed observation studies with another approach to attachment theory. Ainsworth (Ainsworth *et al.*, 1978) added tools for assessing the levels of attachment experienced between mother and infant: her research involved extensive longitudinal observation in naturalistic, laboratorial environments and participants’ homes. From these assessment tools the most famous became the ‘strange situation’. The Ainsworth ‘strange situation’ assessment consists of laboratorial structured proceedings in order to evaluate the stability of infants (between 12 and 18 months) when exposed to different episodes of mother-infant interaction (Ainsworth *et al.*, 1978). The experiment consists of eight episodes that last around 20 minutes and are executed by the mother, the child and the researcher. The sequence of eight episodes is developed through actions made from the

researcher and the mother of the infant being observed in the following sequence (Ainsworth *et al.*, 1978 in Solomon & George, 1999: 291-316):

- 1st. Parent and child alone in a room;
- 2nd. Without the parental participation the child explores the room;
- 3rd. A stranger enters the room, talks to the parent, and approaches the child;
- 4th. Parent quietly leaves the room;
- 5th. Parent then returns and comforts the child / stranger leaves quietly;
- 6th. Parent leaves the room, again;
- 7th. Stranger enters the room, interacts with child;
- 8th. Parent returns/ stranger leaves quietly.

Based on that research Ainsworth extracted three major patterns of attachment: secure, ambivalent-insecure and avoidant-insecure. A fourth category, disorganized-insecure, was later added by Main and Solomon in 1986 (Main & Solomon, 1990). The behaviours found in the studies of Ainsworth were reinforced by many subsequent studies that confirmed attachment as being a strong predictor of behaviours later in life (Hazen & Shaver, 1987). In music, this may have implications for instrumental lessons, where patterns of earlier teacher-pupil interaction may be carried on into higher education.

The use of attachment was important in longitudinal observations of children and teenagers' trajectories in order to understand how attachment developed and established on different paths: socio-economic background (Grossmann, *et al.*, 2002) and different cultural backgrounds (Hinde & Stevenson-Hinde, 1986; Van Ijzendoorn & Sagi, 1999).

Following the expansion of attachment theory, Mary Main developed tools for evaluation of attachment in adults that lead into the *Adult Attachment Interview (AAI)*; (George, Kaplan & Main, 1984). This allowed new perspectives for attachment comprehension through mental and behavioural patterns of organization (Soares, 2007) and detaching the attachment theory from previous experiences into fields as romantic experience in adults (Collins *et al.*, 2004).

The growing interest of attachment applied to adult romantic relationships resulted in the development of instruments reporting romantic attachment. Hazan and Shaver (1987) made a transposition of Mary Ainsworth studies of infant-mother attachment in 1987 with particular interest on the styles of attachment (Canavarro, 1999: 122). These types of categories were initially agree-disagree items that were then developed by several authors into continuous scales and in 1990 Bartholomew (Bartholomew & Horowitz, 1991) included another kind of style: avoidance with the type dismissing-avoidant, that was developed from the adult attachment interview, AAI (George, *et al.*, 1985). The dimensions were named following the contents of the items on self-reports as shown in figure 24:

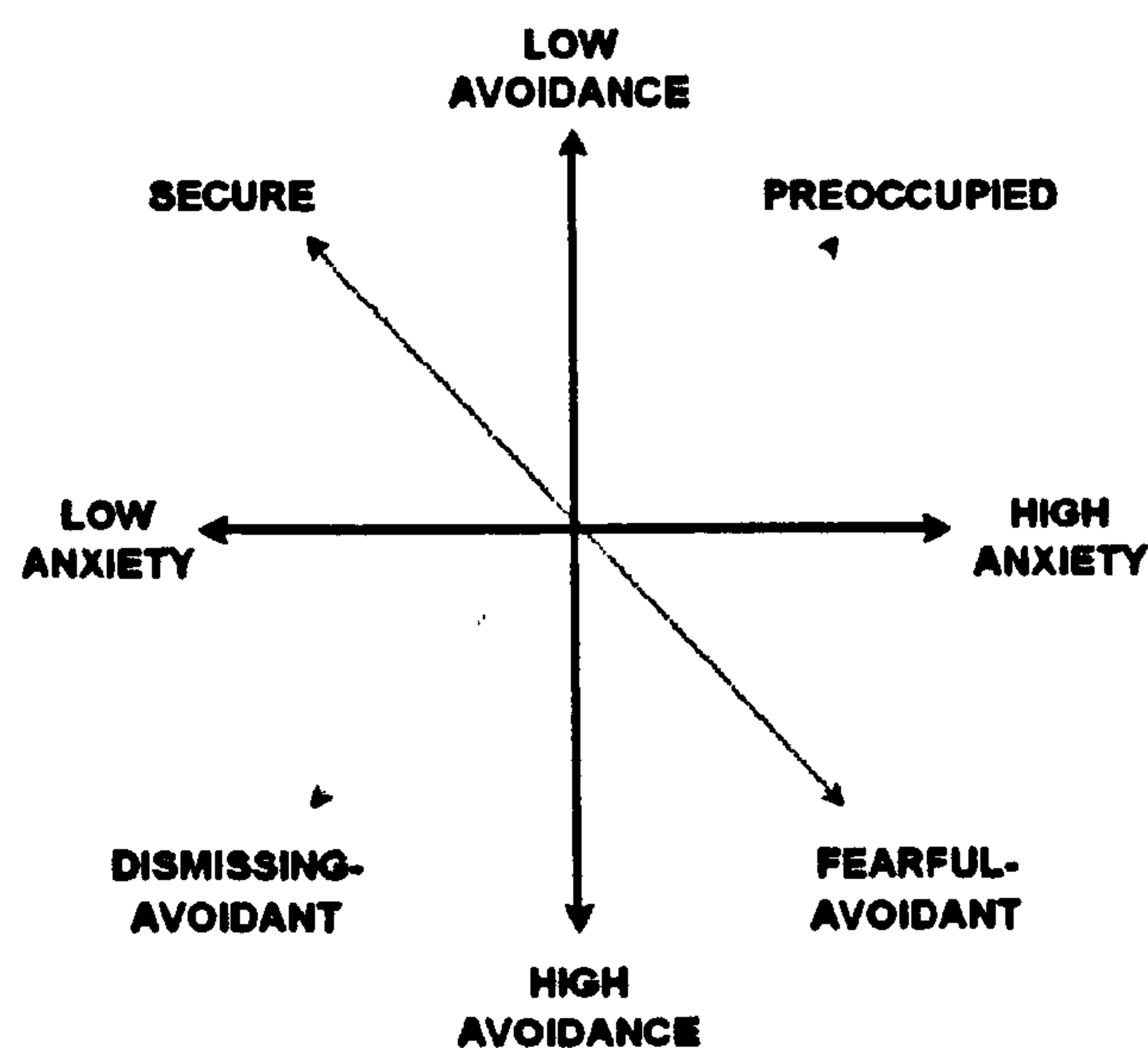


Figure 24. Model of attachment styles distributed according to score tendencies.

(Bartholomew, 1990; adapted from Shaver and Fraley, 2004).

Built over the two dimensions of attachment (anxiety and avoidance), the four styles dependent on the score tendencies of respondents were characterised as secure or insecure (anxious-preoccupied, dismissive-avoidant, fearful-avoidant). The dimensions were defined as:

Anxiety - Reflects the level of worry about being rejected or not loved by partners.

Avoidance – Reports the level of intimacy limitation and independence from the person of attachment.

And the styles described as:

Secure attachment – Individuals rated low in terms of anxiety and avoidance. The secure style of attachment is the result of people having responsive and positive interactions with partners; good perspectives of others, self and relationships; great adaptability and satisfaction on relationship; feeling comfortable with intimacy and independence.

Anxious – preoccupied attachment – Individuals rated high for anxiety and low in avoidance. The anxious – preoccupied style of attachment reflect people having high levels of intimacy, which sometimes become over dependent on partners; have high levels of responsiveness and approval towards others while having less positive views of themselves; raise self-worth doubt; blame lack of responsiveness from partners; worry and behave impulsively in their relationships; fear of being rejected, abandoned.

Dismissive-avoidant attachment – Individuals rated low anxiety and high avoidance. The dismissive-avoidant style reports individuals highly independent to a point of avoiding attachment at all. The self-image of the people with this type of attachment tends to be invulnerable to feelings of closeness; self-sufficient; denying and non-valorising relationships; have less intimacy; hide feelings; view partners as unimportant in comparison to themselves; when facing rejection, tend to distancing from relationship partners.

Fearful-avoidant attachment – Individuals who rate high in both anxiety and avoidance. The Fearful-avoidant attachment people tend to be confused in feelings about relationships by wanting to have close relationships but feeling uncomfortable with closeness combined with negative view of self and partner; by not having self-worth feelings the person with this type of attachment often do not trust their partners intentions. Like the previous attachment style (dismissive-avoidant) the elements of this style tend to seek less intimacy and suppress own feelings.

As well as the establishment of dimensions/ styles of attachment, Bartholomew (1990) developed working models of adults based on the styles of attachment's results which consists on the thoughts of self and others' conception which enabled the observation of the associations between styles of attachment, self-esteem and sociability.

The relations established between self, other, attachment style and positive/ negative tendencies are expressed in the following model:

		Thoughts about self			
		Positive			
Thoughts about others	Positive	Secure Attachment High Self-esteem High Sociability	Anxious Attachment Low Self-esteem High Sociability	Negative	
	Negative	Dismissive Attachment High Self-esteem Low Sociability	Fearful Attachment Low Self-esteem Low Sociability		
		Negative			

Figure 25. Working model of adult attachment according to positive or negative thoughts of self and others. Adapted from Bartholomew (1990) and Canavarro *et al.* (2006).

The working models are based on positive and negative thoughts of self and others considering the style of attachment identified on individuals. The secure and dismissive attachment styles are related to higher self-esteem when compared to anxious and fearful styles of attachment. The secure and anxious attachment styles are associated with higher sociability than dismissive and fearful attachment. The working models enable not only the intimate relationships to be analysed but also the sociability implied in each of the attachment styles.

The long-term research on attachment indicated that the majority of individuals tend to have no significant longitudinal changes in attachment styles, therefore confirming the working models of attachment as being reliable. However, between 20 and 30 percent of individuals do present changes in attachment in periods of weeks or months which suggest that working models may not be as stable as personality traits

(Baldwin & Fehr, 1995; Kirkpatrick & Hazen, 1994; Scharfe & Bartholomew, 1994; Waters *et al.*, 2000).

Regarding the couples' 'pairing', literature reported an association between the quality of relationships and styles of attachment. The secure style in opposition to both avoidant and anxious-ambivalent attachment characterized people with behaviours of trust, satisfaction and independence. Additionally, couples with both elements scoring for secure style tend to present more marital adjustment than couples with mixed and insecure styles. In the mixed couples (with one element being secure) the marital adjustment tended to follow the behaviour of both insecure couples, suggesting that one of the elements would influence the other and consequently the quality of the relationship (Feeney, Noller & Callan, 1994; Kirkpatrick & Davis, 1994; Simpson, 1990).

Apart from the marital relationships, studies of attachment on work environment (Hazan & Shaver, 1990) presented an association between job satisfaction and the own attachment style: secure individuals were generally reported good workers, more confident (rarely worried about failure), not problematic with co-workers and confident. Avoidant style subjects also had good job satisfaction but more dissatisfaction with co-workers and being around people (using work to avoid social contact), and reported work interfering with health and relationships. Anxious-ambivalent reported low satisfaction at work, getting easily distracted, letting love and relational issues interfere with work and feeling little appreciation by co-workers (Hazan & Shaver, 1990 in Feeney & Noller, 1996: 75-76). The study from Hazan & Shaver (1990) also suggests the necessity of more work related attachment research.

In order for attachment to be identified and studied several instruments were built, implemented, developed and interconnected. The following part will present the main instruments used for the assessment of attachment.

Development of attachment instruments

The development of attachment instruments built from longitudinal observation, structured interviews and self-report questionnaires enabled a wider attachment evaluation to be considered. The next table presents the child attachment evaluation of 'the strange situation' for chronological identification and all major instruments used for adult attachment as well as its authors, observational matters and results with the instrument used for the present research highlighted in bold.

Table 25. Review of the most important instruments used for attachment measurement.

Date	Name of Instrument	Author(s)	Observation matter	Result
1978	'The strange situation'	Ainsworth <i>et al.</i>	Laboratorial structured proceedings on mother-infant interaction.	3 major styles of attachment: secure, ambivalent-insecure, avoidant-insecure.
1979	Parental Bonding Instrument	Parker, Tupling, & Brown	25 self report items on memories of subjects' parents	Evaluation of parenting care and control.
1985	Adult Attachment Interview	George, Kaplan & Main	1 hour long semi-structured interview on the individual's past and present relationships with parents	Interview results into three categories: secure, dismissing, preoccupied
1986	Bell Object Relations Inventory	Bell, Billington, & Becker	Self-report measure (45 items) for assessing dimensions of object relations on clinical and non-clinical populations	Four subscales of alienation, insecure attachment, egocentricity and social incompetence.
1987	Attachment style measure	Hazan & Shaver	Internal representations that guide interpersonal behaviour	3 attachment styles (secure, avoidant and anxious/ambivalent) with 13 statements
1987	Inventory of Parent & Peer Attachment (IPPA)	Armsden & Greenberg	Evaluation of attachment to parents (28 items) on teenagers (25 items).	Three factors: trust, communication and alienation.

Date	Name of Instrument	Author(s)	Observation matter	Result
1987	Parental Attachment Questionnaire	Kenny	Self-report measure (55 items) for adolescents and young adults	Reports: affective quality of relationship, parental fostering of autonomy and parental role in providing emotional support.
1988	Measure of Insecure Attachment	West & Sheldon	40 items self-report for pathological adult attachment	Assessment of four scales: convulsive care-seeking, convulsive self-reliance, convulsive care-giving and angry withdrawal.
1990	Adult Attachment Scale -R	Collins & Read	Self-report (18 items) questionnaire for adults	4 attachment styles: secure, anxious, dismissive-avoidant, fearful-avoidant.
1991	Attachment interview	Bartholomew & Horowitz	60 minutes semi-structured interviews to adults	Four types of attachment: Secure, dismissing, preoccupied, fearful.
1991	The Relationship Scales questionnaire	Bartholomew & Horowitz	Self-report measure for adults	Positive/negative models of self and other resulting into 4 attachment styles: secure, anxious/preoccupied, fearful, dismissing.
1994	Attachment style Questionnaire	Feeney, Noller & Hanrahan	Broad based measure (40 items) on the pre-established dimensions on individual differences for young adolescents.	Three factors: security, avoidance and anxiety.

The above attachment measures differ in terms of test conception, content of assessment and specificity. The self-reports rely on the respondents' ability to accurately report their expectations and experiences, which may induce into distort reality whereas the interviews may provide a more realistic setting to the measurements, as it does not imply as much conscious awareness of the testing. Other differences between tests also depend on the domains being measured. Some tests focus on early familiar relationships, others on adult-to-adult relationships specific (intimate, for instance), concerning the other element of the relationship or general.

During the 1980s, two major research lines concerning adult attachment became evident based on the initial establishment of attachment by Bowlby: one centred on the child/ parents (directed by M. Main) using adult attachment interview (*AAI*, George, *et al.*, 1985) and another centred on adult romantic attachment using self-reports (directed by Hazan & Shaver, 1987). The first line of research developed into clinical problems whereas the second had a more psychological broad approach reported through self reports based on the assumption that adults have the capacity to express their emotions towards important relationships (Canavarro, *et al.*, 2006; Bartholomew & Shaver, 1998). The adult attachment scale-r (Collins & Read, 1990), used in the present research, followed the second approach.

The development of new instruments favoured the comprehension of several questions raised initially by Bowlby. For instance, several studies were developed in order to connect the experiences of attachment from early infancy to adulthood and its development in intimate relationships (Berman *et al.*, 1994; Feeney, 1999; Hazan & Shaver, 1987; Shaver *et al.*, 1988), psychological problems (Atkinson, 1997; Dozier *et al.*, 1999; Greenberg, 1999; Sroufe, *et al.*, 1999), and therapeutic relationships (Dozier & Tyrell, 1998; Slade, 1999; Sperling & Lyons, 1994; West & Sheldon-Keller, 1994; Mallinckrodt *et al.*, 1995). More recent studies have associated attachment to relational violence (Lions-Ruth & Jacobvitz, 1999; Holtzworth-Munroe *et al.*, 1997), sexual orientation (Kurdek, 2002; Kurdek & Schmitt, 1986; Mohr, 1999), religion (Kirkpatrick, 1999); twins and singletons (Torgersen *et al.*, 2007); health and strong personal relationships (Bayley, 2006).

The adult attachment research had become well established as the means of understanding close relationships, but had not yet been widely applied in education until Robert Pianta implemented the attachment theory in the teacher-child relationship through observation and measurement on teachers, parents and children in kinder gardens and primary schools (Pianta, 1997). Although the teacher-student relationship had an interceptive point with the present research the age stages completely dissociated the two studies.

The attachment appropriateness for the study of instrumental tutor/ student relationships lays its focus on the therapist-patient relationship and some friendship relationships where Weiss (1991) defends the existence of attachment bonds. Adding to Ainsworth's (Ainsworth *et al.*, 1978) research, Weiss (1991) concluded that relationships do not need to be parental or sexual in order to exist attachment. Taking that, the teacher-student relationship was considered within an appropriate group for observation based on the students' prior questionnaires (in chapter 2) defending the personal empathy and friendly relationship within an important component of the lesson and also through the observation of preliminary lessons where it was also visible the levels of personal involvement between teacher and student (informal conversations, personal advises and confidential matters exchange).

Adult Attachment Scale-R (Collins & Read, 1990)

The first self-report measurement into adult attachment was build by Hazan and Shaver (1987), included three dimensions (as mentioned above) with categorical measures for attachment. Collins and Read (1990) implemented scale measures on a revised version of attachment: adult attachment scale-R (Collins & Read, 1990). The revised version is made for young adults and adults and is constituted by 18 items scored on a 5 point *Likert*-type scale by applying the scales and identifying the individuals' styles. The main dimensions of adult attachment in adult attachment scale-R (Collins & Read, 1990) are comfort with closeness - close, capacity to depend on others -dependent and fear of being abandoned - anxiety. From the main dimension scores four categories are taken following a scoring protocol (of relationships between subscales and categories) resulting in secure, preoccupied, dismissing and fearful described above.

Although many studies specify the attachment levels by characterising participants, the determination of participants being either attached or unattached to each other is still unclear (Hazan, *et al.*, 2004: 56). The attachment theory was later developed to explore how do relationships influence (temporarily or permanently) the persons by following how close relationships are, how they are maintained and finished.

Attachment and personality

The two psychological measures used in the present research (personality and attachment) were believed inseparable and the personality always implicit on a certain degree in attachment (Vaughn & Bost, 1999). Several studies compared, analysed and reinforced the existing relations between the measures of personality and adult attachment (Bäckström, 2001; Carver, 1997; Shaver & Brennan, 1992; Shiota *et al.*, 2006).

Although the two instruments NEO PI-R (Costa & McCrae, 1992) e AAS-R (Collins & Read, 1990) may be used together and the traits of personality have been positively related in some cases and negatively (in other cases) to the styles of attachment, in the present research, these instruments will be used with the purpose of providing a clearer description of participants and the comparative means of qualitative research. Therefore, the relations between the two instruments will be limited to comparative descriptive analysis.

6.3. Methods

6.3.1. Aims

The present study aims to investigate: **i.** what attachment styles characterize singing teachers and students in this sample; **ii.** how the attachment styles differ between singing teachers and students individually and within the dyad; and **iii.** to contextualize the attachment profile of each participant that will serve for later comparative analysis with behaviours, in chapter 7 and 8.

6.3.2. Procedure and materials

The attachment characterisation was based on the existing validated self-report questionnaire *Adults Attachment Scale-R* (AAS-R) by Collins and Read (1990) for the

English participants; and the same instrument for the Portuguese participants called *Escala de Vinculação do Adulto* (EVA) was used, which is a validated equivalent of the English version.

The lack of adapted tools for this specific relationship implied the use of an instrument that characterises the adult romantic relationship. The AAS-R (Collins & Read, 1990) seemed to be the most appropriate instrument for this particular study because it is a validated psychological assessment tool both in the United Kingdom and Portugal. Within the adult attachment instruments the AAS-R (Collins & Read, 1990) seemed to be the less invasive, with fewer intimate matters, which were not relevant for the direct purpose of this study. It presents a clear characterisation of individual attachment style in order to compare with the other participant (teacher or student). In comparison to interview measures it was less time consuming which taking the extensive research done on the same participants seemed important to prevent participation rate decrease. The comparative analysis between teacher and student was made based on pre-existing literature of adult relationships where attachment is observable but should also be confirmed by other means of testing (Bayley, 2006: 3; Solomon & George, 1999).

The measurement of attachment may be approached using multiple measures that will ultimately reveal several layers and perspectives of attachment. However, in most cases one instrument is sufficient for the identification of the participants' attachment styles. Also, since attachment is described in the literature as a less stable element than personality, the test was taken at the last stage of the academic year, in order to enable a more reliable comparison and evaluation of both methods (attachment and personality) together.

Although the teacher–student relationship is different from the intimate adult relationships in practical terms, this study has strong association of elements on both intimate relationships and singing teacher student-teacher relationships, based on trust, safety and choice of being together. Trust is a fundamental element for learning the voice. Whereas with a good teacher the voice may be led into growing and consistently mature, a bad teacher may lead to long term vocal problems or even the loss of the

voice. Trust was also previously defended in relation to the singing teachers by Kemp (2004):

The processes of learning to sing are so subjective seems to encourage a plethora of contradictory theories, which may leave singers, at best bemused, and at worst, highly anxious and constantly unsure about whether they are performing correctly or doing themselves untold damage (Kemp, 2004: 174).

Regarding the choice of being together, both cases (intimate relationships and voice teacher-student) have freedom at various levels regarding the choice of being together. This last statement is based on the questionnaire presented in chapter 3 where most students stated feeling free to change singing teachers and where 76% of students who wished that change to happen actually moved into another singing teacher. Again, Kemp (2004) also reinforced that idea of freedom to change:

Singing students may well find themselves moving from teacher to teacher in constant search for a 'guru' who, by use of a particular form of metaphor, somehow manages to 'speak their language'. (Kemp, 2004: 174).

The components of a singing teacher-student relationship are therefore based on several fundamental characteristics that are also present in more intimate relationships. The purpose of its evaluation is obviously different, but the measures derived from the study of romantic attachment may provide the same type of style indication needed to identify the dyads of the present study.

6.3.3. Participants

All students and teachers being characterised with adult attachment scale (AAS-R, Collins & Read, 1990) are the same as in the observational chapter (8). For the adult attachment scale-r (Collins & Read, 1990), the answering rate was 74.5% being 74.2% rate for students and 75% for teachers.

6.4. Descriptive analysis

6.4.1. Characterisation

The questionnaires were submitted to a descriptive and exploratory analysis. table 26 presents the socio demographic characteristics of the sample implied for adult attachment scale-r (Collins & Read, 1990) because although the participants were common to personality, attachment and video observation a small percentage of them did not return the reports. The next part will present the results of all attachment responses although later for observation and comparative purposes only complete cases will be used.

Table 26. Socio demographic characteristics for AAS-R (Collins & read, 1990) distributed by teacher (N=9) and students (N=26).

Socio-Demographic Variables	Teacher		Student	
	N	%*	N	%*
Gender		(N=9)		(N=26)
Male	4	44.5	8	30.8
Female	5	55.6	18	69.2
Age		(N=9)		(N=26)
19 to 25	0		18	69.2
26 - 36	0		8	30.8
37-50	5	55.6	0	0
62-74	4	44.4	0	0
Mean	54.89 (\pm 11.74) Years		24.96 (\pm 4.95) years	
Age Range	From 38-74		From 19 to 36	
Country		(N=9)		(N=26)
Portugal	5	55.6	16	61.5
United Kingdom	4	44.4	10	38.5

* Percentages for valid cases.

The distribution of participants seemed balanced since in several schools the male students were described as more scarce. So, the sample had 8 male and 18 female students. The teachers' group was more balanced with 5 female and 4 male teachers. The age range in both groups had a wide distribution with students from 19 until 36 and teachers with ages from 38 until 74. The distribution of participants by Country had 5 teachers in Portugal with 16 students and 4 teachers at United Kingdom with 10 students.

6.5. Results

Participants' styles of attachment

According to Bartholomew (1990) and Collins (Collins 1996, cited in Canavarro *et al.* 2006) the proceedings of result exploration were followed in order to define the style of attachment of each individual. Eighty one percent of respondents were identifiable within the four styles. However, 9% of participants were not classifiable due to having results near several styles or being classifiable within several styles simultaneously, according to previous classifications from normative population (Bartholomew, 1990 cited in Canavarro *et al.* 2006). The results distribution were as presented in figure 26:

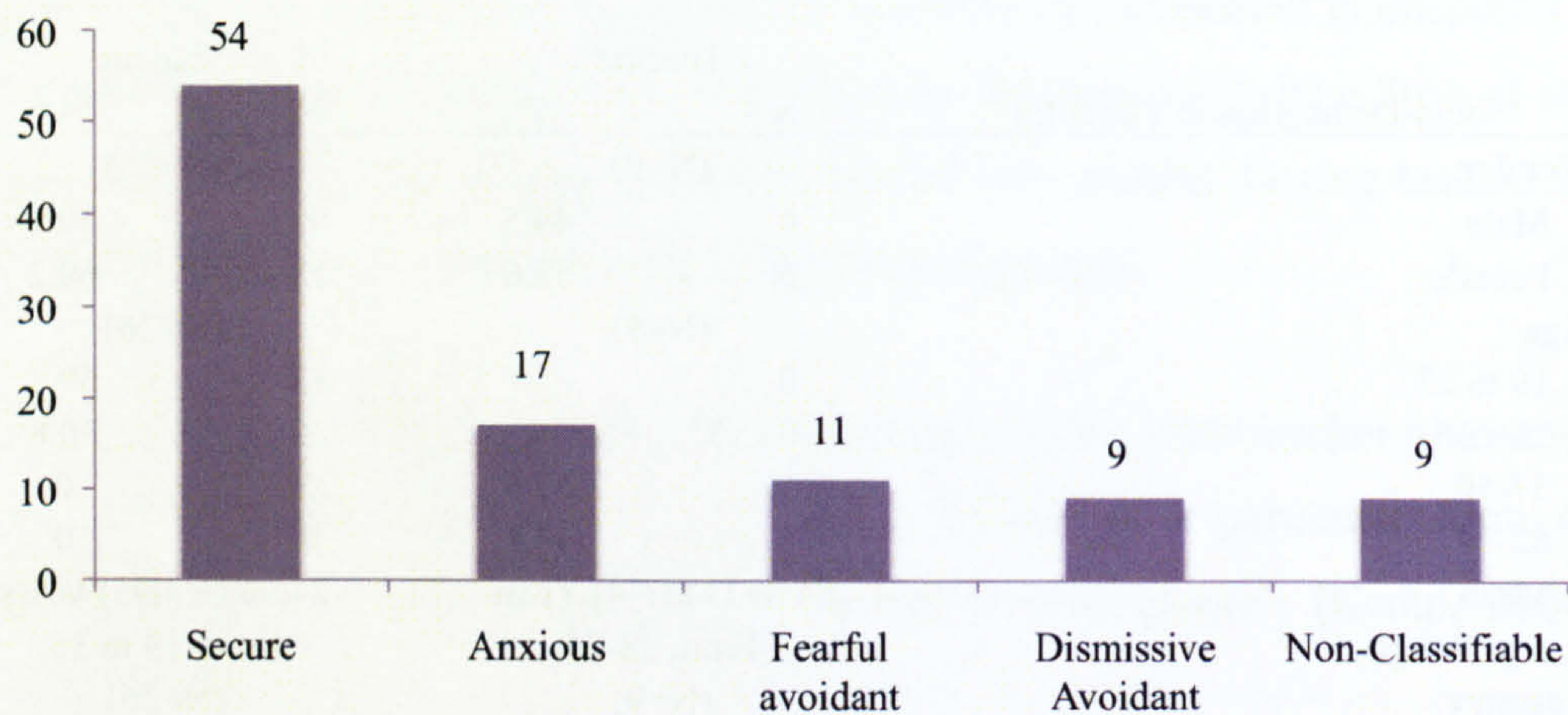


Figure 26. Distribution by style of Adult Attachment Scale-R (Collins & Read, 1990) in percentages.

The majority of participants (54%) reported secure style of attachment, whereas 17% had anxious attachment, 11% fearful-avoidant attachment and 9% were dismissive-avoidant in terms of attachment. The last 9% were non-classifiable. The sample is characterized by having the teachers (N=3) located at secure style and dismissive avoidant (N=2) style, whereas students scored more distributed with secure (N=9), anxious (N=4), fearful-avoidant (N=2).

The distribution of participants by each of the styles according to the Country is presented in figure 27:

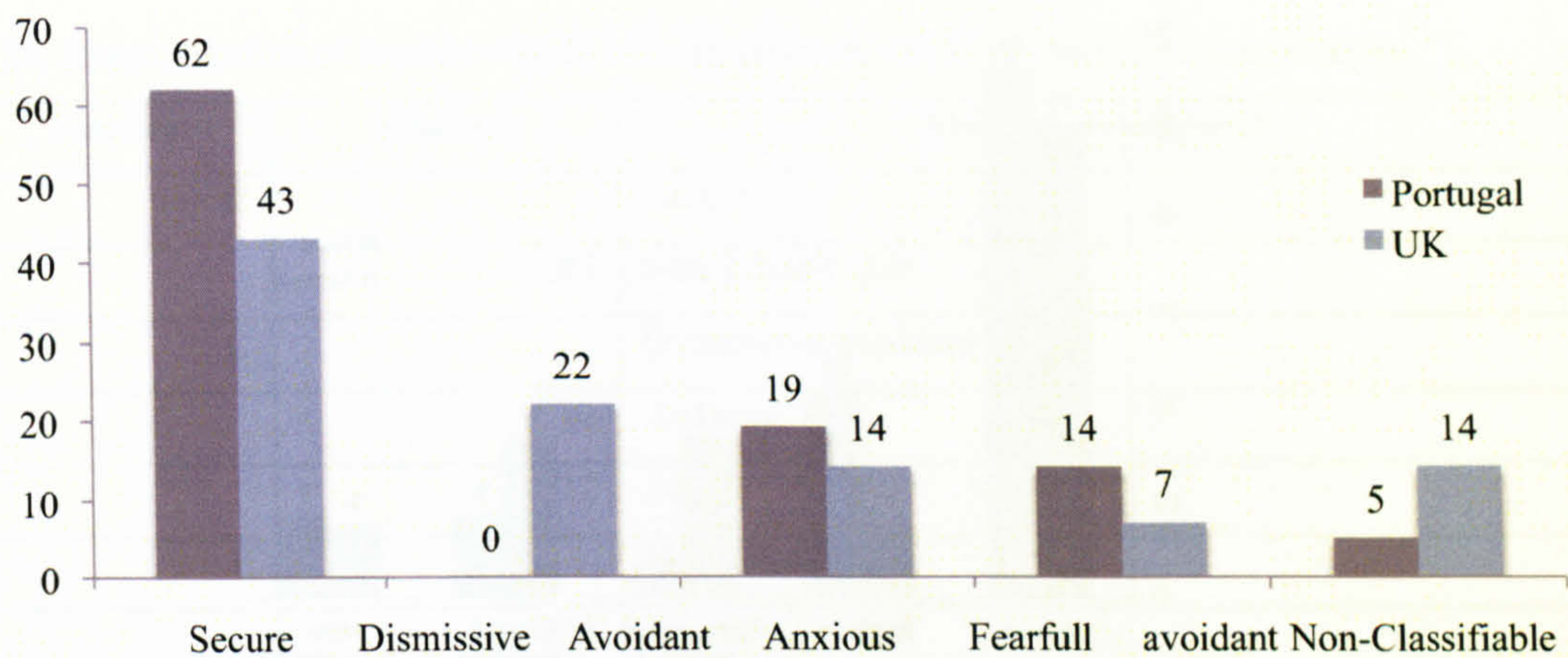


Figure 27. Percentage comparison between styles of Attachment AAS-R according to the Country for singing teachers and students.

According to the distribution by country, the majority of respondents scored secure in both Portugal (62%) and United Kingdom (43%). None of the respondents from Portugal presented the style dismissive avoidant whereas in the United Kingdom 22% had this style of attachment. Concerning the anxious style 19% of Portuguese and 14% of respondents from United Kingdom had this style. For fearful-avoidant style had from Portugal 14% and 7% of respondents from United Kingdom. The non-classifiable respondents were 5% from Portugal and 14% from the United Kingdom.

Regarding the gender distribution of style of attachment the following figure (28) illustrates the respondents' tendencies.

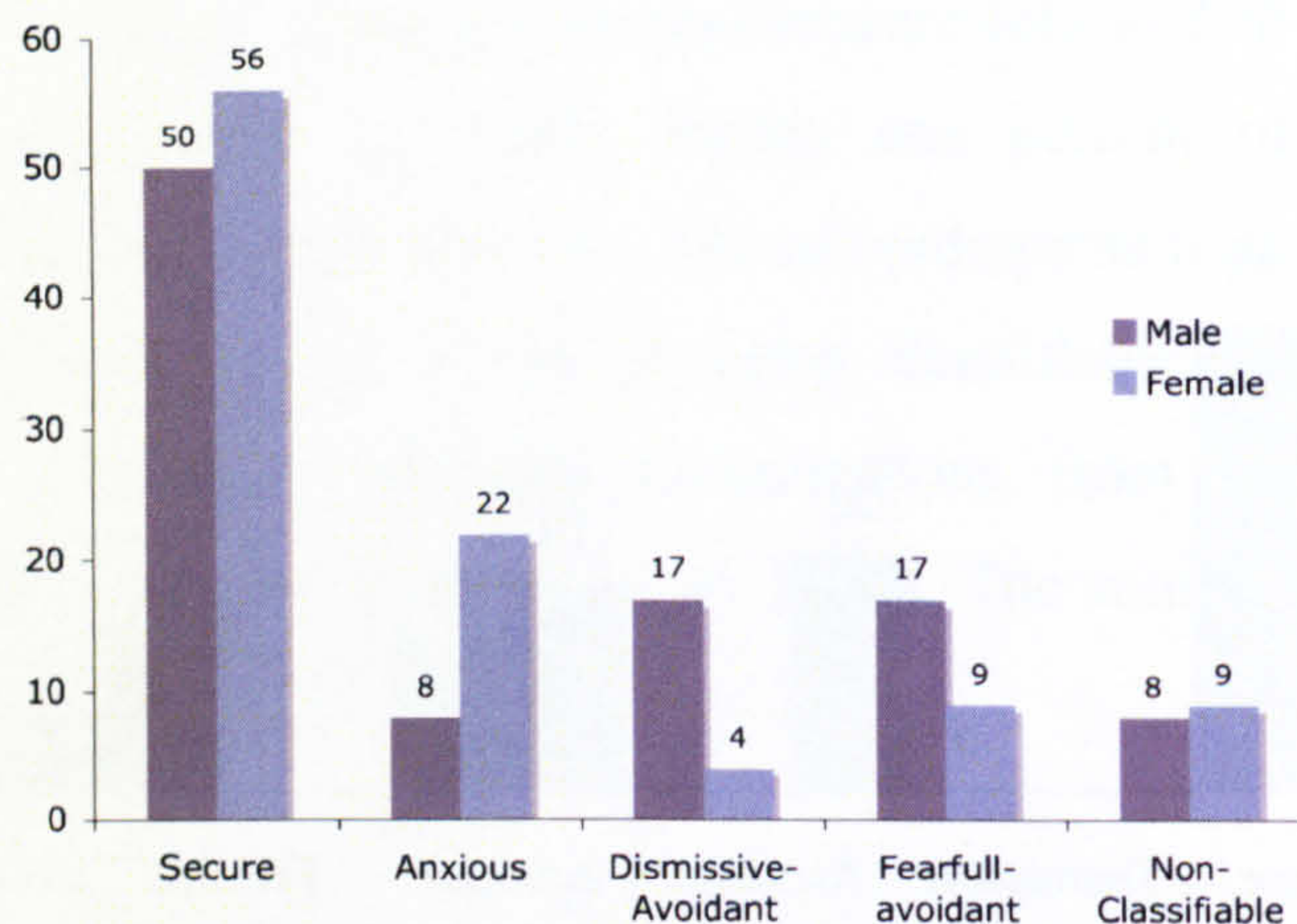


Figure 28. Percentage comparison between styles of Attachment AAS-R according to gender for singing teachers and students.

Both male and female respondents had more than 50% score on secure style. The anxious respondents were mainly female with 22% and male respondents were only 8% on this style. In opposition to anxiety, most male respondents reported higher percentages in both 'dismissive-avoidant' (17%) style and 'fearful-avoidant' (17%) style than the female peers who had 4 % for 'dismissive-avoidant' and 9% for 'fearful-avoidant' style. The 'non-classifiable' respondents were distributed closely for male (8%) and female (9%) respondents.

Participant Individual Attachment characterisation

Since the main purpose of evaluating adult attachment in the present research was to relate it with the observations on a qualitative perspective, only the cases where video collections are complete were used. So, from the initial 35 respondents of adult attachment scale-r (Collins & Read, 1990) a sample of 24 participants were considered valid for analysis.

Table 27 presents each of the singing dyads with teachers (identified with letters) and their correspondent students (identified with the letter of the teacher and a number).

Table 27. Representation of teachers' style in comparison to their students' attachment style.

Teacher	Student	Style of attachment
B		Secure
	B5	Non-Classifiable
C		Dismissive-avoidant
	C11	Anxious
	C12	Secure
E		Non-Classifiable
	E18	Fearful-avoidant
F		Dismissive-avoidant
	F21	Secure
G		Secure
	G24	Anxious
	G26	Secure
	G28	Secure
	G29	Anxious
H		Non-Classifiable
	H30	Secure
	H31	Secure
J		Secure
	J35	Fearful-Avoidant
	J36	Secure
	J37	Anxious
K		Secure
	K38	Secure
	K44	Secure

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B		Secure
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E		Non-Classifiable
	E18	Fearful-avoidant
F		Dismissive-avoidant
	F21	Secure
G		Secure
	G24	Anxious
	G26	Secure
	G28	Secure
	G29	Anxious
H		Non-Classifiable
	H30	Secure
	H31	Secure
J		Secure
	J35	Fearful-Avoidant
	J36	Secure
	J37	Anxious
K		Secure
	K38	Secure
	K44	Secure

Considering the combinations of styles presented above it is possible to see that none of the teacher-participants scored for the style fearful-avoidant or anxious and none of the students, on the other hand, scored for dismissive avoidant. The results indicate that most dyads (N=5) have combinations of both elements being secure, and 6 other dyads are mixed being one element from the secure style and the other element from another style. There is also one dyad that combines one dismissive avoidant teacher with an anxious student.

6.6. Discussion

The results illustrate the majority of participants in this study having a secure style of attachment, which indicates a tendency for people to easily adjust to others, be more positive and have more confidence at work translated into positive working environment. However, the attachment pairing research highlights the importance of appropriate matching with other styles. So, although most participants scored secure, when matched with elements of other styles, the relationships will tend to be less stable compared to secure-secure dyads. This instability will be evident through not relating as securely with the other element and with people around them, mixing more personal and professional matters, getting more distracted and worrying more about failure.

The comparative analysis of attachment styles between countries presented similar characteristics by placing the majority of participants within the secure style. Regarding the gender analysis differences were identified regarding the female participants being more anxious in comparison to male that scored higher on dismissive avoidant and fearful-avoidant.

The dyad combination presented six dyads of secure matched with another style, five dyads of secure-secure styles and one dyad with dismissive-avoidant matched with anxious. The diversity of dyads' results is propitious to a variety of behaviours, which may enrich the observational study in chapter 8.

7. The singing studio observation

Singers cannot hear themselves as others hear them (...) each sound they produce will be accompanied by a particular sensation (...) singers have to learn to detect particular body sensations that connect with their more desirable sounds as, of course, identified by their teachers (Howard, 1992 in Kemp, 2004: 174).

7.1 Introduction

The singers have specific needs to be considered in their lessons that might differentiate them from all other instrumental learning. A detailed observation of the lessons and teacher-student interactions may provide important clues about this specific learning setting. The present chapter is divided in two major parts both deriving from video observation and occasionally complemented with interview and questionnaire information: the first part quantifies the time management between different activities of the singing lessons and compares the time distribution between singing teachers; the second part describes the communication, feedback and strategies used by teachers towards the students in comparison to their peers.

Previous studies have reinforced the importance of using video recorded data for research analysis. Daniel (2006) highlights the fact that this method allows the opportunity of re-observation and the permanency of data but agrees that is demanding in terms of time spending (p. 193). Authors using this method are extensive in instrumental/ singing lessons (Burwell, 2006; Gustafson, 1986; Karlsson & Juslin, 2008; Kurkul, 2007). Taking the importance of observational research, this chapter will focus on video recorded data.

7.2. Methods

7.2.1. Aims

This chapter describes the observation of videos collected in singing lessons over one academic year. The main aims for this chapter are to: **i.** Identify patterns of behaviour in singing lessons; **ii.** identify main structural differences of singing lessons between teachers; **iii.** report longitudinal behaviour adaptation in the relationship

between singing teacher and student; iv. contribute towards identifying relational elements that may affect the singing performance.

7.2.2. Procedure and materials

In accordance to the established by Persson and Robson (1995) the properties of behavioural research in music have to be driven into the needs of that investigation in order for the methodology to serve the individual outcome of music-behavioural science (p. 41). Therefore, for an extensive observation of lessons and its intrinsic characteristics 'in loco' video recordings were made to provide a consistent base of observation collection.

In that regard, it was considered that for the data collection it would be necessary the use of a Sony Mini Camcorder placed unobtrusively on a tripod in a corner of the singing studio allowing the lesson to flow naturally and also letting the researcher have a view of all the elements of the lesson (teacher, student, piano, and mirror).

According to previous studies (Rostvall & West, 2003: 216; Young *et al.*, 2003: 145) the presence of the researcher should be avoided in the studio in order to allow teacher and student to proceed more naturally. Young suggested that the static nature of the lessons could allow the video camera alone to collect all image and sound necessary for the research (p. 145). Although that procedure was tried in the initial video collections, the envisioning of the lessons reported inefficient image capture due to large movement used by both teacher and student during the lesson. Another factor contributing for the limited image range was the fact that several rooms where the lessons were taking place were relatively small and would require camera adjustment from time to time. So, the presence of the researcher was included in all lessons and a silent written notes were taken during lessons.

A pilot study was applied during one academic year in Escola das Artes - Universidade Católica Portuguesa in Portugal. The recordings were made weekly in the researchers own singing teaching lessons with 3 students who were selected as contrasting in personal terms with the teacher/ researcher during one year. Those

lessons were subject to numerous random viewings in order to test adequacy of obtaining data and reliability of observation categories.

The consecutive observation and alternation between lessons enabled the establishment of video collection characterisation. It was established that allowing a 12 weeks interval between observed lessons would provide sufficient elements for reporting the most adequate changes in the relationship.

The participants of the study, teacher and student, were asked to use all the space they normally would if not in the presence of the researcher and/ or the camera and try to processed as normal as possible ignoring the presence of the third person and camera. The recordings were made from begin to end of the lesson uninterruptedly (except when a tape had to be changed which normally lasted for few seconds). No specific behaviours were requested, specific delineations were avoided and the idea of behaving as in any other lesson without the researcher was reinforced. The researcher was several times questioned about any specific directions of behaviour. To each of this questions the researcher always responded that the purpose of the study was to observe a normal lesson and that experimental behaviors, singing principles or explanations of what is happening would not be required. Teachers were advised to act as he/she would normally teach the students.

Following Kennell (2002: 247) who defended that although the presence of video recordings is becoming increasingly used in daily routines, the effects of using this tool should always be questioned, the effects of video recordings on participants were taken into consideration and an evaluation was made recurring to a questionnaire: 'After lesson Report' that will be included later on this chapter. This questionnaire was structured to evaluate the differences of behaviour felt on self-behaviour and on the other person of the one-to-one singing lesson. These questionnaires were piloted in six singing students and one singing teacher from Escola das Artes of the Universidade Católica Portuguesa. That questionnaire was completed (by teacher and student) at the end of lesson from first data collection. The answer sheets were subjected to both a qualitative and quantitative analysis. The above measures were taken to evaluate the interference of the research in the room as

it is possible that teacher and student could be influenced by the presence of the video camera. That evaluation will be included in the last part of this chapter.

A grouping of the videos was made in order to facilitate the chronological order of viewings and teachers to be compared. The following procedures were taken prior to observation:

- i. Random observation testing was made.
- ii. Then, the videos were fully viewed and an overall assessment of timings was made.
- iii. Another viewing was made in regard to teachers and student's behaviour.
- iv. Finally, specific situations (previously marked) were re-observed in order to establish differences between teachers and students of the same teacher.

A second researcher reviewed random samples of the video analysed data in order to review consistency of the analysis (approximately 25%). For the behavioural observation and according to the previous categorisation, successive viewings were made to the all sample. Particular difficulties were found when teachers would simultaneously be included in two or more categories: for instance, student singing and teacher feedback over the performance. Those cases were treated as independent elements and included into the two separate categories. An observational instrument was developed in order to analyse a wide number of videotaped interactions between teacher and student. This observational scheme was also used for the live observation of lessons where initial general notes would be included.

Taking into consideration that instructional strategies are normally dominated by the teachers' talking (Young *et al.*, 2003: 146-147), the observational part of the present research was focused mainly on the teacher and the reported part through questionnaires (in chapter 3) and interviews (along with this chapter) given word to students. In both cases, the teaching techniques involved and a characterization of the relationship was made.

7.3. Descriptive analysis

Table 28 will present an overall socio-demographic characterisation of the elements being analysed in this chapter including all participants from the lessons' observations.

Table 28. Number of participants and percentages according to socio demographic variables.

Socio-Demographic Variables	Teacher		Student	
	N	%*	N	%*
Gender	(N = 11)		(N = 44)	
Male	4	36.4	11	25.0
Female	7	63.6	33	75.0
Country of Origin	(N = 11)		(N = 44)	
Portugal	5	45.5	23	52.3
United Kingdom**	6	54.5	21	47.7

* Percentages for valid cases.

*** The United Kingdom group includes four students from France, Lebanon, Spain and Sweden and one teacher from Italy. However as the sample was collected in the United Kingdom and the small representation of those elements, they were included in the United Kingdom group.

The study was initiated by 11 teachers (4 Male and 7 Female Teachers). However, one of the female teachers was absent from teaching after the first data collection and was substituted by a male teacher that agreed to participate in the third data collection.

Although the initial and main aim of this study was regarding the longitudinal observation of relationships, which required the observation of three stages, that objective was not possible for all cases. So, from a total of 54 cases, 16 cases actually completed the three sets of data collection. The incomplete cases that were not considered for the longitudinal purposes were used for the observation of others aspects regarding the relationship approach, communication, feedback, and techniques of teaching. Moreover, cases that were not used for the longitudinal study were used for comparative means of the teachers' behaviour with different students. The reasons associated with most cases that were not able to complete three stages of the study were:

- Teachers who had chosen to start the study with more than the necessary/ required students and subsequently chose a smaller group to continue the study;
- Students whose schedule did not fit the observation schedule (for instance, one student was having intensive opera rehearsals and unable to temporarily attend singing lessons);
- The constantly changing timetable of teachers' lessons which constituted a challenge for matching all observations;
- One teacher was away for a considerable amount of time on singing appointments and could not continue the observation. The students from this teacher were observed with the substitution singing teacher who accepted to continue the study;
- One teacher who had to be absent for a period of time due to personal problems.

A total number of 106 cases (complete and incomplete) were collected in a total of around 89 hours of video.

7.3.1. After lesson report

Complementarily to the videos, the students were given a report that had as its main target identifying possible differences of self and other participants' behaviour. Here, only dyads that completed all stages are being considered. So, although many more reports were returned, only those who are actually considered longitudinally were included (N=16).

Most participants reported not feeling significant differences in their behaviour or in the behaviour of the other element (teacher or student). The identification of slight modifications were reported as follows:

'I was slightly aware of the video which kept me focused' (teacher E) and 'The concentration was in some ways better, response to improvement was good. She is normally more distracted' (teacher E regarding student E18).

'I felt more present in the lesson' (teacher H, regarding his own behaviour)

'My teacher seemed to be 'teaching' more. As though he felt he was under pressure to get results today through talking to me' (student C12 regarding teacher C).

'Slightly more clear in explaining her methods' (student F21 regarding teacher F)

'I was more afraid of making mistakes' (student K44)

As expected, the participants tended to have awareness of the camera and the researcher being in the room. The statements report higher levels of concentration and fear of failure in the students and more pressure and over-teaching by the teachers. Adding to the above, student C11 (through interview) stated:

'It would be great if you would record every week to make my teacher work more. The presence of the camera made the teacher more focused on the task of teaching and more interested in me' (student C11).

Perhaps, following the pressure that this teacher might have felt on his own teaching, he asked for the subsequent lessons to be observational instead of recorded. That was accepted and the second and third stages were only observed. Although most of the exaggerated behaviour decreased his major teaching behaviours were kept without recording.

Although the above statements are important to consider, it should also be noticed that most participants reported not feeling any differences in their lessons.

The next section presents a quantification of time management, which is expected to provide a comparative analysis between teachers

7.4. Results for time management in singing lessons

7.4.1. Total timings

In the present study teachers were requested to choose students independently of the time that the lesson would present. Most lessons had 1-hour duration. Other fewer cases presented lessons planned to last half hour, forty minutes and lessons of one hour and twenty minutes. The variance of lesson length seemed to be an element worth considering in the present study in order to compare between schools and to identify the lessons' actual duration in comparison to pre-established timings.

The results of time management in singing lessons is shown in table 29, below. Each teacher is represented with the letter A to L. The column minimum represents the percentage of lesson from the student who had a shorter singing lesson and the maximum represents the student who had longer singing lesson for each of the singing teachers. Percentages were chosen instead of the actual timings to allow a more uniform observation and comparison. The empty spaces in the table represent absence of participation in the study for the reasons presented in chapter 4.

Table 29. Total time of singing lessons according to maximum (longer lesson) and minimum (shorter lesson) to each of the teachers (letters A to L) in percentages.

Teacher	1 st Data Collection		2 nd Data Collection		3 rd Data Collection	
	Min.	Max.	Min.	Max.	Min.	Max.
A	93.3	100.0	-	-	-	-
B	80.0	116.6	91.88	94.15	70.0	95.0
C	78.5	103.3	93.33	100.0	96.66	100.0
D	86.8	95.0	90.2	101.93	-	-
E	93.3	105.0	118.8**	118.8**	92.2	95.66
F	71.6	75.1	92.8	95.01	71.98	90.46
G	58.2	117.5	90.12	162.67	93.02	279.77
H	40	93.3	89.33	99.05	70.16	148.81
I	83.3*	116.6	50.0	110.0	108.33	126.66
J	75*	105.0	65.95	107.51	94.0	107.08
K	26.6	83.3	83.76	107.6	60.68	110.16
L	-	-	-	-	92.0	98.83

* - Student was ill, ** - This teacher had only one student for this data collection

Results suggest that singing lessons are very variable in terms of lesson duration. Although some teachers oscillate around 100% for most lessons, other teachers go to more extreme percentages. In the 1st collection of videos, teacher B gives to one student 80% of lesson and to another around 117% of lesson. Another teacher (G) goes to more extreme values by giving one student 58% of lesson and another 118%. Except for the case of teacher I who was teaching a student who reported being ill, and therefore had a shorter lesson due to that condition, there were no apparent reasons for that shortage or increase on other lessons' time. During the academic year it was noticed that the time management between lessons/ students was difficult. However, in one of the cases the lack of timing organization seemed to be particularly relevant. Teacher G always had lessons varying between very low and very high values in all stages for no apparent reasons other than feeling the need to teach one particular student more or less for that day or the fact that by not having the next student teacher G gave that spare time to other students.

It seems important to notice that although some teachers do not achieve 100% of lesson given, this value is generally related to the time between changes of students into the singing studio, search of scores, lesson setting up, delays and other appointments from teachers around the end of lesson. The stronger reasons for teachers to give a lot more lesson time than planned seems to be related to the fact that teachers lose track of time when engaged in teaching and others that feel the necessity to solve a certain problem in that lesson: preparation for performance or other problem discussion.

Taking into consideration the variances presented above (in table 29), a table including mean and standard deviation is presented next for each of the singing teachers. The values regard all lessons' total timings.

Table 30. Mean and standard deviation percentage for all lessons in accordance to the teacher.

Teacher	1 st Data Collection			2 nd Data Collection			3 rd Data Collection		
	N	Mean	Sd	N	Mean	Sd	N	Mean	Sd
A	4	97.5	3.2	0	-	-	0	-	-
B	6	96.7	13.2	3	92.9	1.2	3	85.2	13.2
C	4	90.6	10.4	4	98.3	3.3	4	99.2	2
D	3	92.3	4.7	3	96.3	5.9	0	-	-
E	2	99.2	8.3	1	118.8	0.0	2	93.9	2.4
F	2	73.4	2.5	3	93.8	1.1	3	83.5	10.1
G	8	100.7	22.0	6	125.2	29.2	5	139.5	79.2
H	3	59.6	29.3	2	94.2	6.9	3	99.20	43.2
I	2	100	23.5	3	87.7	32.9	2	117.5	13
J	3	90.5	15.0	3	84.2	21.2	3	99.3	6.9
K	8	84.4	37.0	3	92.2	13.3	3	86.2	24.8
L	-	-	-	0	-	-	2	95.4	4.8

The results from table 30 allow a perception of the variance in the singing lessons by contrast to table 29 where minimum and maximum values were included. For this table all lessons were considered and the values given are an overview of variance on the lessons timings' total timings.

The majority of teachers have Mean values approximate to the expected time of lesson between 90% and 100%. Teachers B, C, D, J, K presented approximate mean values during all stages. Teachers G, H, increase the lessons' time from stage to stage and teacher I oscillates to low values at 2nd stage and seems to compensate that tendency on 3rd stage by increasing time of lessons. The reasons for these oscillations seem to be also associated with the style of each teacher. For instance, Teacher I easily forgets about timings and keeps teaching beyond schedule; teacher H got lower values because he often interrupts his lessons and leaves the room to solve external matters.

7.4.2. Partial timings

Measuring timings in instrumental lessons is normally done with the purpose of evaluating teaching effectiveness (Forsythe, 1977; Geringer, 1983; Siebenaler, 1997), observing the connection between time spent practising an instrument and achievement (Ericsson *et al.*, 1993; Hallam, 1998b; Sloboda *et al.*, 1996) or teaching career longevity and time spent on different tasks of lessons (Mills, 2004). The present research does not intend to reflect patterns of effectiveness or achievement but rather describe the setting of singing lessons' in order to understand differences of approaches, its reflection in the relationships with students, provide information on teachers' time management, and teaching tendencies.

Singing teachers tend to divide singing lessons into sections. Some major events seem to be conscious and other smaller events seem to be brought according to the specific needs of each lesson. Categories of events were raised from preliminary observation research that although its use had different purposes were considered as valid events' sectioning (Purser, 2005; Reid, 2001; Ward, 2004; Young *et al.* 2003). Smaller events specific to singing (Language Coaching, Breathing/ appoggio and character interpretation) were included to allow a better perception of the specificities of this instrument in accordance to the behaviour of teachers on preliminary video observations. The following list was considered for lesson observation:

1. General Conversations
2. Specific Conversations
3. Technical work/ warm up
4. Repetition of repertoire
5. Language Coaching
6. Musicality
7. Interpretation
8. Breathing and appoggio
9. Body warm up and exercises (Which do not include the use of voice)
10. Bibliographic references
11. Break

The above literature refers to general music studies and no singing literature was found following categorisation for the same purposes. The use of practising language (lyrics) was not found in existing literature. That category was added as it constituted a part from the lessons that would not match any of the existing categories.

In order to better describe the learning/ teaching environment and not only the musical processes involved, it was considered that all moments should be categorised. Therefore, the analysis of lesson interruptions (moments where the lessons would be stopped according to external needs) was included to allow a perception of effective vs. ineffective time use. The same approach was given to breathing and body exercises that did not seem to fit into other categories and was helpful in identifying more detailed approaches to teaching.

The next figure (29) resumes all teachers in accordance to the categories' timings that will be described in more detail after:

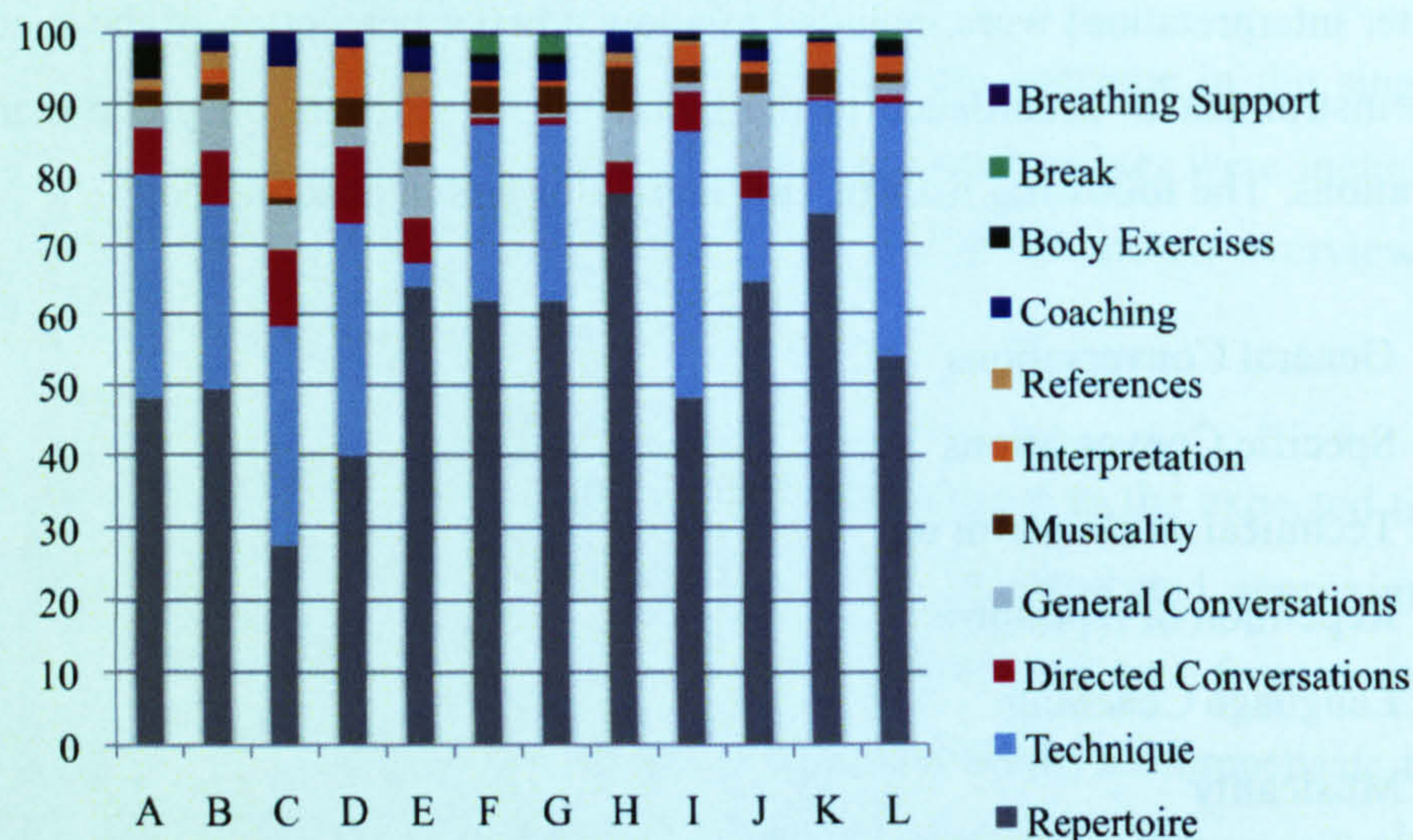


Figure 29. Distribution of all teachers according to time management for all matters in percentages.

Each of the above categories will be described in more detail next using percentages to allow comparative means based on time spent. These main lesson activities were calculated from the recordings by identifying the dominant behaviour

in each 5 seconds. In order to provide comparisons of behaviour, the time results will be presented:

1st in charts with time distribution for each matter including all participants/singing teachers regardless of completing all data collections by calculating the mean value of all lessons recorded for each teacher.

2nd using histograms to present a longitudinal perspective referring exclusively to teachers who completed the three stages, calculating the mean values of all participant teachers who completed three stages.

1. General Conversation

This category includes any kind of conversations that does not specifically concern to content of the lesson, singing or career of student. Themes on this category were mainly about teacher /student's private life or concerning other people without any relation to the singing itself and general health of student and teacher.

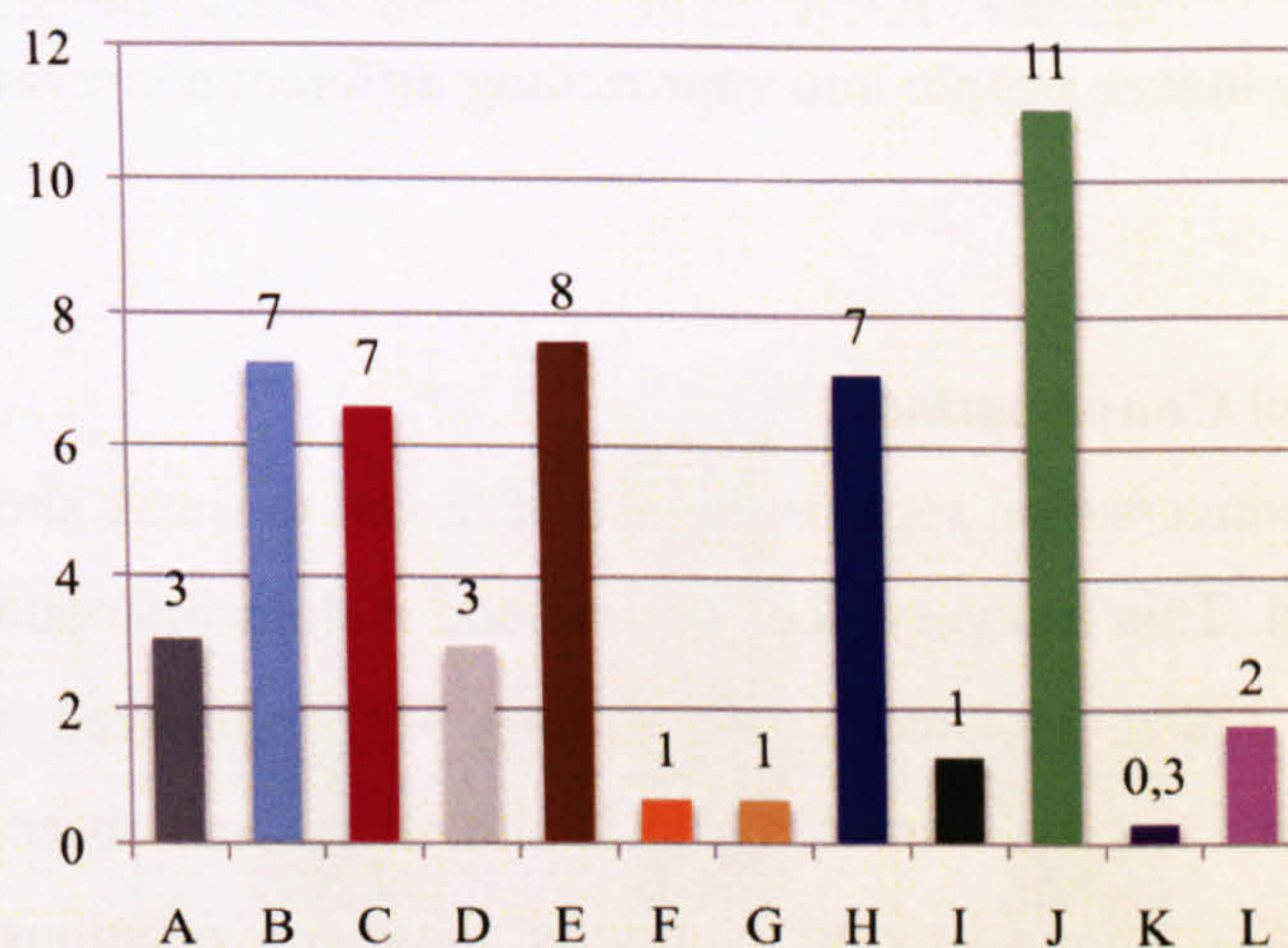


Figure 30. Time management by teacher for general conversations in percentages.

The results express the use of conversations regarding external matters by all singing teachers. Teacher F, G, I, K and L keep these matters to a minimal in comparison to teachers B, C and E, H and J that use considerably more time engaging on conversations external to their singing tasks. The teachers seem to have tendencies for certain types of conversations: teacher E concerned mainly personal experiences, teacher H and J engaged more into organizational conversations regarding external

activities of school (not related to singing). Teacher C, although used many matters external to singing did not engage in any personal themes.

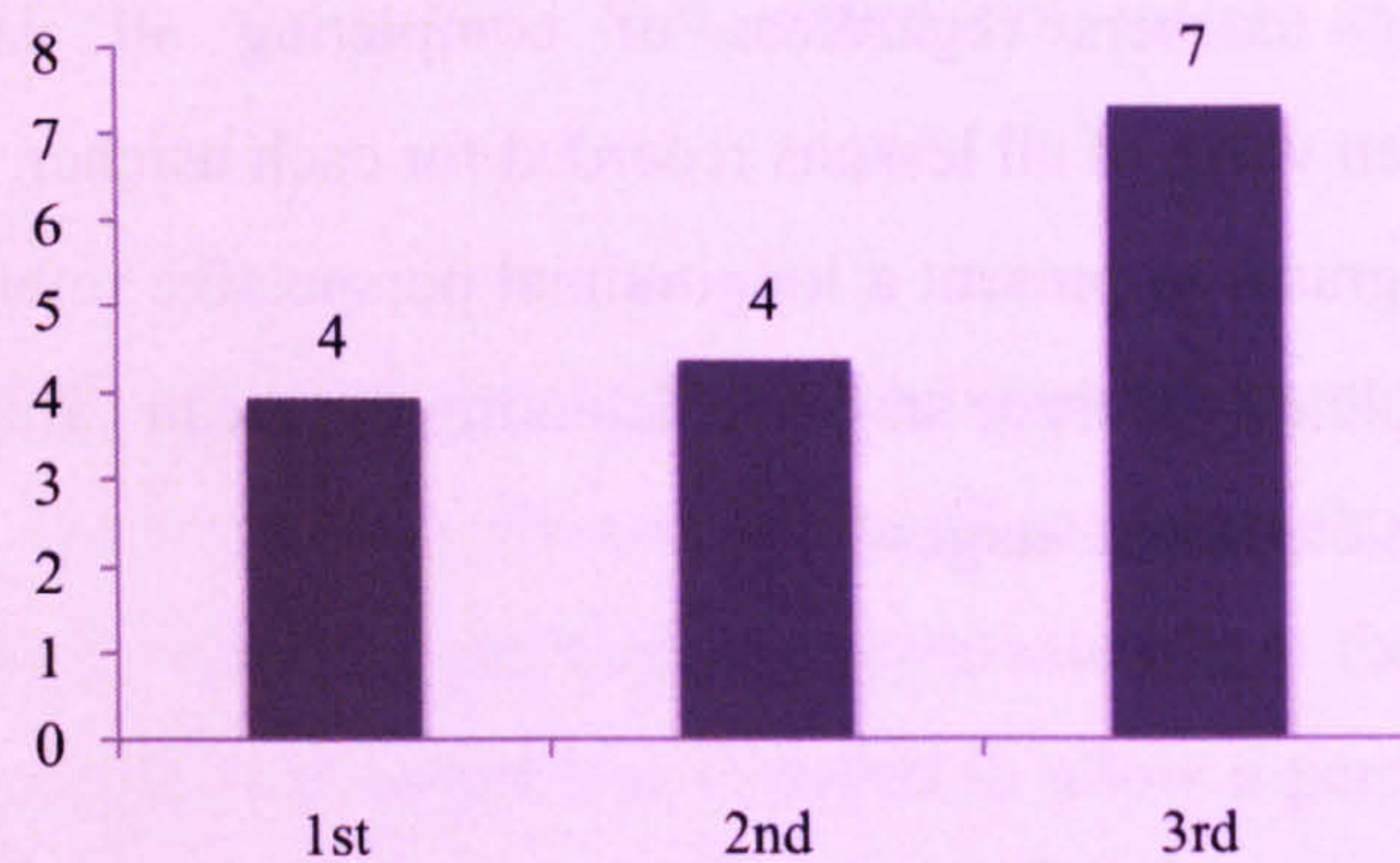


Figure 31. Longitudinal distribution of general conversations for teachers who completed all stages, in percentages.

General conversations are distributed through all stages of the academic year, although teachers tended to use it more at the last stage. It seems that the relational development may induce people into approaching different conversation themes.

2. Directed Conversation

Directed conversation regards the use of lesson to speak about singing related themes, in general. This category does not include dialogs dialogues engaging in the work itself but rather isolated conversations. The observed themes of these conversations were: singing, career, vocal health, auditions, observed concerts, and financial support to studying singing. Normally, these conversations took place at the beginning of the lesson.

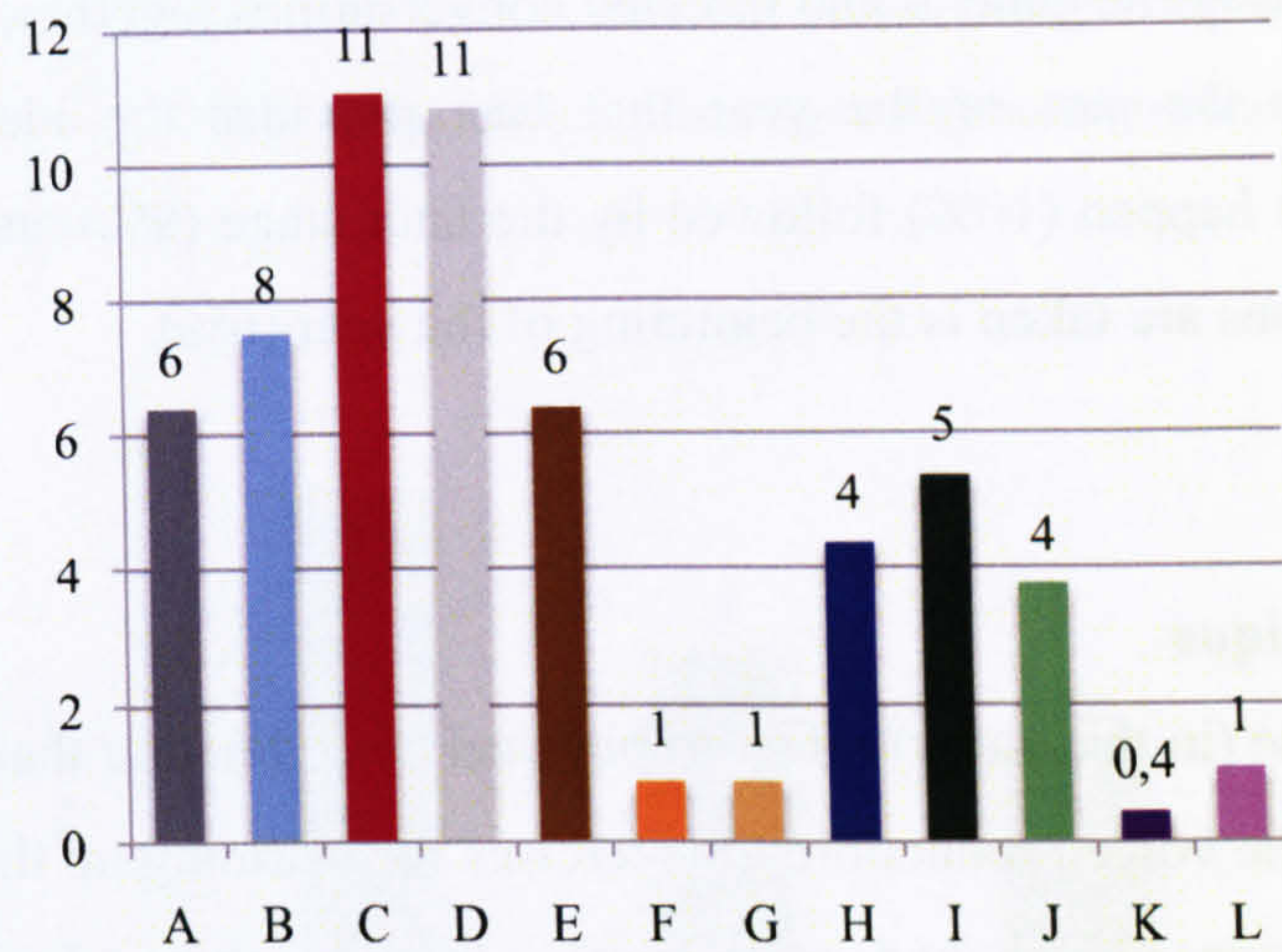


Figure 32. Time management by teacher for directed conversations in percentages.

All singing teachers used directed conversations. However, teachers F, G, K and L seem to engage very little in singing conversations. It is noticeable from the above results that for instance teacher C and D use a lot more conversations than all other teachers. The reasons for this behaviour may be associated with the specific teaching techniques that will be discussed later on this chapter.

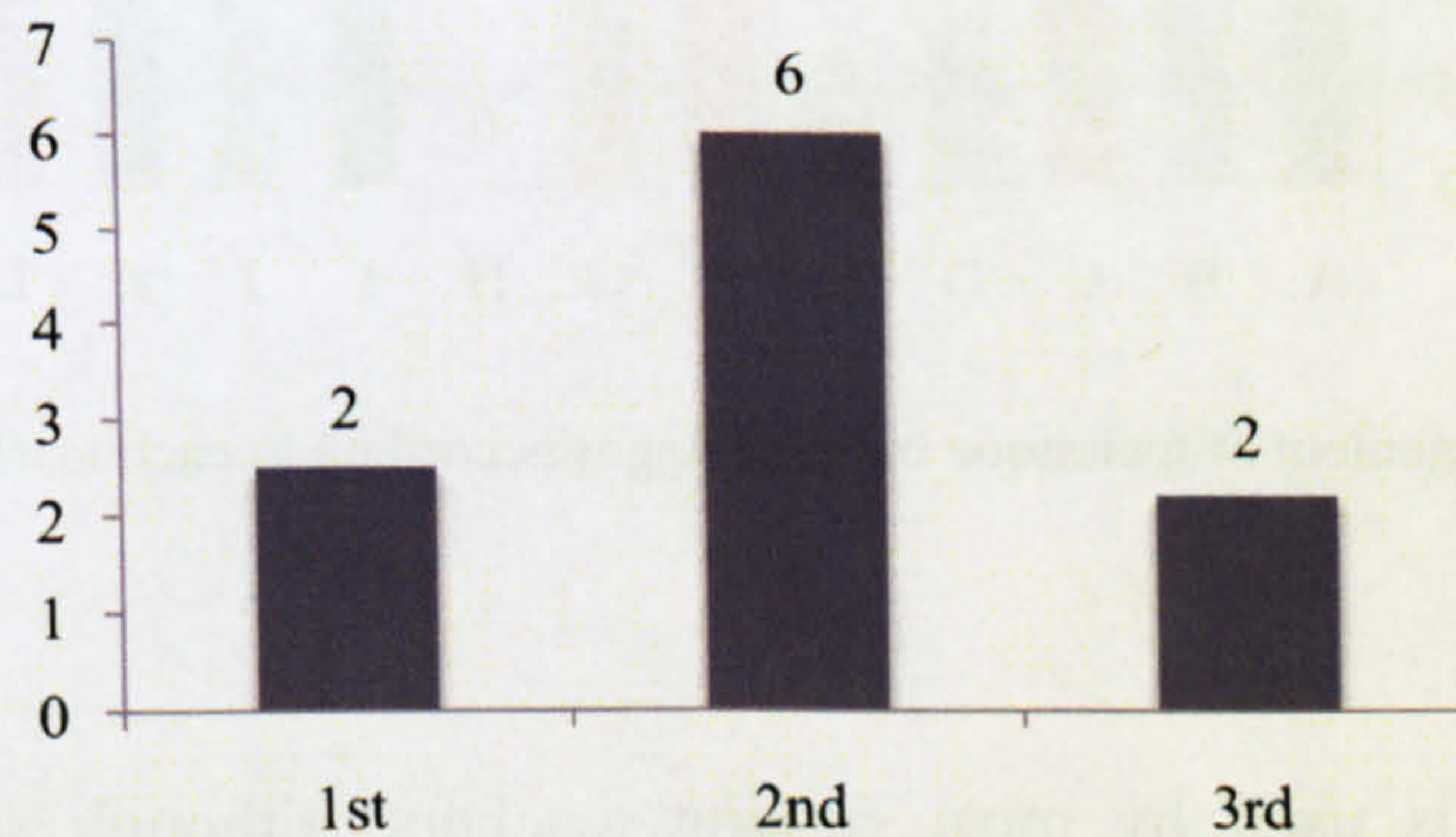


Figure 33. Longitudinal distribution of directed conversations for all teachers in percentages.

Observing these types of conversations throughout the academic year, it is noticeable that the second stage favours an increase on singing-related conversations. Both beginning of year (formation of relationship) and last stage of the year (previous to exams) have the same values of these conversations.

Considering the general and directed conversations together, it is clear that the second stage is the part of the year that best provides the ideal conditions for conversations to happen (10%) followed by the later stage (9%) and the stage where least conversations are taken is the beginning of the year (6%).

3. Technique

Technique (in this study) refers to physical co-ordination that is implied in the mechanisms of the voice production: all exercises for warming up the voice or during repertoire execution (which had a technical intention) except breathing exercises, which was considered as a separate category.

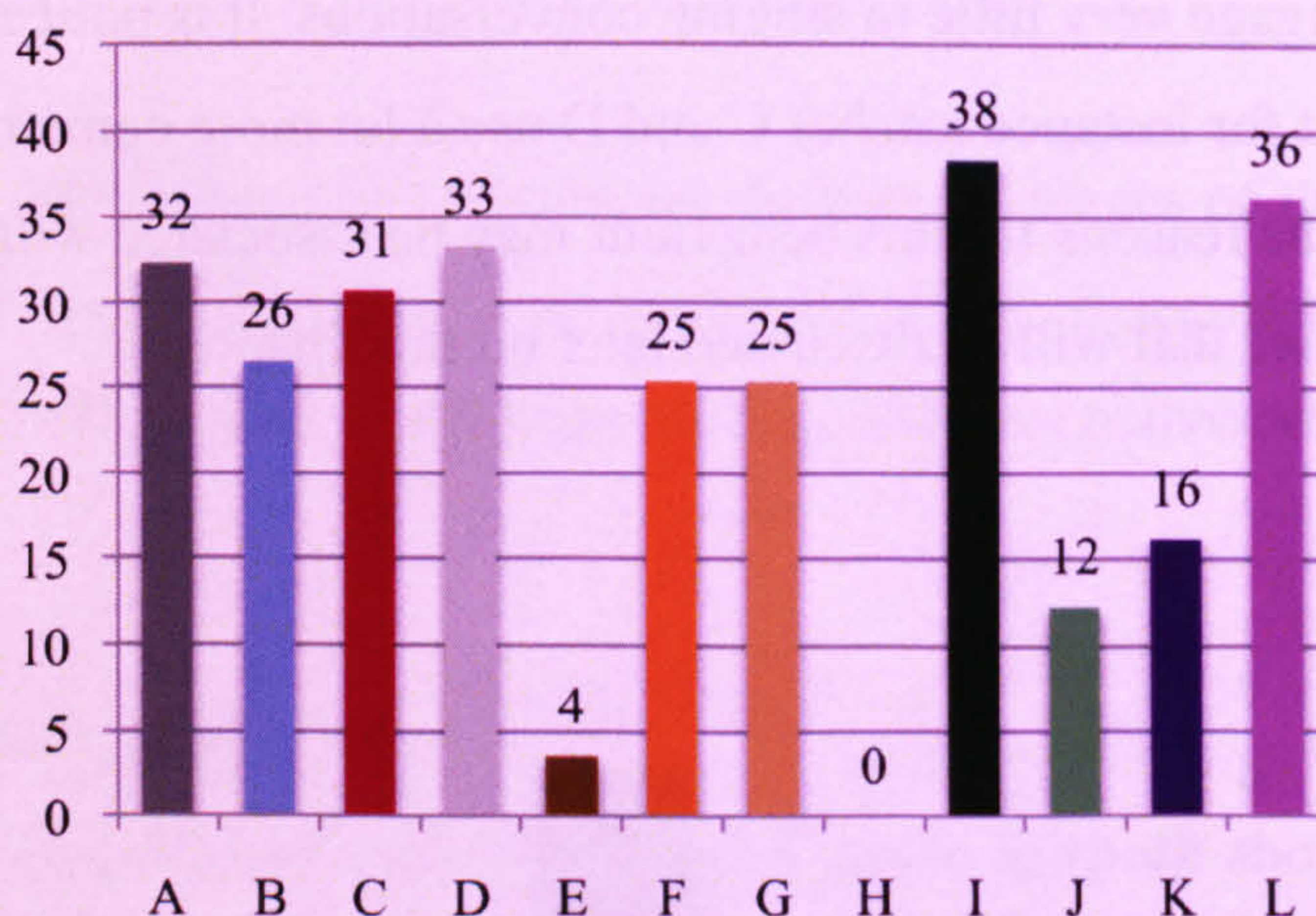


Figure 34. Time management of technique in percentages according to each teacher.

Technique is used by most singing teachers, although some invest larger amounts of time than others. For instance, teachers C, D, I and L all spend more than half the lesson working through technical exercises. Teacher H and J (interestingly from the same school) do not make any exercises, warm ups or technical exercise as part of their lessons. Teacher J only warms up the voice of students during the first trimester of their graduate course after which he expects the students to bring that work done. In the opinion of teachers H and J the technical capacities should be delivered during the performance itself and not by creating a specific moment to work

on that. Furthermore, this category is taken as being a warm up and not a specific strategic element of singing. Therefore, students are expected to warm up their voices previously to the lesson.

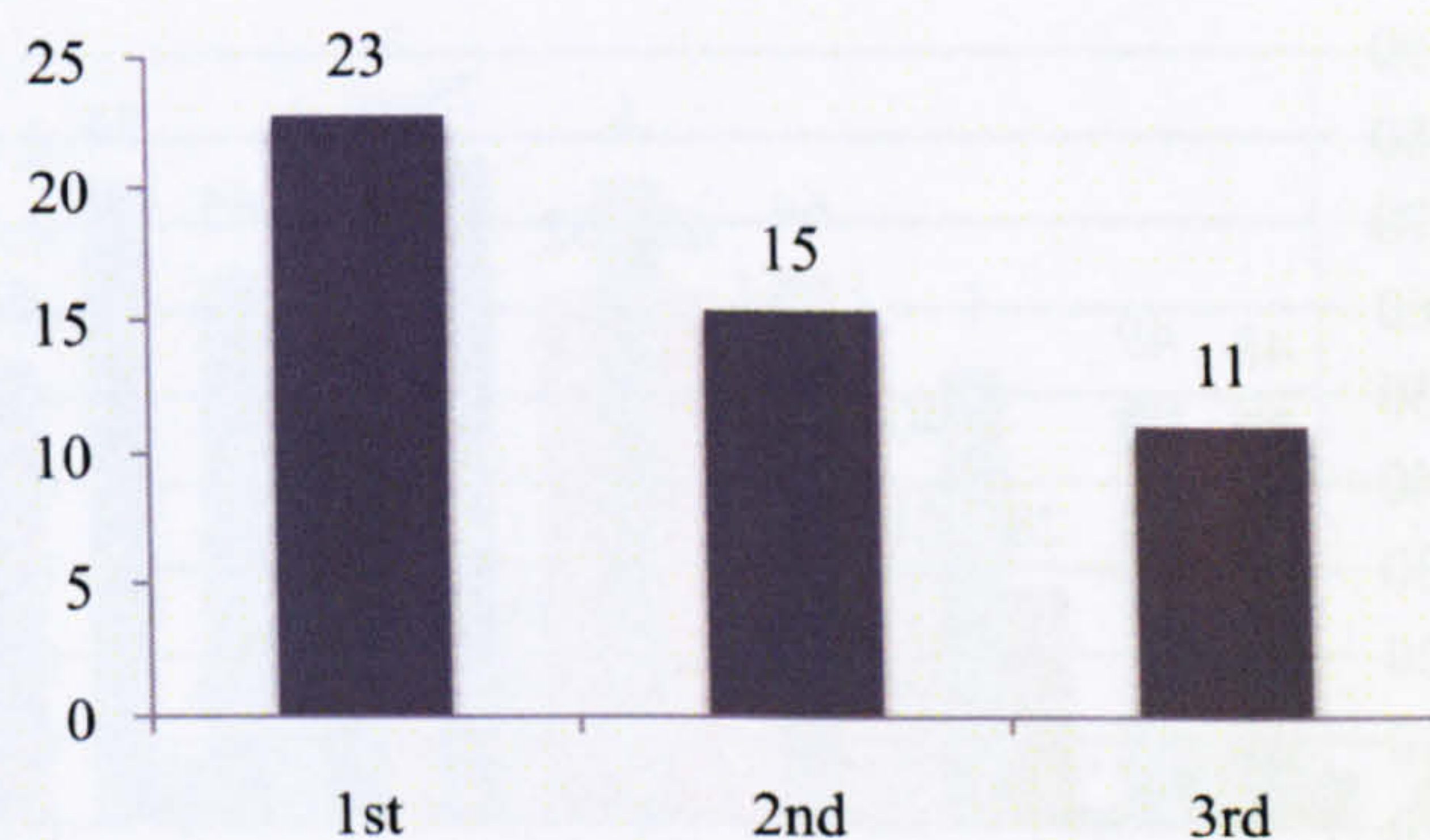


Figure 35. Longitudinal distribution of technique for each teacher in percentages.

The variations according to the stages of year clearly show an intensification of technical exercises during the first stage. It is apparent that as the year develops the technical work decreases importance in detriment of other aspects. For stages 2 teacher E and J stopped working on this matter. Teacher E would normally work technique during all stages but the fact that this stage had longer conversations inhibited the technical part. At stage 3 even more teachers (E, F and J) stopped working on technique in order to prepare repertoire, which will be presented next.

4. Repertoire

As repertoire it was included all parts of lessons where the student would be performing the scores without specifically engaging in any of the other categories.

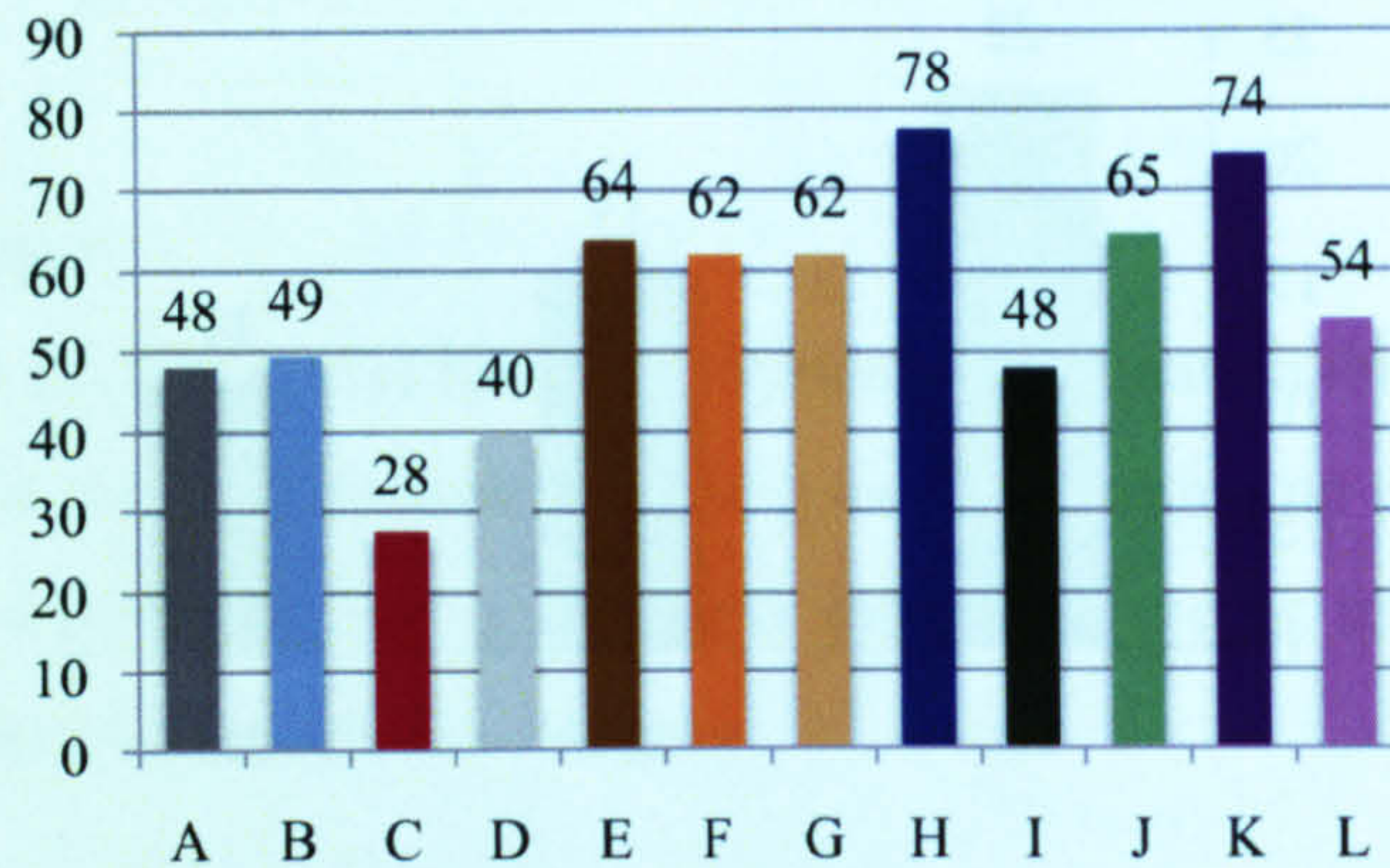


Figure 36. Time management by teacher for repertoire in percentages.

All lessons had the work on performing scores so, Repertoire is the only category used by all participants at all stages. For this category, most teachers spend around half the lesson on repertoire. Whereas teacher H and K go beyond that value by spending almost 3 quarters of the lessons on repertoire. In opposition to these behaviours, teacher C only works on repertoire around 28% of the lesson.

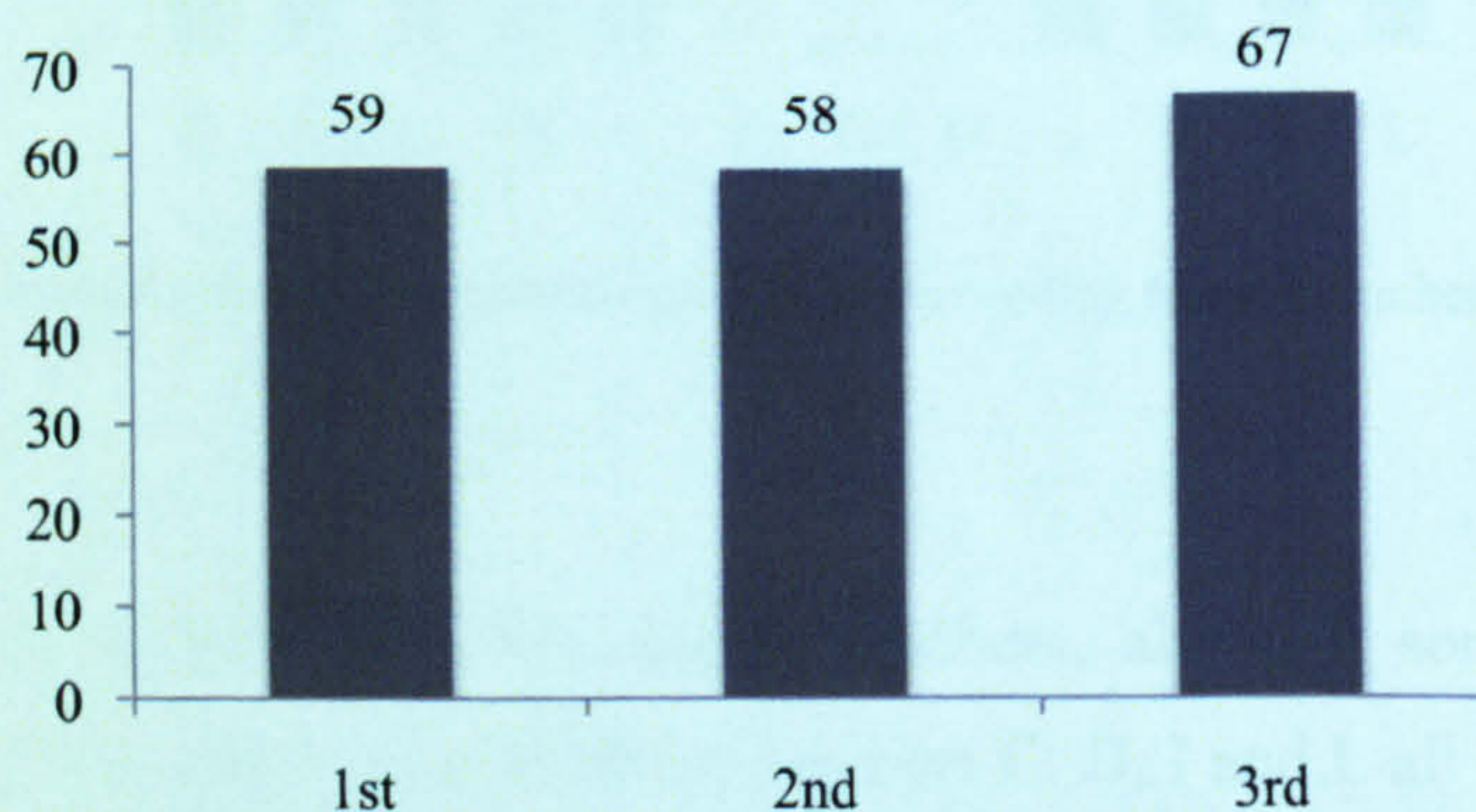


Figure 37. Longitudinal distribution of repertoire for each teacher in percentages.

The longitudinal observation of this matter allows a perception of intensification on repertoire towards the end to the academic year, which is justifiable by the approximation of exams where the repertoire will be performed. The first and second stages are more balanced around the 60% use of lesson to work on Repertoire.

5. Language Coaching

This category was considered whenever teacher and student would stop all other tasks in order to work in diction, lyrics' pronunciation, and text accent.

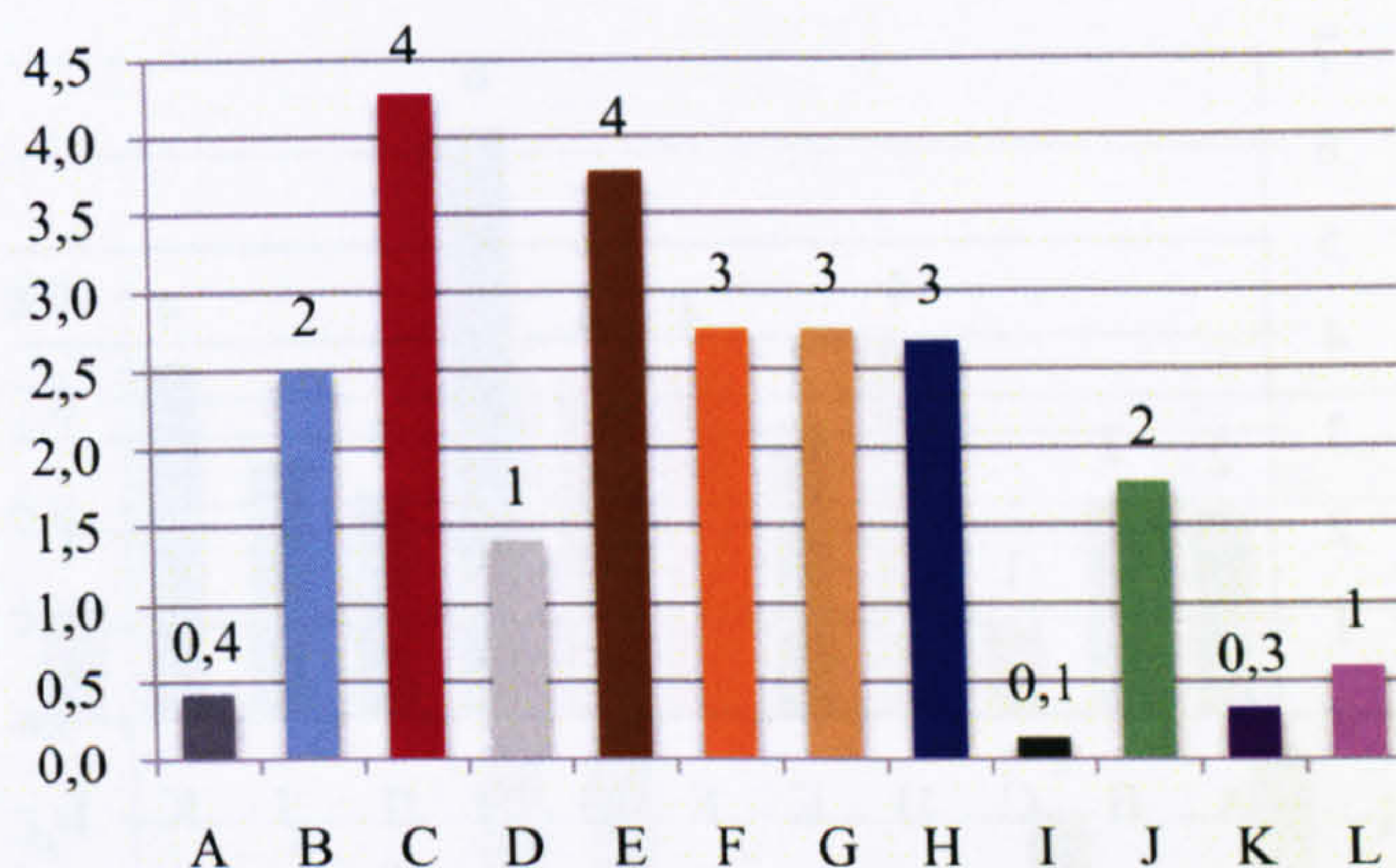


Figure 38. Time management by teacher for language coaching in percentages.

The importance of this category may perhaps be expressed by the fact that all teachers used it on one or more occasions. Teachers A, I and K used it on few occasions and spending less time in comparison to other teachers that spent around 3 or 4% of the lesson working on language matters (C, E, F, G, H).

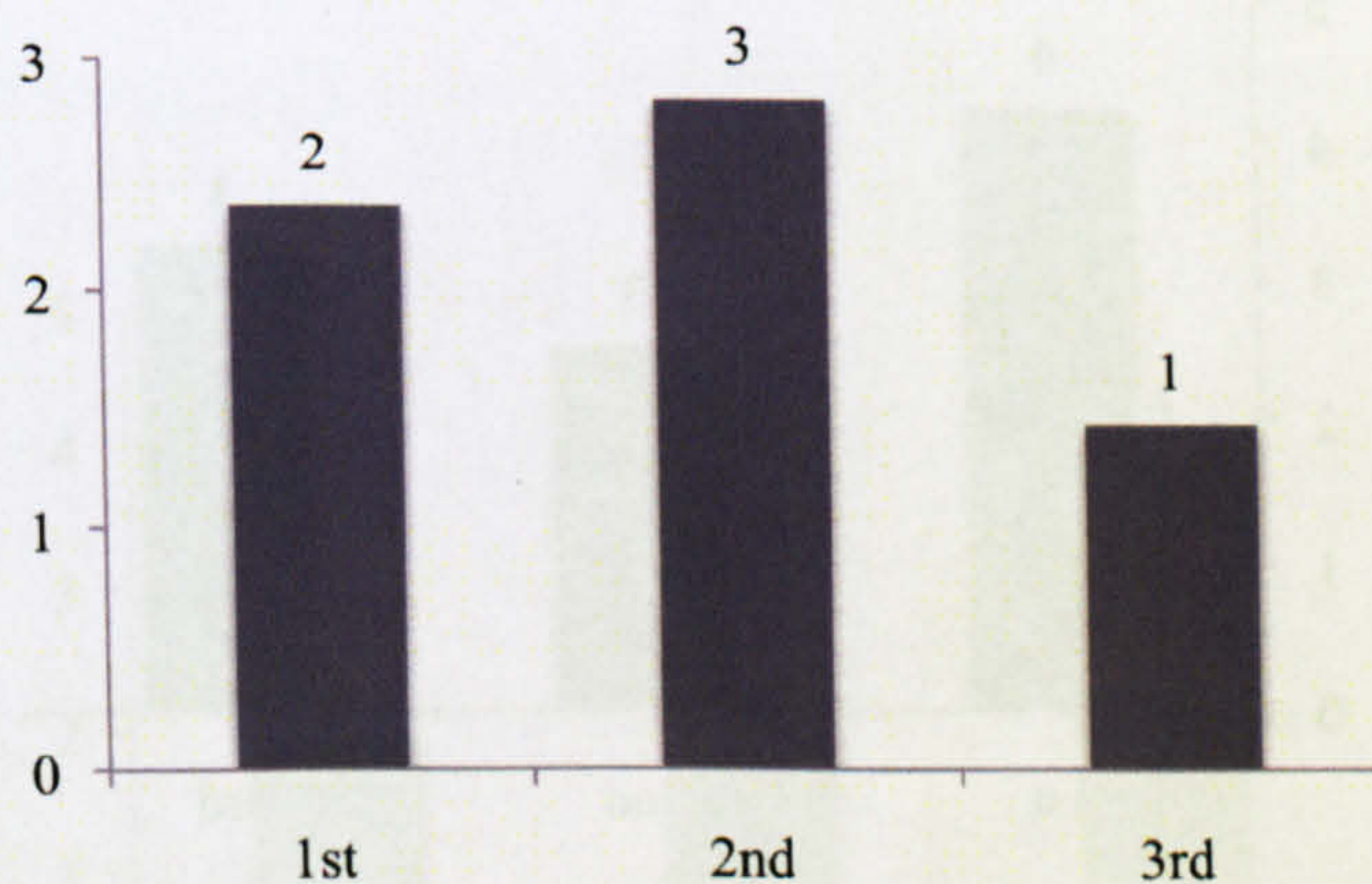


Figure 39. Longitudinal distribution of language coaching for each teacher in percentages.

In longitudinal terms, the second stage had more work on this matter. The repertoire tend to mature towards the end of the year and language is characteristic of initial stages of work.

6. Musicality

Musicality refers to indications related to phrasing, stress of notes, dynamics, ornamentation, use of certain sound effects as well as the exploration of composers' intentions transposed into style and the established traditions of a piece.

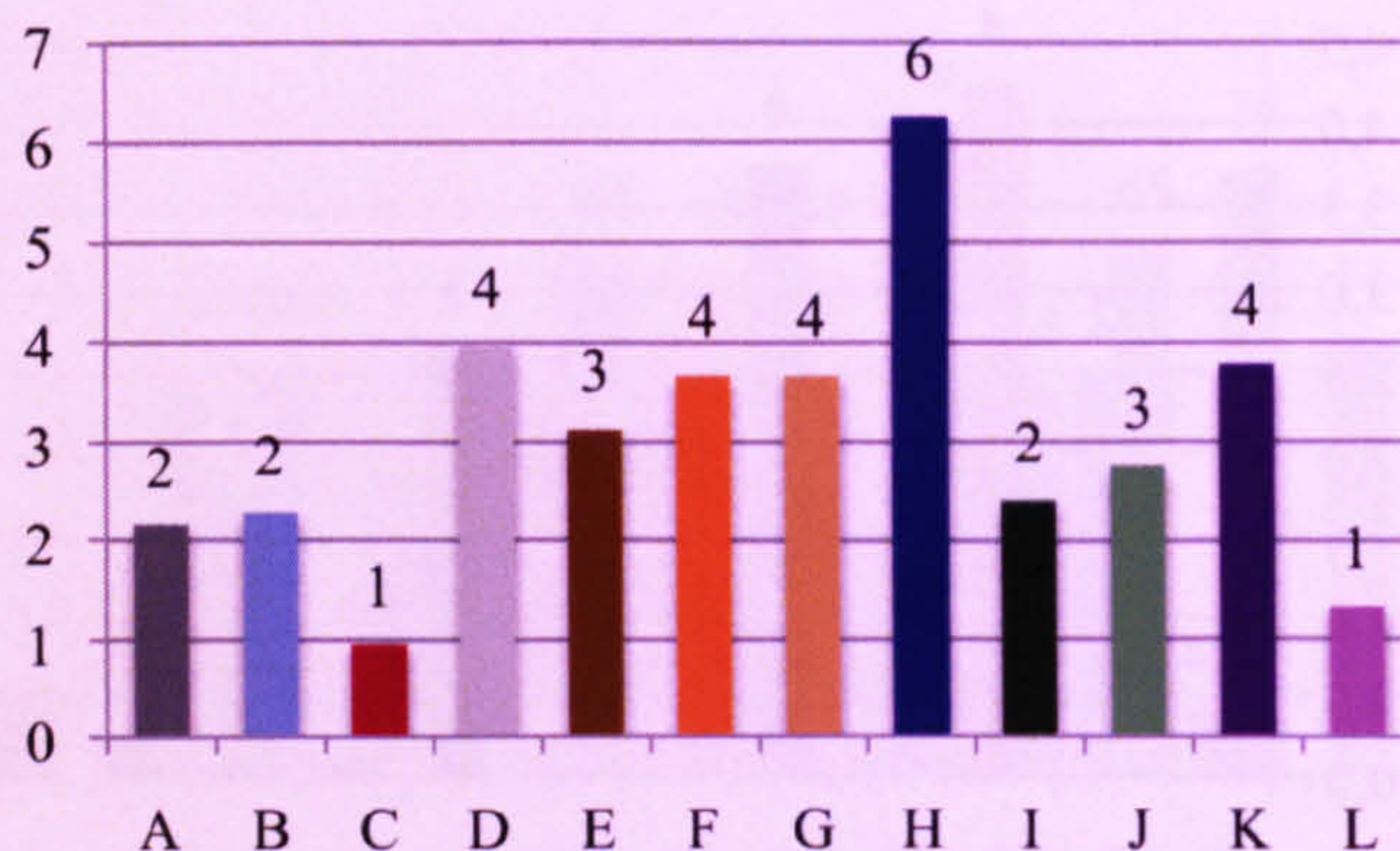


Figure 40. Time management by teacher for musicality in percentages.

The use of musicality is also implicit in all teachers' teaching and perhaps is the matter where teachers are more balanced in terms of time quantification. Here all teachers spend between 1 and 4% of their lessons working on this matter except for teacher H who went slightly over those values (6%).

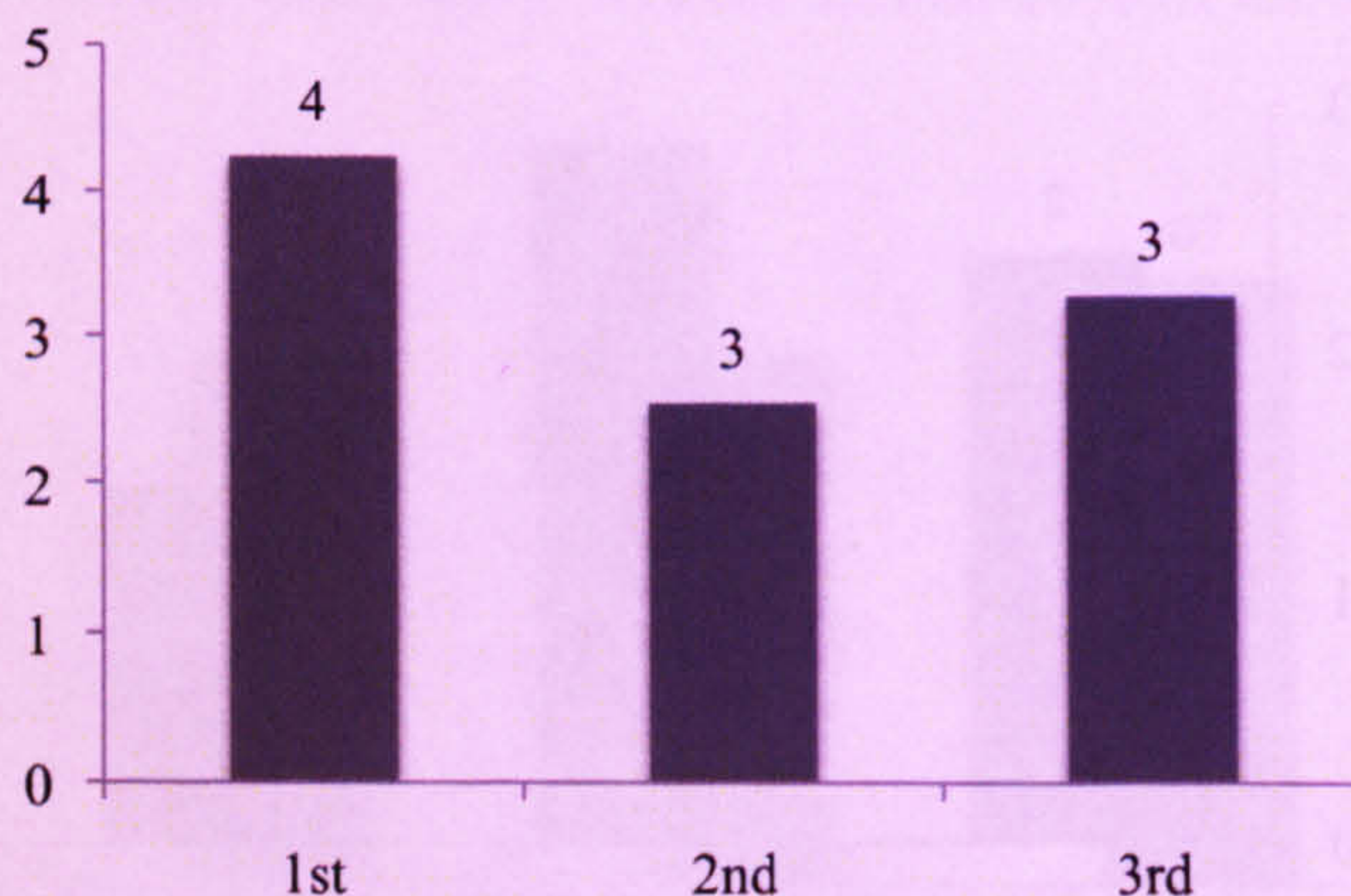


Figure 41. Longitudinal distribution of musicality for each teacher in percentages.

Longitudinally, the values concerning musicality seem to be stable. This matter is worked throughout the academic year without much variation. Being the first stage with most musicality (4,24%) the second lower (2,53%) and third with 3,26%.

7. Interpretation

For interpretation it was considered all moments were teacher and student were specifically identifying the character of an opera /or the lyrics of a song by facial or body expressivity.

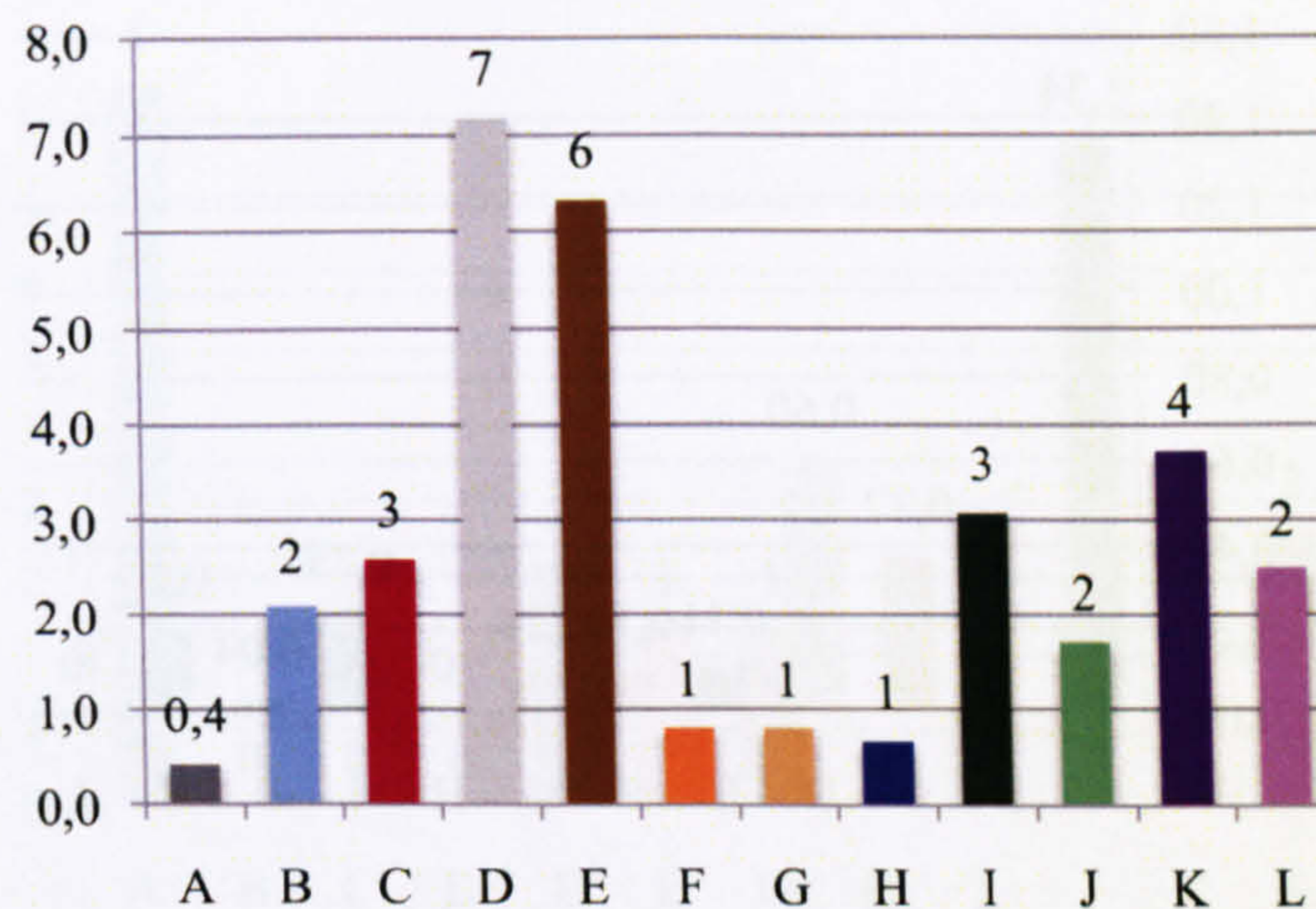


Figure 42. Time management by teacher for interpretation in percentages.

In terms of interpretation there seems to be a wider variation. There are teachers working around 7% of the lesson on interpretation whereas others work around 1%.

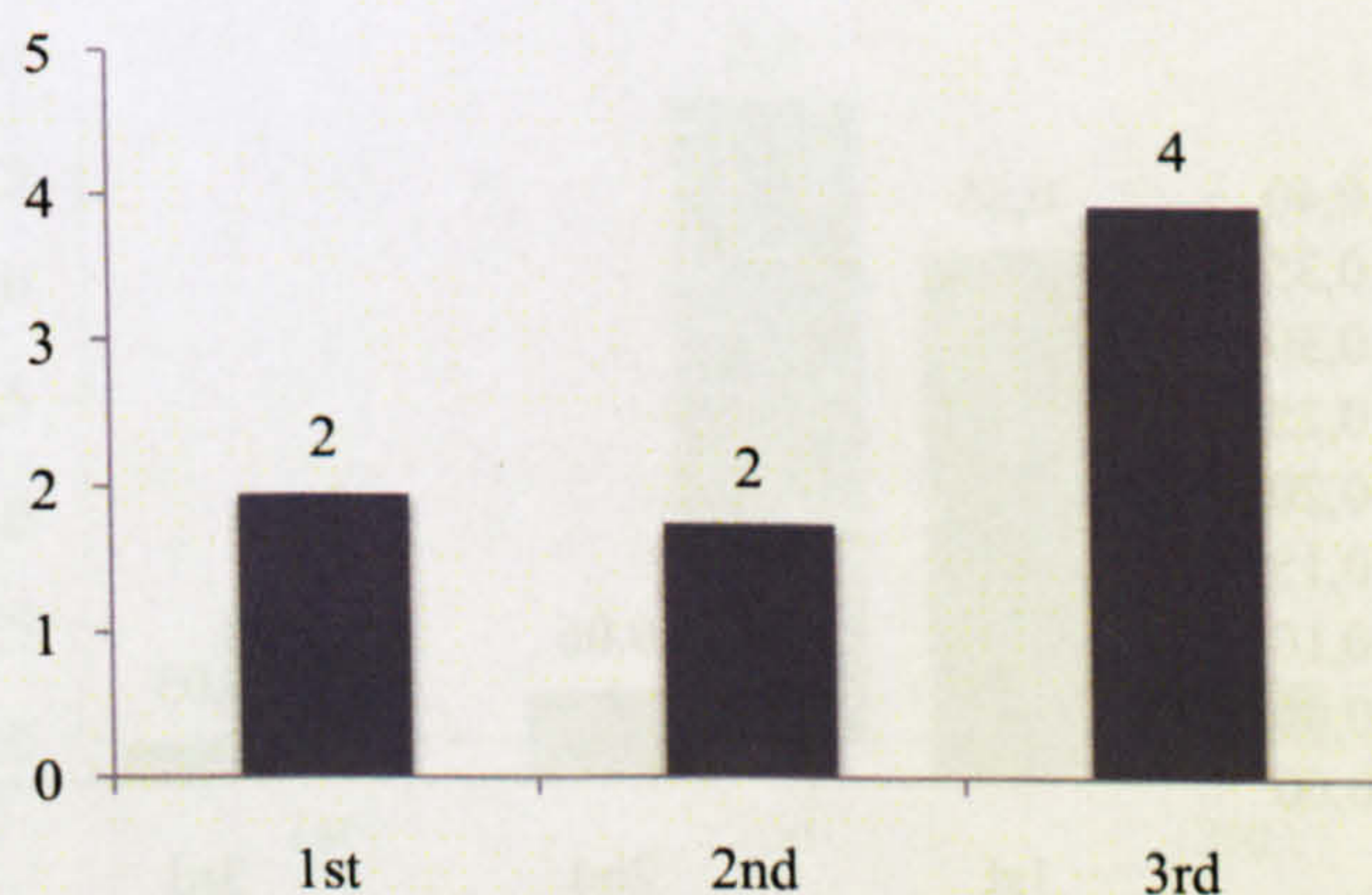


Figure 43. Longitudinal distribution of interpretation for each teacher in percentages.

Again, the association of repertoire maturation and tendency to approach the exams season seem to influence interpretation that increases at the end of the year.

8. Breathing Support

This category concerned all moments where the breathing and appoggio of voice were exclusively being worked. This category was considered independent from technique as singing teachers often stop all other aspects in order to perform exercises to develop breathing and support/ appoggio.

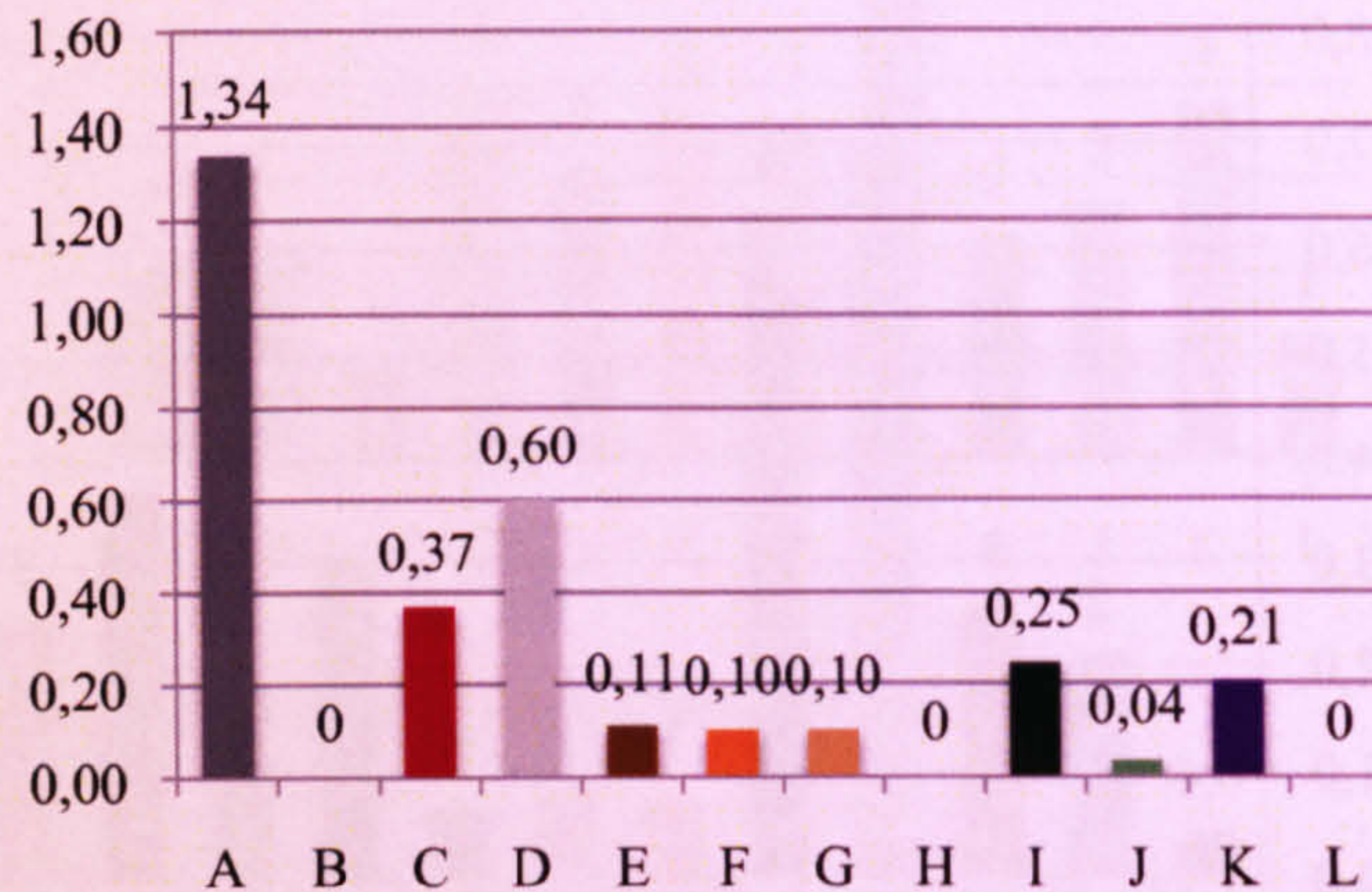


Figure 44. Time management by teacher for breathing support in percentages.

Although in the chart it seems apparent that there is a clear 'investor' on this matter. A more careful observation must be taken as the values on this matter are relatively small. So, all teachers used this matter for less than 2% of the lessons. There are 3 teachers (B, H and L) who did not use this category at all. Teacher A was the one that most used this approach.

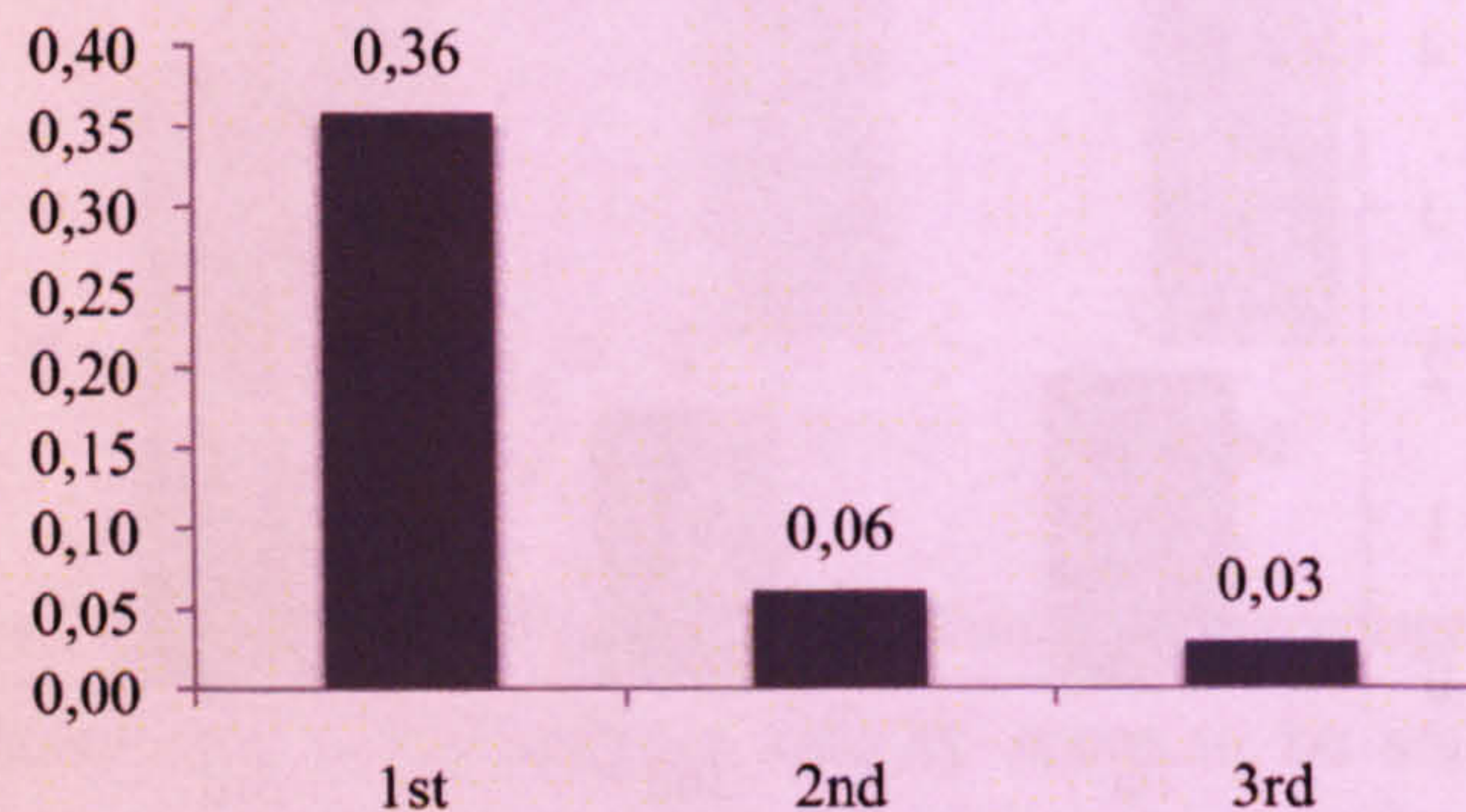


Figure 45. Longitudinal distribution of breathing support for each teacher in percentages.

Longitudinally speaking there was a clear decrease on this category throughout the academic year.

9. Body Exercises

This category does not directly concern to breathing or technique but rather was considered as an independent category as some teachers work the body posture, warming up, brain gym and relaxation in order to get results in other categories such as repertoire.

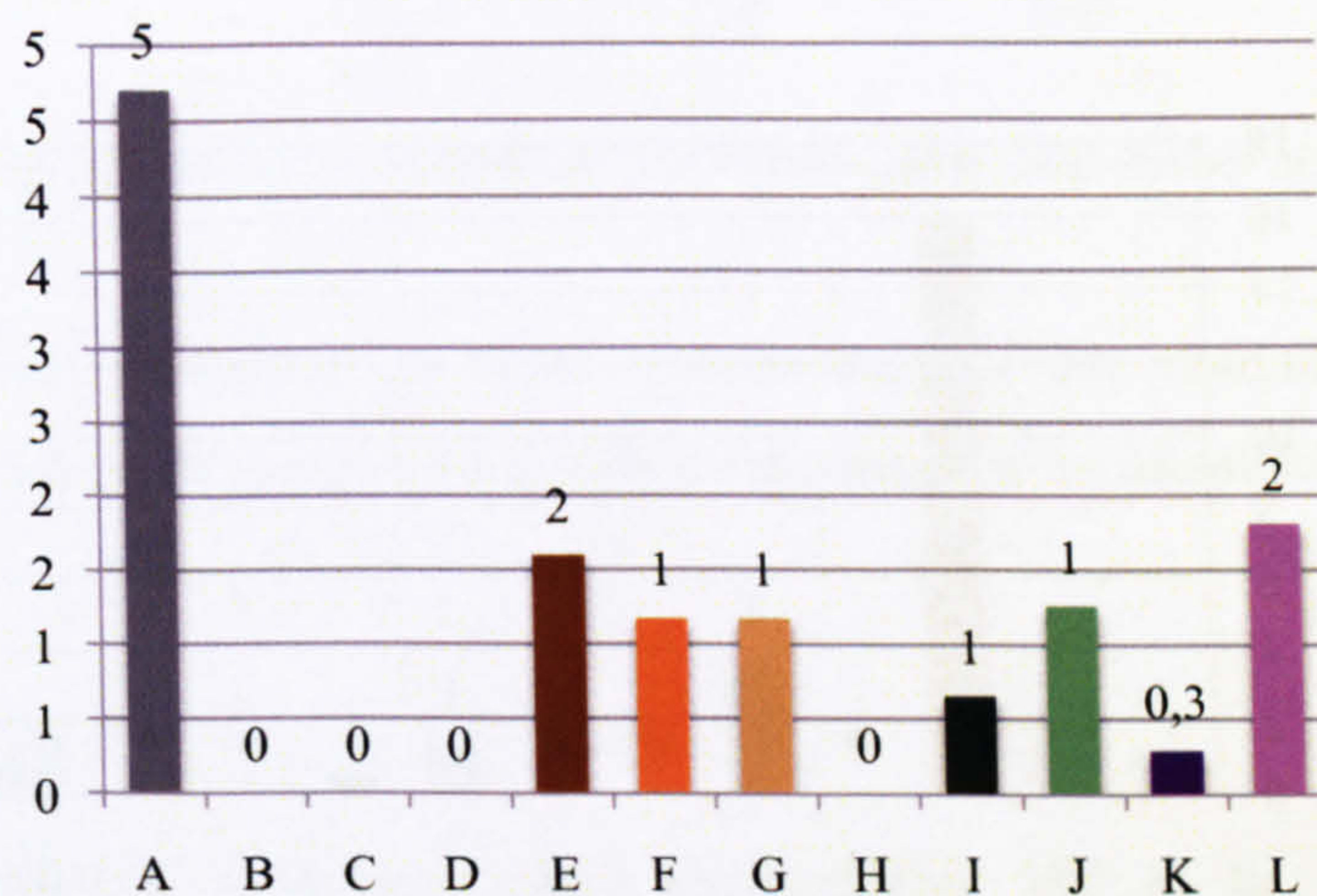


Figure 46. Time management by teacher for body exercises in percentages.

Again (as it occurred in breathing) teacher A is the most user of this category with 5% of lesson spent on this matter. All other teachers work less than 2% on body and again teachers B, C, D, G, H did not approach that matter.

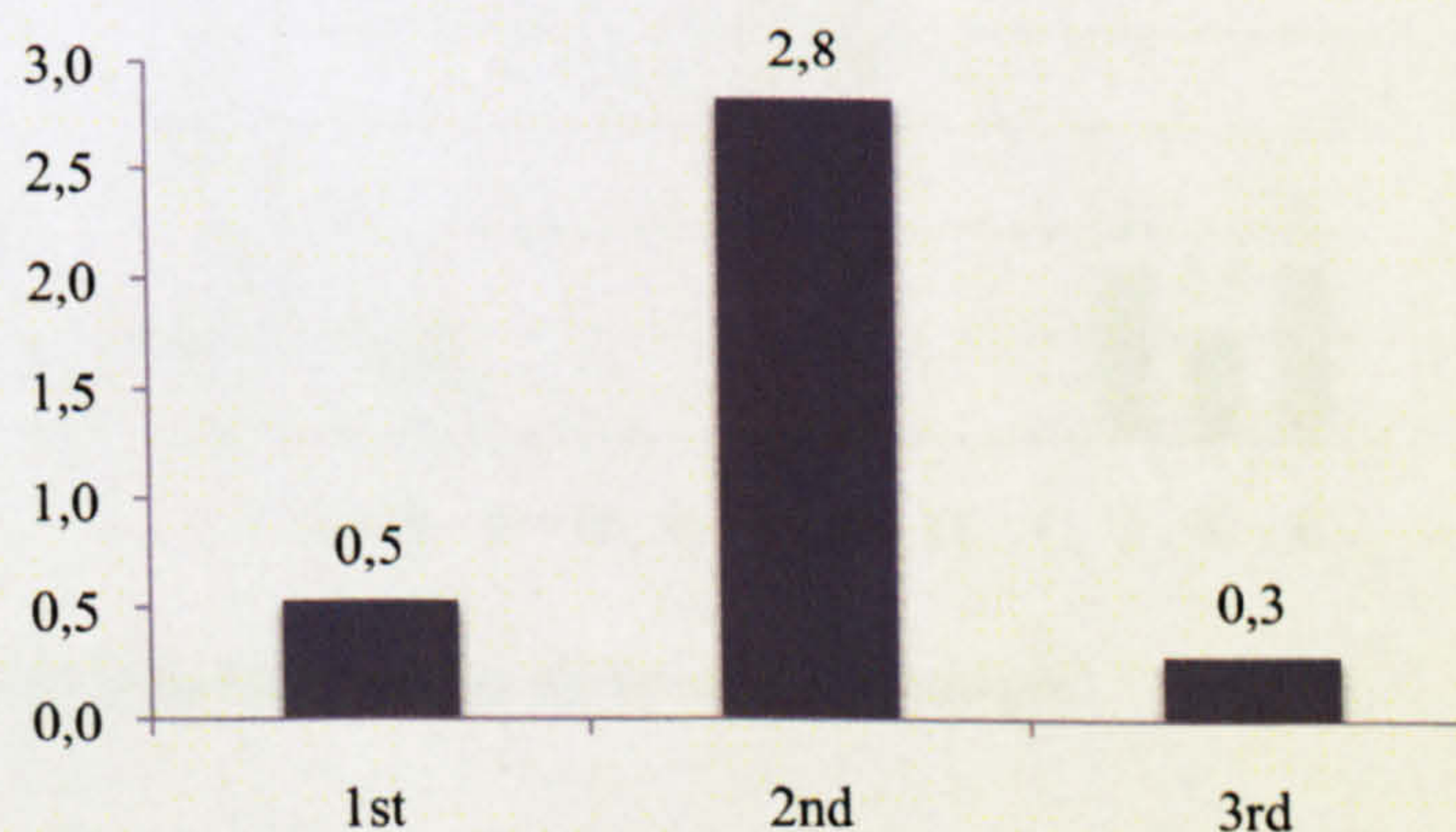


Figure 47. Longitudinal distribution of body exercises for each teacher in percentages.

Through the year, the work on body exercises was more associated with the second stage.

10. Bibliographic References

As some teachers do not only give practical instructions to their students but also spend time referring to other singers, books, audio and video recordings as well as live presentation for advising the students into some aspects of performance, this category was considered. This category is differentiated from direct conversation because it constitutes an advice to the student and not only a conversation about a related matter.

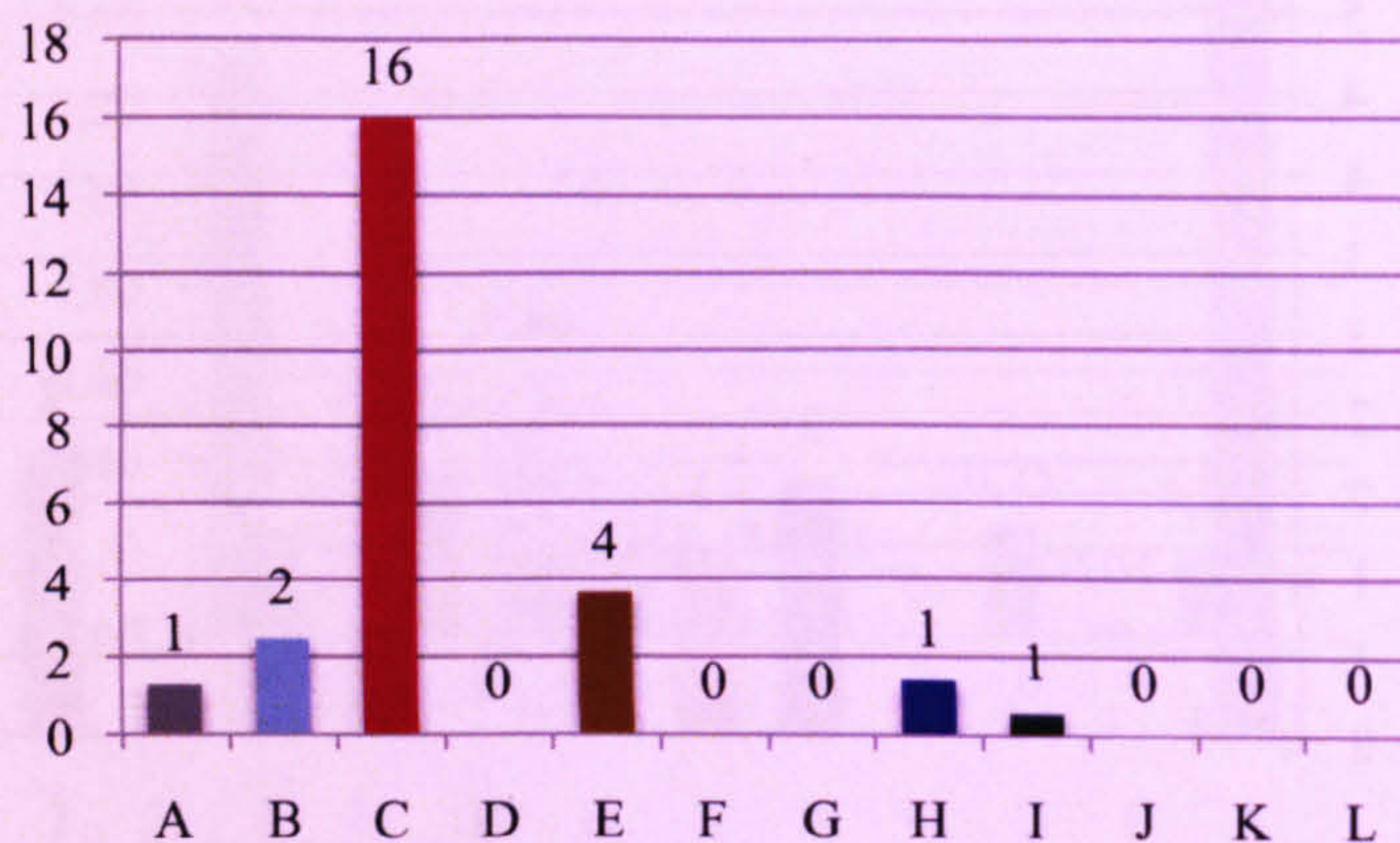


Figure 48. Time management by teacher for bibliographic references in percentages.

Clearly teacher C is the one which most time spent instructing sources where his teaching was expressed. This teacher scored 16% of the lessons on bibliographic references. Other teachers used this matter with more moderation and teachers D, F, G, J, K and L did not use it.

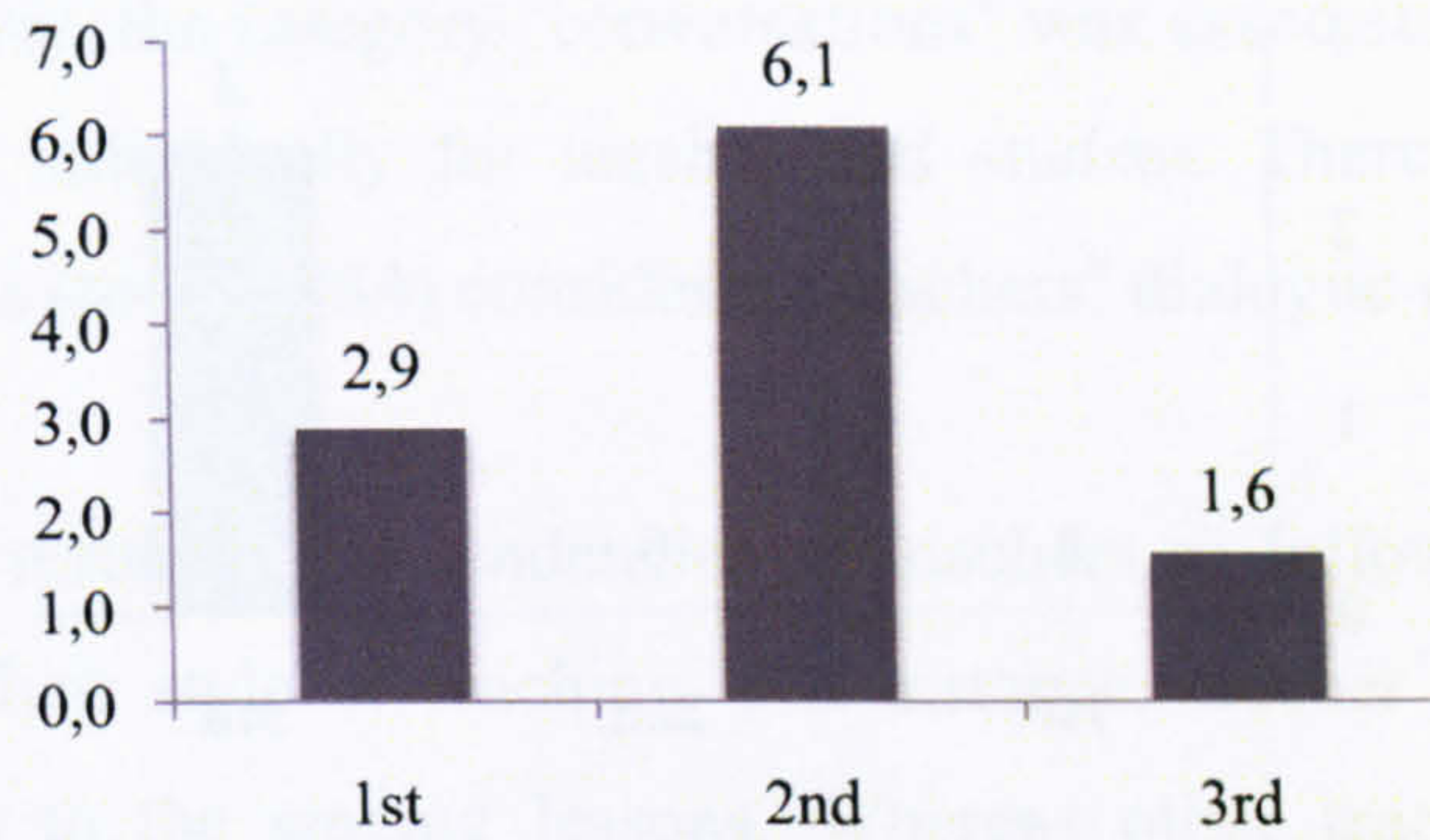


Figure 49. Longitudinal distribution of bibliographic references for each teacher in percentages.

Again and according the more spoken stage of the year, the second video collection was where the most bibliographic references were identified.

11. Break

All moments of lessons where the teaching had to be interrupted were included in this category. Interruptions included teacher or student answering mobiles, other teachers and students entering the lesson and requesting something, teachers leaving the room for other unknown reasons.

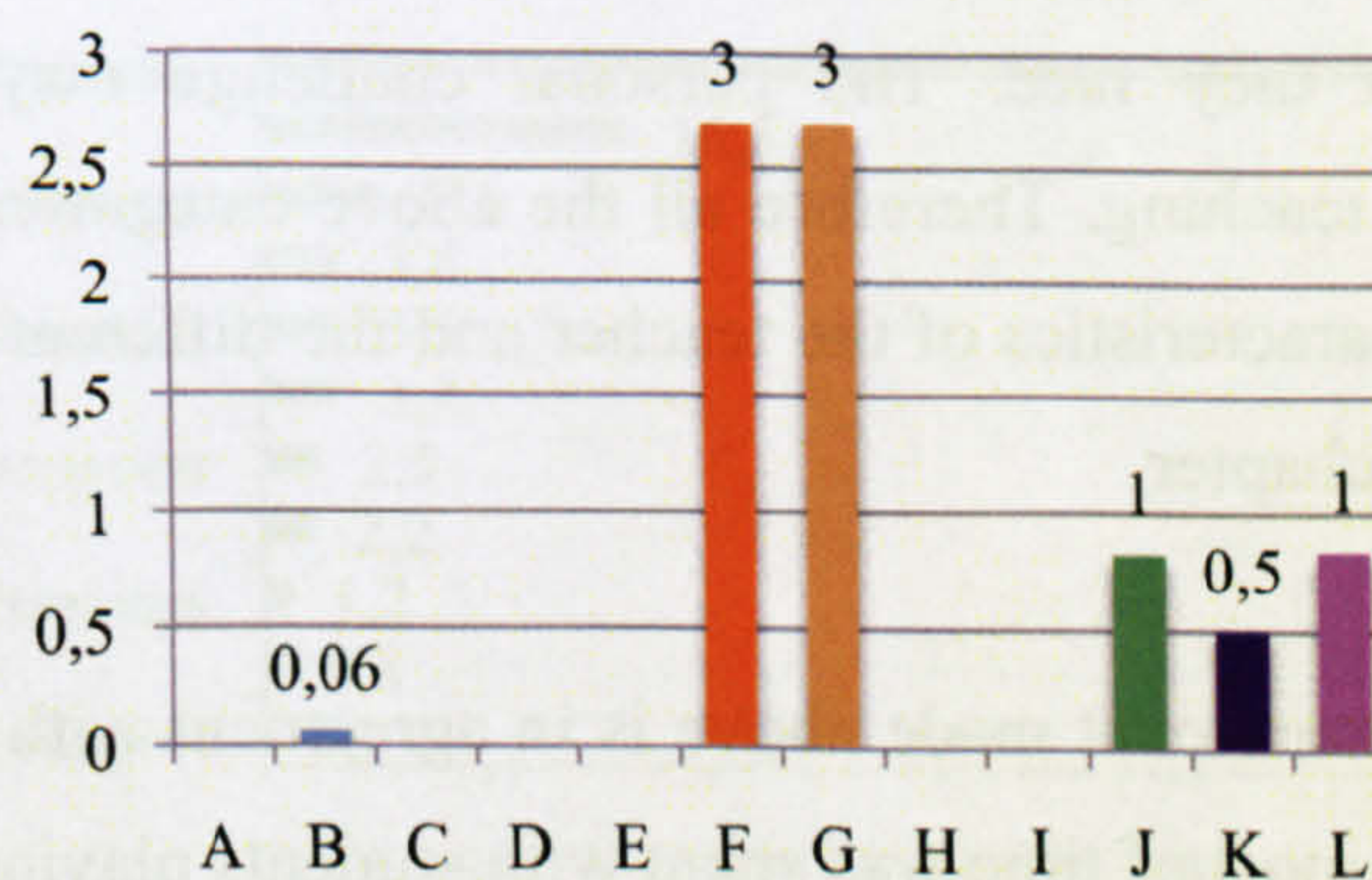


Figure 50. Time management by teacher for break in percentages.

The teachers that most interrupted their lessons were teacher F and G, followed by J and L. Most teachers, however, did not interrupt their lessons at all: A, C, D, E, H and I.

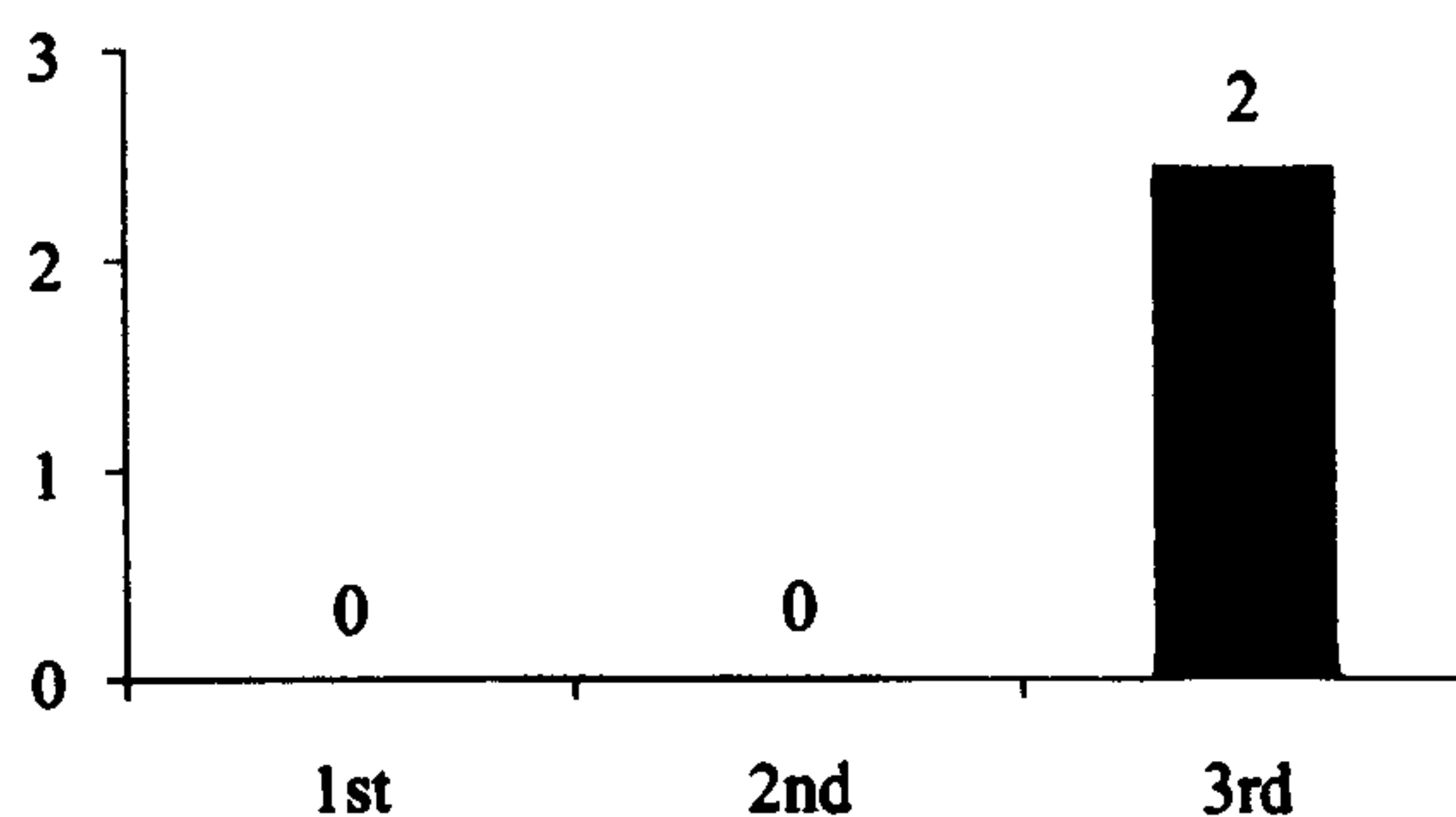


Figure 51. Longitudinal distribution of break for each teacher in percentages.

The last stage was the one where breaks were taken. The first two initial stages did not present this characteristic.

The above results confirm the variety of elements that are put into the development of a singer. Beyond the technical and musical aspects, a singer has to achieve standards of quality in fields of language and body expressivity that do not seem visible in the approach to other instruments.

Although all teachers are ultimately searching for the same goal: singing quality, high standard performance level, projection of individuality, their approaches vary widely in accordance to their own way of working or is accordance to the person/ student that they face. The personal challenge may constitute a major influential aspect of teaching. Therefore all the above categories will be observed in regard to the own characteristics of the teacher and the different students of the same teacher, later on this chapter.

The time measurement made above is in agreement with previous studies (by Kostka, 1984) where most of time was spent with students playing (represented above as repertoire). In what concerns social reinforcements the present study follows the same tendency of conversations using around 10% of lessons (Kostka, 1984: 120).

Again, in agreement to previous studies (Daniel 2006: 105; Speer 1994: 20) the teachers prevail in terms of time spending over the lessons. Although an individual quantification of lessons' matters was not used towards teacher and student separately, in the present study, it was clear that most of the speaking was taken by

the teacher. However, the category ‘conversations’ was associated for both elements and not evaluated individually for teacher and student. Therefore, a comparative analysis to Kostka’s study (1984) considering teachers’ dialogue will not be possible.

The above results show tendencies of teachers to follow certain behaviours that may project their style of teaching. For instance, teacher A showed a clearly different approach to the singing lessons. Whereas other teachers distribute their singing lessons more into the singing itself, this teacher had a more body oriented type of teaching as she scored over all other teachers on breathing, and body work. Unfortunately, this teacher could not continue the study after the 1st stage and will not be regarded in the longitudinal qualitative research, which could provide a clear type of teaching.

7.4.3. Most Focused aspects of singing

The lessons, in this study, were recorded in three different stages of the academic year. For each of the stages the matters have variances. In order to have a clearer view on the matters that have more time relevance, the following figure (23) provides an overview of all aspects of lesson in order of most time consuming until less used.

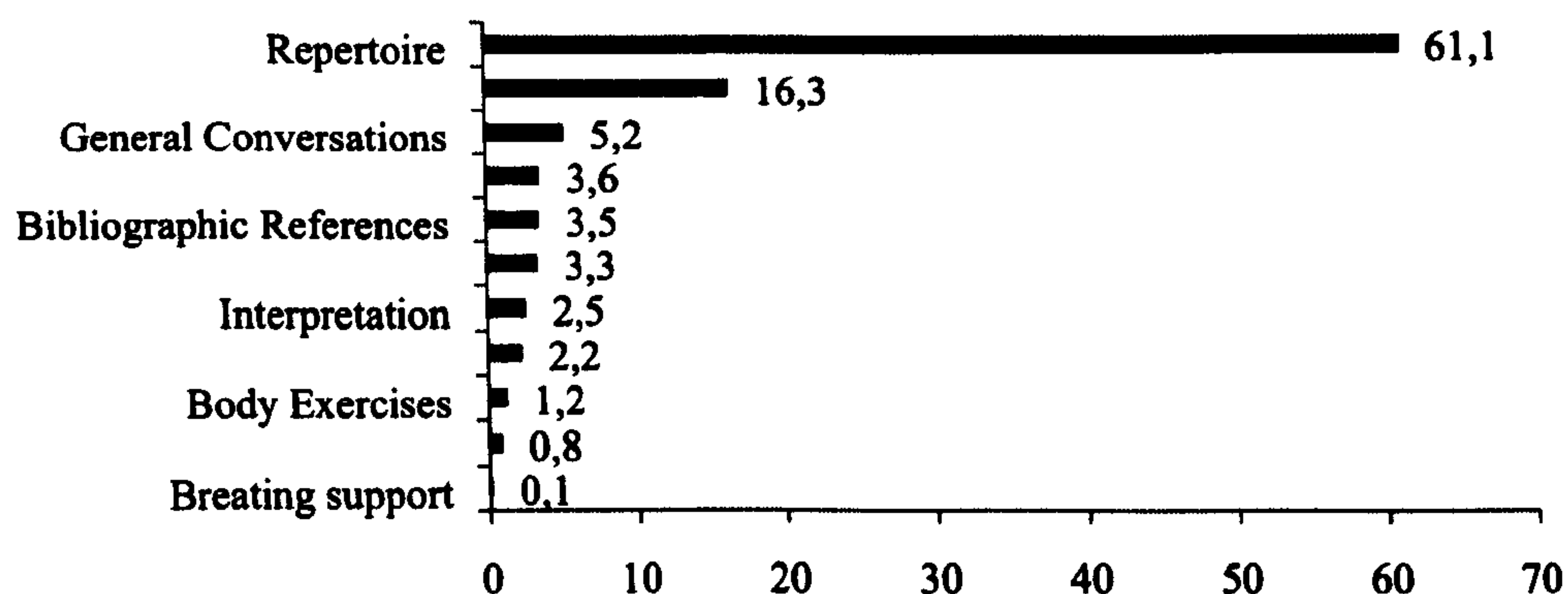


Figure 52. Time distribution according to each category of time management in lesson in percentages.

The use of time clarifies that repertoire occupies most of the lessons, followed by technical singing aspects. Singing lessons are clearly practical with over 3 quarters of the lesson being spent on direct practice of the instrument.

Interestingly, the indication that the third most used category is general conversations may indicate how important the development of the relationship between the teacher and student may be as this category reports the conversations that are not related with any singing task. All other categories are distributed in minor percentages under 4%.

7.4.4. Piano Accompaniment

The singing lessons vary between being one-to-one and one-to-one in the presence of a piano accompanist. Although in other instrumental lessons the presence of an accompanist is important, in singing lessons the accompaniment seems to have a reinforced importance. Very few pieces are written for 'a capella' and most of those are not included in the normal repertoire programme which automatically means that the pianists' presence is indispensable and that although lessons are called one-to-one (because the accompanist's presence is normally restricted to playing) there is in most lessons the presence of a third person.

The lessons that were not in the presence of a pianist were accompanied by the teacher. The following scale was created to evaluate the levels of piano playing in singing teachers:

High – Singing teachers who are able to play most of the accompaniment of the pieces and play harmony.

Medium – Teachers who play enough notes to give an idea of what the accompaniment is like.

Low – Singing teachers who play few notes and give every now and then a note reference.

The distribution of teacher by levels was as follows:

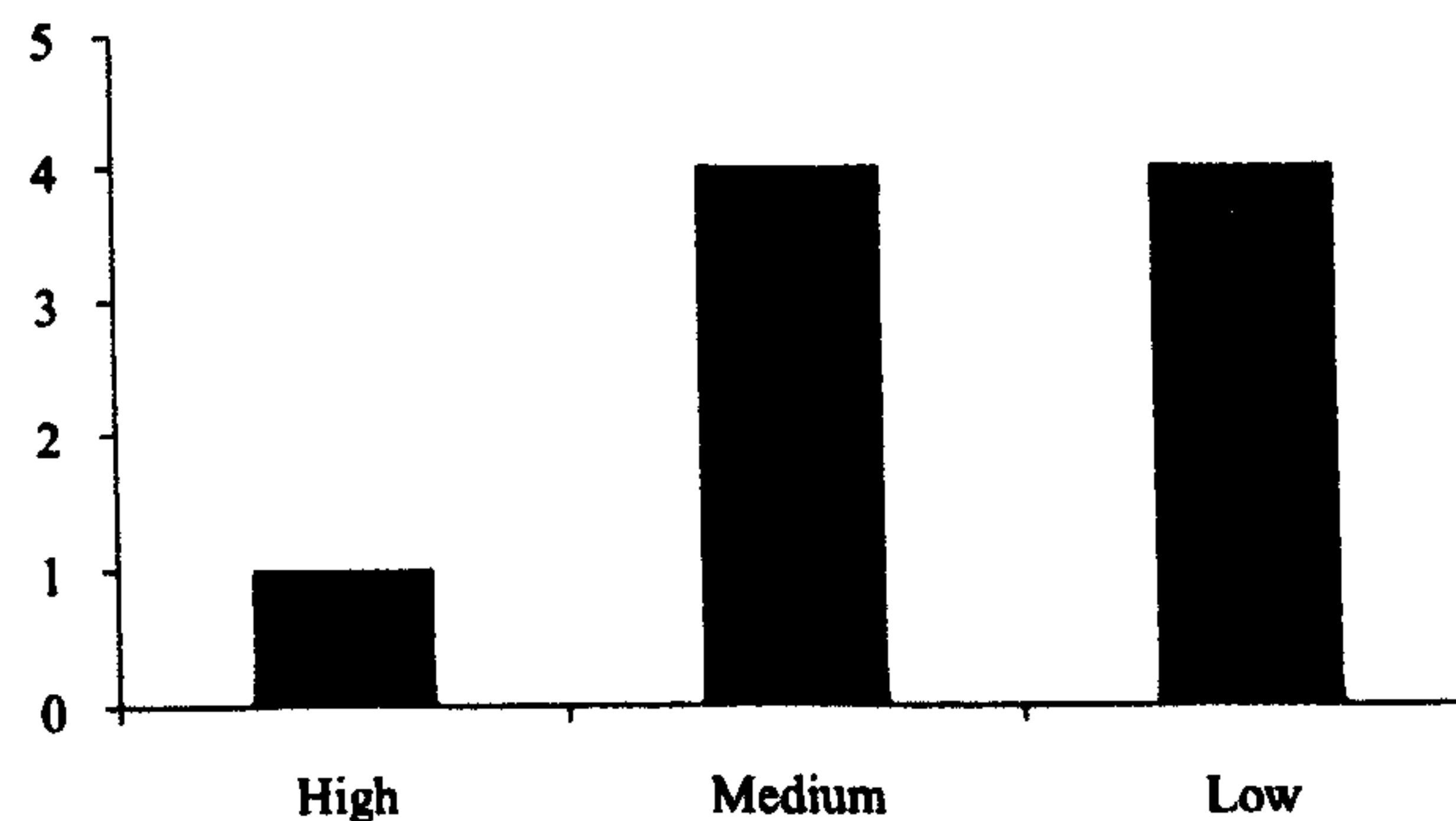


Figure 53. Singing teachers' distribution according to piano playing level.

In a previous study by Teachout (1997: 48) where the students ranked the teachers' skills and behaviours that best could provide successful teaching, the teachers' piano playing skills was ranked at the lower end between all skills indicating that students did not value that element. However, that study did not have any relations with singing lessons, where these values could, perhaps, be different. Considering the results from chapter 3, where the students expressed the important missing elements of the singing studio, the accompanist was considered indispensable. That result indicated a relation between the perceived teaching quality and the teachers' playing. Indeed, the presence of an accompanist was noticed as a particularly relevant element of the vocal lessons. Teachers' behaviour tended to be more closed and distant when having to perform various tasks, such as playing the piano, listening, teaching and often singing. The use of particular teaching strategies (presented later on this chapter) was also affected whenever the accompanist was absent.

7.5. Results of qualitative video observation

An integral analysis to the videos was made as well as a qualitative description. This study contains a large amount of data, which consequently implied a large process of time-consuming observation. For each lesson an individual report was made. The data from each report was then organized into larger longitudinal and comparative analysis between teacher-students' dyads. The fields presented below are an extraction and compilation of the written analysis for each lesson.

The overall observation indicated patterns of behaviour similar between teachers that were consistent with existing literature: feedback, verbal and nonverbal communication that is the basis for analysis. As the singing teacher-student relationship is difficult to dissociate from its purpose of teaching and learning, the solely evaluation of the relationship would be based on rather subjective measures. In order to overcome that fragility, all relational evaluations are made through the lesson's tasks and confined to the singing teaching/ learning interacting where both elements are involved. The next qualitative part will be sectioned in parts that describe both the relationships and the teaching/learning processes of singing lessons.

7.5.1. Teaching Techniques

The literature review (chapter 2) enumerated several studies where the strategies used by teachers (mostly in other instruments) are referred for the development of students (Burwell, 2005; Gaunt, 2008; Gipson, 1978; Person, 1996; Reid, 2001; Siebenaler, 1997; Woody, 2000). Each instrument seems to have its specific teaching techniques (Young *et al.*, 2003: 144). The teaching techniques applied to singing will be described on the next observational part that intends to clarify the singing teaching strategies used in the lessons observed. As the main responsible for the strategies of lessons are the teachers, the next part will focus on their side of the teacher-student dyad.

The teaching techniques identified in previous literature focused mainly on the use of the following categories: demonstrations (Hallam, 1998a; Purser, 2005; Siebenaler, 1997; Ward, 2004; Woody, 2000), trying out examples (Purser, 2005; Ward, 2004), examples of famous performers (Ward, 2004), and self-reflective learning (Gaunt, 2008; Purser, 2005; Young *et al.*, 2003). To these categories was added according to the preliminary observations of lessons the following: verbal transmission of own experience, imitation, physiological terms and metaphorical examples. Each of these categories will be described in more detail, next:

Demonstrations

The teaching strategy 'demonstrations' refers to the teacher using his or her own singing voice to exemplify the sound or interpretation to be followed by the

student. Other nonverbal signs that get to be established more accurately with time often complement these demonstrations. So, this strategy may be more effective when the relationship is well established, as the student tends to know better what is expected from the teacher's demonstration and those signs.

From the observations it was noticeable that as the relationship evolved, the type of demonstration' strategy was normally maintained but the complementary verbal descriptions decreased. The danger, in one hand is that by doing so, the student may misinterpret the aims of the performance but on the other hand, with the development of the relationship the student may become more aware of smaller nonverbal signs from the teacher used to complement the demonstration.

Although half the teachers (3 female and 1 male) from this study did not sing professionally (mostly due to their age), their use of voice on the lessons was maintained as an instrument for teaching. Other younger teachers also used their voices to demonstrate and there was little discrepancy between younger and older teachers in the amount of vocalizations used in lessons. However, the accuracy and efficiency of the demonstration could be considered, perhaps, as clearer in young teachers.

Teacher I presented her concerns regarding the exaggerated use of own voice over many hours for demonstrations but justified that often this process seems to be uncontrollable and unconscious. Also the use of this strategy was considered ambiguous as teacher 'I' also expressed:

'I wonder what my students feel when I sing. I often read in their faces 'yes, that's nicely sung but how do I do it?'' (Teacher I).

Another teacher reinforced the misleading risk of using this teaching technique in one of the lessons saying to the student:

'Sing not as I sing, sing as I tell you' (Teacher E speaking to student E18).

So, as said above this type of teaching technique seems to raise the need for other complementary elements in order to produce the right effects on the students. However, in opposition to that, student B8 mentioned not being able to work with a teacher of older ages as although their experience in singing may be richer, the fact that the voice does not produce clear demonstrative sounds was an impediment to her proper development. So, there is awareness from the students about which teachers may be more suitable towards their objectives and the teaching techniques are an important factor deciding the teacher-student match.

All teachers in one or more moments of their teaching used demonstrations. It seems that singing is brought a lot from the auditory sensitivity between teacher and student. Several teachers (B, E, F and K), interestingly all women, used this strategy as their main element to project singing intentions to their students. However, clear complementary elements were added in order to fulfill the specific tendencies of each teacher. For instance, teacher B complemented the demonstrations with verbalizations of own stage experience and teacher K mostly complements her singing with gestures meaning technique.

Other teachers who used demonstrations as their main instrument of work tend to use it in order to serve specific purposes. Teacher E used demonstrations mostly to transmit the inner sensations of singing and through emotions raise in the student the singing capacities whereas teacher F uses her many demonstrations during lessons mostly to provide phrasing and dynamics;

Between the teacher who use demonstrations in smaller amount (C, G, H, J), all male, teacher G used some demonstrations in a unique way: this teacher does not produce the actual sound (perhaps to save his own voice) but by exaggerating the indications and complementing with gestures (meaning technique) delivers to the students his vocal intentions. Teacher J justified his lack of demonstrations as a strategic way to save his voice from over use. However, perhaps unintentionally, he sung in diverse occasions almost as if through speech he would not able to express his teaching intentions.

For teacher C the small use of demonstrations was justified by feeling that he had stopped singing for long time:

‘When I used to sing, because now I don’t do much of it, I used to make this with my voice. Honestly, my voice worked today but sometimes it doesn’t. Today is a good day, today is a good day’ (teacher C).

As mentioned above, demonstrations seem to raise complementary tools in order to produce the right effects on students. Interestingly in the case of teacher H the use of demonstration was not complemented with verbalizations but rather the use of verbalization was complemented with demonstrations. So, to the conceptual demonstration was added the practical exemplification.

It was noticed in several older teachers an exaggeration of gestures in order to guarantee the accuracy of vocal demonstrations. Teacher K seems to be aware of her vocal age and the fact that the voice does not sound as clear as younger voices. She mentioned using her voice to allow a perception of vocal movements needed more than the expectation that the students would follow her sound and creating a background gestural language for reinforcement.

Imitation

Imitation was considered a distinct category from demonstrations because although teachers demonstrate without intending to be imitated, in some occasions the process involved in listening and reproducing sound is closer to an imitation than a vocal suggestion. This category also included the cases where the teachers imitate the students’ mistakes in a caricatured process and therefore giving the student a perception of their own singing. Regarding the use of imitation with an exaggerated intention, teacher F and I reported the following concerns:

‘I wouldn’t try to make the exercise wrong because it is much easier to get it wrong. I have to do that because I am imitating you and I am often doing things that are not good for my voice or I am practicing things that I don’t need. But don’t practice wrong!’ (Teacher F to student 21).

‘Sometimes I use my voice to show how the students are making a mistake. I do that and my teacher used to make it as well. How much of those mistakes are kept in own muscles/ physical or even psychological memory? We spend average 14 or more years training our voice to go to the right place. Let’s say we spend 20 years imitating student’s mistakes. How much of that will stay? What stays more? The right or the wrong practice?’ (Teacher I, in interview).

Obviously, this concern would lead into further research and discussions but this method is indeed well implemented in the singing lessons, and this concern seems appropriately raised.

Teachers who mostly use this teaching were teacher F and G. One identified difference between these two teachers was that teacher ‘F’ tends to use it without any other indication but by exaggerating made sure the student understands the point. This approach may lead into de-motivation if not used with the right self-confident students. Teacher G tended to complement that imitation with the right sound. So, by doing wrong/right singing teacher G seemed to be only indicating opposite options and not directly caricaturing the student.

Physiological terms

Physiological examples as an independent category is considered whenever teachers use muscle, cartilage, cavities and nerves description to explain the functioning of the voice, and through that, help students produce the right sound effects on students’ voices. Although the traditional approach to singing is being mostly used, some singing teachers seem to be approaching singing with more scientific references. From the present observation study it was noticeable more traditional teachers (C, E, K, J) using indication such as: ‘think forward with your voice’ (teacher K), ‘More space in the mouth’ (teacher C) and other more physiological and specific muscle teacher’ indicators (G, F) for the same indications: ‘Use the resonance of the sinus cavities’ (teacher F), ‘raise your palate’ (teacher G).

An example of more traditional teaching was, for instance: 'You have a tendency to put the voice in a wrong place, do this way (teacher sings to exemplify)' (teacher K) whereas teacher F when facing the same case responded 'Your vocal placement is wrong, try placing your voice on the foci by feeling more resonance on the mask' (teacher G to student 26).

Teacher F uses bodily exercises that project the repetition of the same movements and muscle habituation. This strategy, related to Brain Gym (Goble, 2006: 58), seems to be associated with the student trying out examples until experiencing the right use of own voice. The body seems, for this teacher, as important as the voice itself. A lot of attention is put into the body in the form of body movements, improvisation and relaxation exercises. This was the only teacher who performed relaxation massages on the students' back in order for them to free their body. Teacher F was included in this category because her knowledge of bodily exercises is strongly associated with the physiological theories. However, the transmission of physiological terms was not as strongly used as by teacher G.

In opposition to that, teacher G uses physiological terms in scientific verbal references. This teacher has a particular way to direct the flow of the lesson by through specific muscle and cavity identification asking the students to produce sound. The students of this teacher are expected to know all components of voice: 'Where exactly is located the palate and what is it used for?' (teacher G questioning student 24). So, although both teachers have a physiological tendency to teach, each have a specific approach, one being driven by exercises and another by providing verbal indications of terms.

Verbal transmission of own experience

Verbal descriptions were considered an independent category in order to observe how much of teaching is made recurring to verbalizations. In addition to that, the own experiences of the teachers' career seem to serve as important future teaching elements passed from teacher to student over generations. Most teachers prefer this technique as a complement to other more practical (try out examples), artistic (demonstrations) or scientific (physiological terms). However, the use of

verbalizations was by teacher C used as the main tool for teaching and contrastingly teachers G and F kept verbalizations to a minimum.

Teacher B uses verbalizations of own vocal experiences mainly in what regards the technical means. She expresses the process of sound production. Teacher H added the delivery of many interpretative and musical indications as well as working through the text of songs/ arias using verbal explanations. Teacher J also uses verbalizations as a strategy to develop the students' singing but rather tends to use it simultaneously to the students' singing and his descriptions go mostly around the sound projection.

On the other group of teachers (that express mostly own experiences), teacher E uses verbalization in the search for emotional and sensorial exploration:

'Sing in a stretching sensation', 'Sing it with passion and feeling and the wrong French will not be noticed' (teacher E to student E18)

'The idea of the gardens means: come to me...', 'trust the dramatic feeling' (teacher E to student E18)

This teacher (E) uses all the interpretative inner feelings as a way of letting the voice come on the right place. There is a kind of subconscious approach to how feelings affect the voice as well as into personal way of directing students. The lessons of teacher E are complemented a lot of career directives brought from own experience, through verbalizations.

Teacher C is who mostly uses the verbal strategy for teaching. He described all approaches, sound effects, technical elements of voice and musical inflections recurring to the use of verbalizations. This teacher seems to be very persistent in his approach to singing. Comparing with the other teachers, the method used by teacher C is much more time consuming as he uses speaking through all processes of vocal production without the students' singing. The use of the same strategy to solve all type of problems, as it was the case of teacher C verbalizing all vocal objectives, was seen by some of the students as the incapacity to use other methods, whereas other students considered that persistency as a positive indication that the teacher knew the

best for his students (students C11, C12, C14). Although the students were not responding to that approach, the same methods were kept. Often that persistency did not allow the student to sing more than 3 notes before getting back to the same notes over and over again. Unfortunately, teacher C was the only teacher considered in this study that did not return the personality test, which could prove interesting in this approach section. However, Teacher C described his own teaching as: 'I am not teaching you to sing but only tracking your brain to know how to use your voice' (teacher C to student 11). Similarly, for teacher F the process of letting the student experiment own voice and bring the necessary feelings from which the voice will be built from brain gym (through distracting the awareness of the students towards the processes undertaken). In both cases the teachers tend to dissociate from the students vocal awareness by verbalizing and not experimenting (C) or experimenting but not developing a conscious awareness.

The use of verbalizations on teacher G's lessons was kept to a minimum. Teacher G developed a specific type of communication (nonverbal) that lead into having the students following the indications without much verbalization. This type of teaching may seem quite confusing for an external observer. However, between the teacher and the students that teaching seemed effective and time saving. Although at the beginning of the relationship it seemed inevitably to spend more time (developing it) it became increasingly more effective to a point where teacher and student almost read each other's musical thoughts by looking at each other.

Metaphorical

The use of metaphors was considered as an independent category, although it is obviously part of verbalizations. This category considers the use of metaphors to induce the sensations on the student that ultimately produce the appropriate sound. Teacher A, considered the use of metaphors as an important method on her lessons and justified the approach:

'In my experience as a teacher I find it difficult to explain technique because the instrument is internal. It can be really difficult to let the student understand how to use it properly and what I am doing technically and internally. Going through sensations facilitates the process' (Teacher A).

Metaphors were generally used by most teachers and even by teachers who tended to have a more rigid approach, as teacher C. Metaphorical imagery was used as follows:

‘You sound like you are reading a shopping list. Don’t read a list. Rather make love with this words, mean the words, have an intergalactic affair with these words’ and ‘anchored to the floor and with ropes stuck to the sky’ (teacher C with student 11).

At this occasion, the teacher diverted the approach from being only technical into being more interpretative/ metaphorical. So, it seemed that when all other means of verbal approach were used the metaphors would bring through sensations the feelings needed for the right vocal production. Other teachers used this method during teaching as the following illustrations show:

‘The wave on the voice is missing’ (Teacher K to student 38)

‘You used to make a cheesy voice here’ (teacher B to student 5)

‘What excites you? Chocolate? Sing as if you are tasting it’ (teacher C to student 12)

‘Stretching kind of sensation on that phrase’ (teacher E to student 18),

The inner particularity of the vocal instrument seems to be strongly associated with sensorial effects. In that, teachers seem to find a possibility to facilitate the processes of vocal production by inducing the right feelings of students through metaphorical imaginary.

Trying out examples

This category refers to the physical nature of training the voice. The use of trials, repetition of the same passages until the voice produces the appropriate sound. This perspective of singing induces the lessons into becoming more as a training moment. All lessons had moments where the students were under vocal trial and repetition. However, some teachers tended to use that approach as their main strategy for teaching. A strong example of this was teacher F, who by making students repeat

many different exercises (normally, absolutely different from lesson to lesson) created a sense of new experience every lesson and therefore made the students be on a position of constant trial, correction, repetition. The teacher who better contrasted with this approach was teacher C who used for all lessons the same order of exercise sets. All students knew what is the exercise that comes next and what purposes they serve. So, by 'using them at home and by knowing the sequence of the lesson the vocal consistency would increase' (teacher C). Obviously, both approaches may be valid and produce results on the students but each might produce a better effect if matched with the appropriate students.

Examples of experienced singers

This category refers to the listening recommendations of singing teachers to their students in order to use experienced singers as role models for their singing techniques and interpretations. Several teachers used this category in order to indicate the goals of their requests. During the observed lessons teachers referenced other singers as a teaching strategy:

'I refer to the speed of coloratura as in the technique of Cecilia Bartoli' (teacher B).

'Have you heard Fischer Dieskau sing this lieder? Try using more variation of tempi (...) as he does' (teacher J)

'I strongly recommend that you find a recording of this with Victoria de Los Angeles' (teacher E with student 18).

The indication of singers seemed to serve all types of singing related skills.

Self-reflective learning

Self-reflective learning is defined as the strategy used in order to make students think about a preceding performance or student justify own decisions and through that developing independent thinking. In this category is often included the use of questioning by the teachers as guideline for that process to occur. The teacher that better describes the above is teacher B who mostly used strategic self-reflective learning in the sense that she offered indications to the students but throughout the lessons was always questioning in order to identify how conscious students were of

their singing and making the students develop their own independence. Besides the direct benefits for students' independence, teacher B also reported using this technique as self-defense of students who tended to be less trusting of her. In other words, whenever the teacher felt that the students did not believe in her indications, the process of thinking would be passed on the student by questioning:

'How did you feel singing this?', 'How do you think would be the best way to solve that?', 'Did that work?' (teacher B with student 6).

So, not only teaching strategies serve as tools for developing students but also as relational strategies of producing the right effects on the relationships and vice versa. Teacher B behaved differently regarding all other students by using less questioning but questioning was present in all lessons. Another example of questioning at trust levels was:

'How does that feel? All right didn't it?', 'Or are you just saying that to please me?' (teacher F with student 21).

Questioning seems to be associated with teaching but also with many relational strategic purposes where the teachers are

7.5.2. Singing Communication

The next section will present the characteristics of teachers and students regarding their use of singing communicative means. It was noticed that the variations of speech amount between lessons had normally a relational intentionality, a developmental necessity or was used to fill gaps of time. For instance, when students reported having vocal health problems, the lessons became more spoken and often whenever teachers felt the students' voice tired from the exercises it was noticed in the use of strategic conversations in order to give time for the student to relax. The verbal communications had also a relational intentionality whenever the teachers and students engaged in conversations regarding personal matters. That type of conversations seemed to be used in order to help teacher and student get to know each other, which could ultimately contribute to a better relationship. Another purpose of

verbal communications is characterized as part of feedback delivery and questioning which served the direct needs of singing lessons' strategy and development.

Besides the verbal transmission of knowledge, the singing lessons are strongly characterized by the use of other approaches as the use of nonverbal communication: gestures associated with vocal positions, sound movements and interpretative indications. The types of communication used in the singing lessons by the teachers and students participating in the present study will be described next.

Nonverbal, verbal and musical communication

Regarding the use of nonverbal communication, all teachers use a group of gestures related to their singing teaching or as a complement to their speech. That nonverbal communication is implemented, by the teachers, through an unconscious process starting at the beginning of the relationship by initially complementing that nonverbal communication with verbal descriptions. After several months, that secondary language becomes increasingly strong until in some cases substituting the teachers' verbalization. In the case of teacher B, the use of eye contact, which was more intense in the initial stage, seemed to function as the adaptive element to the teachers' nonverbal communication as in order to evaluate the reactions of the student; the teacher intensified the amount of eye contact. In this dyad the student, often, immediately performs the gestures of the teacher. That imitative reflection enabled the student to internalize faster those means of communication.

The nonverbal teaching strategies may be time saving, as by not having to stop the students' singing the teachers can still communicate singing indications. Additionally, several teachers (B, E, F, G, J, K) use verbalizations simultaneous to the students' singing which is also time saving. The indications by gestures or verbalizations simultaneous to students' singing tend to be referring to minor corrections. In the case of teacher F the gestures are not only a way to provide feedback/ indications but also a technical tool: by having the student focused on movements (hands and body) the teacher achieves the vocal freedom and relieves tensions.

Besides the use of conventional gestures for feedback: head nods (affirmative/negative) for instance, the teachers develop technical gestures that through repetition create an awareness on students and the capacity to respond without having to interrupt the flow if their singing. The gestures associated with the singing strategies for each of the teachers are identified table 31, next:

Table 31. Gestures associated with technical indications by teacher.

Teacher	Gesture	Indication
B	-Hand gestures	-Technical positioning and vocal vibrato
C	-Hand gestures -Conducting gestures -Pointing forward with forefinger	-Indication of mouth/ vowel positioning, -Tempi orientation -Pointing the forefinger – associated with negative feedback
E	-Facial expressivity - Conducting gestures	-Indicating the interpretation and feelings of emotions -Tempi orientation
F	-Hand gestures/ exercises.	-The gestures to be imitated by the student to provide the appropriate vocal movements.
G	-Precise muscular positioning gestures -Movements that indicate physiological processes	-Pressing the jaw with finger in order for the student to line forward the head. -Bouncing the head to indicate tension on the students' neck. -Use of facial expressions that indicate foci of voice/ projection. -Palm of hand movements indicating the raised/ relaxed palate and representations of the vocal instrument.
H	- Hand gestures -Pointing forward with forefinger -Clapping and foot tapping	-The gestures to accompany verbal communication -Pointing the forefinger for negative feedback -Tempi orientation.
J	-Facial and hand movements -Thumb up	-Indicating vocal foci and articulation of words, lips positions, and palate. -Musical articulation. -Delivers feedback by using thumb up
K	-Large round hand movements -Body movements	-Indicates technical points, energy moments of scores, flow of phrasing. -Provides emotional support to the students' singing affirmatively.

As presented above, most teachers use gestures meaning specific technical requests. The two teachers who were exceptions were teacher E and H who only use major gestures as a complement of their speech. That lack of nonverbal communication awareness was particularly felt in one lesson from teacher H where while student was singing the teacher started nodding 'No' with the head. In the lessons of some other teachers, that indication would make the students stop, but here the student only stopped singing when the tea actually started speaking.

Gaze

The singing teachers may be considered privileged in the freedom that the instrument provides. When the student is not reading from the scores, teachers have direct eye contact with their students, direct access to their body (which would not be possible with other external instruments). It was not unusual to see teachers interfering with the movements of the students' bodies by controlling their abdomen, jaw, shoulders while students were singing. That type of contact is often disturbed by the lack of an accompanist, which 'forces' the singing teacher to play the piano and therefore divide the focus of attention with another element.

It may be considered good practice that singing teachers play the piano, is able to accompany the students and provide the necessary harmony for the singing. That may influence the tempi variations, to which singing teachers may be more sensitive and provide musical communication between the teacher and the student. However, teachers who do not play piano at all, in institutions where pianists are provided, may actually prove more positive to the lessons. That was the case of teachers G and J that by not playing the piano and having an accompanist always present were in constant direct visual contact with students. Teacher H also did not play the piano, but approached the students differently. The student and teacher stayed around the piano facing laterally to each other. In more critical moments (when teacher asked something repeatedly) student and teacher faced each other frontwards eye to eye.

Teachers B, C, F, K had another type of availability towards the students as they had to play the piano in all lessons. Although there was a connection with the students, having to divide the attention with reading notes and playing clearly affected the lessons. In particular with teacher F the management of having to play the piano

was disruptive of the contact with the student. The main difference was identified with, during the technical part, most teachers looking straight to the student and feeling more free (as they would only have to play a note for each exercise of the student) whereas during the repertoire having to play the piano made teachers and students more apart. Interestingly, for teacher K the technical part had more eye disconnection as this teacher tended to face the floor or close the eyes while student sang and only occasionally look at student. That seemed to enable her to concentrate more on the sound itself. During the repertoire the teacher focused on the student when in the presence of an accompanist and to the scores when having to play the piano. So, the presence of an accompanist had always an impact.

Even when having to play the piano, most teachers tried to have as much eye contact with their students as possible by placing the piano forward or by looking in the eyes of the students when speaking. However, the eye connection during performance would be in most cases lost. The teachers with best playing skills (C), however, seemed to manage well the distribution between reading notes, playing piano, listening to the students, singing and delivering feedback. For teacher C (as well as for teacher F, above) there was a clear differentiation between technical parts of the lesson where the teacher would look straight to the student and repertoire part, where the teacher had to read the scores. An intensification of eye contact in repertoire was felt particularly in the first and last stages. The first as a focus of attention to develop nonverbal communication and the last when students had performances and both were working under pressure.

In most cases the use of eye contact enabled the teachers to have a clearer follow up of the students' movements and expressivity and by associating that with facial expressivity deliver feedback, interpretative ideas and constant support.

Posture

Teacher G tended to be always moving in the room (a big auditorium) but using the body movements and facial expressions of the students' performance, although his body posture is permanently relaxed: shoulders down and slow relaxed walk, hands hanging/ relaxed. Interestingly, the performance of the students would follow the teacher G to whatever place of the room he would be 'as a sunflower

would towards the sun' (student G28). So, the students were permanently aware of the teachers' presence on the room. The same moving approach was used by teacher J by moving all over the room, getting closer and far from the students. However, in this case the students tended to maintain a performance posture looking away.

Most teachers had a relaxed approach, which translated into having the students also relaxed. For instance, teacher B (with student B5) crossed legs in a relaxing posture while speaking of interpretation. The student responded immediately to that relaxed moment by following the same posture and by feeling more in synchrony with the teacher diverted the conversation into a personal problem. So, it seemed that the posture (nonverbal communication) of the teacher (in a moment of relaxation) was indirectly expressing the possibility for the student to approach the teacher and an opportunity to get into a matter that was disturbing the student. So, posture seemed to provide an indirect availability for the students.

It was clear, in general, that most teachers and students faced singing lessons in a relaxed manner. Particularly in the lessons of teacher B, E, G, J and K it was noticeable through the postures being relaxed: legs crossed, relaxed shoulders, amount of smiles/ laugh and use of touch that teacher and student were in the same relaxed 'mood'. Teacher E and student E18 for instance expressed that relaxation by, at last stage, both taking off their shoes. Perhaps an exaggerated relaxation might not be ideal for the benefit of singing. An example of this was the case of teacher B with Student B8 that by getting at ease with the teacher started singing seated (which is an uncommon position for a singing lesson). It seems that this request would not have happen in the initial stages where both were not as confident with each other. That was the only student during the research that was seated during singing lessons. Another element of posture showing a lack of interest was the student singing most of lesson with the hands in their pockets. So, although the feeling of easy environment may be beneficial, the excess of that may be, perhaps, counter-productive.

The opposite of that extreme relaxation was noticed in the lessons of teacher C, where the posture tended to be almost 'military'. The teacher used touch by beating the legs of the student using boxing kind of movements almost athletic with lots of strength on the body posture and energetic approach, touching the face and

shoulders while speaking in a short distance from the student. This approach seemed initially strong and tough for the student but as proven through the course of the year, the teacher approached students in different ways proving that adaptive means were one of his strategies. Particularly with another student (female) the approach was completely different. A gender establishment of this teacher's behaviour is not possible as he had all students except one from male gender.

Body proximity

Being the voice an instrument integrated in the body of the singer and in the teachers' body, it does not seem surprising that the teachers and students of this instrument tend to have closeness and use of touching in each others' bodies. Particularly the most approached places were all abdominal region, chest, neck, facial, back and legs. Teacher B, C, E, F, G, J, K used the above touching spots whereas teacher H did not use touching at all.

Several teachers (G, H, K) used occasionally a bigger distance from their students, which seemed to allow a vocal projection development that would not be possible otherwise. So, the use of distance between teacher and student should be managed in order for the student to receive in one hand the necessary personal approaches but on the other hand by having the appropriate distance being able to use more vocal projection.

The relationship established by the teacher and the type of teaching approaches used may establish closer or distant physical distances. For instance, Teacher F creates an easy physical proximity with her student from the beginning. Other than touching, massaging (back, facial and ears), evaluating the abdominal muscles of the student, this teacher provided the student with the freedom to touch the teacher during the teachers' singing. Although this was the teacher that most intensively used the physical approach, others followed the same touching identification. With teacher C the use of touching (facial and legs) was only observed at stages 1 and 2 where the technical work was more intense. Teacher G for instance, seems to believe in the effects of checking the abdomen constantly in order to evaluate the appoggio of the students' voices.

The appropriate studio conditions seem to strongly interfere with the flow of the lessons. For instance, teacher J always taught on big rooms except of one lesson. In all lessons, he would strategically use the distance between himself and the student to develop projection, move all over the room and make big gestures. In the lesson where the dyad was changed into a small room, the teacher stayed seating the all lesson, provided differently the feedback by speaking low and not making as many gestures. The same could perhaps happen if any of the other teachers had been placed in rooms with different characteristics. Teacher F, had a small room with an unmovable mirror place a corner wall. Occasionally the students would be facing their back to the teacher, the piano could not be moved in order for both seeing each other and that seemed to be conditioning the lessons. Particularly with that teacher (F) who had a very physical/ gym approach, a bigger room could have made a big difference.

Feedback

The communication of feedback happens (as explained in chapter 2) when the teacher reports or reinforces to the student what went right and/or wrong in a previous performance. Feedback is often characterised by its clear bipolar (positive or negative type of feedback) tendency, which will be considered in the observational analysis below. Furthermore, there will be a focus in how that feedback is transmitted to students following the observational, qualitative characteristics of this research.

Feedback does not seem to be a static element but rather an element that evolves together with the development of a student and with the teacher-student relationship. Following the evolutionary characteristics of feedback, the longitudinal differences between each stage of videos will be considered as well as a comparative analysis between different teachers. Also, in order to improve the depth in which feedback will be presented next, a categorisation was built over previous literature. The next part will report the cases of singing teachers and students in a descriptive and comparative analysis.

Delayed and real-time feedback

Besides the most used verbal and nonverbal communication types of feedback which are of most interest for this research, other tools are in use in singing lessons to

support feedback. These instruments seem to be of great importance and are used in many of the observed lessons: the delayed feedback (audio recorded, video recorded instruments) or real-time feedback (mirror, computer programs).

Several teachers advised students to use video/ audio devices in order develop self-awareness of performance (delayed Feedback). In fewer lessons 5 students included an audio device for recording the lesson to allow a later reflection of their own singing. In one of the cases (teacher B with student B5) the teacher offered the necessary equipments for the recording of lesson. The fact that the lesson was already being video recorded may have caused the students not videoing their lessons. However, video did not seem to be a usual practice.

In almost all lessons, the teachers provided mirrors for real-time visual feedback to students. The direction of students into looking to the mirror seemed to be in most cases automatic. Several times, however, teachers requested students to look into the mirror to identify tensions, unbalanced movements, posture and facial expressivity that seemed to be a recurrent strategy for singing teaching. In a total of 14 singing studios observed, 11 had a mirror either fixed on walls or movable. During lessons, 7 teachers referred to the mirror in order to explain certain aspects of performance, which accentuated the importance of using this instrument for work. The other more recent computerized types of real-time feedback were not in use in any of the observed lessons.

In chapter 3 students were asked whether their singing studios had all the necessary elements. From the 42% of student who reported having something important missing, the majority mentioned a mirror. Furthermore, several students mentioned the mirror, as an element that initially made them feel uncomfortable but ultimately proved to be very useful for their development. So, the appropriate conditions of the singing studio may contribute positively for the singing outcome of students.

Personal characteristics (dis) associated with feedback delivery

The tendencies of delivering feedback to students seemed to be in most cases associated with the personal attitude of the teachers. Regarding the use of feedback, the teachers are the most influential elements as it all depends on that them.

Teacher B always kept the environment of the lesson calm and relaxed. As a consequence of that, the delivery of feedback also was made in a smooth way. At the first stage of this research the teacher totally avoided criticizing the student, instead suggesting exercises that work as indications for the student that something needs improvement. The student tended to take feedback easily by only responding with singing.

Another teacher who followed that same type of behaviour was teacher G who was very soft in the approach to feedback: a gentle approach was demonstrated in the use of facial expressions and gesture representation of vocal muscles, cavities' shapes or by singing with the student in a low tone. This teacher also did not criticize and rather gave indications, seemed to have an endless patience and independently of how many times the same passage was done, this teacher stayed with the same strategy over and over again until solving the problem. In this case, although there was not a negative approach to the student, the limited range of approaches may have induced students to feel frustrated over time. However, that did not seem to happen in this teacher's lessons but was rather seen as 'the teacher knows what he is doing and that this was the right strategy for my voice' (student 24 when handling the after lesson report).

Although teacher (B) had only one student completing all stages, her sample had a total of 8 different students participating. The teacher's smooth approach generally produced on the students a sense of relaxed working environment that was translated into the students being motivated. One exception was the case of student B46 that presented as a reaction to that relaxation being uninterested, easily bored, singing seated and showing that the program had not been previously studied. That behaviour was in agreement with the students' personality that presented low scoring on (e1) being distant, (e3) reserved, (e4) not hurry and (e5) not interested in excitement. So, although in most students the feedback did not imply a direct impact

on the students' behaviour, in the case of student B46 those significantly lower values of personality may have facilitated the uninterested response, even though, the teacher kept the same posture, approach and types of feedback for this student as she did for all other students.

Another teacher who followed that same type of behaviour was teacher G who was very soft in the approach to feedback, demonstrated in the use of facial expressions and gesture representation of vocal muscles, cavities' shapes, by speaking and singing with the students in a low tone as well as imitating the students' mistakes with his own voice. This teacher also did not criticize and rather gave indications, seemed to have an endless patience and independently of how many times the same passage was done, this teacher stayed with the same strategy over and over again until solving the problem. In this case, although there was not a negative approach to the student, the limited range of approaches may have induced students to feel frustrated over time. However, that did not seem to happen in this teacher's lessons but was rather seen as 'the teacher knows what he is doing and that this was the right strategy for my voice' (student G24, interview). The use of mistake imitations could lead into hurting the student by exaggerating behaviors. However, this teacher's approach was normally controlled and the possibility of hurting the students' feelings much reduced as he does not exaggerate the performances. The students of teacher G reported trusting in the teacher's strategies and being satisfied with his feedback, which was apparent in the lessons and confirmed during interviews.

Teacher J also presented a positive attitude that was translated into the delivery of feedback. He seemed to take an in-depth personal approach when compared to other participant teachers. This teacher is empathic to students, positive, has sense of humor and is close to the students both physically and emotionally by approaching several matters of students' personal lives and therefore cultivating good relationships. His approach seemed to take particular care to the students' feelings. An indication of that was that before delivering any kind of feedback the teacher always said the name of the student and seemed to be aware of students' reactions to his feedback by reinforcing feedback ideas in a more positive way to keep students motivated. The students' reactions to this teacher were by one side positive and funny,

when humorous moments occurred but very committed to the lesson as a reaction to the teachers' effort.

Teacher K, an experienced female teacher who was referred in the interviews to be quite respected and loved tended to keep a maternal type of relationship with her students. The personal empathy seemed to enable the teacher to feel closer to the students and therefore free to make any comments regarding their singing. So, although this teacher presented feedback in a direct way, she always made sure the personal approach was careful in order to keep students close and motivated. This teacher seemed to have a protective attitude towards students, expressed in occasions where the students were less well. For instance, when the teacher was criticizing, she often indicated reasons that might be the cause of the student not being able to respond: 'the voice was so dry and separated, perhaps the cold outside is not helping' (teacher K speaking with student 44)'; or on another occasion, 'you are recovering from a cold. That's why her voice is not well today...' (teacher K speaking to and about student 38). The students of teacher K seemed to take this teacher in a very polite, careful way. Students reported feeling that the 'personal dialogues at lessons were a way to 'getting to know each other better and trust more at the teacher' (student 45, interview). Another student mentioned that having the teacher 'delivering many indications proves that she is a good teacher' (Student 38, interview). The respectful and delicate response of all students to this teacher was noticeable in the course of the lessons by the way students always smiled at teacher and always kissed her before and after each lesson.

The above teachers B, G, J and K had a positive attitude that seems to be translated into the feedback delivery. Their careful personal approach was also used into letting the students know what was being performed well or wrong with balanced care for the students.

On a less moderate perspective, teacher E was quite direct in terms of feedback approach. In most cases, this teacher simply indicated directives without explaining why, in a manner that some of the students perceived to be too cold. The teacher's justification for the straight directives was as a time management strategy and by getting results the students seemed to get the meaning of each request. Student

E18 also mentioned being happy with the teachers' 'prompt and sharp' approach. The teacher added the difficulties of adaptation to each of the students:

'With some students I can speak very directly and to some other I don't know when to talk directly to them' (Teacher E).

Although teacher E uses strict indications, the personal side of the relationship seemed to help balance the lesson. If feedback was to be analyzed alone, this teacher would possibly be considered as distant and not caring for the students' feelings. However, in the personal perspective the teacher used strategies of approaching the students that made her still seem comprehensive and fair. For instance, in moments where the interpretation was to be analyzed, this teacher included personal sensible perspectives, always started lessons with requesting an overall description of the students' week, which showed to care for the students. The students were very prompt in responding to the teachers' requests and seemed interested although student E18 clearly lacked confidence and mentioned in several occasions for instance 'I'm not doing well', 'I'll never make it'. In the last stage, the teacher questioned the observing researcher an opinion on this student's progress as a strategy to make the confidence of the student become higher before the exams.

Comparatively, both teacher K and E use their personal relationship balances the use of direct feedback. However, in comparison to teacher K, teacher E goes further by being firmer on students by not choosing as much the words and consequently being more direct than teacher K.

Teacher C appears as a 'hard to deal' (student 11, interview), very direct, prompt and fast in the delivery of feedback; seems to strategically evolve the student by in one moment delivering negative aspects and on the other compensating with being extremely positive when students achieve any small point. Here, it was not the personal approach that would compensate the use of a lot of direct feedback but rather the use of positive feedback to balance the previous negative feedback.

On the negative feedback, teacher C tends to stop in every single note to deliver feedback and not allowing the student to move onto the next note or phrase

until the correction is achieved. The teacher places himself on a superior level from the student, by not allowing the student to speak or deliver his or her own opinion and being demanding. He seems in his lessons to be the owner of all knowledge, speaks in an imposing way, shouts, uses 'don't...' and 'You've got to...' a lot. However, in an overcompensating way whenever the student progresses, teacher C turns into becoming over positive to create in the student the feeling of achievement and motivating the student. So, the extremes of this teacher's personal moods are reflected in the also extreme peaks of feedback delivery as well as in the personal preference of using only spoken directions as the means to approach the student. To this teacher, students seemed divided in terms of reactions. Whereas some students seemed to take the criticism, progressing and motivated (Students C14, C48, C49) others seemed confused, often showed signs of frustration and confessed misbelieving in the teachers' strategies (student C13, interview).

Teacher F is an active singer, busy and always on her mobile. She seems initially to be almost uninterested in the students' feelings. The way the feedback is generally delivered is straightforward, distant, without looking at the students (in order to regard the consequences of that delivery). The teacher did not seem to have a sense of strategic speaking to the students. Instead, everything was said straightforward. The teacher often did not seem to bother if the student was able to take that criticism or not. However, occasionally the teacher stopped the lesson just to ask how the student is feeling and to approach the resistance of the student to her feedback. So, there were periods of feedback delivery, and breaks for emotional evaluation from the teacher to student. The most frequent verbalizations included: 'That's so bad', 'I want to hear...', 'That's it', 'Look at the mirror', 'Don't...', 'Do that for me...', 'Not bad'. Often the words were not the strongest negative approach but rather the way that feedback was delivered in a strong manner. The students' however seemed to have maturity enough to take that feedback and showed to be motivated although confessed that they are aware of the teacher's busy agenda and lack of availability given to students. Student F21 confessed that this unavailability from her teacher taught her how to become more independent.

Also, on the more distant approach, teacher H who is an experienced, charismatic and humorous male singing teacher does not seem to prevent himself

from saying spontaneously whatever negative needs to be said. Although this teacher is funny (which could allow students to be more at ease), the distance between teacher and students is clear and the high respect from his students kept. The status of teacher-student positions is very clear in these teachers' lessons. Furthermore, the distance that is kept in the relationship is clearly transposed to the delivery of feedback.

This teacher (H) used negative feedback in a very direct way, but the same behaviour does not occur when positive feedback is delivered. This teacher has an indirect, formal and intellectual way of complement delivering to the student, as if appraisal needs formalities but criticizing may be delivered directly. For instance, positive feedback: 'That's the little thing that make you go to the other side (meaning quality)'; whereas for indicating something not going well: 'Don't...', 'that's bad', 'I did not like that', 'I did not like this part', 'Don't dark to much the 'o'', 'It sounds dreadful', 'I wouldn't separate so much', 'It's ok but...', 'It's not bad but...', 'Listen, I have heard better. I think that this is not well because you are doing...'. Regarding the nonverbal communication associated with feedback, this teacher has the habit of pointing up with finger when delivering feedback as if giving an order. However, that gesture (as it seemed to be frequent) did not seem to intimidate the students. In the case of this teacher (H), all students reported knowing well what to expect before starting the lessons with this teacher as he is well known for this 'demanding' approach and being occasionally being left alone.

In terms of personal approach to feedback, all teachers were consistent in using their preferred delivery to different students. For instance, teacher B by avoiding criticism; Teacher G, using low voice manners; J, using humour; teacher K, being maternal; E, being direct; teacher C, hard to deal; teacher F straightforward; teacher H, formal. The above approaches to feedback had obviously produced different effects on the students' motivation and trust on teachers (reported in the interviews). Most students showed to be motivated and happy with their singing teachers. However, several students reported that for their ambitions to be achieved they thought another type of teachers would be necessary, which indicated a dysfunctional type of relationship.

Amount of feedback/ interruption

In the majority of observed lessons, most of the time available was used for singing and the teacher would interrupt to provide the explanations to how to improve the previous performance when it seemed necessary. Most teachers approached the lessons with a general distribution of feedback that followed the pace of the students. The interruption of pieces was frequent through all teachers but taken naturally as a response to the students singing. For instance, teacher D in terms of feedback was quite patient by giving the student time to sing and letting the students often sing through several times the repertoire from beginning to end only referring feedback between pieces. Teacher C, presented a more extreme approach to the use of feedback by using in most lessons a lot more verbalizations than the students would sing. The most extreme case occurred with student C13 that got to sing about 5 minutes of one-hour lesson. This teacher had a concept of singing lesson that obviously was different from other teachers. Whereas others normally worked through the voices to make the students have the sensations of proper voice placement for instance, this teacher believed in delivering the tools and letting the students discover out of the lesson through practicing what was verbally mentioned in the lesson.

Another approach to feedback that was different from the majority of teachers was the cases of teacher G and J. These teachers were very consistent in not allowing the students produce sounds that would not have a certain quality. This implied an increase on the amount of repetitions and interruptions towards achieving the level required and would interrupt the students for each note that is not sung well. Teacher G approaches the students with care but persistently as the amount of repetitions and interruptions indicate. His approach is to stop as many times as needed and repeating the same strategy. There is inadaptability to changing strategy (as expressed above) but that seems to result over time with his students. Teacher J who is another case of over quality search associated with repeating the same passage until a certain level is acquired was constantly delivered feedback both verbal/ nonverbally and musically (by singing himself to explain). An indicator of this permanent feedback was that none of the pieces performed to this teacher were sung from beginning to end without interruption. The commitment of teacher J seemed to have positive outcomes on the students rather than putting them down. The students seemed to take the involvement

of the teacher as a way to express that he cares for them and the immediate results on the students' voices clarify that. It is often noticeable the projection, intonation and other immediate changes in the voice of students.

The approaches to feedback seem to be endless in what regards the personal, technical and pedagogical measures of singing teaching. However, the timings taken to approach the student are consistent in defining what teachers are faster to achieve improvement (Teacher G and J), those that are more moderate and follow the students' learning rhythms (A, B, D, E, F, H, I, K) until the other extreme of following a certain rhythm independently of the student (teacher C).

Positive - Negative Feedback

All feedback, no matter what aspects it refers to seems to have a tendency for a positive or negative pole. Whenever a teacher praises a student or enumerates the good aspects of a performance positive feedback was considered and when a teacher requests improvement of certain aspects of performance or defines what went wrong it was interpreted as negative feedback.

The teacher participants of this study presented tendencies regarding the use of feedback. Whereas teacher A, B, I and J present in most cases positive feedback prior to delivering negative feedback in order to prevent hurting the student with criticism other teachers tend to deliver a more direct type of feedback by saying the negative feedback and occasionally using positive feedback whenever the performance achieves a certain quality but not as a motivational strategy.

As shown above the verbal feedback delivered to students had specific characteristics associated with the type of teaching preferred by each teacher. Regarding the positive/ negative feedback poles the same correspondence was found. So, for instance, teacher B who was generally in a positive mood would always praise before recommending anything to students in order to minimize the negative impacts of criticizing. That behaviour follows the recommendations made by Hallam (2001: 62-63) and Cencer (2007: 32) who defended balanced positive-negative feedback in order to keep students optimistic about their learning processes.

Although teacher B uses this type of feedback behaviour predominantly, it suffered alterations as the relationship evolved by diminishing the amount of praise and getting faster into the recommendations. This teacher seemed to develop in the students over time a sense of security that allowed her to move more quickly into the necessary amounts of negative feedback. Although the positive tone was always present (even when students clearly showed that they did not study) this teacher managed to evolve the students in a positive way into developing but getting more and more used to being criticized. A more detailed longitudinal observation will be made later on this chapter.

The use of positive and negative verbalizations were characterized by the following expressions for negative feedback: 'you have to...', 'you have to make sure...', 'you need to ...', 'I think that you should...', 'Now do it again', 'Try to achieve this ...', 'And again..'. For the positive feedback the most used words were: 'yes, exactly!', 'Yes, yes', 'that's better', 'that's really what you should practice'.

The care for the students' feelings (in teacher B) seems to be so strong that the teacher keeps the balance between positive and negative (suggestions) unstopped. This teacher seems to adapt to each student by being more at ease with some students than others in letting them know what needs improvement but works through all aspects with positivism.

Teacher C, on another perspective, delivers mostly straight negative feedback to students. This teacher has a unique way of teaching singing, which is characterized in terms of feedback poles by delivering all the negative aspects until the students' limit. Then, the teacher normally backed up from criticizing and started praising every little achievement of the students. That positive section of lesson seemed to make the less experienced students feel good but one more experienced student confessed being confused and mis-believing in the teaching: 'At one point of the lesson I started thinking that the teacher does not have anything else to teach me as he always tells me how good I am doing' (student C13).

Another teacher who tends to deliver negative feedback until a limit point is teacher F who by getting involved with the conceptions of singing through exercising

and brain gym often leaves the students unchecked for reactions to feedback. The type of feedback of teacher F is also mostly related to criticizing, suggesting means to improve the singing and suggestions. Instead of continuously delivering and checking the reactions of the students, this teacher at certain points of the lesson stops to evaluate the students' responses to her feedback investments.

Teacher E tends to develop close relationships with the students which seem to enable her to being seen as a friend and feeling more free to deliver all types of feedback. That relational strategy is mostly based in staying in touch with external matters of each other's lives and careers. That strategy seems to enable the teacher to comment more freely the performance to the students knowing that their feelings will not be hurt. Although all positive and negative feedback seem to be delivered spontaneously, this teacher appears to be quite aware of the students' responses to her feedback.

Although teacher E seems to manage well the delivery of feedback she confessed:

'Another thing that is complicated is when to support them and when to through something at them to get it right' (teacher E).

That statement from teacher E raises the sense of teachers' necessity to have clear notions of when students are not able to produce something and therefore teachers are requesting to much and when to push students into developing something that they are able to make but simply not producing. That management skill may strongly benefit the development of a student and strengthen the teacher-student relationship, as the teacher does not request from the student other than his/her possibilities.

In opposition to teacher E, teacher H does not seem to regard as carefully for the students' reactions. The choice of negative, positive or even the words used do not seem to follow any strategy or care for the feelings of the students. The students of teacher H seem to already expect this type of speech. So, all feedback is delivered spontaneously, directly and often complemented with humor. This teacher gives in

most cases direct orders and delivers feedback to more than one aspect at each time. Teacher H is very meticulous in the pronunciation of text so there are often interruptions for the correction of that matter. Teacher H is one of the teachers who seem to be usually marked by the students as hard to deal with in terms of feedback, as he tends to deliver straight forward all aspects.

In the case of teacher G, the fact that this teacher rarely uses negative feedback seemed to have a strong effect on the student. Normally teacher G makes suggestions to what needs improvement. Whereas for other teachers the use of negative feedback is recurrent, in this case the same words seemed to be taken by all students in a much stronger sense. For instance, when the teacher expressed 'you are doing ... wrong' the student immediately responds by asking permission to try again. The use of this type of feedback seemed to be strategically made and produce clear results in the responses of students.

Although teacher J does not seem to measure positive and negative feedback, as he delivers all aspects of singing in a positive, happy way, the lessons' mood is initially kept high. However, if the verbal expressions would be taken alone, all should be considered as negative feedback as the teacher is constantly indicating measures to improve performance without regarding any appraisal. Extreme criticism included, for instance: 'You sound like a crocodile', which did not seem to get the student any intimidated and rather seemed to push the students to be sharp focused and was used as a last resource with student J35. So, beyond the tendencies of positive and negative feedback one important factor to take into consideration seems to be the ways the feedback is delivered and how do teachers prepare the students for that feedback.

Teacher K had a particular approach to feedback, as it would vary according to the stage of the lesson. The teacher normally started the lessons by mainly giving indications of what needed improvement. During the technical part teacher K gave mostly indications in a short manner without praising or criticizing. For instance, the following expressions were used: 'think higher', 'more resonance', 'that's ok', 'more vibration in the voice', 'too much'. Then, the teacher would start settling down and criticizing all aspects straightforward. Although there are a lot more negative

feedback implied, this teacher concluded each exercise with an appraisal and letting the student know how much better he/she made something. So, there would be always a compensation of the negative section with an appraisal. Another differentiation noticed was during the technical part this teacher was more demanding, using mostly negative feedback as if in that part the student was expected to achieve more easily her requirements and during the repertoire part that behaviour would be different by allowing the student more space to grow in several aspects and being more patient and positive.

The use of positive/negative poles of feedback delivery seems to have clear effects on the students' outcomes. Obviously, the content of that feedback has the most influence on the singing results but the strategic treatment made by the teacher to produce results also seems to be influential. For instance, teacher who balance positive with negative feedback seem to be able to motivate the students at the same time that negative aspects are being worked. Teachers who use excessively positive feedback were seen by the students as less capable to analyze the necessities of the student or unconscious. On the other extreme, teacher who excessively use negative feedback seemed to produce in more experienced students the results needing improvement but less experienced students could be driven into being less motivated. In the case of teachers who were inclined to using a lot of negative feedback some students reported having been informed of that particular tendency prior to starting that relationship by other colleges or by the head of studies.

As seen in the characterization above, the feedback may have several impacts in the students' attitudes and interpretations. On one hand, positive feedback is essential in order to get the students motivated but on the other hand (as in the case of student C11) the excess of positive feedback made the student feel that the teacher was not challenging or seeking higher objectives.

One important factor to consider in the characterization of positive and negative feedback is that although negative feedback in analyzing solely the words may have a negative tendency, there are teachers who use it with clear negative attitude and others that use negative feedback in a positive manner and therefore diminish the impacts for motivational purposes. This was the case of teacher J (above)

who delivered negative feedback in most cases and kept repeating the same phrases endlessly but by complementing the feedback with humor would achieve the necessary improvements; teacher K that kept concluding between sections with positive feedback; Teacher B that would balance between positive and negative feedback would be by doing such sure that the students were affectively balanced and take the criticism well. Other teachers C and F that would use mostly negative feedback without the previous care also demonstrated that in determined moments of the lessons (normally by stopping) would evaluate how the students are feeling.

Communication of feedback delivery

The nonverbal communication used for feedback happens in many moments of the lesson. As it does not require the interruption of performance, many teachers use signals to provide indications. These signals seem to be developed over time between the two elements although the biggest clear contributor for the development of nonverbal communication seems to be the teacher. Simple movements, expressions and actions such as smile, head nod, upper thumb, body posture of the teacher are indicative of good performance, whereas wrinkled face, head nodding or teacher's conducting the tempi are often indicators that something is needing improvement.

The nonverbal communication goes beyond the direct indication of right and wrong and teachers use nonverbal communication in order to indicate muscles, inner movements, resonance, and location of placement of voice that although are possible to describe verbally are normally preferred to be indicated. For instance, teacher K whenever wants the students to use their palate makes a round movement over the head indicating the necessity of elevating that element or whenever the student is going out of vocal placement points to face as referring 'the vocal mask'. Such gestures/ movements indicate to the observer that there was a previous work of coordination between teacher and student in order to know what the gestures mean. In some occasions the teachers complemented the gestures with verbal communication, which in future occasions may lead the student into knowing what is expected solely from the gesture.

The longer processes of delivering feedback were made recurring to verbal communication. For some students, this type of feedback expression may prove more

effective and accurate as the teachers tended to become more detailed through verbalizations. Although for some students it may be more accurate than using nonverbal communication, the use of verbal feedback is more time consuming as it prevents the performance to proceed. Some teachers also delivered minor verbal directions simultaneously to the students' performances. In the present study teachers C, E tended to avoid that simultaneous verbal feedback approach whereas all other teachers in some occasions used it.

The use of short verbalizations in order to keep the flow of the lesson was expressed in the lessons of most teachers. For instance, the following positive expressions were used: 'yes, yes', 'good', 'yes, good', 'right', 'well done', 'much better', 'ok', 'good', 'not bad', 'that's it', 'right'; And the following correcting expressions: 'again', 'and again', 'don't', 'no', 'once more', 'that's ok', 'too much', 'listen'. It was noticed that most short expressions were associated with the delivery of positive feedback whereas for the negative feedback teacher would normally engage in longer verbal communication. For instance, with teacher K the use of short technical verbalizations: 'Think higher', 'more resonance', 'vibrate', 'too much' in comparison to repertoire longer verbalizations that would require an interruption: 'If you don't mind...', 'we could make this part...', 'No, you're rushing, do...'.

Another strategy used in verbal communication of feedback was the case of teacher J that strategically used on his spoken voice many coloring effects in order to create different expressions and therefore evolve the students. For instance, when he needed the students to get focused he used a low quiet voice reinforcing the importance of the speech; often sounding as an infant storyteller in the way the voice is colored; getting in other occasions higher and reinforcing the feedback with an intense emotion.

In terms of verbal in comparison to nonverbal communication it was detected that most teachers had developed a strategic way of communicating with their students. Teachers and students used expressions that served their needs but could not be considered as scientific. For instance, when teacher K asked the student to 'yawn' she did not exactly mean that the student would yawn during performance but rather that the palate should be elevated; single word directions used lead the student

into moving certain muscles and achievement without having to stop the performance and being therefore more time effective. All these processes seemed to have been previously explained.

In terms of time management the most effective way of communication seemed to be nonverbal communication which by having developed a list of gestures/movements such as seemed to (in most cases) effectively produce an accurate result on the students' performance without an interruption. Most of nonverbal feedback was related to technique through gestures, movements, head nods and hand movements. The nonverbal communication seemed to be in development with some young relationships (when teacher complemented gestures with verbal explanations) and already acquired with students who were with same teachers in the previous year(s).

Teacher G, J and K tended to use short verbalizations almost simultaneous to the performance that would increase the speed of feedback. For instance, teacher J often uses his own voice to exemplify seems to be focused in every moment of the lesson using gestures, vocalizations, movements. This teacher keeps walking, suggesting and conducting during students' performance. His body movements and facial expressions show that he is always focused in the lesson and with the student. Teacher J uses a lot of head nods, thumb rising, bouncing, beat marking. So, there seems to be an association between the rhythm of the lesson, and the rhythm of feedback.

The use of musical communication was implied when teachers would use musical exemplification isolated from verbal or nonverbal communication. Although this method may seem imprecise in its purpose, teachers and students seemed be able to understand the objectives expected from each others' performance. Regarding the use of this musical communication applied to feedback, most teachers (A, B, C, D, F, G, J, K, L) used the own voice to exemplify the right production of sound. Although the type of timbre, age and gender were in many cases different, teachers seemed to believe in the use of this method to work with sonority, technique and interpretation.

Above all, it seemed important to notice in the delivery of feedback that independently of using verbal or nonverbal communication to deliver feedback, most teachers seemed to adapt their preferred type of feedback to the interpretative capacities of students. So, for instance, teacher C always used the same inflexible approach to all students by preferring to deliver verbal communication, interrupting the students' performance and approaching all problems with the same verbal method. That attitude may have its benefits by letting the student always knowing what to expect but will also have a reverse in preventing the students from exploring other means of communication and not using time management more effectively. Teachers B, D, E, G, J and K presented more diverse approaches dependent on the students and that seemed to provide more opportunities for students' perceptions. Another extreme example of feedback providing was the case of teacher I who although would vary between several methods and approaches, would have students often confused and not knowing exactly what was advised and questioning the teacher to repeat the recommendations.

In sum, the effectiveness of delivering feedback does not seem to be associated with using many approaches or a single one but rather by adapting to the specific needs of each student and providing the most varied and complete means of achieving knowledge acquisition as possible. Teachers tend to use nonverbal communication for shorter delivery of feedback and verbal communication for longer for more detailed feedback.

Longitudinal feedback analysis

The next section will include a description of alterations observed throughout the year as well as stable behaviours regarding feedback.

Teacher B, seen as constantly aware of the students' feelings by completely avoiding criticism, started at the second stage to interrupt more frequently than in stage 1. It is noticeable that the confidence between the two elements (teacher and student) has improved enough for the teacher to know that she is able to approach the student with suggestions more often. Although the frequency of interruption has increased, it is also noticeable that the teacher kept the feedback approach by always

delivering something positive before criticizing, therefore ensuring that the feelings of the students were protected.

Another element of differentiation was that initially the teacher tended to give only indications of what the student needed to improve whereas at 2nd stage the teacher described what needed improvement as well as telling the student what went wrong. So, at second stage, not only the teacher suggested what needed improvement but also described the negative aspects of the performance. Often that indication was made recurring to the teacher imitating the students' mistakes with her own voice, which did not happen in the first stage.

Teacher B also augmented the positive feedback and new words were included: 'good', 'better', 'that's it!', 'yes keep that', 'gorgeous'. New words for negative feedback included: 'make sure you...', 'a bit more of...', 'Don't...'.

At the third stage the teacher already felt the need to criticise directly the student. Negative feedback was mostly in the technique and much less in the repertoire part. The students seem to be progressively adapting to what the teacher suggests. At last stage it was clearer that the fear to hurt the student's feelings was now disappeared and the directives were said straightforward more than in earlier stages. Normally, this teacher would repeat as many times as needed the same directive. At this last stage, the teacher changed that behaviour and tells the student that it is not the first time she is repeating the same directive: 'Again, it is just ...' which in previous stages did not happen regardless of how many times the teacher had mentioned the same things. The development of relational confidence or the proximity of last terms exams may be imposing different behaviours from the teacher.

At the last stage there was also a decrease of positive feedback followed by negative. The teacher keeps the pattern of delivering the directive (what to improve) followed by the negative feedback. It is apparent that the teacher is more at ease with the student and it is obvious that the pressure of exams is demanding straightforward measures now: 'That was slightly sharp' would not be used in previous stages the use of careful words was 'try to sing higher'. The expression of what needs improvement comes first now and the explanation of what to do comes at last which is the first time

that this inverted behavior happens. Regardless of these small nuances, teacher B is normally consistent in the approach of feedback to student throughout the academic year.

Teacher C, in a longitudinal perspective, presented the most consistent behaviour through all stages by using the same feedback methods and approach. The most noticed alterations occurred normally within the same lessons by delivering in some moments excessively negative feedback and then turning into the extreme opposite. The hardness in the negative feedback seemed to be an acquired aspect of the lesson and students seemed to be increasingly less responding and aware of the shouting. For instance, the use of hard words and repetition of same aspects by teacher C produced a feeling of frustration on student C11 who at one point seemed disconnected and not happy to continue trial over the same aspect. The teacher immediately backed up by saying 'you are getting there' and going back to saying what needs improvement. Dealing with negative feedback seems to require sensitivity skills in order to produce a positive outcome and not lead students into frustration. By one hand this teacher expresses his disappointment to the student by blaming:

'Hang on, that's not going to help you', 'you lost it because you went somewhere else there' (Teacher C speaking to student C11).

On another hand, in the next moment the teacher would compensate with high amounts of positivism. Some of his most used phrases include:

'It's getting there', 'Much, much more improved', 'Yes good', 'much, much better', 'real good', 'right', 'well done', 'That's good' (Teacher C speaking to student 11).

The turns from excessive negative into positive feedback seemed to show that this teacher is aware of the students' feelings, however, this student later confessed that it made him misbelieving in the teacher when all positive feedback was delivered as if the teacher would not have any comments over the singing.

Teacher C had both inexperienced young students and experienced students. The effects of his feedback behaviour were clear in comparing experienced with younger students. Although younger students would become increasingly frustrated, experienced students would fight for achievement and seemed to use that criticism directly to improvement. The teachers' inadaptability seemed to be causing in younger students a lack of development but rather good effects of other more experienced students. For teachers who personally have a tendency to be more criticizing the balance between positive and negative feedback may be more crucial particularly with young inexperienced students who may not have the required strength to develop. So, it seemed that either the teacher was not adaptable to students or the wrong younger students were chosen for this teacher. Teacher C in longitudinal terms gets into the same cycles of extreme negative and positive feedback but does not reveal evolutionary characteristics over the academic year regarding feedback.

For teacher E the longitudinal delivery of feedback was associated mainly with the development of the relationship. Although this dyad was always under pressure because the student had in two of the three stages coming performances, it was noticeable that the relationship between teacher and student developed into being more free talking. At the first stage the teacher approached the student by being more careful than in the second stage where she felt freer to express for instance:

'Now when you are performing this tomorrow, with luck there won't be any French speaker in the audience'! (Teacher E with Ironic Laughing).

'I don't care how you breathe as long as you play the role of Charlotte'
'I am not saying that is right but I rather have you singing with the emotions and the French not so well rather than having you sing with perfect French and no emotions. I am not saying you are getting away with it but rather what you have to do 24 hours before'.

The external performances may have pulled the second lesson's rhythm higher. It was noticed that the pressure of this concert made the teacher more active

and focused by stopping the student more often than in the first stage. At the last stage the proximity from final recital presented as well a differentiation in the feedback by including in the lesson more pieces than normally. However, that pressure did not seem to influence the lesson as it did in the second stage. At third lesson the teacher uses her own singing much more than before. There, it was noticed that the teacher was approaching the feedback with more detailed quality search by not mentioning basic technical needs but rather going through more interpretative, emotional and 'decorative' matters of music and seemed to feel the necessity to give the student self-confidence and sense of accomplishment. Another indicator of that accomplishment is the fact that at this stage the teacher would wait until the end of each piece in order to provide feedback, which was not so visible earlier. Although that differentiation was found the way the feedback was provided was still direct but making as much as possible the student feel motivated.

The approach of the next teacher (F) had a strong longitudinal characteristic as it seemed to progress into developing in the student a sense of self-evaluation. Teacher F had an inverted approach to what most teachers do. This teacher starts the relationships by 'attacking' the student in terms of feedback and from that initial approach relaxes and starts working in a more positive approach. So, at first stage a straightforward way of speaking is made by delivering all the necessities of improvement whereas at the second stage the teacher backs up by giving a more positive approach and at third stage it is the student who self-criticizes her performance and the teacher defends the positive aspects of the student's singing. That increasing positivism could to be associated with the fact that the student's career appointments had several important concerts coming and the teacher would be softer. That behaviour enabled the student to acquire skills of independence and the relationship into a more ease and relaxation. The evolution of the student might justify that approach at later stages. Although this teacher had several students being analyzed, this was the only student who completed all stages of videos. The comparative analysis had therefore some limitations but regarding students who completed two stages, the same growing adaptability to students occurred.

The smooth approach to students used by teacher G was characterized as well as in the personal approach by the use of few verbalizations during the technical part

at all stages. This teacher normally spends all technique without any verbalization using facial expressions or imitation of the students' mistakes but inverts that behaviour in the repertoire. At the second stage teacher G added few words at technique such as 'once more', 'again' and started using positive feedback before delivering negative feedback. Also, at the second stage the imitation of students' singing gets more like a caricature imitation of what went wrong in the previous performance. So, an accentuation of negative feedback has been developed. The amount of continuous singing increases and by the last term the students get to sing many pieces without interruptions although the teacher keeps delivering feedback through nonverbal communication simultaneous to the performance. The teacher used a lot of gestures meaning technique as a way of avoiding to stop the students and the pressure of exams is noticeable and that the teacher needed to get a wider perception of the all piece and by being more positive showing with own voice how to sing 'More like this' seems to invest more in the self believe of students.

The longitudinal points of differentiation found at teacher H's lessons between the three stages are mainly related to the fact that the teacher relays increasingly more at the student's options. Whereas at the initial stage the teacher would be always referring to pieces and giving feedback regarding the repertoire, at the last stage the students shown that this responsibility was already theirs and that the teacher had build through feedback the responsibility and independence to make their choices. One other factor contributing to that might be that both students from this teacher are already working professionally on demanding careers. At stage 1 the teacher delivers many references to students and treats them from a superior level. At stage 2 that treatment becomes more as a recommendation, giving the student choices regarding interpretation, sound and musicality and at the third stage the feedback given always relays over the choices made by the students. The verbal communication also suffered alterations. At first stage the following phrases were used: 'Don't...', 'that's bad', 'I did not like that', 'I did not like this part', 'It sounds dreadful'. At the third stage the feedback were almost as recommendations: 'I would not do this in here', 'I would make...', 'I think...'. Another point of longitudinal differentiation was that the teacher at second stage seems to intentionally and strategically give time to the students' voice to relax between scores. The teacher used the delivery of feedback to allow the students time to speak about matters needing clarification and recover the

voice. At this stage the teacher seems more sensible to the students' vocal needs and the students seem to be more relaxed. Although at the initial stage teacher H would use his own voice to present demonstrations, at second stage he changes that behaviour by not singing at all. Also, by standing always still the teacher seemed less engaged at this point than in the first time. At the last stage the amount of feedback given by teacher H substantially increases, becomes more accelerated and simultaneously to the students' performance the teacher moves much more in the room. The teacher moves all over the room for the first time in all lessons. He goes around the piano, seats over his desk, behind the desk, walks around the room, and conducts the music and the entrances. Whereas the initial stage the focus of feedback was on the text or interpretation, at the last stage the given indications were very wide going from intonation, musicality, text, phrasing.

In summary, in the first stage teacher H did not give feedback during the singing of the student, in the second stage that happened once and in the third stage the teacher makes that constantly. The reasons for that may be associated with the timing requirements, the development of the relationship, or apparent loss of patience. Another progressive development felt in feedback was the use of direct feedback only at stage 1, at stage 2 the teacher would give to the student the chance to express his/her opinions and at the last stage started mixing all the previous ways of feedback.

Regarding teacher J, the feedback seemed to change within the lesson and also longitudinally throughout the academic year. At the first modification it was noticed that this teacher at an initial stage of the lesson gets to be humorous and close from the students and as the lessons evolved the teacher seemed to deepen the focus of attention and becoming more serious, evolved and criticizes increasingly more. That initial relaxed funny approach to the student normally returned by the end of the lesson. That strategy seemed to evolve the students before the actual lesson in order to make the student calm and by the end of lesson made the students leave the lesson with a feeling of achievement. As this approach was consistent for all stages it seemed part of the teacher's personal approach to the students. In several occasions, the teacher listened to one single note of a piece and did not allow the students to go forward, by repeatedly stopping the performance until it got sung correctly. This demanding behaviour was more noticed in students at a higher stage than the

beginning student, indicating that the teacher knew when students are able to respond to his requests. For the younger and inexperienced student this teacher had a more patient approach showing that he knew her limitations. Comparing the approach of this teacher in regard to several students, it was noticed an adaptation to the students' level. To the more advanced students (C35 and C36) the same profile was kept but to a female student (37) who was initiating a more careful approach was used. Gender comparative analysis would not be possible as there was only one female student with this teacher and two male students. So, a comparative analysis is being made only in regard to the level of development. For instance, for the more advanced students, the teacher imitates, criticizes and requests 'without mercy' but adding some humor. He uses being funny at beginning and end of lessons as a way to help the students coping with all feedback. At the middle section of on of the lessons, where the teacher becomes more demanding, teacher J got once emotionally upset with student 35's performance. Immediately all strategies were used as the teacher started exemplifying, finding solutions and suggesting in many ways how that particular problem would be solved. With student 36 the criticism got generally more intense than with other students as he would take often longer to correct things. The student did not react at all criticism with other than responding by singing to the mainly technical requests. The teacher got frustrated at the middle of the lesson by the student's lack of effort to solve problems. As the teacher needs to get into deeper layers to get results he approached new techniques to achieve the student: for instance, to create self-evaluation awareness in the student, the teacher used questioning the student a lot more than with other students. The point of differentiation at this point did not seem to be the level of each students, gender or the teachers' modification of strategy but rather the personal effort made by the student.

Generally, the teacher responded to the performances by letting student know what is wrong before explaining what to correct but initiating all feedback with calling the student by the name. At the end of each lesson the teacher gave an overall perspective of the lessons' developments, which seemed useful to let the student know the point of situation.

Teacher J became increasingly relaxed over the academic year. Whereas at stage 1 the lessons were quite demanding the 2nd and 3rd stages become more relaxed.

The relaxed behaviours were characterized by spending more time chatting, having humorous moments increased over time, the pieces becoming increasingly less interrupted and by having students make more choices regarding the lessons. The reasons associated with that increasing relaxation could be the habituation to the presence of the camera or the natural adaptation from teacher to students. There was also an overall increase of positive feedback from stage to stage. The moments where the teacher would have to use all strategies and explore repeatedly the same parts decreased although the teacher keeps being extremely focused and active in the lesson through out the year. The students seem to respond faster to the teachers' requests and the teacher does not repeat as many times as in the first stage the same parts. The teacher had in stage 1 to use several strategies and explain in different ways to reach to the students sung change and after stage 1 it is noticed adaptability to the teacher methods and the process is faster. The use of conclusive reflections at the end of the lesson was expanded to the end of each piece. So, the teacher would explain the objectives of his requests by the end of a certain piece and at the end would give an overall conclusive appreciation of the lesson.

The type of feedback of teacher K seems to change within the lesson according to being teaching technique or repertoire. This teacher seems to be giving as much as possible in terms of feedback but also being as positive as possible and wait patiently for the right moments to produce achievement. Even when the performances do not seem to be working at all, this teacher tries to keep the patience and never lost her temper. Teacher K's behaviour when comparing between several students (and this teacher had a big group of student participants) all lessons throughout the year had the same consistent type of behaviour: the use of tender but constant feedback and positivism. Moderate differences were found in the thematic of feedback that oscillated from being more technical at the initial stages into more interpretative at the last stage. Another change identified in the use of feedback was associated with exemplifying (using own voice) a lot more at the last stage. The amount of feedback was increased at the last stage. The last stage may have been influenced (in comparison to previous stages) by the fact that there was not an accompanist and that the teacher had to be divided between delivering feedback, playing the piano, reading the students' scores and listening to the student. An in-

depth comparative analysis of teachers with and without the presence of an accompanist will be made later on this chapter.

Questioning

Besides the fact that questioning is considered a strategy associated with the development of independent thinking on student, as it will be seen later on chapter 8, the teachers' questioning may also be used as a relational strategy. Teacher B (who is fun of using this method) confessed approaching the problematic students through delivering many questions and projecting on the students a self-evaluating responsibility. For instance, she mentioned one student that had difficulties trusting the teachers' recommendations. The teacher changed the strategy from being responsive into being in the position of questioning the student about how she felt the performance in a constant self-evaluation. The confrontational criticism was excluded from the lessons and a feeling of self-responsibility input on the student.

Besides the use of 'self-evaluative' questioning, singing teachers also questioned their students regarding their knowledge of characters, roles, translations of foreign texts and musical interpretation. Most of the questioning is made by the teachers as an evaluative mean and not by the students as it would be expected by the maturity of the students.

7.6. Discussion and conclusions

The present chapter provided an overview of the events and strategies taking place in the singing lessons, with particular focus on the relationship between singing teacher and student. The major contributors towards the singing lesson by different means of relational strategies concerned the teaching approach, the use of feedback and means of communication.

Teachers used various teaching techniques, as an instrument to promote faster and more accurate knowledge acquisition by students. Most teachers tended to adapt the lessons into the students' needs whereas others (C and F) used similar strategies with all students. It was noticed that teachers who adjusted more to their students by personalizing lessons tended to produce faster results by being able to move into other new aspects of singing.

One major teaching tendency for most teachers was the use of demonstrations. The practical nature of singing lessons seems propitious to the use of that approach. Although most teachers used demonstrations as a strong teaching strategy, the majority complemented with other strategies, which in one hand provided variety to the teaching but on another hand made sure the demonstration is oriented towards the right aims. Cases where the relationships were better established (teacher and student knowing each other better) reflected more accurate use of demonstrations, with the students responding more quickly to the teachers' intended message.

Another element raised from the present research is that students tend to prefer either teachers who are able to produce accurate vocal sound (as young teachers) or search more for experienced teachers (older) in detriment to the demonstrative part of the teaching. So, in order for student and teacher matching to be more effective the demonstrative capacities could provide one of the characteristics that will help students be satisfied with their future singing teachers. Through the use of demonstrations it was also clear that teachers were aware of the judgment made by their students. So, the fact that teachers need to produce the right sound in order to exemplify to the students puts them in a potentially uncomfortable/ fragile position which may be positive in generating empathy between teacher and student (as both are challenged by vocal difficulties), or negative (if the teacher repeatedly is unable to produce proper sound) leading to students' mistrust.

Although demonstrative approaches were in most use, for the majority of the teachers, the approach to certain methods was constantly changed according to the perceived necessities of each student. Perhaps the best example of that was teacher K who tried to use as much variety as needed with the ultimate aim of getting the voice on the right performance. Other teachers also tend to give a lot of themselves to serve the lessons' needs. For instance, by imitating the student's mistakes, the teachers place their voices in inappropriate positions that might be reflected in their vocal health. Other types of involvement in the lessons were presented by teachers J and K on the students' performance by internally and permanently singing with the students. This was particularly evident in the movements of their lips constantly following the

words of the songs, the performing tension of their bodies and the interpretative expressions on their faces.

Contrasting, rather less adaptable approaches were observed between teachers F and C. Teacher F tended to bring new exercises for all lessons and with that provide new challenges to the students' voices whereas teacher C, on the other hand, constantly used the same exercises by the same order to provide the students with elements to work later alone. This teacher's strategy of using the same exercises seemed to serve a specific aim for developing staccato, legato, vowel balance, fast, slow tempi. So, one teacher constantly varies exercises and another permanently keeps the same exercise 'ritual'. Again with the same participants, teacher F constantly exercises and builds sensations that ultimately will have effects on the voice whereas teacher C focuses on the mental processes by raising the awareness of processes without much experimentation. Neither teacher can be considered wrong in the practice of their teaching although both take teaching into extreme measures. However, each seems to be more appropriate for specific types of students as it will be observed later in regard to the personality and attachment scale of students.

Additionally, teaching strategies may also be dependent on the relationship itself, as teachers who are more at ease with students may provide wider variety of strategies in comparison to teachers who feel lack of trust from their students and therefore protect themselves by using more questioning techniques.

In terms of communication, teachers used all three types of communication (musical, verbal and nonverbal) according to their preferences and style of teaching. Most teachers used musical communication only occasionally, as it seemed more effective on specific moments than expressing through other means.

The verbal pedagogic lexicon varied between teachers who were more scientific (using physiological terms) and teachers using parallel terms that meant the same (yawn – meaning raise the palate, for instance). Both types of teachers developed the verbal approaches throughout the year and students seemed increasingly familiar with terms by responding faster to requests. The verbal communication of feedback was also used strategically by one teacher who used

colouring of voice to induce students into being more focused whenever that was not the case. Adaptability was also felt in the nonverbal communication. The students reproduced at the later stages gestures presented by the teachers at the initial stage during singing. Nonverbal communication was mostly used in order to locate muscles, indicate movements, and substitute for verbal communication.

Although several external instruments (mirrors, video, audio recordings) are in use to complement feedback, the most used means of feedback observed were through the traditional verbal and nonverbal communication from teacher to student. Feedback it seems was an inevitable element of instrumental lessons. All lessons followed the scheme of knowledge transmission from teacher to student based on the teachers' own personal priorities and professional experience. Effective feedback delivery not only seemed to help students develop but also seemed to provide the motivation and trust needed for students' improvement. Therefore, this element was considered as a crucial point on the teacher-student relationship.

The feedback was also noticed as a tool to make students more conscious of their singing and so more able to critique their own performance. It was clear that all teachers had a different approach to feedback and that the personal attitude of each had a major impact on their approach to indications. On the other hand, it was felt that between all differences of approach, most teachers had an adaptive attitude towards the students' characteristics, which influenced their minor nuances of approach but did not change the major options of feedback delivery associated with the personal characteristics.

Noticeable was also students' differences affecting the learning. Students who were more advanced seemed to take criticism in a more positive way than beginning students who were more likely to lack motivation. In higher education institutes (as the case of this research) the students tended to have had previous extensive learning processes that might have provided that awareness. However, in some cases it was noticed an adaptability from teachers to the starting students in order to allow them to grow. The positive feedback generally provided a tendency to divert the students into being motivated and interested whereas negative feedback tended to drive students

into feeling challenged. The major influential factor on how feedback was taken, in the observed students, was due to their maturity.

Most teachers, however, tended to manage the delivery of feedback in a balanced way in order to control the emotional effects of feedback. The most common strategies used by the teachers included: expressing positive before negative feedback; delivering as much negative feedback as necessary but making sure the personal relationship had been established enough to support the criticism; using a gentle approach to balance the straightforwardness of negative feedback; complementing feedback with humour; concluding sections with a positive statement; stopping the lessons to evaluate how the students are perceiving feedback.

Another factor influencing feedback concerns the timings for interrupting the students. Most teachers (N=8) had a balanced approach to feedback by letting the students sing and interrupting occasionally whenever it would be opportune, other (N=2) teachers had faster rhythms by constantly interrupting the students and keeping the flow of the lesson high. One teacher drove the lessons into being slow and letting the students sing less in favour of longer feedback expressions.

The longitudinal observation of feedback presented several evolutionary behaviours characterized in most cases by an adaptation of the students to the teachers' feedback requests; getting faster in understanding the requests of teachers; an increase of nonverbal communication; feedback becoming more direct as the relationship confidence was developed; development of self-evaluation; increase of continuous singing (often entire pieces) before delivering feedback; change in the thematic of feedback from pure technical aspects into more interpretative. The adaptation processes felt throughout the year led most teachers and students on patterns of behaviours such as: teacher and student taking turns by student initiating performance and teacher responding to that performance.

The alterations felt in the observed academic year seemed to also follow external influences. The major influence of the teachers and students' behaviours was clearly the academic agenda that by establishing the evaluation moments forced the lessons into a different pace. Whereas some teachers become more precise in working

more detailed aspects (dynamics, small technical points), others approached the pieces with more distance by indicating interpretative and overall suggestions. The amount of interruptions also varied from teacher to teacher being some teachers more intense (to push students) and others mentioning less negative feedback (allow confidence to be developed in students). All these aspects seemed influenced by the teachers' attitudes but were strategically altered occasionally depending on the students taught.

Variances were felt in terms of institutional performative activities. Some of the observed colleges had their students highly involved in external and internal performances that influenced the lessons by having students sing more repertoire and getting less feedback. Although the majority of the lessons followed the normal academic agenda, several lessons were clearly affected in terms of timings for concerts.

It was noticeable that most students were motivated and that in most cases the feedback used was the most adequate although all lessons had differences in the approach, timings, intensity, communication and delivery of feedback, which made each teacher a unique transmitter of knowledge.

In summary, most teachers used combinations or teaching strategies/ techniques to serve the purpose of developing their students' voices. The combination of those teaching techniques are highly indicative of the teachers' styles and will be analyzed in combination with personality and adult attachment measures in chapter 8.

8. The finger print characteristics of singing teachers: the confluence of all measures

8.1. Introduction

Taking the results shown in previous chapters the present part will converge all measures by comparing the behaviours taken from the lessons and the interviews in relation to the measures of personality and adult attachment. Furthermore, the elements presented in this chapter will consider behaviours that were longitudinally consistent and presented through several occurrences.

The combination of teacher and student evidently depends on many factors, and in most cases the relationship potential is not considered at the outset. Most teachers in the present study reported looking in the first place for vocal and artistic potential in detriment of the relational necessities of the student:

‘I am the one who chooses the voices I want to work with. I look for the natural shine that guides me into knowing the future sound of the voice’ (teacher D).

‘I regard the potential of the person in becoming a professional singer and tend to choose my students following that instinct’ (teacher K)

The above statements represent an overall perspective transmitted by most teachers that is consistent with previous studies (Presland, 2005), presented earlier in chapter 2, by identifying that most institutions disregard the personal approach in setting up teacher-student combinations. However, in one of the observed institutions the relational importance is already put into practice:

‘The head of our department is very careful trying to match people to the right teachers, and we allow people to make consultations because with some you get on terribly well and with somebody else, they just get destroyed by the teacher. With some phrases people can get completely crushed’ (Teacher E, in interview).

Teachers, students and head of vocal departments are generally aware of the importance of having 'healthy' relationships occurring in their lessons. However, they all seem to lack effective means and evaluating measures that may provide the necessary clarification. A combination of measures, such as the ones presented in this research, might provide the necessary elements for the forthcoming relationship to function successfully.

Taking that a negative relationship might influence the musical development of students (Hallam, 1998a: 230), the present chapter hypothesizes the combinations of teachers and students where the relationship may be more functional or dysfunctional: dysfunctional (in the present research's context) being considered as low relationship quality, rather than necessarily the precursor of relational breakup.

8.2. Methods

8.2.1. Aims

The aims of this chapter consist of indentifying: i. which personalities and adult attachment styles have higher and lower predisposition to functional or dysfunctional relationships between singing teacher and student; ii. What is the usefulness of this approach for understanding and developing teacher-student interactions?

8.3. Procedure

Based on the results presented in previous chapters for personality, adult attachment and behavioural description, this chapter converges all information in order to profile dyads and evaluate their relational functioning. In order to accomplish this task, all characterization of personality (domains and traits) was based on Costa and McCrae (1992: 14-18) and Costa and McCrae (2000: 73-74) and attachment descriptions based on Bartholomew (1990). The descriptions of personality and attachment were then evaluated in specific behaviours found consistently in the singing lessons between singing teachers and students. The traits and style characterization were analyzed through observing repeated longitudinal behaviours rather than single-event behaviours that were discarded.

8.4. Results

8.4.1. Personality

As a starting point it was noticed that the singers' group in itself had characteristics that were common for all dyads regarding the combination of neurotic traits, for instance. Taking the assumption that at least some dyads (within all participants) had functional relationships and that within the singers' group identified in previous literature the same characteristics (of high neuroticism) were found, the present analysis prioritized dyads where elements had different characteristics (particularly those with extreme values) in order to evaluate the effects of the difference having a positive impact on the relationship, as in 'opposites attract', presented in the literature of chapter 5.

There was a tendency for dyads to score highly within the same personality domain or within the median score, which was not validated as contrasting and a closer observation into the traits level was made. The observations of relational behaviours were therefore considered in comparison to contrasting elements located within the personality traits of teacher and student.

Contrasting personality identification of anxiety (n1) was found for the teachers B, G, H and K. This indicates that either elements of the dyad (student or teacher) scored high or low in contrast to the other element that scored at the opposite extreme. A positive impact between contrasting scoring was found for the trait anxiety (n1) in the sense that having a low score anxiety teacher working with a highly anxious student could provide the necessary stability for the flow of the lesson. That was the case for dyads B5, G24 and G29. In the dyad B5 it was particularly observable through the fast speaking rhythm of the student in contrast to the slow paused discourse of the teacher having the effect of stabilizing the lessons and maintaining a professional balanced environment. The student was conscious of that characteristic as she constantly expressed her nervous states:

'I am quite anxious about singing little bits through the opera instead of continuous parts' (student B5) – 'Have you tried listening to some recordings?' (teacher B)

In opposition to the previous scoring, for dyads H30 and H31 the anxious high scoring was located with the teacher in contrast to the low score of students. This inversion of positions was presented having a tense and worried teacher permanently delivering justifications for each singing request. The students' low anxiety expressed:

'Teacher, I understand what you are asking but do you think if I make (vocalization) it will also work or not?' (student H30)

The above statement by student H30 also indicated low vulnerability (n6), translated by being able to better manage situations, which again was in contrast with the teacher, who whenever was under pressure (high vulnerability) would become more distant and retreat into a more formal behaviour.

Students dealing with highly anxious teachers, by scoring low anxiety might benefit from more balanced relationships. If additionally, the student scores low-vulnerability, for instance, then the functionality of the relationship may benefit to higher levels of comfort.

Another high vulnerability (n6) case, teacher K, expressed that through a constant necessity to ensure all the students 'blindly' followed her indications and teacher E, again high vulnerability (n6), permanently excused herself for her bad singing when demonstrating. That indicated a certain self-feeling of vulnerability to a point where the student would be the one delivering feedback:

'That's lovely sung' (Student E18 to teacher E).

Considering the opposite case, teachers with low vulnerability (n6) in contrast to the students high vulnerability (n6) was shown through teachers behaving more strategically (as shown in chapter 7) with teacher B:

'How did you find your voice on that phrase? Do you want to repeat it?' (teacher B towards student B5).

By understanding the pressure put from the student's persistent questioning, the teacher exchanged the roles by asking first and constantly. Students with high vulnerability were also expressed by appearing more affected by external factors. For instance, student J37 (high n6) started all recorded lessons mentioning her voice was not well and that she had been affected by health problems in the precious week; student B5 expressed her vulnerability by having a necessity to depend on the teacher on several aspects: the teacher providing recording equipments, tapes and bring scores, for instance.

Having contrasting levels of vulnerability may provide the self-confidence to cope with the dependence of the other element and ultimately balance the teacher-student relationship. The trait vulnerability (n6) between all traits of neuroticism was where most participants were distributed between extreme high and low scoring indicating a good propensity of relational success within this sample.

Within the extroversion domain, the contrasting trait warmth (e1) revealed in teachers a more reserved side when compared to the students' more affectionate side (high e1). Teacher G presented that more distant/ reserved interaction by engaging in few conversations (as presented in time quantification, figure 29 in chapter 7). The students (G26, G28, G29) responded to that by constantly smiling. The high warmth (e1) on students does not seem to have as much impact as if the opposite, perhaps, occurred because teachers seemed to dominate the lessons. The present sample did not have any case where the opposite scoring could be evaluated. Although it does not concern a contrasting score, it seemed important to establish a comparative analysis of behaviour between the above students of teacher G and student G24 that by scoring low warmth was clearly less worried about providing a friendly image and tended to be more task oriented and showing little interest on emotional development. As teacher G provided this research with all students of his class, it became easier to find students with many characterizations and interactions. For the dyad E18, the low warmth was more characterized through the feedback delivery where the teacher tended to be straightforward and firm:

'Stop, I don't want you to sing standing like that. Sing to someone in a sense of performance' (teacher E to student 18).

The student responded to the teacher's approach being relaxed and again smiling (high warmth). So, contrasting scoring for warmth did not seem to greatly reflect on the teacher-student relationship as the students' capacity to cope with the teachers low warmth did not seem to be directly compensated with high scoring on warmth

Contrasting gregariousness (e2), such as dyad H30, may have good relational results because a student who typically prefers to be alone got to be stimulated by the humorous side of the teacher. The same positive outcome was observable in contrasting scores for activity (e4) where one element of the dyad induced the other into becoming more vigorous: highly active teacher K with student K44 when the teacher is actively dancing, making many gestures and the student did not care for making any movements and following the teacher.

The application of the trait assertiveness (e3) in application to singers did not seem to constitute a valid measure as participants scoring low (e3), typically avoid public speaking, for instance did not actually shown that, perhaps through the developed skills required to face public.

The high scores for excitement-seeking (e5) and positive emotions (e6) found for the teachers E, F and K in contrast to their students' low scoring. The behavioural representation of those traits was observable through being highly energetic. The positive emotions (e6) particularly in the case of the teachers seemed to produce good outcomes on students. For instance, teacher K (as presented in chapter 7) tended to be positive towards the students defended the student by referring external factors of vocal interference making all seem more positive:

'If we were on a sunny day, that passage would have resulted' (teacher K to student K38).

The high scoring for actions (o4) was mostly reflected in the choices of more unusual types of repertoire and by having teachers low scoring, the students' requests were sometimes unattended: dyads G28, G29, J35 and J37.

Comparatively with more balanced dyads (in terms of scoring), students got more 'exotic' choices of repertoire used (teacher F, for instance).

The insistence on same teaching approach and narrow variety of methods (presented earlier, in chapter 7) by teacher G is now explained by his trait ideas' (o4) low scoring. On the other hand, when faced with a student high scoring for ideas (o4) she demonstrated highly analytic and intellectual curiosity, which seemed to challenge positively the teachers opposite personality tendency.

The present sample had dyads with contrasting scores for values (o6) but none of the dyads presented behaviours that characterized this trait. However, it should be expected that singers face interpretative situations where 'values' might constitute a challenge between teachers and opposite scoring students.

The domain openness was perhaps where participants better expressed their artistic tendency by scoring almost exclusively high for fantasy (o1), aesthetics (o2), feelings (o3) and actions (o4). These traits characterize imaginative, emotionally responsive, sensitive individuals searching for unusual activities and valorizing beauty. On the other side, agreeableness is the domain where most dyads have scored differently. In what concerns the dyads with contrasting scores low trust (a1) on students was found translated in the careful/ suspicious response to teachers' directions:

**'Why are you asking me this exercise', 'this is not working on my voice'
(Student F21).**

The teachers' responses were:

**'I don't believe you, be honest with it... It's not that bad, it feels worse than it sounds', 'just open your voice I don't care how it comes out'
(teacher F to student F21)**

Student F21 argued permanently about the teachers' opinion and the outcome of her voice. On the other hand, the case of teacher B (expressed earlier) by feeling

threatened from the questioning of student B5 is a good example of suspicious behaviour that might affect the teaching and therefore influence the learning by possibly having a less functional teacher-student combination. So, a teacher scoring low trust in contrast to the students' high trust (a1) may benefit the development of the student by following most of the teachers' directions but the physical nature of the instrument might be the reason why most singers are characterized on low scoring for this trait.

Dyad F21 was characterized with contrasting straightforwardness (a2) scoring. A characteristic behaviour was:

'You have been promising me this reference for some time: Now it's urgent' (student F21 to teacher F)

On the other hand, the opposite scoring provided the teacher with a more manipulative side presented, for instance, by switching between different approaches, moving from repertoire to technique and back without letting the student consciously understand what and why it is happening.

Compliance (a4) is a trait characterized by, in one hand being tolerant and forgiving (high score) and on the opposite (low score) being contesting and lacking patience. A clear example of high compliance was teacher G' constant patience through exploring the same method as many times as necessary and an unique moment where his high compliance was put to the test was when student G24 and the accompanist had long 25 minutes' argument. The teachers' tolerance was clear by staying passively waiting until all was over to express his opinion. This argument made it impossible for the lesson to continue with the student crying. So, put through a tense situation, with a camera filming and two people fighting, the behaviour of this teacher clearly responded to his personality traits with low scoring for anxiety (n1), actions (o4), tender mindedness (a6) and high scoring for values (o6) and modesty (a5).

On the opposite behaviour identified in teachers F's low compliance (a4) was associated with her contesting and impatience regarding the students' questioning:

'To me that's better, but what do I know?' (teacher F)

Although the above behaviour could be interpreted as modesty (a5) in the case of this teacher it was related to ironically informing the student that she should not question the teachers' indications so often. Modesty is one of the traits that were not consistently identifiable through the lessons. It tended to be a camouflaged trait, present perhaps on other moments of the participants' lives. So, although differences of scoring for this trait were found, it was not possible to use any relations with the present study.

The low score of student F21 regarding competence (c1) was quite perceptible from her constant questioning the teacher, feeling frustrated although her singing was going well. In few moments where the student felt accomplishing something, she became greatly enthusiastic but soon turned into having low opinion of her capacities. This trait (competence) may be ambiguous in the evaluation of singing lessons and may easily be confused with modesty. Student K38, who also scored low competence (c1), had several technical challenges that were faced in a defeated way. So, instead of trying and insisting over the same problem in order to accomplish a passage (as it was the case over students H30 and H31, with high competence) this student would simply say:

'I can't sing this' (student K38)

Teacher K who had a contrasting scoring for competence (c1) responded through adding her sensibility by calling the student with 'dear', 'darling' and 'my love' which is characteristic of high scoring for competence and its strategic capacity to deal with life. On the other hand, a teacher with low competence (H) expressed that through being more defensive and speaking as though students should sing everything right and have prepared the scores better, although obviously the students seemed reasonably prepared. As mentioned above, the students (H30, H31) responded always with new courageous trials typical of high competence (c1).

In terms of order (c2) the only dyad in opposite extremes was E18. Here the student with high order, demonstrated that through bringing always lists of questions regarding repertoire and of concerts coming up. The opposite representation of low order (c2) which characterized all other teachers and students except student G24 (who scored medium) was mostly characterized through students often not knowing where her scores were, not preparing the verbal presentation of scores for concerts occurring in the next day, displaying all belongings in different places of the room, forgetting scores and having to go out from their lessons. On the teachers behaviour although some teachers scored lower than others for this trait most disorganized behaviours concerned their agenda and career appointments arrangements, which interfered with the lessons dates and times. The ideal setting for this trait would be both elements scoring high order (c2), however, as seen through the vast majority scoring low, the contrasting dyads may actually benefit from the balanced organization.

Regarding dutifulness (c3), all contrasting dyads had the students scoring high. However, two teachers also scored high in this trait, which was represented through for instance:

'I don't want surprises... I must hear all pieces you'll sing on exam'
(Teacher F)

In what concerns students sense of dutifulness (c3) in opposition to their teachers' low scoring the biggest indicators of this behaviour was characterized through the students trying to divert the lesson from conversations into singing (K38) or in the case from teacher H (low scoring on dutifulness) texting on a mobile phone or reading while students sing (this behaviour was not observed but referred to in students' interviews - K30, K31).

In terms of achievement striving (c4), the dyad with best contrast representation of was F21. Although the low achievement striving was not visible on the teachers' behaviour, the student clearly corresponded to her high scoring by having in all lessons, new career developments: concerts, courses and competitions all over the world. In all lessons the student reported new developments to the teacher.

Interestingly, although most teachers scored low for order (c2) they scored high for self-discipline (c5), indicating being generally disorganized but rather persistent and task oriented professionally. In terms of contrasting dyads, teachers G and E both scored high and both revealed following a consistent drive of the students' voice. The students' opposite behaviour was mostly related with student G26 feeling a frequent frustration in many exercises. Neither participants scored in the opposite direction (teacher low and student high).

The last trait, deliberation (c6), refers to the careful (high scoring) or spontaneous (low score) evaluation before taking actions. In this trait, teacher E (low score) demonstrated her spontaneity, through explaining how a song should be interpreted. By getting involved with the text (reminding of her father) the teacher started crying uncontrollably. A spontaneous teacher might be positive by being able to express more freely through the lessons although not always needing to get so deeply involved. However, this behaviour indicated how close a singing teacher student relationship might need to be in comparison to an instrument where lyrics are not used and so emotions might not be raised in the same way. The careful (high deliberation) response of the student was observed by getting closer from the teacher and carefully offering to help.

In most cases the contrasting trait scores reported positive influence for the singing lessons, however, the appropriate traits should be considered and a generalized application of contrasting score is not recommended. Considering that, the next part a list of traits that might potentiate indications of functional and dysfunctional teacher-student relationships is provided below (table 32). Table 32 summarizes the traits in combination to the findings presented in this research. Several domains have incomplete sets of traits, as none of the teachers or students scored contrastingly. For all other traits a summary of contribution towards (dys)functional relationship is presented.

Table 32. Recommended scoring in accordance to behaviours experiences in the present research.

N: NEUROTICISM	
n1: Anxiety	Having one of the elements (regardless of being the teacher or student) balancing the other element's anxious state might be positive for the relationship.
n3: Depression	Contrasting scoring for this trait did not provide enough indications for more functional or dysfunctional relationships
n4: Self-conscious	This trait did not seem to interfere with the relationship.
n5: Impulsiveness	Not applicable to the present study
n6: Vulnerability	Contrasting scores for vulnerability is not recommended.
E: EXTROVERSION	
e1: Warmth	Contrasting scores (high student – low teacher scoring) was innocuous for the teacher-student relationship as contrasting scores did not to affect positively or negatively.
e2: Gregariousness	High score for teachers in contrast to the students' low score may provide positive encouragement for a singer student.
e4: Activity	Contrasting scores (from either teacher or student) may be beneficial to the relationship.
e5: Excitement- Seeking	High scoring for this trait resulted positively in both teacher and student.
e6: Positive Emotions	High scoring for this trait in contrast to the other element (either teacher or student) reflects positively.
O: OPENNESS	
o4: Actions	High scoring for teachers may be positive. The opposite is not recommended.
o5: Ideas	Contrasting score is recommended although preferably teachers should score high.
o6: Values	No identifiable behaviours within the lessons
A: AGREEABLENESS	
a1: Trust	High score of teacher with low score for student is preferable in opposition to low teacher and high student scoring.
a2: Straightforwardness	Contrasting scored may be beneficial if the student scores high. The opposite should be analyzed in regard to other traits of the student
a3: Altruism	No clear identifiable behaviours found.
a4: Compliance	Contrast scores may benefit the relationship in particular if the teacher's score high in opposition to student low. The opposite direction is not recommended.
a5: Modesty	No identifiable behaviours found.

a6: Tender-Mindedness	Contrasting scores may help balance the relationship. Preferably, teachers should score high.
C: CONSCIENTIOUSNESS	
c1: Competence	The teachers' high score is recommended in opposition to students' low score.
c2: Order	Contrasting scores might benefit the relationship.
c3: Dutifulness	Contrasting scores may be beneficial in either teacher or student as one element may balance the other.
c4: Achievement Striving	Contrasting scores did not prove beneficial or unbeneficial for the relational outcome, as the teacher did not report any behaviours considered for this trait.
c5: Self-Discipline	High scoring on teachers may benefit the relationships
c6: Deliberation	Low score for deliberation on teachers is not recommended

Note: Only traits with opposite scoring within the singers sample were considered for this table.

The results reflect not only a clear tendency of traits contributing towards the singing teacher relationship but also a more layered contribution of those traits being some more effective and recommended than others.

In order to establish the hierarchical order of contribution towards the singing teacher relationship the next figure illustrates the different levels found:

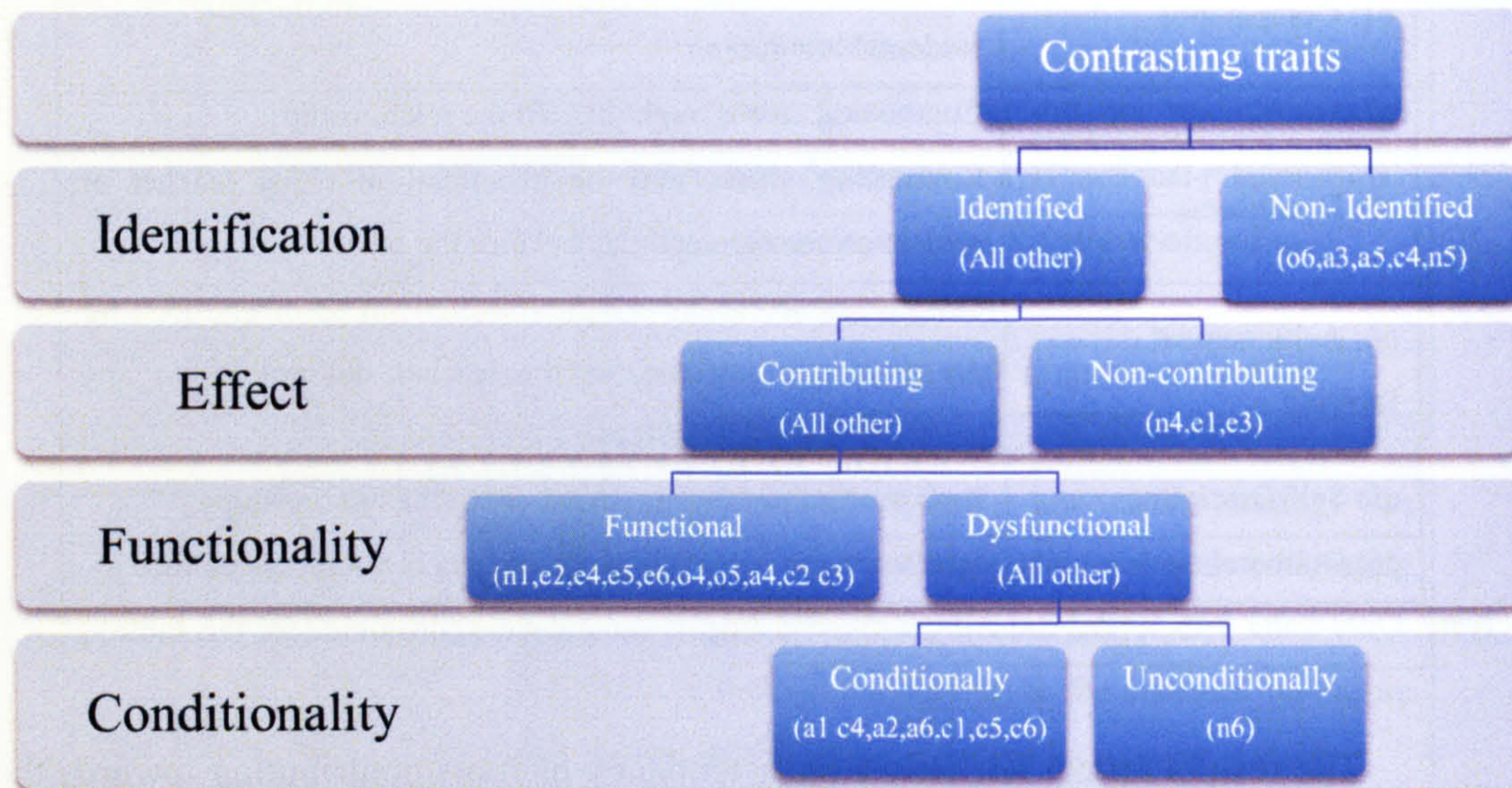


Figure 54. Hierarchical representation of traits' contribution for the singing teacher-student relationship.

Most contrasting traits were identifiable through teacher-student's behaviour, having most contributed towards identifying the quality of the relationship. However, five traits did not provide any conclusive behavioural information. Within the identifiable behaviours most traits contributed towards the relationship's quality and three traits proved being innocuous for the relationship. So, the traits that interfered with the relationship were evaluated in terms of contribution. Most contrasting traits interfered positively with the relationship by providing higher levels of quality whereas other traits contributed towards its dysfunctionality. For the traits contributing for dysfunctional relationships it was also possible to observe that one trait clearly should not be combined contrastingly (n6, vulnerability) and seven other traits could benefit from working together if the conditionality is followed, for instance: (o4, action, 'High scoring for teachers may be positive. The opposite is not recommended').

The characterization made through personality testing, as shown above, allows a perception of potential expected behaviours between singing teachers and students that can provide the means for distinguishing functional from dysfunctional

relationships. This instrument may be particularly important when used previously to the relationship in order to profile dyads and highlight characteristics that ultimately will raise the quality of relationship. Additionally, this research used another instrument, adult attachment scale-r (Collins & Read, 1990) that will be presented in the next part.

8.4.2. Adult Attachment

The other instrument used for the evaluation of singing teacher-student relationship was the adult attachment scale. For the participants' analysis it was considered the combination of attachment styles as suggested earlier in the literature of work environment and couples match (Feeney *et al.*, 1994; Hazan & Shaver, 1990; Kirkpatrick & Davis, 1994; Simpson, 1990). With this instrument it was possible to group the dyads in correspondence to their styles, as follows in figure 55:

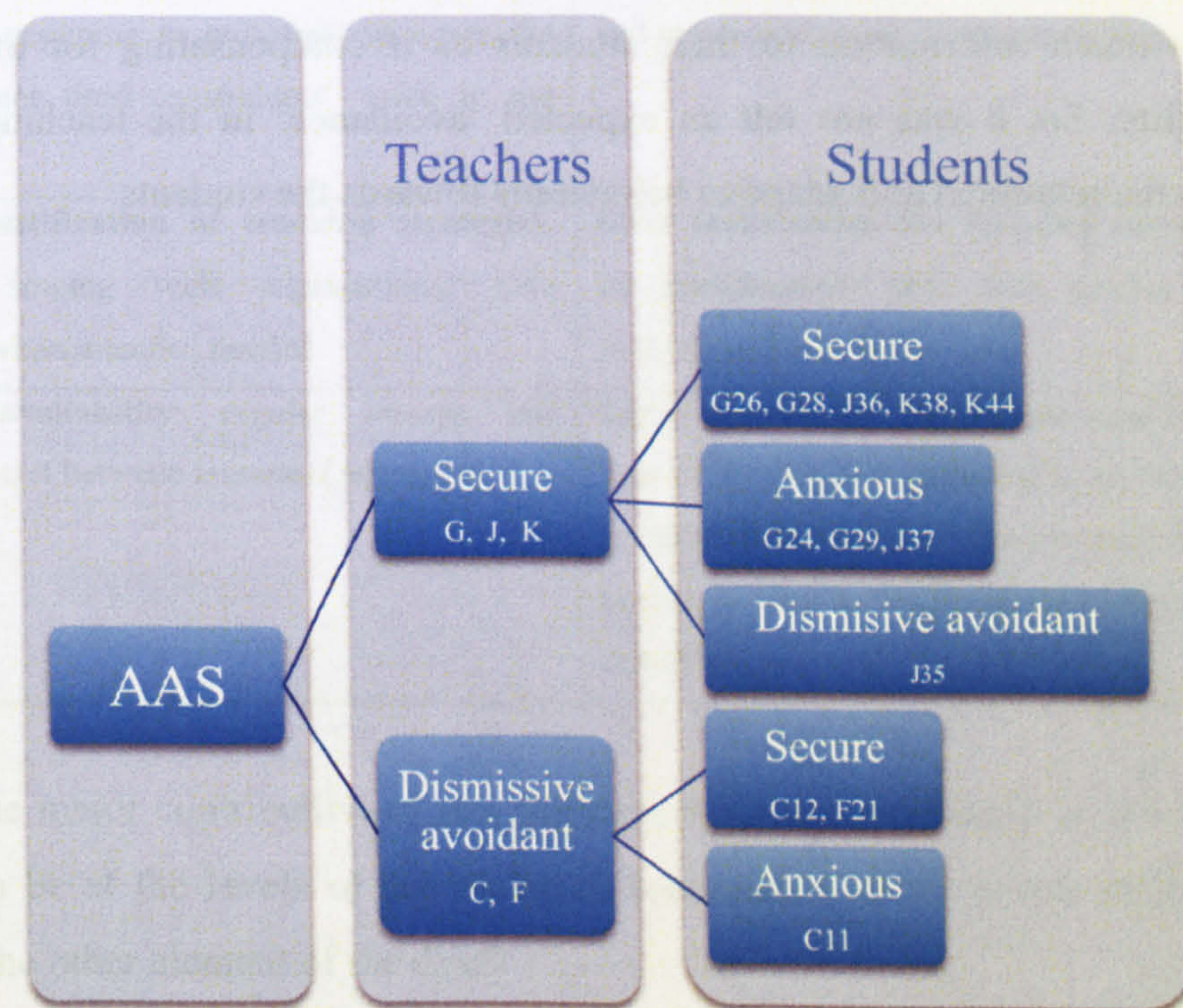


Figure 55. Distribution of participants (teachers and students) according to styles of adult attachment (Collins & Read, 1990).

The above figure illustrates all combinations of participants' styles of attachment, which presents five combinations between teachers and students. Other eight combinations of attachment style would be possible but did not appear within the present sample. The repetition of combinations, however, seemed important as it allowed a comparative analysis between dyads. All dyads with at least one non-classifiable element were excluded, as it did not provide sufficient information for the present study.

As a starting point the teachers' styles were comparatively observed. Clearly different behaviours were noticed between teachers with secure and dismissive-avoidant styles in terms of availability towards their students, stability of the lessons, teaching adaptability and personal involvement. Both dismissive avoidant teachers (C and F) had lower levels of proximity with their students, translated in fewer personal conversations, using little adaptation towards the singing needs of the students, by keeping the same methods persistently being used. In both cases, teachers tended to give too much information to their students as if compensating for their lack of adaptability. So, it was not felt an expected 'avoidance' in the teaching itself but rather in the relational and adaptive behaviours towards the students.

The behaviours presented in table 33 characterized the main differences identified in the relationships of teachers with secure attachment in comparison to dismissive avoidant attachment.

Table 33. Comparative analysis of behaviours in teachers with secure and dismissive avoidant attachment.

Teachers' style of attachment	
Secure	Dismissive-avoidant
Care for students: always asking how students are at beginning of lesson or how the students spent the previous week	Little personal involvement: less involvement with the students' external life.
Teaching adjustment: switch between strategies for the benefit of student's development.	Stick to same approach: although the approach often seems to take longer to result, the approaches are insisted.
Adaptation to physical conditions: lessons are more adapted to the physical condition of the students by engaging in conversation when the voice becomes tired or students' voice in not responding	Same methods of vocal use: the same methods are used in order to solve additional complications and more continuous singing activities.
Balanced justification of teaching strategies: intercalate singing with explanations; give indications when intended needed.	Over justification the teaching options (C) or no justifications (F): each teacher used one extreme of behaviour.
Balanced availability: regular lessons and possible contact between lessons if necessary.	Little availability: lessons are hard to schedule, part of lessons are spent trying to find space on agenda (teacher F); teacher-student distance makes it hard to communicate between lessons (teacher C).

The major contribution of this instrument for the evaluation of a relationship seemed to be at the levels of proximity in comparison to the levels of availability found in the other element of the dyad.

As observed from the above behaviours, the differentiation between physical proximity and actual relational proximity are clearly different variables of the relationship. Teachers C and F are an example of how much physical contact to the benefit of singing lessons may be used, without actually translating into their

relationships being closer. Both teacher use methods that are based on touching, however, that did not translate in other terms of relationship quality in what concerns the availability and proximity of the teachers towards the students.

The availability is a particularly important element on the teacher-student relationship. Without meaning that the teacher has to be available for all moments of the students' career life, the fact that the lessons get to be regularly planned, students occasionally might have the necessity to exchange information with teachers (through phone, email or by office planned time) seemed to give great comfort to students and reinforces the importance of this quality as proposed by Cencer (2007) previously in chapter 2. For the secure teachers, the availability was also translated in letting the students communicate more during the lessons than dismissive avoidant teachers.

On the students' characterization, a wider range of attachment styles was scored. A comparative analysis of behaviour differentiation between secure and insecure styles of attachment are presented in table 34:

Table 34. Comparative analysis of behaviours in students with secure in comparison to other styles of attachment.

Students' style of attachment	
Secure	Anxious, Dismissive-avoidant, fearful avoidant
Questioning: question teachers more than other styles	Fears rejection: do not question teachers' choices or indications.
More independent taking own decision and depend less on the teacher	More dependent: count with teacher for most decisions, particularly concerning their career.
Less problematic: Rarely reported being involved in problems with other individuals of the educational institution.	More problematic: students brought to lessons relational problems and arguments with other people from the institution
Confident: without seeming arrogant take singing with more confidence	Worried: fear failure more often

The behaviours between secure and insecure styles were clearly identified as presented above, however, between the insecure there was not a clear differentiation to allow a consistent classification. One reason for this might be associated with the small number of participants for each style not allowing the behaviours to be observed

comparatively and longitudinally. Another contributing factor might be as expressed in the literature, that secure styles are clearly identifiable in comparison with all other styles but not between the other dismissive avoidant, anxious and fearful-avoidant styles within mixed couples (Feeney *et al.*, 1994; Kirkpatrick & Davis, 1994; Simpson, 1990).

Regarding the behavioural observation of dyads according to the styles of adult attachment of the other participant it was noticed that secure matched with secure elements projected a more functional relationship than mixed dyads. In the secure-secure dyads the relationships in most cases seemed to provide the necessary elements for the singing activities progress smoothly, whereas in mixed dyads the relationship tended to interfere more often with the working activities.

Furthermore, an analysis was performed to evaluate whether teachers' secure style matched with insecure student projected a different type of dysfunctional relationship from insecure teachers with secure student. Taking that the teachers seem to have most interference in the lessons outcome, it seemed that preferably dyads with secure teachers performed better lessons than the opposite. Further research (with larger number of participants) is believed to bring clearer elements to the evaluation of singing teacher-student relationships.

8.5. Discussion and conclusions

This chapter provided an overview of behaviours occurring in singing lessons that are associated with participants' personality and adult attachment as well as a contributing towards identifying predictors of relational functionality.

A list of contrasting personality traits proved to have bigger impact on the quality of singing teacher-student relationship: n1 (anxiety), providing balanced rhythms of speech and interaction; e2, (gregariousness) raising the mood of the lessons and therefore approximating the dyad; e4 (activity) potentiating higher involvement of the other element; e5 (excitement-seeking), bringing energetic stimulation to the lesson; o5 ideas, intellectually challenging behaviours; o4 (actions), allowing the necessary tools to be implemented; compliance (a4), prudent behaviour helping to accept better the other person.

Another group of personality traits proved to be innocuous, as it did not seem to affect the relationship: Warmth (e1), not affecting the relationship; assertiveness (e3), singers developing appropriate skills in order to face audiences; modesty (a5) and values (a6) not presenting an impact on relationships. Additionally, one trait was identified as avoidable in singing teachers-student's relationship: vulnerability (n6) as one element did not seem to compensate the other but rather affect it negatively. Not only traits provided an identification of the relationship but it also provided information towards knowing which traits potentiate its functionality and how.

The teachers' style of attachment had major impact on the teacher-student relationship by adding stability, adjustment, balance and higher relational quality for dyads with both elements scoring secure. However, in mixed dyads, less functional interactions could be observed between teacher and student by having less communication, availability, methodological adaptation, and bringing into the lessons external relational problems. The highest contributors for the relationship quality in terms of attachment were the teachers, although mixed dyads had considerably less functional relationships independently of being the teacher or the student the 'destabilizing' elements of the relationship.

The personality and attachment tests provided an identification of potential behaviours that ultimately influence the teacher student relationship. The use of such elements consists in a complementary validated psychological element that increases the potential of teacher-student relationships working in higher levels of quality and additionally previously to the relationship, measuring the personal potentialities of both teacher and student.

Currently there are few effective tools available to provide heads of department, teachers and singing students with clear prediction of relational success. In higher education, where a graduate course might last for 3 or 4 years, a student that will have half that time in a dysfunctional relationship may ultimately see affected his /her professional potentialities and perhaps limit future career. The identification of predictive relationship matching is therefore of great importance and this study contributes towards the quality of those relationships.

The present chapter has demonstrated which traits of personality and attachment styles might be crucial for the quality of relationships between singing teachers and students and concluded that indeed, in agreement to Mason (2000) there are as many ways to teach singing as there are singing teachers. However, each teacher is equipped with a group of characteristics that allow a behavioural prediction.

9. General conclusions

9.1. Conclusions

This study contributes to the clarification of teacher-students' relationship in a multidirectional way. The combination of observational studies with the data from psychological instruments provided a more accurate and valuable indication that singing teachers and students tend to behave according to their personal and psychological characterisation, which takes the understanding of singing lessons into a more objective setting. Furthermore, the application of psychological instruments into music studies and specifically in singing was enriched by the combined use of personality and adult attachment in observations. Its findings are of relevance for heads of vocal departments, singing teachers and students by providing means of predicting, interpreting and supporting relational quality.

The studied lessons revealed similar characteristics in terms of most teacher domination observed in instrumental lessons indicating that between vocal and instrumental lessons this characteristic is generally maintained. Adding to that result, this study contextualized the interactions occurring in singing lessons and concluded that teacher dominance is based on two essential factors: the personal characteristics, whenever teachers' traits are characterised by dominant behaviours; and by professional conditionings, which imposed an attitude of being 'in charge'. The first factor indicated that most teachers follow a personality characterisation of high scoring assertiveness (e3) translated in being more decisive and confident. However, in a few dyads an inversion of roles was observed, in which the student was effectively in charge of the lesson: driving conversations or diverting between matters of lessons. For these dyads, the characterisation clearly presented students with more dominant characteristics or teachers with insecure style of attachment. Nevertheless, this research confirms the previous characterisation of instrumental setting by Daniel (2006), Persson (1996) and Hepler (1986) but adds to previous literature the fact that occasionally, rare dyads present inverted roles of lessons' dominance.

The consistency of teachers' behaviour in response to different students was tested and an adaptive behaviour was felt from most of the teachers towards the

different characteristics of students in terms of teaching approach, types of feedback and communication means. These elements of interactive adaptability are in conformity to the previous study by Presland (2005) where teachers adapt to students as the variable element; but it contrasts with Reid's (2001) perception that teaching adaptability is not yet implemented in instrumental teaching. The present study adds to Presland (2005) and Reid (2001) by identifying the element of the students' personality and adult attachment that is responsible, if not for all, for most variations of behaviour.

Regarding the students' perspective of teachers' skills, the present research is in agreement with previous research (Teachout, 1997) with students identifying personal characteristics of teachers as the most important. However, perhaps due to the exclusively vocal characteristics the present study, demanding specific teaching tools, the students valued more highly the musical skills of the teachers through preferring demonstrations in lessons. Indeed, the observations made of lessons provided a clear identification of this method of teaching as mostly used, which on the one hand is positive by providing the students with their preferred teaching, but may also raise the need for a more demanding complementary combination of teaching means. For most cases with demonstrations, teachers tended to use nonverbal communication, verbal complementary resources, and be always dependent on the relationship development to ultimately guarantee the perception of their vocalizations.

In the study by Ward (2004) teachers expressed which strategies were most often used to provide students with the necessary tools for development. The use of listening to other performances was listed highest, followed by verbally expressing teachers' ideas. Demonstrations were indicated as the least popular tool (p. 202). In the present study the inversion of that behaviour occurred, by having mostly demonstrations followed by verbalizations and listening to other singers between the techniques moderately used. These differences may perhaps be associated with singing having specific characteristics that differentiates it from other instruments.

Singing implies a clear distinctive type of teaching as identified through the observations. Firstly, the interpretative character of the instrument through lyrics (non-existent in other instruments) proved to demand a much closer approach from teachers

who often got involved in sharing personal events; furthermore, the fact that teachers have to correct linguistics, distinguishes them from their peers who do not have to deal with such a variety of teaching aspects. This last element also proved to be time consuming, which comparatively to other instruments leaves less available time for other more musical aspects to be developed. So, indeed this study confirms earlier research by Burwell (2006) and Woody (2000) that distinguish singing from other instrumental lessons, but adds aspects where that differentiation is identified in teaching techniques approached with linguistic and interpretative means which is not applicable to any other instrument.

The longitudinal observation indicated that the relationships developed into becoming more personal and often included elements from the personal lives of both teacher and student. The relational development between teacher and student includes a wide list of variables, such as means of accurate communication: the further the relationship developed the fewer complementary tools became needed, single gestures or vocalizations being sufficient for students to understand the teacher's intentions, suggesting that the relationship with the student could have major impact on other aspects of singing

The use of psychological instruments (in this case personality and adult attachment) was found through this research to contribute substantially to the measurement of teaching effectiveness. Previous research has tended to evaluate teaching effectiveness through musical and performative results but lack instruments for defining the implications of personal characteristics in the learning teaching processes although there is a clear awareness of their importance (Reid, 2001; Kennel, 2002). The present research provides other means of evaluating musical teaching effectiveness external to the solely musical product. The use of NEO PI- R (Costa & McCrae, 1992) and adult attachment scale-r (Collins & Read, 1990) instruments provided specific predictive elements of relational behaviour for most of the traits observed as contrasting between teacher and student and styles of attachment.

The characterisation of teachers and students in terms of personality demonstrated strong tendencies of singers (both teachers and students) to score within the same domains, which agrees with previous research, where this professional class

had clear characterisation tendencies (Coimbra, 2004; Kemp, 2004). Particularly clear was high scoring for neuroticism where participants were all within the high scoring range for all traits. The scoring results indicated a clear personality profiling for the group of singers, indicating a professional predisposition either by having certain characteristics following the type of career or being influenced by the environment where singers are included confirming Kemp (2004)'s results. Rather less consistent results were presented for the domain extroversion where singers scored through all ranges. These findings confirm those of Coimbra (2004) by not identifying high levels of extroversion demonstrated in previous studies by Wilson (1984). The present study also reinforces the importance given by Gustafson (1986) to personality being an important tool for educational purposes and adds to that study by putting in practice the examination of behavioural applications in singing lessons rather than Suzuki.

The adult attachment scale-r (Collins & Read, 1990) characterised most participants as being secure. This study contributed towards the confirmation that most dyads with mixed styles of attachment (secure with insecure, dismissive-avoidant, fearful-avoidant and anxious) indicate a prediction for less stable relationships as presented by Hazan & Shaver (1990). The contribution of the present research was through the identification of specific singing teaching-learning behaviours: these include recognition that secure teachers approach vocal health of their students with strategic care; they use balanced justifications through teaching; and present higher levels of availability in opposition to insecure teachers. Secure students, on the other hand, do not fear rejection and tend to question more their singing teachers, showing high levels of independence and confidence in opposition to their insecure peers.

Concerning availability, the present study identified this characteristic as being associated with the type of attachment style of teacher and student. Teachers with secure attachment present higher levels of availability towards responding to students' necessities in and out of lessons. This study builds on the importance given to availability by Cencer (2007), Presland (2005) and Rostvall and West (2003) by identifying evaluative means of those characteristics and distinguishes available teachers from unavailable in more than time provided to students but also identifying the quality of availability in the relationships

Additionally, proximity as evaluated by behavioural observation is reported in the literature as challenging and intuitive (Gaunt, 2008). Indeed, physical proximity seems to have little association with relational proximity: teachers with higher levels of touching interaction with their students presented distant relationships and were confirmed through adult attachment scoring to have a dismissive avoidant style. So, the measurement of proximity might be better identified through using other means than mere interaction, as it seems to be associated with deeper relational layers.

From the results concerning cross-cultural differentiation between the two countries involved in the second part: Portugal and United Kingdom demonstrated statistically consistent results for both personality and adult attachment. In personality terms the traits of differentiation were self-conscientiousness, impulsiveness, ideas and achievement striving which may be hypothesised by the Portuguese participants having lower levels of ambition, more controlled and limited in comparison to the English students.

In general the teachers fulfilled students' expectations and students reported having high levels of satisfaction towards the teachers' options in most matters. It seemed important that through raising the quality of relationships the students may increase levels of motivation that will reflect in the quality of their performances.

9.2. Methodological discussion

The methodologies used for this research were necessarily broad in order to investigate such multidirectional perspectives. In order to provide an accurate view of the singing teacher-student relationship, the research constituted quantitative and qualitative instruments, which are discussed and evaluated next.

Inquiry

The methods used in the initial questionnaires included both a broad variety of themes concerning the student relationship's expectations and realities, which produced a large variety of factors perceived by the students: background, experiences, aims, expectations, realities and beliefs. The questionnaires were designed with many open questions, to provide the students with the freedom to add other aspects of relevance that could be included for the later observational study. Although most

aspects of student relationship were raised and validated, several other aspects had to be discarded, as they did not accomplish statistical validation. Although the questionnaires, followed a pilot experimental stage, there were still inconclusive points that did not allow that part to be as consistent as the rest of the instruments used for this thesis.

Video recording

In order to investigate the real setting where singing lessons took place the use of an instrument providing large storage of information became necessary. Additionally, taking the longitudinal perspective of this research a comparative analysis provided through recordings for subsequent analysis and discussion seemed important. So, the use of a video recording device was considered. Early concerns were raised about the camera and the researcher restricting the participants' attitudes in the lessons. To overcome that, the intention was to leave the camera set at the beginning of lessons, with the researcher returning at the end of lessons to collect the tapes. However, due to the large movements occurring in the lessons, that approach did not produce its effects because parts of lesson were not captured. So, the presence of the researcher became indispensable in order to discretely make the appropriate rotations on camera and capture as much as possible without interfering with the lessons.

If this research was conducted on a larger scale, it is thought that the installation of several cameras in the room left permanently over time could provide safer levels of behavioural interferences. However, since this observation took place over one academic year, the effects of the external presence were gradually disappearing and comparatively insignificant changes were identified. To evaluate the levels of interference in the behaviours, a report was devised and given to teachers and students at the end of lesson. This instrument will be explained in more detail next.

After lesson report

To evaluate possible differences between recorded and non-recorded behaviour, and following previous research defending the use of complementary means of evaluating those effects (Kennell (2002)), a short report was designed to be given to all participants immediately after their lessons. The report concerned the

evaluation of altered behaviours as self-assessment and on the other person (teacher or student). This report ensured that more than the researcher's perspective on the recordings would be considered. Indeed, some participants identified behaviours of over-teaching and awareness. However, the reported alterations constituted a significant small proportion in comparison to all participants who did not identify any alterations from which it is possible to conclude that most recordings captured normal behaviours.

Diaries and interviews

Adding to the above methods, which constitute the core of data collection, informal interviews and diaries for registration were included. The usefulness of using these methods was related with developing the relationship between researcher and participants, certifying unclear information and allow participants to freely expose their concerns and ideas. It was clear that the isolation in which the lessons take place does not benefit the student's freedom to speak about the lessons. It should perhaps be considered in schools the sporadic presence of third person to whom both teachers and students could refer to overcome the isolation. It was noticed in both teachers and students the necessity to engage in conversations regarding their practice with the researcher, by sharing their struggles and accomplishments.

Personality

Regarding the personality observation, and taking the extensive variety of possible combinations, the present study focused on the contrasting traits between teacher and student. A much larger identification of combinations would be possible on a larger scale study not appropriate for thesis dimensions. Participants seemed eager to see the report with their personality results, which added enthusiasm and provided maintenance of participation rates.

Adult attachment

This study presented a major challenge yet an innovative contribution to music research in particular to music psychology on applying a new instrument: the adult attachment scale-r (Collins & Read, 1990). By implementing this instrument, the exploration of unknown methodological fields imposed reinforced analysis, compatibility and cautious evaluation. Being the first study using that resource to

serve teaching-student relationship in music education, also provided added enthusiasm and expectation for participants and researcher.

This instrument allowed a more accurate observation of compatibility between teacher and student, raising questions related to proximity, dependency and availability between teachers and students, which combined with lessons observation proved signs of effectiveness towards dysfunctional and functional relationship identification.

Methodological contribution

This was the first study involving the use of adult attachment styles and behavioural measurement in singing lessons, which added enriching and innovative tools of approaching research in singing teaching. Additionally, the results highlighted predictors of relational functionality. It was the first investigation concerned with relational functionality in singing lessons. Previous research studied relationships in regard to effectiveness and technical skills.

This research provided a broad perspective on the matter as it combined: a preliminary inquiry concerned with the students perspective; an extensive longitudinal observation and subsequent categorization, analysis, and reflection; psychological validated instruments that provided complementary consolidation to the research; informal interviews and diaries which linked all other instruments and fulfilled any unapproachable data through other means to both teacher and student.

9.3. Implications

Taking that teachers behave in accordance to their teachers' practices (Schmidt, 1998; Woody, 2000) this research has implications that goes beyond the present singing setting, into the future relationships of students when becoming teachers. The quality of the present relationships might affect the future perceptions of the teaching setting. In providing teacher-student relationships with the appropriate combinations, and consequently raising their longitudinal quality, the students are provided with much more than musical skills but rather the knowledge and feeling of appropriateness. Additionally, by increasing the awareness of singing teachers as to

the effect of personal attributes, this study may contribute towards teachers being more sensitive to choosing students more carefully.

This research has also implications for researchers interested in the longitudinal factors in effective musical teaching and learning and practitioners concerned with matching and improving student-teacher relationships, which reinforces the consideration by Cencer (2007) of personal combination being the base for all learning processes. This study also contributed towards research in students' possible motivation to continuing or giving up studying music.

For students, the effects of this research are that by knowing their teachers' psychological characteristics and how they function, they can manage their teachers in a better way. Secure students are already best able to cope with the type of insecure teachers, but insecure students could be better prepared to know what to expect and how to manage difficult situations in the singing lesson. Raising students' awareness of these factors is part of their development as independent learners, and could have a longer term effect on their own future teaching and performing.

For teachers, by acknowledging personality and attachment of students, they too can learn to become more adaptive to the students' needs. Strategies for working with different kinds of students could be recommended to teachers (see Chapter 8) and used as part of their continuing professional development. Additionally, these findings would also be of use for the training of future teachers by helping in the awareness of their own tendencies and those of their students, and so enabling reflective choices for more effective practices.

9.4. Future research

As already shown, the application of adult attachment has previously non-existent in music research. This study focused its point of interest on the singing-teacher's relationship and findings suggested that important elements of the person's attachment are translated in the relationship, the teaching and learning. Further research could be done in observation of other instrumental lessons in order to comparatively regard points of interception or differentiation between the voice and other instruments. Furthermore, within the singers group a more extensive attachment

research (in terms of participants) could provide all combinations of styles and enable a wider observation in order for all insecure styles to be included, analyzed and compared.

The present study indicated a relevant interference of the presence of an accompanist affecting the relational quality between singing teacher and students. It would be of interest to consider in further studies the clarification of which relational aspects are being affected by that person and to what extent it benefits the relationship between teacher and student.

It would also be important to analyse the quantitative consequences of functional and dysfunctional relationship in the developmental outcomes of the singing students. The present study reported extensively to the relationship. However, it would be important to project the findings of this research into the effects on singing development.

Based on the present research and the indicated relevance of previous researches of personality (Coimbra, 2004; Howard, 1982; Kemp, 2004; Wilson, 1984; Wubbenhorst, 1994), it is considered important that more studies approach personality in order to identify all other non-contrasting personality traits. This study has laid the foundations for a more complete understanding of teacher-student interaction, which has the potential through more substantial and extensive samples to be developed into a sophisticated tool for understanding teacher-student combinations and their effectiveness.

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Appendix A

Students' beliefs comparison between genders

Mean comparison (standard deviation) regarding beliefs between genders.

Students' Beliefs	Gender		
	Male	Female	
	N= 15	N= 49	
	Mean (SD)		<i>p</i> *
The teacher–student relationship interferes with the development of the student.	2.7 (1.5)	3.9 (1.5)	.008
The teacher's behaviour adjusts over time.	3.6 (.7)	3.6 (.8)	n.s.
My behaviour adjusts over time.	4.1 (1.0)	4.0 (.6)	n.s.
A teacher of the same gender is more likely to make me more comfortable.	2.4 (.8)	3.2 (1.2)	.025
Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	3.9 (.9)	4.1 (.9)	n.s.
My personal problems are reflected in the way I sing.	3.8 (.9)	3.7 (1.0)	n.s.
I avoid discussing personal issues in my singing lesson.	3.2 (1.0)	3.4 (1.1)	n.s.
I avoid discussing Professional issues in my singing lesson.	2.3 (.9)	2.5 (1.3)	n.s.
My singing teacher has an awareness of personal issues	3.3 (.7)	3.1 (1.0)	n.s.
My singing teacher has an awareness of professional issues	4.1 (.7)	3.7 (1.0)	n.s.
My singing teacher explores the interaction between professional and personal issues related to my singing	3.8 (.6)	3.3 (1.0)	n.s.
I feel free to change my singing teacher if I am not happy with his/her work.	3.3 (1.2)	3.6 (1.0)	n.s.
A singing teacher should be tough to get results from student.	3.5 (.7)	3.0 (1.2)	n.s.
A singing teacher needs to have personal empathy.	3.9 (.7)	4.00 (.7)	n.s.
Theoretical approach in singing lessons is important.	4.1 (.6)	3.8 (.8)	n.s.
Clear verbal communication between you and your singing teacher is important	4.7 (.6)	4.6 (.5)	n.s.
Non verbal communication (Gestures, body codes, facial expressions) between you and your singing teacher are important.	4.4 (.6)	4.2 (.8)	n.s.

* Two-tailed *Mann-Whitney* test with confidence level of 95%.

Students' beliefs comparison between groups with different starting ages

Mean comparison (standard deviation) of two age groups ('Under 18' and '18 and over') regarding the students beliefs.

Students' Beliefs	Age of Singing lessons Start		
	Under 18	18 and Over	
	N= 38	N=26	
	Mean (SD)		<i>p</i> *
The teacher–student relationship interferes with the development of the student.	3.4 (1.6)	3.9 (1.5)	n. s.
The teacher's behaviour adjusts over time.	3.6 (.9)	3.6 (.6)	n. s.
My behaviour adjusts over time.	4.0 (.6)	4.1 (.8)	n. s.
A teacher of the same gender is more likely to make me more comfortable.	2.9 (1.2)	3.2 (1.2)	n. s.
Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	3.9 (.9)	4.2 (.9)	n. s.
My personal problems are reflected in the way I sing.	3.7 (1.0)	3.7 (.9)	n. s.
I avoid discussing personal issues in my singing lesson.	3.3 (1.1)	3.6 (1.0)	n. s.
I avoid discussing Professional issues in my singing lesson.	2.3 (1.1)	2.7 (1.3)	n. s.
My singing teacher has an awareness of personal issues	3.2 (1.0)	3.1 (.9)	n. s.
My singing teacher has an awareness of professional issues	3.7 (.9)	3.8 (.9)	n. s.
My singing teacher explores the interaction between professional and personal issues related to my singing	3.4 (.8)	3.4 (1.1)	n. s.
I feel free to change my singing teacher if I am not happy with his/her work.	3.4 (1.0)	3.7 (1.1)	n. s.
A singing teacher should be tough to get results from student.	3.1 (1.1)	3.2 (1.0)	n. s.
A singing teacher needs to have personal empathy.	3.9 (.7)	4.2 (.6)	n. s.
Theoretical approach in singing lessons is important.	3.7 (.7)	4.0 (.8)	.049
Clear verbal communication between you and your singing teacher is important	4.6 (.5)	4.7 (.5)	n. s.
Non-verbal communication (Gestures, body codes, facial expressions) between you and your singing teacher are important.	4.0 (.8)	4.5 (.6)	.01

* Two-tailed *Mann-Whitney* test with confidence level of 95%.

Students' beliefs comparison between groups of students with different number of singing teachers

Mean comparison (Standard Deviation) of students who had 'until 2 singing teachers' and students who had '3 and more teachers' regarding the students' beliefs.

Students' Beliefs	Number of teachers		
	Until 2 teachers	3 teachers or more	
	N= 30	N=34	
	Mean (SD)		<i>p</i> *
The teacher–student relationship interferes with the development of the student.	3.6 (1.6)	3.6 (1.5)	n. s.
The teacher's behaviour adjusts over time.	3.9 (.6)	3.4 (.8)	.013
My behaviour adjusts over time.	4.0 (.6)	4.0 (.8)	n. s.
A teacher of the same gender is more likely to make me more comfortable.	2.9 (1.3)	3.1 (1.1)	n. s.
Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	3.8 (.9)	4.2 (.9)	n. s.
My personal problems are reflected in the way I sing.	3.8 (1.0)	3.7 (1.0)	n. s.
I avoid discussing personal issues in my singing lesson.	3.6 (1.1)	3.2 (1.0)	n. s.
I avoid discussing Professional issues in my singing lesson.	2.7 (1.2)	2.2 (1.1)	n. s.
My singing teacher has an awareness of personal issues	3.1 (.9)	3.2 (1.0)	n. s.
My singing teacher has an awareness of professional issues	3.6 (1.0)	3.9 (.9)	n. s.
My singing teacher explores the interaction between professional and personal issues related to my singing	3.4 (.9)	3.4 (1.0)	n. s.
I feel free to change my singing teacher if I am not happy with his/her work.	3.5 (.9)	3.6 (1.2)	n. s.
A singing teacher should be tough to get results from student.	2.9 (1.2)	3.3 (.94)	n. s.
A singing teacher needs to have personal empathy.	3.8 (.6)	4.2 (.7)	.032
Theoretical approach in singing lessons is important.	3.7 (.8)	3.9 (.6)	n. s.
Clear verbal communication between you and your singing teacher is important	4.6 (.5)	4.7 (.5)	n. s.
Non verbal communication (Gestures, body codes, facial expressions) between you and your singing teacher are important.	4.1 (.9)	4.3 (.6)	n. s.

* Two-tailed *Mann-Whitney* test with confidence level of 95%.

Students' beliefs comparison between groups with different singing learning longevity

Mean comparison (Standard Deviation) of students' singing studying duration (less experienced - until 3 years of singing and more experienced - 4 years and over) regarding the students' beliefs.

Students' Beliefs	How long had singing lessons		p *
	Until 3 years Less experienced N= 20	4 years and Over More experienced N=44	
	Mean (SD)		
The teacher–student relationship interferes with the development of the student.	3.8 (1.6)	3.5 (1.5)	n. s.
The teacher's behaviour adjusts over time.	3.5 (.8)	3.7 (.8)	n. s.
My behaviour adjusts over time.	4.0 (.7)	4.1 (.7)	n. s.
A teacher of the same gender is more likely to make me more comfortable.	2.9 (1.2)	3.1 (1.2)	n. s.
Physical contact (teacher using touch to demonstrate exercises during singing lesson) is helpful to develop technique.	3.9 (1.0)	4.1 (.9)	n. s.
My personal problems are reflected in the way I sing.	3.5 (1.1)	3.8 (.9)	n. s.
I avoid discussing personal issues in my singing lesson.	3.7 (1.0)	3.3 (1.0)	n. s.
I avoid discussing Professional issues in my singing lesson.	2.9 (1.3)	2.3 (1.1)	n. s.
My singing teacher has an awareness of personal issues	3.0 (.9)	3.3 (0.9)	n. s.
My singing teacher has an awareness of professional issues	3.7 (.9)	3.8 (.9)	n. s.
My singing teacher explores the interaction between professional and personal issues related to my singing	3.0 (1.0)	3.6 (.8)	.025
I feel free to change my singing teacher if I am not happy with his/her work.	3.5 (1.1)	3.6 (1.0)	n. s.
A singing teacher should be tough to get results from student.	3.1 (1.1)	3.1 (1.1)	n. s.
A singing teacher needs to have personal empathy.	4.0 (.6)	4.0 (.7)	n. s.
Theoretical approach in singing lessons is important.	3.9 (.9)	3.8 (.7)	n. s.
Clear verbal communication between you and your singing teacher is important	4.6 (.5)	4.7 (.5)	n. s.
Non verbal communication (Gestures, body codes, facial expressions) between you and your singing teacher are important.	4.1 (.8)	4.3 (.7)	n. s.

* Two-tailed Mann-Whitney test with confidence level of 95%.

Appendix B

Description of domains and traits according to according to Costa & McCrae (1992) and Costa & McCrae (2000).

	High Score	Low Score
N: NEUROTICISM	Evaluates adaptability vs. emotional instability.	
	Worried, nervous, emotionally insecure, hypochondriac.	Calm, relaxed, secure, resistant, self-satisfied.
n1: Anxiety	Apprehensive, fearful, worried, nervous, tense.	Calm, relaxed, stable, courageous.
n2: Angry hostility	Frustrated, bitter, easily irritable.	Easygoing, slow to anger, moderate.
n3: Depression	Feeling of guilt, sadness, hopelessness, lonely, melancholic.	Rarely experience sadness, are optimistic and hopeful.
n4: Self-Consciousness	Shameful, embarrassed, uncomfortable around others.	Balanced, secure, less disturbed by awkward social situations.
n5: Impulsiveness	Inability to resist temptations/ desires.	Capable of resisting, self-controlled, high tolerance to frustration.
n6: Vulnerability	Unable to cope with stress, hopeless, becoming dependent.	Capable of handling themselves in difficult situations.
E: EXTROVERSION	Evaluates the amount and intensity of inter-personal activity, capacity to express joy.	
	Social, active, talkative, optimistic, affections, orientated for interpersonal relationships, cheerful.	Reserved, independent, shy, task oriented, silent.
e1: Warmth	Easily become close to people, friendly and affectionate.	Distant, cold, formal.
e2: Gregariousness	Likes being in company of others, happy, social.	Prefers being alone, avoid social stimulation.
e3: Assertiveness	Dominant, strong will, confident, decided	Reserved, avoids public speaking.
e4: Activity	Highly active, vigorous, need to keep busy.	Relaxed in tempo, not hurry.
e5: Excitement- Seeking	Likes high stimuli, excitement, take risks, exhibitionist.	Careful, serious, low or no interest in excitement.
e6: Positive Emotions	Happy, funny, joyful, love.	Little enthusiastic, placid, serious.
O: OPENNESS	Evaluated the search for experiences, exploration of the non-familiar.	

	Curious, tends to have many interests, creative, original, imaginative, unconventional, willing to question authority.	Conventional, pragmatic, limited, non-artistic, lower interest on things.
o1: Fantasy	Imaginative, active fantasy life.	Prosaic, keep mind on task.
o2: Aesthetics	Valorizes esthetics, arts and beauty.	Insensitive to and uninterested in art and beauty.
o3: Feelings	Emotionally responsive, sensitive, empathic, experience higher than other happiness and unhappiness.	Limited range of emotions, insensitive to environment.
o4: Actions	Search for variety and news activities, unusual foods.	Like Routine find change difficult.
o5: Ideas	Intellectually curious, analytic, theoretically oriented.	Limited curiosity, pragmatic, narrow focus on limited topics.
o6: Values	Tolerant, open spirit, large horizons.	Dogmatic, limited, conservator.
A: AGREEABLENESS	Evaluated the quantity and orientation of interpersonal tendencies.	
	Altruistic, sympathetic to others, eager to help, forgiving, believing in others.	Egoistic, skeptical, of others, unmerciful, manipulator, revengeful.
a1: Trust	Believe in the well intentions and honesty of others.	Cynical, suspicious of others' honesty and danger.
a2: Straightforwardness	Frank, sincere.	Manipulative, calculative.
a3: Altruism	Altruistic, actively social interested, generous.	Self-centered, reluctant to get involved in other people's problems.
a4: Compliance	Tolerant, forgive and forget.	Aggressive, antagonistic, contesting.
a5: Modesty	Humble, self-effacing.	Arrogant, narcissistic amplified image of self.
a6: Tender-Mindedness	Moved by human side and feelings.	Realistic, rational, less moved by pity.
C: CONSCIENTIOUSNESS	Evaluates the degree of organization, persistency and motivation towards an objective.	
	Organized, reliable, hard-working, strong-willed, disciplined, ambitious, punctual.	Irresponsible, lazy, neglectful, hedonistic.
c1: Competence	Sense of capability to deal with life, sensitivity, prudent.	Lower opinion on their capacities reflected in lower self-esteem.
c2: Order	Well organized, tendency for clean tidy	Disorganized, unkempt.

	environment.	
c3: Dutifulness	Adhere strictly to moral obligations, conduct and ethical principles.	Irresponsible, unreliable.
c4: Achievement Striving	Full of objectives in life, high aspirations, hard working,	Little ambitious, lazy, seem aimless.
c5: Self-Discipline	Persistent, task oriented until completion despite distractions.	Easily discouraged, when facing frustration easily quits.
c6: Deliberation	Careful before taking actions, makes plans.	Spontaneous, take actions before evaluating the consequences.

Appendix C

Comparison between combined mean scores and standard deviation of English normative group and the Singers group in the NEO PI-R (Costa & McCrae, 1992) for college age.

College Age						
NEO-PI-R	English					
	Normative group		Singers group		z	p
	M	SD	M	SD		
N: Neuroticism	96.3	21.9	112.5	0.7	32.40	0.02
n1: Anxiety	17.5	5.0	16	2.8	-0.75	0.59
n2: Angry hostility	16.0	5.1	23	1.4	7.00	0.09
n3: Depression	15.3	5.7	22.5	6.4	1.60	0.36
n4: Self-Consciousness	16.4	4.7	14.5	4.9	-0.54	0.68
n5: Impulsiveness	18.4	4.3	23	1.4	4.60	0.14
n6: Vulnerability	12.8	4.4	13.5	0.7	1.40	0.40
E: Extroversion	121.2	18.2	108.5	4.9	-3.63	0.17
e1: Warmth	23.2	4.3	20	2.8	-1.60	0.36
e2: Gregariousness	19.2	5.1	23	1.4	3.80	0.16
e3: Assertiveness	17.0	5.1	20	1.4	3.00	0.21
e4: Activity	18.8	3.8	14.5	3.5	-1.72	0.34
e5: Excitement- Seeking	21.5	4.0	12.5	6.4	-2.00	0.30
e6: Positive Emotions	21.5	4.1	18.5	4.9	-0.86	0.55
O: Openness	116.8	17.8	121	5.7	1.05	0.48
o1: Fantasy	20.1	4.8	22	4.2	0.63	0.64
o2: Aesthetics	18.6	5.6	23	2.8	2.20	0.27
o3: Feelings	22.4	4.3	23	2.8	0.30	0.81
o4: Actions	15.8	3.5	13.5	6.4	-0.51	0.70
o5: Ideas	19.1	5.0	20	1.4	0.90	0.53
o6: Values	20.8	3.7	19.5	3.5	-0.52	0.70
A: Agreeableness	113.5	16.6	100	2.8	-6.75	0.09
a1: Trust	18.7	4.4	16	7.1	-0.54	0.69
a2: Straightforwardness	18.3	4.8	19.5	9.2	0.19	0.88
a3: Altruism	23.2	3.6	14	1.4	-9.20	0.07
a4: Compliance	15.6	4.4	15	0.0	*	*
a5: Modesty	18.0	4.5	21	1.4	3.00	0.21
a6: Tender-Mindedness	19.8	3.3	14.5	7.8	-0.96	0.51
C: Conscientiousness	114.5	21.1	111	4.2	-1.17	0.45
c1: Competence	21.1	4.0	19.5	6.4	-0.36	0.78
c2: Order	17.8	4.9	11	1.4	-6.80	0.09
c3: Dutifulness	21.2	4.1	23	0.0	*	*
c4: Achievement Striving	18.9	4.9	20.5	2.1	1.07	0.48
c5: Self-Discipline	18.9	5.1	18	4.2	-0.30	0.81
c6: Deliberation	16.6	4.5	19	1.4	2.40	0.25

* SD is .00 so it is not possible to calculate

Comparison between combined mean scores and standard deviation of Portuguese normative group and the Singers group in the NEO PI-R (Costa & McCrae, 1992) for college age.

College Age						
NEO-PI-R	Portuguese					
	Normative group		Singers group		z	p
	M	SD	M	SD		
N: Neuroticism	99.7	18.3	128	8.5	4.72	0.13
n1: Anxiety	19.4	4.3	25	0.0	*	*
n2: Angry hostility	14.8	4.2	20.5	3.5	2.28	0.26
n3: Depression	16.3	5.0	28.5	0.7	24.40	0.03
n4: Self-Consciousness	17.1	4.3	14	11.3	-0.39	0.77
n5: Impulsiveness	17.9	3.6	24.5	4.9	1.89	0.31
n6: Vulnerability	13.9	4.3	15.5	3.5	0.64	0.64
E: Extroversion	112.6	15.4	108.5	12.0	-0.48	0.71
e1: Warmth	21.9	3.8	15.5	14.8	-0.61	0.65
e2: Gregariousness	18.2	4.9	21.5	12.0	0.39	0.76
e3: Assertiveness	14.6	3.6	19.5	7.8	0.89	0.54
e4: Activity	17.0	3.4	22.5	10.6	0.73	0.60
e5: Excitement- Seeking	20.7	3.9	19.5	7.8	-0.22	0.86
e6: Positive Emotions	20.1	4.2	10	1.4	-10.10	0.06
O: Openness	113.5	18.2	130	15.6	1.50	0.37
o1: Fantasy	18.7	4.9	24	2.8	2.65	0.23
o2: Aesthetics	20.6	5.1	21	8.5	0.07	0.96
o3: Feelings	20.6	3.9	20	9.9	-0.09	0.95
o4: Actions	16.8	3.4	24	2.8	3.60	0.17
o5: Ideas	18.5	4.8	19	4.2	0.17	0.90
o6: Values	18.0	3.4	22	1.4	4.00	0.16
A: Agreeableness	113.6	15.5	111.5	4.9	-0.60	0.66
a1: Trust	17.9	4.1	14.5	0.7	-6.80	0.09
a2: Straightforwardness	17.2	4.1	21.5	3.5	1.72	0.34
a3: Altruism	21.5	3.9	22	11.3	0.62	0.96
a4: Compliance	17.1	4.6	15.5	3.5	-0.64	0.64
a5: Modesty	19.0	4.0	18.5	7.8	-0.09	0.94
a6: Tender-Mindedness	20.7	3.4	19.5	6.4	-0.27	0.83
C: Conscientiousness	113.0	18.2	124	18.4	0.85	0.55
c1: Competence	19.2	3.5	16.5	10.6	-0.36	0.78
c2: Order	18.7	4.6	18.5	2.1	-0.13	0.92
c3: Dutifulness	21.0	4.1	26	4.2	1.67	0.34
c4: Achievement Striving	19.7	4.1	24.5	0.7	9.60	0.07
c5: Self-Discipline	17.8	4.2	21.5	0.7	7.40	0.09
c6: Deliberation	16.5	4.6	17	12.7	0.06	0.97

* SD is .00 so it is not possible to calculate