## Communication apprehension among business and accounting students

By

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#### DECLARATION

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#### ABSTRACT

In light of the importance of effective communication in today's global, dynamic business world, accounting and business education programmes place considerable emphasis on the development of communication competencies among students. However, not all students appear to benefit as desired from communication skills development. Prior research has identified communication apprehension, or fear of communicating, as a major factor which inhibits an individual's willingness to communicate and his/her capability to develop effective communication skills.

The purpose of this study is to explore communication apprehension, oral and written, among accounting and business students at an Irish Institute of Technology. The study is carried out using both quantitative and qualitative research methods. The validity and reliability of two common apprehension instruments (Personal Report of Communication Apprehension and Written Communication Apprehension questionnaires) were confirmed for use in an Irish context and then used to obtain evidence on the levels of communication apprehension experienced by first year students. In the second phase of the study, 17 students with differing levels of apprehension were interviewed to look at the phenomenon through the lens of the student. The results are analysed and compared to other studies and the implications of the research are then presented.

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## LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
DIT	Dublin Institute of Technology
CA	Communication apprehension
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
KMO	Kaiser-Meyer-Olkin - measure of sampling adequacy
ML	Maximum likelihood extraction
OCA	Oral communication apprehension
PRCA-24	Personal report of communication apprhension
TCA	Total communication apprehension
WAT	Written apprehension test
WCA	Written communication apprehension
WCA-24	Written communication apprehension questionnaire
UK	United Kingdom
US	United States

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## CHAPTER 1 INTRODUCTION

#### 1. Introduction

#### **1.2.** Motivations for the study

- 1.2.1 Communication apprehension among Irish business and accounting students – a research opportunity
- 1.2.2 Personal experiences of the researcher as a business educator
- **1.3** Objectives of the study
- **1.4** Structure of the thesis
- 1.5 Summary

#### 1.1 Introduction

Irish employers, like those elsewhere in the world, demand that business and accounting graduates possess effective oral and written communication skills. However, despite the considerable efforts made by higher education institutions over the past 20 years to prioritise the development of communication competence, many students do not develop the appropriate skills. There is increasing awareness that an individual may experience a range of fears concerning communication tasks or situations which may inhibit the development of the requisite communication skills. These fears or anxieties many relate to either (or both) oral or written communication and they are commonly referred to as 'communication apprehension' (CA). This thesis explores the phenomenon of CA among business and accounting students within higher education in Ireland.

The remainder of this chapter presents the motivation for the study and outlines its primary objectives. It also describes the structure of the thesis and the contents of the various chapters.

#### **1.2** Motivation for the study

There are two primary motives for conducting this study. Firstly, there has been limited prior research concerning CA among Irish students. Secondly, as a lecturer in higher education, I have seen firsthand the fear that students experience in trying to communicate and I wish to gain a deeper understanding of this fear.

## **1.2.1** Communication apprehension among Irish business and accounting students – a research opportunity

Good oral and written communication skills are critical for success in today's global, dynamic business world (Roebuck et al., 1995; Dearing, 1997; Messmer, 1999; Albrecht and Sack, 2000, Quible and Griffin, 2007; Gray, 2010). Indeed, Russ (2009, p.395) contends that scholars and practitioners have long argued that communication competence is intrinsically linked to professional effectiveness and success. It is now widely recognised that graduates entering the world of work require more than academic knowledge of their chosen discipline; they also need a diverse range of non-technical competencies and, in particular, they must be effective communicators (McDaniel and White, 1993; Crawford et al., 2001; Cavanagh et al., 2006; Mitchell et al., 2010). Several empirical studies have highlighted that employers place significant emphasis on communication skills in their hiring and promotion decisions (Kelly and Gaedeke, 1990; Deppe et al, 1991; Maes et al., 1997; Warnock and Curtis, 1997). Furthermore, over the last 20 years, surveys have consistently shown that employers rank oral and written communication competence as highly as, or higher than, technical skills (Blanthorne et al., 2005; Gray et al., 2005; Hassall et al. 2005; Jackling and DeLange, 2009; Jackson, 2010).

The relationship between communication competence and job success has motivated many colleges and universities to introduce courses to enhance their students' oral and written communication skills (Ameen et al., 2010; Du-Babcock, 2006). In fact, many academics recognise that they must equip students with the communication skills desired by employers if their degree programmes are to be successful (Plutsky; 1996; Mitchell et al., 2010). This emphasis on communication competence has led to business communication courses becoming a "staple" in undergraduate students' experiences (Russ, 2009). However, despite these developments, the communication capability of graduates across a range of disciplines has attracted considerable adverse criticism (Graham et al., 2009). A report by the Royal Literary Fund (2006, p.xi) indicated that poor writing skills is a pervasive problem, with students at both new and old universities in the United

Kingdom (UK) being "afflicted to a disabling degree by inadequate writing skills". Furthermore, many employers remain dissatisfied with the communication competence of new graduates (Hassall et al. 1999; Cavanagh et al., 2006; Quible and Griffin, 2007). For example, 86% of a sample of 233 UK employers was disappointed with graduates' communication abilities (Council for Industry and Higher Education, 2008). Similarly in Ireland, a recent report from Gradireland (2010) reveals that over half of Irish employers surveyed consider that graduates possess poor oral and written communication competencies.

Within the various business disciplines, accounting faculty have placed considerable emphasis on the development of effective communication skills. This focus was fuelled by the concerns expressed by practitioners and professional accountancy bodies regarding the communication competence of accounting professionals (e.g. AAA, 1986; AECC, 1990, Mathews et al., 1990). The increasing importance of communication in accounting can largely be attributed to the change in the nature of the work undertaken by accountants today, as Siegel (2000, p.75) comments:

Today's accountant isn't isolated from other parts of the organisation. He or she works on cross-functional teams, interprets financial information for people in other parts of the organisation, and is looked to for input on strategic decisions. Communication skills are critical simply because there is a tremendous amount of interaction between accountants and other people in the organisation.

Consequently, it is now recognised that communication skills are among the most important competencies for graduates to possess upon their entry to careers in accounting (e.g. Zaid and Abraham, 1994; Albrecht and Sack, 2000; Borzi and Mills, 2001; Courtis and Zaid, 2002; IFAC, 2003). Internationally, in response to the various calls for changes to the university accounting curriculum, a considerably body of scholarship has emerged providing insight and guidance on the development of communication skills (Gray, 2010). In Ireland, studies concerning the relative importance of various knowledge types and skills of accountants in the workplace have highlighted the significance of effective communication (Collins, 2000; Feeney and Pierce, 2007). Chartered Accountants Ireland (CAI), the largest professional accountancy body in the country, outlines

that effective communication is a core business competence that members must develop and demonstrate during the qualification process and which must be subsequently maintained as part of members' commitment to continuing professional development (CAI, 2010).

It is clear that the business world demands effective oral and written communication, but many new business graduates (whether generalists or accounting or other specialists) entering the workplace are deficient in the communication skills deemed essential for business despite having experienced business communication courses when in higher education. There is increasing recognition that the failure to develop appropriate communication skills may not be due to the quality of relevant education and training, but rather may result from students' experiencing CA. In fact, exposing students who have high levels of CA to situations designed to improve their communication skills is likely to increase their anxiety and lessen their learning. Consequently, it is argued that it is necessary to alleviate CA before focusing on the enhancement of communication skills. Thus, if business academics are to be successful in designing and implementing intervention strategies that will sensitively develop students' communication capabilities, they firstly need to gain some insight into the CA profiles of their students.

#### **1.2.2** Personal experiences of the researcher as a business educator

I work within higher education in Ireland and have taught both undergraduate and postgraduate students for many years. As each new cohort of students arrives at college, it is clear to me that many are fearful of communicating. As a tutor to a group of first year students, I am particularly cognisant that some students fear mixing with, and talking to, their peers and refrain from conversing with others even during supportive, ice-breaking induction sessions. Most recently, I noticed a student who spent all of her breaks texting on her mobile phone. She later admitted that she engaged in this behaviour because she was scared to talk to others and was fearful of how she would respond if one of her peers tried to initiate a conversation with her. Generally, as first year progresses, most students

appear relaxed in their communication with peers, but communication-based learning activities, such as meetings or public speaking, often give rise to new In particular, many students find giving a presentation to be a very fears. challenging experience, and at the extreme some students will become so fearful or upset that they will absent themselves from the activity and forfeit marks which may count towards their final results. Additionally for many years now, I have noticed that students often experience anxiety concerning writing and encounter difficulties when completing a writing assignment. On asking students anecdotally to explain the reasons for their fears, it appears that they struggle to express their views in writing and are fearful of evaluation. I have observed that while the level of fear experienced regarding various communication situations or activities may reduce for some students over the course of their degree programme, for highly apprehensive students the fear persists and in some cases it is debilitating.

In my experience, postgraduate students are not immune from communication apprehension and whereas most appear to be comfortable conversing one to one or in small groups, many admit to heightened fear when required to engage in any form of public speaking. This is the case even though most of these students participated in communication courses as part of their undergraduate study. Ultimately, for many students an improvement in communication skills did not occur as a result of these courses. I have often attempted to alleviate students' fear by providing a supportive learning environment, but I have become increasingly aware that without fully understanding the levels and type of CA experienced by students that my efforts to reduce their fear may be worse than useless.

Thus, my observations and experiences of students' communication fears prompted me to initiate this research study in the hope that by developing a thorough understanding of the phenomenon that I will be better placed to design appropriate interventions in the future that will reduce students' apprehension and enable them develop the communication skills essential for their future careers.

#### **1.3** Objectives of the study

There has been very limited prior research concerning the levels of CA experienced by Irish students, despite both the observed day to day communication fears demonstrated by students and the known significance of communication competence for success in the workplace. Furthermore, its seems that no prior research study, either in Ireland or elsewhere, has explored the phenomenon of CA using qualitative methods and through the lived experiences of students themselves. Thus, the aim of this thesis is twofold. Firstly, it seeks to measure the levels of oral and written CA among first year, business and accounting students at a higher education institution in Ireland. Secondly, it aims to qualitatively explore the phenomenon of CA from the perspective of students. The study focuses on first year students because it is important to understand the baseline of CA with which students commence their higher education study. Some particular attention is paid to the accounting students within the full sample in this study given the explicit emphasis placed on communication competence by the accounting profession (more so than other business disciplines) and also a substantial number of prior studies exist which have focused on accounting students.

It is hoped that this study will aid the understanding of the phenomenon of CA among business and accounting educators in Ireland, so that appropriate interventions can be designed to alleviate students' anxieties and fears and enable them to develop as effective communicators ready for the demands of the workplace. In addition, it is hoped that the findings of the study will contribute to the expanding body of literature concerning CA, by providing measures of CA in Ireland which can be used as benchmarks in future studies. Furthermore, the qualitative aspects of the study will extend prior research by providing rich descriptions and insights into the experiences of students with CA.

#### **1.4** Structure of the thesis

Chapter 2 presents the literature review. It considers the nature, causes and consequences of CA. Different approaches to the measurement of CA are presented and the origin, development and validity of two widely used instruments, which measure students' levels of oral and written CA, are examined. Finally, prior studies which have measured CA among business and accounting students are reviewed.

Chapter 3 provides an account of methodological issues considered in the design and execution of the study. It outlines the philosophical assumptions underpinning social science research and their interplay with qualitative and quantitative research approaches. The philosophical orientation of the researcher is delineated and aligned with the research approach. Finally, the specific objectives of the study are articulated.

Chapter 4 reports on the quantitative phase of the study. Firstly, the process of data collection and analysis are described. The tests of the statistical validity and reliability of the two measurement instruments are presented. The results for the full sample, the disciplinary groups and the gender groups are then outlined, analysed and compared to the findings of previous studies.

The qualitative phase of the study is reported in Chapter 5. The process of data collection is outlined and the approach to the analysis of the data is presented. The findings are then presented with regard to both oral and written CA and some emergent themes are considered.

Chapter 6 reviews the study, reflecting on the findings in light of the objectives. The strengths and limitations of the study are considered and some directions for future research are outlined. The chapter concludes with some reflections of the researcher regarding the outcomes of the study.

#### 1.5 Summary

This chapter has introduced the study which is presented in this thesis. It has explained the motivations for the study, articulated its objectives and presented the structure of the thesis. The next chapter presents the literature review.

#### CHAPTER 2

### COMMUNICATION APPREHENSION

2.1	Introduction		
2.2	Nature of communication apprehension		
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#### 2.1 Introduction

The importance of communication in business was set out in Chapter 1. Many employers are dissatisfied with the levels of communication skills of new graduates, even though most third level institutions provide communication training as part of their business degree programmes. If graduates lack the required communication competence, it may be due to a lack of training, but, it may also be due to a fear of communicating orally and/or in writing, as the following extract from the autobiography of M.K. Gandhi, who later became a pre-eminent political and spiritual leader of India, highlights:

I had not the courage to speak and I therefore decided to set down my thoughts in writing. I went to the meeting with the document in my pocket. So far as I recollect, I did not find myself equal to reading it, and the President (of the Society) had it read by someone else. This shyness I retained throughout my stay in England. Even when I paid a social call the presence of half a dozen or more people would strike me dumb. He invited me to speak at a meeting for the promotion of vegetarianism. I ascertained that it was not considered incorrect to read one's speech. I knew that many did so to express themselves coherently and briefly. I had therefore written down my speech. I stood up to read it but I could not. My vision became blurred and I trembled, though the sheet hardly covered a foolscap. Sit Mazmadur had to read it for me. I was ashamed of myself and sad at heart at my incapacity (Gandhi, 1982, p.70-71)

Suffering from high levels of CA is not uncommon. In fact, up to 20% of the student population experience high levels of fear of oral communication (McCroskey, 1977a) and up to 18% of students are anxious about communicating in writing (Smith and Nelson, 1994). Fear of communicating has been researched for many years. Richmond et al. (1997) compiled a bibliography of over one thousand references to studies (theses, published articles, and books) concerning communication, avoidance, shyness, reticence, quietness, and communication apprehension. Whereas a significant body of research has developed over the years, particularly concerning CA, the number of studies undertaken outside the United States (US) is relatively small, as Klopf (1997, p.269) comments: "studying communication apprehension still seems to be primarily a US enterprise, causing relatively few and inconsequential ripples abroad". In addition

to extending the existing CA work to other countries, greater academic effort is required to extend and generalise the construct, and to carry out research on the effect of factors such as differing cultures, humour and teacher immediacy (Zhang, 2005).

In this chapter, the literature on the nature of oral and written CA is explored. Some of the instruments that are used to measure a person's level of fear of communicating are examined and prior studies which have investigated CA among different groups of students are evaluated. This literature review will then frame the design of the current study as will be outlined in subsequent chapters.

#### 2.2 Nature of Communication Apprehension

Nearly 70 years ago, Gilkinson (1942, p.141) noted that students often experienced anxiety when communicating in a classroom and different students reacted differently to the anxiety. The degree of fear for some was significantly higher when speaking in public. This was referred to as speech or 'stage' fright which was regarded as:

an evaluative disability, occurring in social speech situations, and characterised by anticipatory negative reactions of fear, avoidance, and various internal and other manifestation of tension and behavioural maladjustment (Clevenger, 1959, p.134).

McCroskey (1997b, p.76) reports that the expansion of higher education in the US in the 1960s introduced types of students to college classrooms who were not accustomed to speaking in public and actually had many problems in coping with the communication aspects of programmes. This problem was reviewed by the 'Ad Hoc Committee on Evaluation in Speech Communication', formed by the Speech Association of America. The committee reported in 1969 that "since many problems in speech communication pedagogy may result from students' inhibitions rather than their inability", it recommended the study of the phenomenon and the development of instruments to measure, at various ages, the extent of communication-bound anxiety (Research Notes, Spectra, 1969, p.4).

McCroskey (1970, p.270) labelled this communication bound anxiety "communication apprehension" (CA).

McCroskey (1977b, p.82) describes CA as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons". Each individual has a unique level of apprehension concerning real or anticipated communication which results in a number of individual differences such as effectiveness of, amount of, and desire for, communication (Richmond and McCroskey, 1998, p.26). This uniqueness may explain why one person feels anxiety or apprehension in a particular situation and another person does not. While this is still not fully understood, there is now a considerable body of research on this type of anxiety. Indeed, from 1977 to 1997, CA became the single most researched concept in the field of communication studies (Wrench et al., 2008).

It is clear that a person may experience a different level of CA depending on whether he/she is communicating orally or in writing. Oral CA (OCA) is concerned with the fear of speaking with or talking to other people, for example, on a one-to-one basis, in groups, in meetings or public speaking. Written CA (WCA), on the other hand, is concerned with the level of fear or apprehension that the person feels when required to write, such as preparing a report, essay, or case study. The two forms of apprehension are different but some research, which is reported on later in this chapter, indicates that there is a correlation between them.

Two types of OCA, namely trait-like OCA and state-like OCA, have been identified (McCroskey, 1997b, p.84). Trait-like apprehension is an aspect of personality which refers to those characteristics of the person that account for consistent patterns of feeling, thinking, and behaving (Pervin et al., 2005, p.6). Trait-like OCA is viewed as a relatively enduring orientation toward a given mode of communication across a wide variety of contexts and individuals with high trait-like OCA typically experience fear and anxiety in relation to many, if not all, communication situations (McCroskey, 1997b, p.85). In contrast, state-like OCA, on the other hand, is specific to a given oral communication situation, such as

giving a particular speech to a group of strangers or being interviewed by an important person for a new job at a given time and place. These two types of OCA are regarded as endpoints on a continuum with intermediary alternatives as shown in Figure 2.1 below (McCroskey, 1997b, p.84). Moving across the line from left to right, trait-like OCA reflects the personality of the individual; context-based CA refers to the apprehension an individual feels across different communication situations in general; audience-based OCA refers to the apprehension felt when communicating with a specific audience or group, or with a given individual or group in different situations; and state-like or situational OCA, is apprehension felt when communicating with an individual or group in a given situation.

Trait-like	Context-based	Audience-based	Situational	
₊				
More Trait-like		More situational (or state-like)		

Figure 2.1. Oral Communication Apprehension Continuum

Source: Richmond and McCroskey, 1998, p.43.

When confronted with communication activities, individuals who demonstrate high levels of anxiety towards oral communication report fear, tension, or physical symptoms (such as increased heart rate and sweating) (Beatty and Dobos, 1997, p.217). Many suffer like this in silence, and they are not aware that the complaint is so common. Indeed, Horwitz (2002, p.1) refers to this fear as "the hidden communication disorder because it is frequently not recognised, acknowledged or discussed".

While there is much literature on oral communication, less research has been conducted concerning WCA. This term was coined by Daly and Miller (1975a) who were previously students of McCroskey. Faigley et al. (1981, p.16) provide a good definition of WCA:

the tendency to experience high degrees of anxiety when asked to write, resulting in an approach-avoidance conflictive state which manifests itself in one's behaviours, attitudes, and written product. Daly and Wilson (1983) expand on this definition by suggesting that the apprehension results from the perceived evaluation accompanying the writing task.

Fear of communicating in writing may not only affect how a person approaches a writing task but may also lead to a negative attitude to writing (Daly, 1977). Research indicates that, as with oral communication, the level of an individual's anxiety toward writing may influence both his/her behaviour and affect his/her performance. It is not the equivalent of having poor writing skills but it may impede the individual's ability to write effectively (Simons et al. 1995). The more apprehensive people are about writing, the lower their expectations are for success in writing, and the less skilful they are when it comes to writing. The attitude an individual holds towards the act of writing will also affect how they perceive the evaluation of their writing (Daly and Miller, 1975b).

Whereas significant advances have been made in exploring the nature, causes and consequences of CA, it still remains difficult to predict a person's specific response to a situation requiring social interaction (McCroskey, 1997c). A person's level of OCA or WCA will affect his/her approach to communication. The person who is a high oral apprehensive will seek to avoid having to speak or may feel very uncomfortable in many communication situations, whereas, the low apprehensive in many cases will seek out situations that require talking and will actually enjoy the experience. Similarly the person who has a fear of writing will try to avoid writing or will not enjoy the writing experience, whereas, the low writing apprehensive will consider the writing task a positive experience. Hence, an understanding of why one person is apprehensive and another is not is considered essential in understanding the effects of CA.

#### 2.3 Causes of oral and written communication apprehension

There has been much research carried out which has considered the nature/nurture debate and possible causes of OCA. Early research placed the emphasis on the

nurture aspect and indicated that the source of OCA lay primarily in a child's experience during its formative years, and it was therefore a fear learned by exposure to one's environment - culture, parents, school, peers, siblings, etc. (McCroskey, 1997c). Factors such as reinforcement (rewards and punishments a person receives for communicating), skill acquisition and modelling (imitating a parent's communication style), have been found to contribute significantly to the development of OCA (Daly et al., 1997, p.25; Richmond and McCroskey, 1998, p.49-50). However, no single environmental factor accounts for the development of OCA and all aspects of the environment actually blend together (Daly et al., 1997, p.29). For example, a person who has a tendency to be apprehensive will probably not communicate as often as others, and will therefore not receive sufficient reinforcement to encourage communication. Lack of willingness to communicate will prevent the development of the necessary skills and if the role models available to a person are not good communicators this will also aggravate the problem. Furthermore, evaluative situations such as assessment activities in school or higher education may trigger OCA. Other factors in the environment which may increase OCA include novel or unfamiliar situations, formal situations, and occasions which were previously unsuccessful. Some or all of these occasions may cause anxiety or apprehension to rise for certain individuals. For the low apprehensive, any apprehension experienced in the above situations will subside either during or shortly after the event. But for the high apprehensive the apprehension may linger, and it may affect his/her ability to perform to the best of his/her ability (Richmond and McCroskey, 1998, p.50).

In the late 1990s, the social learning theory or 'nurture' factor regarding OCA was considered by some researchers to lack 'predictive power' (McCroskey, 1997c, p.7). It was felt that it was not possible to predict the communication behaviour of an individual simply by examining the factors in his or her nurtured environment. Researchers identified that a person's personality or genes may be the main reason why one person is more apprehensive than another. Thus, Beatty et al. (1998) reconceptualise OCA as representing inborn, biological characteristics, that, like many other personality traits, do not depend primarily on social experience and learning processes. They refer to this trait-based

communication paradigm as "communibiology" (p.199), which they base on the body of research linking the genetically inherited neurobiological structures to personality traits. The basic propositions of this new theoretical perspective of OCA are that all psychological processes (thinking, remembering, motivation, emotions) involved in social interaction depend on brain activity, and brain activity precedes psychological or social experience. The neurobiological structures, the nervous system and brain circuits which process information and control behaviour, and the underlying temperamental traits, or basic dimensions of personality, are mostly products of genetic inheritance, and therefore environment has only a negligible effect on trait development. Accordingly, differences in interpersonal behaviour are principally seen as a consequence of individual differences in neurobiological functioning, that is, they are mainly dependent on the nature of the individual (Beatty et al., 1998).

Communibiology researchers acknowledge that an individual's environment (nurture) will impact on OCA, but they consider that the genetic dimension (nature) is far more significant. Beatty et al. (1998) consider that the relationship may be 80/20 in favour of genetics whereas social learning theorists give more weight to the environment and would put the relationship at 40/60 or 50/50 (Carey and DiLalla, 1994; Condit, 2000; Condit, 2000a). Eysenck (1997, p.287) contends that nature and nurture are two sides of the same coin, they cannot be treated separately, and their effects and interactions must always be studied jointly. Carey and DiLalla (1994, p.32) concur and suggest that "the question is no longer whether nature or nurture shapes human development but rather how these complex influences act together to form specific outcomes".

A study of OCA in the classroom in a US university reports that one in four students experienced apprehension at least once per week and that the frequency of the CA was unaffected by class standing, academic major, population of hometown, birth order, transfer or 'native' status, grade point average, age and sex (Bowers, 1986). The students themselves attributed their OCA to crowds and their own characteristics. Heuett et al. (2003) suggest that the sources of a person's difficulty with communicating in public are linked to how the person

thinks about public speaking, how s/he feels about public speaking, and the performance skills involved with public speaking which the person has developed. Where individuals feel that their skills will meet the audience's expectations, then they will not view the situation as threatening and will experience a lower level of apprehension than would apply if they thought they were not up to the task. If individuals experience severe physiological arousal, for example increases in heart rate, respiration and perspiration, this may interfere with their ability to perform. If they do not have the necessary skills this will raise their level of apprehension. So, the combination of thoughts, feelings and communication skills, together result in how individuals will react in communication settings and lead to a possible increase in their levels of OCA. Thomas et al. (1994) suggest that OCA is predicted to increase directly with the tendency to think about oral communication tasks in terms of what can go wrong, what is going wrong, and what is wrong with oneself as a communicator. These thought patterns skew the content of individuals' thoughts about oral communication in such a way that they draw biased or exaggerated conclusions about the threat posed by the communications task. In contrast, a person's level of OCA is predicted to decrease when the person has a tendency to think about how the oral communication task can be successful.

While a large amount of oral communication occurs within most organisations, substantial levels of written communication are also necessary (Scott et al., 1978). Therefore, the importance of writing cannot be underestimated. As stated earlier, a person who has high WCA may wish to avoid writing or reduce his/her writing requirement to the minimum. Research into WCA has not been as extensive as for OCA and so the causes of WCA are not as clear or as well reported. Nonetheless, social, contextual and cognitive variables all contribute to form a person's level of apprehension toward writing (Daly and Wilson, 1983). Faigley et al. (1981) suggest that WCA is not assumed to lead to poorer writing nor is poorer writing assumed to result in apprehension. Most likely the relationship is bi-directional; apprehension and performance probably reinforce each other (Faigley et al., 1981). Clark (2005, p.78-9) views WCA as a "manifestation of the larger construct which is writing anxiety". The behaviour is part of the process

when a person becomes anxious about writing. The anxiety may result in particular behaviours, depending on how the "person integrates the affective, cognitive, and socio-cultural elements of their experiences to make sense of the world around them" (Clark, 2005, p.78). She points out that though the physiological and cognitive processes of human reasoning and the generation of emotional reactions appear to be similar in all people, the products of these processes, both cognitive and affective, vary from person to person. The person's unique interpretation of his or her experiences is actually what triggers his or her anxiety (Clark, 2005, p.128) and thus, the sources of WCA vary for each individual and are very difficult to determine.

Where a person feels that his/her written work is of a quality that will lead to negative evaluation, it may cause an increase in his/her level of apprehension (Daly and Wilson, 1983). Also, previous writing experiences which led to negative responses may result in an expectation of further negative responses or evaluations. This expectation may become self-fulfilling. Fearing further negative responses, s/he may avoid writing which in turn may lead to lower inclinations towards any further attempts. As a result, a person with high WCA may be unable to put the words together to write (writer's block), may have a very negative attitude to his/her ability to write, and may also have a general anxious, agitated feeling during the writing process. Thus, a person's personality (nature) may cause the person to have a disposition to be apprehensive and then the writing experiences and feedback s/he receives from those around him/her (nurture) has a negative effect on his/her outlook (Clark, 2005).

Gender, background, and culture are often linked to CA levels. Females are commonly reported to be more apprehensive than males when communicating in public, meetings and in the overall OCA context (McCroskey et al., 1982; Andriate and Allen, 1984; Jaasma, 1997; Lang et al., 1998; Donovan and MacIntyre, 2004). However, the relationship between gender and WCA is not as clear. Daly and Miller (1975b) find that females have significantly lower WCA scores than males, a finding confirmed by Pajares and Valiante (1997) and Riffe and Stacks (1992). Daly and Miller (1975b) suggest that research has consistently shown than females tend to achieve higher marks in writing activities than males and thus, the positive reinforcement is likely to explain a lower level of apprehension. However, Clark (2005) drawing on a number of studies reports no significant correlation between writing anxiety and gender, a view supported by Rechtein and Dizinno (1998).

Prior research indicates that students from a lower socioeconomic background report lower levels of OCA than among white collar and upper class students (Lang et. al., 1998). This may seem surprising but a possible reason for this may be a selection bias, with financial constraints permitting only the more skilled communicators from lower income homes to be successful in reaching third level education. Similarly, individuals who gain entrance to third level education with lower than average grade points (referred to as unprepared students) report lower levels of OCA than traditional type students (Andriate and Allen, 1984). A possible explanation for this may be that the administrative realities associated with college entrance may deter unprepared students from lower socioeconomic backgrounds who may be high apprehensives.

The relationship of culture to levels of OCA has been the subject of studies in different countries. For example, Japanese students are reported as more apprehensive that their US counterparts, but it must be remembered that high OCA in Japan does not have the same negative implications as in the US (Pryor et al., 1995). As a collectivist culture, the Japanese education system and society place less value on individual assertiveness than is the case in the US. Similarly, Taiwanese students, report higher OCA levels, particularly in the public speaking context, compared to their US counterparts (Hsu, 2004). Taiwanese culture would reflect that of Japan with greater emphasis on collectivism compared to the individualistic culture of the US. This suggests that great care must be taken when interpreting the results of studies involving students from differing cultures.

In summary, it is still not fully understood why one person is more apprehensive than another. However, it seems that the nature of the individual will lead to a predisposition towards a certain level of both oral and written CA. In addition, the environment, in the form of reinforcement, acquisition of skills and modelling, influences the trait-like and context-based levels of CA experienced by the individual. In the next section the consequences of OCA and WCA are examined.

#### 2.4 Consequences of oral and written communication apprehension

As stated in the previous section, a person's level of CA is influenced by a number of factors. Where the person suffers from high OCA a number of mainly negative consequences may ensue. It can have a negative effect on how an individual learns to communicate, on learning or knowing appropriate communication behaviours, on developing the necessary communication skills to communicate effectively when required, and on developing a positive attitude towards communication (McCroskey, 1997b, p.101). When highly anxious children are compared to their non-anxious peers, their social and communication skills have been found to be poorer (Daly et al., 1997, p.28). The consequences for many students suffering from high OCA are that they do not ask questions in class, make themselves inconspicuous, skip class, drop needed programmes, experience depression, achieve less than their aptitudes would justify, and, as a consequence, fail to learn needed information and thus, receive lower evaluation by instructors (O'Mara, et al., 1996; Bowers, 1986). Some high apprehensives may try to conceal their fear of communicating by over-communicating or talking all the time, but this is a rare and unusual response (Richmond and McCroskey, 1998, p.53). A much more common reaction is to remain quiet and Kougl (1980) suggests that high apprehensives who remain quiet do so because of a feeling of inadequacy in handling communication situations.

Quiet people express a strong preference for occupations in which communication requirements are low (Daly and McCroskey, 1975). They are perceived as being less competent, less successful on the job, to require more training, to be less satisfied on the job, and to have more difficulty establishing good relationships with co-workers (Richmond, 1997, p.266). They may not fare well in interview settings and consequently may, in effect, be punished for their high OCA by

losing the job opportunity, the promotion, or the salary increase (Daly and McCroskey, 1975; Gardner et al., 2005). The number of quiet people in organisations is below expected norms, which may indicate the possibility that quiet people are excluded from being hired or are more likely to leave the organisation than others (Richmond, 1997, p.266). Meyer-Griffith et al. (2009) outline a number of other effects on individuals with average and high levels of CA, such as a difficulty in making decisions, and commitment anxiety. These factors may also contribute to the lower than expected number of high apprehensives employed by organisations.

Bourhis and Allen (1992) carried out a meta-analysis of over 20 studies conducted in the period 1937 to 1990, which showed a small but significant correlation between OCA and cognitive performance (e.g., IQ, grade point averages, course grades, assignment grades, and test scores). The effect of OCA is evident in the learning preferences of students, where high OCA students are identified as preferring an avoidant learning style and appear to be more passive in their learning preferences, compared to low OCA students who prefer a participative learning style and are more active in their learning experiences (Bourhis and Allen, 1992). Thus, the avoidant learning style of the highly apprehensive student may impede their learning.

Whereas many of the consequences of OCA are negative or indicate that high OCA is a disability, it does not automatically follow that all high OCA sufferers will perform poorly when required to communicate orally (Allen and Bourhis, 1996). Some may have sufficient determination to complete any required communication tasks and may achieve good grades. They may feel a high level of apprehension and anxiety but with appropriate interventions and positive encouragement can accomplish a communication task effectively. Watson and Munroe (1990) suggest that high apprehensives may actually meet assignment deadlines out of fear of punishment or poor grading but, at the same time, their fear of communicating may prevent them asking for assistance or interacting with academic staff and peers.

As with OCA, many negative aspects have been reported for those who suffer from high WCA. Research indicates a marked difference between high and low apprehensives concerning writing competency and performance (Daly and Miller, 1975b; Daly, 1977; Daly 1978; Faigley et al., 1981). A number of factors are revealed. Highly anxious writers produce essays that are significantly shorter and less syntactically 'mature' or 'fluent'. They are unable to develop their ideas as well as low apprehensives. They differ on both perceived message quality and actual structural characteristics of the messages (Daly, 1977). Their level of apprehension also interferes with their ability to enjoy the writing experience and they fail to achieve the standard attained by those with low WCA. They do not demonstrate as strong a knowledge of writing skills; and when the person does not have the skills he/she is unlikely to have success in writing activities (Daly, 1978). Individuals with high WCA perceive their past experiences in writing as significantly less successful than low apprehensives. This appears to be critical as no matter how skilled or capable they are in writing, "if they believe they will do poorly, or do not want to take a course that stresses writing, then those skills or capabilities matter little" (Daly and Miller, 1975b, p.255). Low WCAs demonstrate higher performance than high WCAs as measured by grade point averages, IQ tests, and final course grades (Bourhis and Allen, 1992, p.71). Clark (2005), drawing on the work of McKain (1991) and Crumbo (1998), and supported by Boening et al. (1997), concur and note a significant but low level of correlation between WCA and academic performance.

Those with high WCA find writing unrewarding or even punishing and they avoid situations where writing is required (Daly and Shamo, 1978, p.124). Such individuals select programmes in university and careers that they perceive as requiring less writing (Daly and McCroskey, 1975; Daly and Shamo, 1976; Bennett and Rhodes, 1988; Wiltse 2006). The greater use of new technologies, such as email and internet may be of benefit to high WCAs as it appears they are less apprehensive of electronic media as they notice the technology and not the writing task in hand (Scott and Rockwell, 1997, p.55). Indeed, Mabrito (2000) suggests that highly apprehensive writers feel more comfortable participating in

electronic discussions with unknown audiences than they do when communicating with familiar audiences.

A number of studies report a statistically significant, but not large correlation between levels of OCA and WCA (Daly and Miller, 1975b; Daly and Wilson, 1983). The next section examines the various methods available to assist high apprehensives to control and treat the problem.

#### 2.5 Controlling and treating communication apprehension

Whereas it is not proposed to carry out tests of treatment methods on any students as part of this piece of research, it is considered important for the sake of completeness, to indicate that there are appropriate treatments available. Research indicates that the gap between the low and high OCAs may be diminishing over time (Bourhis and Allen, 1992). This may be explained by a number of factors, including increasing awareness among educators of the negative effect of OCA on educational outcomes, better identification of students who experience high OCA, the development of instructional strategies to meet the special needs of high OCA and WCA students, and an increasing availability of various treatment programmes with demonstrated effectiveness.

There are two basic approaches to reducing OCA, namely, behavioural interventions and pedagogical interventions (Simons et al., 1995). Behavioural approaches work on an individual's physiological and/or psychological state, that is, on his/her attitude to communicating and the underlying fear associated with the apprehension. Behavioural interventions include systematic desensitisation, cognitive modification and visualisation. Systematic desensitisation involves relaxation exercises and is associated with lower levels of both state and trait OCA. This form of treatment trains a person to perceive public speaking as "non-threatening" rather than "threatening" and should reduce the fear associated with public speaking (Ayres et al., 2000, p.24). Cognitive modification focuses on the beliefs of the speaker. It should alter the way a person views the communication

task and decrease any perceptions of threat of punishment (Allen et al., 1989). Visualisation allows the speaker to imagine a successful completion of a communication assignment.

Pedagogical approaches differ from the behavioural approach in that they focus more directly on the communication tasks and seek to reduce the apprehension felt by concentrating on the communication competence required to communicate effectively. The principal pedagogical interventions include skills training and actual public speaking. Thus, in the treatment of OCA it must be acknowledged that CA and communication skills are two distinct dimensions of the communication process. There may be students who lack the skills and therefore avoid communication or handle themselves poorly when they are communicating. There are others who undoubtedly have good skills, but certain situations generate anxiety for them. Others have both CA and poor skills (Baldwin et al., 1983). This has been recognised for many years in the business world. Manv organisations recognise the central role communication plays in organisational effectiveness and millions of euro are spent each year to enhance the communication skills of employees, particularly those in middle and upper management levels (Scott et al., 1978). Unfortunately, for many employees in the typical organisation, expenditures on communication skills have little likelihood of producing more effective communication because the communication problem for those individuals may not be one of skill deficiency, but rather one of OCA. The situation is no different in third level education and it is no less important to properly analyse the student who displays a level of inability to communicate effectively. Otherwise it may result in incorrect remedial action being taken.

Interestingly, in a survey of 307 departments in US universities, Robinson (1997) found that skills training is the most common intervention and it would appear that it is the only form of intervention in a significant number of colleges in the US. However, a number of studies report that for high apprehensives, skills training, including preparation and practice, actually increases the level of apprehension and the most effective approach is a combination of systematic desensitisation, cognitive modification and skills training (Brooks and Platz,

1968; Phillips and Metzger, 1973; McCroskey, 1976; Allen et al., 1989; Stanga and Ladd, 1990; Ruchala and Hill, 1994; Thomas et al., 1994; Kelly and Keaten, 2000).

Research has been carried out on the effect of preparation as a coping device for high apprehensives. Smith and Bainbridge-Frymier (2006) found that most students do not practice even though practice is positively correlated with speech evaluation. However, Thomas et al. (1994) report on a number of studies which indicate that the effect of preparation is inconclusive (Thomas et al., 1991; Ayres and Raftis, 1992). They suggest that preparation did not significantly enhance performance or reduce state OCA. Interestingly, Ayres (1996) finds that high OCAs reported spending more time than low OCAs preparing their speeches and yet they received lower grades than the low OCAs. She reports that the high OCAs' preparation time may be misdirected in that they spend more time on note taking but less time on audience analysis and rehearsal activities than low OCAs.

In addition to behavioural and pedagogical interventions in the treatment of OCA, another important factor in higher education is the creation of a supportive and positive classroom environment. OCA in the classroom centres primarily on the apprehension felt when one is being evaluated (Neer and Kircher, 1989) and it is mediated in part by the interpersonal atmosphere within the classroom. Booth-Butterfield (1988) suggests that anxiety in the classroom may be moderated by manipulating the context (interpersonal, group, classroom, public speaking), by motivating the student (varying the grade available for the communication activity), and making the setting more friendly (setting up a communication situation with a friend or stranger). Students' OCA should be regarded as normal, and teaching techniques should help students handle feelings of apprehension (Connell and Borden, 1987; Grace and Gilsdorf, 2004). The techniques must be applied sensitively and systematically, probably over a relatively long period of time, and by trained practitioners (Hassall et al., 2000). Thus, the best treatment for OCA appears to be a combination of behavioural and pedagogical interventions delivered in a supportive and positive atmosphere.

Similar to the treatment of OCA, Popovich and Massé (2005) indicate that instructors who wish to have an impact on the high written apprehensive students must address the students' negative attitudes at the outset and must remain dedicated to bolstering the confidence of the students over a period of time. If those students are not targeted for remedial action, they will fail to become competent, confident writers. Both behavioural and pedagogical approaches may be used to address the WCA of students. It is worth remembering that Daly and Miller (1975a, p.248) note that

the procedure commonly used of forcing students to write is very likely the wrong choice of treatments. All one is doing is reinforcing the punishing nature of the writing act in those situations.

Thus, the use of more writing assignments to increase writing performance of students with high levels of WCA without addressing the fear of writing is questionable. The "more-is-better" approach to writing may serve to impede the performance of high WCA students (Marshall and Varnon, 2009, p.49). Hassall et al. (2000, p.98) concur and point out that, the underlying fears and anxieties of students with high levels of CA "need to be addressed before action is taken on the skills front".

Many US universities offer training programmes in writing as part of business degree programmes. For example, in a sample of accounting programmes in 263 US colleges and universities, 77% of undergraduate programmes offer students a course in general business communication, but only 39% of graduate programmes offer such a course (May and May, 1989). In a further study of 52 top-ranked undergraduate business schools, all had communication activities in place.

Simons et al. (1995) recommend that curriculum design and teaching methods should take into consideration those with high levels of CA. Behavioural treatment such as visualisation is related to feelings of increased enjoyment in writing and to finding writing more rewarding in the immediate situation. But the positive feelings may not endure over time as visualisation is not effective on how people feel about their writing skills. Ayres and Hopf (1991) suggest that if the students lack basic skills, their skills may have to be upgraded before a procedure like visualisation is effective in changing their view of writing.

Feldmann and Usoff (2001) propose a different approach to improving writing performance and changing attitudes to writing by placing greater emphasis on feedback, a view supported by Elias (1999). They advise a reduction in the number of writing assignments to allow students to improve their assignments with feedback from their lecturers on the quality of their work and also on their grammar and spelling. They suggest that students be allowed to resubmit an assignment up to four times to obtain a perfect score and Feldmann and Usoff (2001) conclude that having students revise and resubmit the same assignment was the only technique that resulted in a statistically significant increase in students' relative ranking of the importance of writing to success in an accounting career.

Some studies (e.g. May and May, 1989; Wygal and Stout, 1989) stress the importance of skills training such as report writing, grammar lessons, a welldesigned series of assignments, and the use of informal writing techniques, such as free-writes, journal and letter correspondences, to improve writing skills and possibly reduce WCA. Fox (1980) introduced a student-centred method, involving large group interaction with comments from peers and instructors. He also suggests that an important element of the method, which reduced WCA levels at a faster rate than conventional instruction, is the positive feedback, particularly at the start of the course, which is essential to change the perception of the student to viewing writing as a non-punishing event (Fox, 1980, p.48). This approach is adopted by Ng et al. (1999) who found that large groups could be helped to develop their writing skills by the provision of detailed feedback, additional guidance from an independent specialist and the completion of two assignments to reinforce the feedback guidance. Greater supervision and feedback on the writing assignments play a significant part in reducing apprehension, improving the quality of students' writing and assist their transition from "collegiate writing to professional writing" (Scofield and Combes, 1993, p.79). As with the treatment of OCA, a combination of treatment using cognitive behaviour treatment and instruction on writing appears to be the most effective approach in reducing WCA (Salovey and Haar, 1990; Whitworth and Cochran, 1996).

In summary, behavioural and pedagogical treatments used properly along with creating a supportive environment can be successful in reducing levels of both OCA and WCA. Any interventions should attempt to address both how a person feels about communicating and the skills needed to communicate effectively. In any exploration of CA it is important to ascertain individuals' levels of apprehension. There are a number of methods available to do this and two commonly used instruments are McCroskey's Personal Report of Communication Apprehension (PRCA-24), which measures OCA, and the Written Communication Apprehension (WCA-24) adapted from Daly and Miller's Written Apprehension Test (WAT), which measures WCA. These instruments are discussed in greater detail in the next section.

#### 2.6 Measurement of oral and written communication apprehension

There are three major approaches to the measurement of CA. The first approach measures the physiological reactions of an individual to the communication situation. There are a number of limitations to this approach, including the lack of trained personnel to conduct such tests and also difficulties in administration. The second approach evaluates CA using observer ratings. However, as CA is mainly an internal feeling, it must be recognised that what is observed may not reflect the actual anxiety felt. The third approach of self-report measures is the most widely used method of measuring CA, as it reports the feelings of the individual and is easy and inexpensive to administer (McCroskey, 1970). This approach can also capture anxiety responses in a variety of communication contexts. McCroskey (1997a, p.196) supports the use of self-report measures and argues that often the best way to find out something about a person is simply to ask the individual. Self-report measures are most appropriate when they are directed toward the feelings of the respondent and where there is no reason to fear negative consequences for any answer given. There are, however, some limitations with

self-report instruments. Howard (1994) advises that if appropriate care is taken in the design of a study, self-reports often represent a valuable and valid measurement strategy. Bline et al. (2003) considers that self-reported data may be open to the criticism that respondents will supply false information which is not verifiable from another source, and that the group being studied may not be representative of the general population. In spite of these limitations, it is considered that the advantages outweigh the disadvantages of using self-report measures in this study.

Prior to 1970, measuring OCA using self-report measures focused primarily on public speaking situations. However, in the 1970s, McCroskey developed a number of self-report instruments for measuring CA in different contexts. In particular, he developed the Personal Report of Communication Apprehension (PRCA-College) to measure the level of OCA among college students (McCroskey, 1970). This initial questionnaire consisted of 76 statements to which students responded on a 5-point Likert scale. Some of these statements were drawn from the Personal Report on Confidence as a Speaker instrument developed by Gilkinson (1942). Following trialling, the instrument was later refined and changed and in 1982, McCroskey developed the version of the instrument which continues to be used today, the Personal Report of Communication Apprehension (PRCA-24) (McCroskey, 2006, p.40).

The PRCA-24 measures the overall construct of oral communication, as well as four sub-constructs, which relate to different communication contexts (speaking one to one, in small groups, in meetings, and in public) (McCroskey, 2006, p.42). The instrument consists of 24 statements concerning the student's feelings about communicating orally across the four contexts (six statements for each context). Twelve of the statements are positively worded, such as 'I like to get involved in group discussions' and 'I feel relaxed while giving a speech'. The other twelve statements are negatively worded such as 'I dislike participating in group discussion' and 'I am afraid to express myself at meetings'. The students are advised that there are no right or wrong answers and to work quickly indicating their initial impressions by replying to each statement using a score of 1 up to 5, 1

indicating 'strongly agree' and 5 indicating 'strongly disagree'. The range of scores on each sub-construct is from 6, which indicates very low OCA, to 30, which indicates debilitating level of OCA in that construct. The scores for all four sub-constructs are then added together to indicate the overall OCA score for the respondent. The range of overall OCA scores on the instrument is 24 to 120.

McCroskey (1997b, p.90) using data drawn from over 100,000 subjects in the US, report that the mean total score on the PRCA-24 was 65.60 with a standard deviation of 15.30. This mean and standard deviation are referred to by some researchers as a US national norm (Stanga and Ladd, 1990). McCroskey (1997a, p.209) classifies those who score more than 80, which is approx one standard deviation above the mean or US national norm, as high apprehensives. Those who score less than 50, which is approx one standard deviation below the US national norm, are considered low apprehensives. McCroskey (1977a) reports that, in surveys of more than 20,000 students over an eight year period, 15 to 20 percent of US college students suffer from debilitating CA, that is, their apprehension is of such magnitude "to interfere with the individual's functioning in normal human encounters" (p.28).

King et al. (1988) emphasise the value of the four OCA context scores, as the total PRCA-24 score may hide high apprehension in one or more of the sub-contexts. Vinson and Roberts (1993) analyse the between-context variance scores of the PRCA-24 (variance between OCA in one to one, groups, meetings, and public speaking). They suggest that the between-context variation represents an estimate of the individual's location on the trait-state continuum. The lower the variations the more trait-like the person's OCA, and conversely, the higher the variation the more state-like the OCA. The importance of context is linked to a person's OCA level. Low apprehensives feel that context is irrelevant. On the other hand, moderate and high apprehensives are more likely to have similar (high) scores in the public arena (public speaking and meetings) and (low) in the one to one context, but they differ in the group context where the moderates are more likely to have lower scores. These scores are reflected in findings by McCroskey and Richmond (1984, p.347) who report that, overall, over 70% of students report

high CA in the public speaking context, whereas the number drops to 50% in the meeting context, 25% in the group context and only 10% in the one to one context.

An instrument to measure WCA was also developed in the 1970s. Daly and Miller (1975a) report that if students who seem unduly apprehensive about writing are to be helped, it is essential to firstly identify them. They considered that, in keeping with the research into OCA, there might exist a general anxiety about writing and thus, they developed the WAT (Writing Apprehension Test) (Daly and Miller, 1975c). The initial draft questionnaire consisted of 63 statements to which students responded on a 5-point Likert-type scale. The items selected were modelled on a number of other instruments, including McCroskey's PRCA-College, and were concerned with some form of apprehension about writing, including anxiety about writing in general, teacher, peer and selfevaluation, and a number of other writing contexts. The questionnaire was completed by undergraduates in a US university and having carried out factor analysis, twenty-six items were selected to compose the final instrument which contains thirteen positively phrased statements, such as 'I have no fear of my writing being evaluated' and thirteen negatively phrased statements, such as 'I'm nervous about writing'. Like the PRCA-24, the directions for completing the WAT instrument emphasise that there is no right or wrong answer and requests that students be as honest as possible. The scoring of the instrument is similar to The range of potential scores is from 26, for a very low the PRCA-24. apprehensive, to 130, which would mean a debilitating level of WCA. Daly (1978) administered the survey to 3,603 undergraduate students at a large Midwestern university in the US and they found a mean score of 75.59 with a standard deviation of 13.35. This mean and standard deviation are considered a US national norm in some subsequent studies (Elias, 1999; Marshall and Varnon, 2009). Bennett and Rhodes (1988) report that the instrument has strong internal reliability and validity. Bline et al. (2001) find that the factor structure of the WAT is unaltered by reordering the items and that the stability of the instrument indicates the strength of the factor structure. Daly and Miller (1975a) state that the instrument has face validity and they also provide evidence of the predictive validity of the instrument.

The WAT has been used many times in its original form. However, Hassall et al. (2000) varied the instrument for use with business students. They felt the original questionnaire was more appropriate to English composition programmes and so they altered some of the wording (e.g. 'composition' was changed to 'essays' or 'written work'). They also removed four statements and inserted two new ones. The revised version was subsequently used with business students by Gardner et al. (2005) who conducted factor analysis on the amended instrument and they report that results show a robust and reliable set of results for the instrument which they refer to as WCA-24. Thus, this instrument contains 24 statements, with a potential range of scores from 24 to 120.

# 2.7 Studies carried out on oral communication apprehension among business and accounting students

The increased emphasis on the importance of good communication skills in the business world has led to a number of researchers investigating the levels of CA among business students, with much of this research focusing on accounting students due the ongoing accounting education change debate. While there are fewer studies of OCA and WCA among business and accounting students compared to the volume of studies in different disciplines, the body of research has increased in recent years. Furthermore, while the majority of the studies have been carried out in the US, there is now some research emanating from other countries, including Canada, UK, Ireland, Spain, and New Zealand. The findings of some of these studies are reviewed in this section.

#### 2.7.1 Studies on oral communication apprehension

The results of some of the studies concerning OCA among business and accounting students are shown in Table 2.1 (see page 34).

Study	Country	One to one	Group	Meetings	Pub speak	OCA
Stanga and Ladd (1900)	US	14.2	15.0	16.0	18.8	64.1
Ruchala and Hill (1994)	US	14.1	14.7	16.3	17.8	63.0
Smith and Nelson (1994)	US	12.0	12.6	14.0	17.3	56.0
Hutchinson et al. (1995)	US/Australia	14.2	14.8	15.4	18.0	62.4
Simons et al. (1995)	US	14.2	15.3	16.2	19.1	64.8
Fordham and Gabbin (1996)	US	N/A	N/A	N/A	N/A	66.4
Warnock and Curtis (1997)	Ireland	14.6	18.1	18.9	21.0	72.6
Elias (1999)	US	N/A	N/A	N/A	N/A	66.4
Hassall et al. (2000) *	UK Spain	13.3 13.0	13.6 15.1	17.7 20.1	19.3 19.9	63.8 68.1
Burk (2001)	US	N/A	N/A	17.8	19.4	64.9
Aly and Islam (2003)	Canada	15.5	16.4	17.8	19.5	69.2
Gardner et al. (2005) *	New Zealand	15.0	15.8	19.9	18.5	69.2
Hassall et al. (2005) *	UK	13.4	13.9	17.7	19.3	64.2
Warnock et al. (2005)	Ireland	13.7	18.9	20.5	22.7	75.8
Joyce et al. (2006) *	UK	N/A	N/A	N/A	N/A	67.6
Hassall et al. (2006) *	UK	N/A	N/A	N/A	N/A	69.2
Arquero et al. (2007) *	UK	13.3	13.7	17.5	19.2	63.7
	Spain	12.1	14.6	18.6	18.7	64.0
US national norm		14.5	15.4	16.4	19.3	65.6

<b>TABLE 2.1.</b>	Mean	<b>OCA</b> levels an	mong business students
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In these studies the word 'interview' was used in place of 'meetings' and the word 'presentations' in place of 'public speaking'. Thus, the findings from these studies are not completely comparable.

\*

Analysis of data in Table 2.1 reveals a number of interesting consistencies. The scores in the more formal contexts of meeting and public speaking are higher. In all cases conversing one to one is the lowest, conversing in groups is next highest, then meetings, and finally the highest scores are recorded in public speaking. As can be seen, the studies listed in Table 2.1 have been conducted with students not only in the US but also in Australia, Ireland, UK, Spain and New Zealand leading

Hassall et al. (2000, p.97) to conclude that a high level of CA is not a phenomenon exclusively found amongst students in North America.

Stanga and Ladd (1990) were the first to explore CA among business and accounting students and they found that introductory accounting students had slightly above average levels of OCA compared to the national average. This finding was replicated by subsequent US studies and research conducted elsewhere (Simons et al. 1995 - US; Warnock and Curtis, 1997 - Ireland; Hassall et al., 2000 – UK and Spain; Gardner et al., 2005 - New Zealand; Arquero et al., 2007 – UK and Spain). However, some studies with final year accounting students showed that the students' levels of OCA were at or below the US norm (e.g., Ruchala and Hill, 1994; Fordham and Gabbin, 1996). Several researchers have also explored variations in the levels of OCA experienced by accounting students compared to those taking different business majors. In the US, Simons et al. (1995) found that accounting majors had higher OCA scores than other business majors and they had the highest scores in three of the four communication settings (group, meeting and public speaking). Similar findings have been reported with accounting students studying in the UK, Spain (Hassall et al., 2000; Arquero et al., 2007), and Ireland (Warnock et al., 2005). In contrast, Borzi and Mills (2001) found that accounting majors at two US universities had significantly lower levels of OCA than non-accounting majors.

Studies exploring the impact of higher education on the levels of CA experienced by business and accounting students have yielded mixed results. In a US longitudinal study, Aly and Islam (2003) found no significant differences in the levels of OCA reported by students when beginning and completing programmes. In another US study, Fordham and Gabbin (1996) concluded that the communication component of the curriculum alone was not successful in alleviating CA in students with above average levels of apprehension. Similarly, Gardner et al. (2005) found no significant differences in OCA between students in introductory, intermediate and advanced accounting courses at a New Zealand university. Hassall et al. (2000) also observed that students' OCA scores remained unchanged as they progressed through their degree programmes. In Ireland, Warnock et al. (2005) found that postgraduate accounting students exhibited very high scores for OCA at the start of their programme, but there was a significant reduction in their scores by the end of the programme, particularly in the area of public speaking.

Several studies have examined the link between the levels of OCA and academic performance, but the findings have been inconclusive. Warnock and Curtis (1997) found no association between OCA and students' overall academic results. Gardner et al. (2005) also concluded that there was very little evidence of association between levels of oral apprehension and academic performance. However, the results of a study by Allen and Bourhis (1996) showed that high levels of OCA were related to lower academic achievement. Similarly, Arquero et al. (2007) reported a highly significant negative association between OCA and academic self-rating.

Prior research concerning the impact of gender on OCA has produced conflicting results. Daly et al. (1997, p.29) report that some research finds no gender differences but other research suggests that there are some differences. However, they find that the magnitude of the difference is so small as to suggest that "the difference is probably inconsequential" (p.29). Stanga and Ladd (1990) reported no differences in the levels of OCA between male and female accounting students. However, Simons et al. (1995) found that female accounting and management students were more apprehensive about OC than their male counterparts. Furthermore, when analysing the four communication settings they found that female students were significantly more apprehensive in meetings and public speaking situations than males. Several other studies have also identified gender differences, with female students exhibiting significantly higher levels of OCA especially in the areas of public speaking (presentations) and meetings (interviews) (Hassall et al, 2000; Gardner et al., 2005; Arquero et al., 2007).

#### 2.7.2 Studies on written communication apprehension accounting students

As reported in Chapter 1, communication skills in general, and written communication skills in particular, continue to be viewed as critical for success in business and accounting (Stout and DaCrema, 2004, p.291). However, as with OCA, the number of studies concerning WCA among business and accounting students remains small. The results of a number of these studies are shown in Table 2.2 below.

Study	Country	WCA
Smith and Nelson (1994) *	US	50.1
Simons et al. (1995) *	US	67.8
Hassall et al. (2000)	UK	62.4
	Spain	64.2
Gardner et al. (2005)	New Zealand	63.2
Hassall et al. (2005)	UK	62.7
Joyce et al. (2006)	UK	66.3
Hassall et al. (2006)	UK	64.5
Arquero et al. (2007)	UK	62.5
	Spain	65.6
US national norm *		75.6

TABLE 2.2. Mean WCA levels among business students

\*

used 26-item version of WCA instrument with a range of 26 - 130.

The studies indicate that WCA levels of US business and accounting students are below the US national norm. The 1995 Simons et al. study surveyed second year university business students which included students from the four primary disciplines – accounting, finance, management and marketing - and "others" from the disciplines of computer information systems, hotel management and actuarial math. They found that students in the full group were less apprehensive about writing than the US national norm (Daly, 1978), but that accounting majors were more apprehensive than any other business majors. This finding is reflected in a number of students outside the US. In the UK and Spain and in New Zealand, non-accounting business students report significantly lower levels of WCA than their accounting counterparts (Hassall, 2000; Gardner et al., 2005; Arquero,

2007). As with OCA, the studies confirm that WCA is as much a factor for business students as for non-business students, and this is true in countries other than the US.

As with studies into OCA, prior research concerning the impact of gender on WCA has also produced conflicting results. Some studies (Daly and Miller, 1975a; Riffe and Stacks, 1992; Elias, 1999) found that female students have lower WCA than male students, while other studies reported the opposite results or no gender differences (Cayton, 1990). Within the business and accounting disciplines, several studies have found that gender was not a significant variable in determining a student's WCA (Simons et al., 1995; Faris et al. 1999; Gardner et al., 2005; Arquero et al., 2007).

Marshall and Varnon, (2009) report that accounting seniors recorded significantly lower mean WCA scores than the US national norm. However, they also report that results of their study show a significantly higher proportion of final year accounting students report low apprehension compared to Daly and Miller (1975a) but that the percentage of high apprehensives was not significantly different.

In exploring the link between WCA and academic performance, Gardner et al. (2005) identified a small but significant negative correlation, a finding which is consistent with the results from studies among non-business students. Similarly, Arquero et al. (2007) found a significant inverse relationship between WCA and academic self-rating for both UK and Spanish business and accounting students. Several studies have also investigated whether OCA and WCA are related. Simons et al. (1995) report a significant, but not large, positive correlation between OCA and WCA across all business majors and by gender. This indicates that a business student who has high OCA often also has high WCA. These findings are consistent with a number of other studies among business and accounting students (Smith and Nelson, 1994; Simons et al., 1995; Arquero et al., 2007 and Marshall and Vernon, 2009).

#### 2.8 Summary

In this chapter, the nature of CA has been set out. The causes of OCA and WCA have been explored. Some of the consequences of high CA, which are mainly negative, are identified. The treatments for high CA, behavioural and pedagogical, and the effect of a supportive environment are discussed. The major approaches to the measurement of CA and the development of the two instruments, the PRCA-24 and WCA-24, are described. Finally, the results of prior studies on CA among business and accounting students are reviewed. More detailed analysis and comparisons will be shown in Chapter 4 which will address the quantitative findings of this study. However, before that the philosophical assumptions underpinning the research will be set out and are discussed in the next chapter.

# CHAPTER 3

# **RESEARCH METHODOLOGY**

# 3.1 Introduction

- **3.2** Philosophical assumptions
- **3.3** Quantitative versus qualitative research approaches.
- 3.4. Research approach adopted in this study
- 3.5. Summary

#### 3.1 Introduction

As already indicated, the purpose of this study is twofold. Firstly, it seeks to measure the levels of oral and written CA among business and accounting students in higher education in Ireland. Secondly, it aims to provide a qualitative insight into the phenomenon of CA from the perspective of students. The previous chapter presented the literature review which frames the study, while the purpose of this chapter is to discuss the research philosophy and approach underpinning the study and the methods used to achieve the research objectives.

#### **3.2** Philosophical assumptions

Social science is not, nor ought it to be, a "value free endeavour", and researchers should be vigilant about the ways in which values inform their activities in the conduct of research (Williams and May, 1996, p.192). When doing social science research, the researcher, intentionally or otherwise, makes assumptions about the nature of the social world and how it can be investigated (Burrell and Morgan, 1979). These assumptions then determine the approach the researcher adopts and the research questions asked. It is important to understand these assumptions because they provide directions for designing all phases of a research study (Creswell, 2007, p.15). There are many assumptions that can be made and this has led to an array of theories and approaches to research. Many writers (Firestone, 1987; Guba and Lincoln, 1988; McCracken, 1988; Flick, 2006) have contrasted the assumptions of the various paradigms on several dimensions and this study will utilise the Burrell and Morgan (1979) framework to explore the philosophical underpinnings of the current study.

Burrell and Morgan (1979, p.22) argue that it is possible to analyse the different approaches to social theory in terms of two key dimensions of analysis, the subjective-objective dimension of the nature of science and the dimension of social regulation versus sociology radical change in the nature of society. They identify four distinct sociological paradigms which are shown in Figure 3.1 below.

The sociology of radical change					
	Radical humanist	Radical structuralist			
<b>Subjectiv</b> e			Objective		
	Interpretive	Functionalist			
The sociology of regulation					

Figure 3.1: Four paradigms for the analysis of social theory

Source: Burrell and Morgan, 1979, p.22

### The subjective-objective dimension

In the subjective-objective dimension, Burrell and Morgan (1979) identify four sets of assumptions about the nature of the social world and the way in which it is investigated, namely ontology, epistemology, human nature and methodology. They relate these assumptions to four extreme positions as shown in Figure 3.2 below.

Figure 3.2. Scheme for examining the assumptions about the nati	ire of	social
science		

Subjectivist app	roach	Assumptions	Objectivist
to social science			approach to
			social research
Nominalism	←	ontology	Realism
Anti-positivism	←	epistemology	Positivism
Voluntarism	<	human nature	Determinism
Ideographic	•	methodology	Nomothetic

Source: Burrell and Morgan, 1979, p.3

A brief outline of these assumptions and positions is considered necessary to understand the philosophical approach of this study. Ontological assumptions involve the theory of existence and the nature of reality. The nature of reality poses two views: does reality exist external to the individual or does it exist only in the individual's mind (Burrell and Morgan, 1979, p.1)? The objectivist approach of the realist position sees the world as existing external to the individual and that phenomena may be studied as a detached entity which is divorced from the "independent" researcher (Chua, 1986, p.583). The subjectivist approach of the nominalist position is that reality is a product of the individuals own views and the social world beyond this is nothing more than names. The nominalists believe that the social world is constructed by those living in it and there is no single truth. This nominalist approach is also referred to as a constructive approach which asserts that "social phenomena and their meanings are continually being accomplished by social actors" (Bryman, 2008, p.18).

Epistemology concerns the nature of knowledge, ways of knowing, how one understands the world, and gains knowledge of it (Burrell and Morgan, 1979, p.1). Two major theoretical perspectives have dominated epistemological debate. The positivist perspective (objectivist approach) view the world as existing as an objective entity, outside of the mind of the observer, and in principle it is knowable in its entirety (Porta and Keating, 2008, p.23). In essence this approach is based on traditional approaches "which dominate the natural sciences" (Burrell and Morgan, 1979, p.5). The second major theoretical perspective which has dominated the social sciences is described as phenomological or interpretivist where the researcher is committed to understanding phenomena from the actor's perspective and examining how the world is experienced (Taylor and Bogdan, 1998, p.3). The important reality is what people perceive it to be. This antipositivist position, which came to prominence in the 1960s, is that understanding the social world can only be achieved by looking at it from the perspective of the individual and whereas the positivists adhere to rigid rules, the anti-positivists adopt a broader approach (Burrell and Morgan, 1979, p.5). In the traditional objectivist perspective, reality is seen as objective, empirical, and rational, and attention is directed at better knowing and representing it. This contrasts with the subjective perspective which sees reality as "subjective, ill-structured, complex, anomaly-filled, fluid and socially constructed" (Covaleski and Dirsmith, 1990, p.549). The highly subjectivist view of the anti-positivist sees reality as a projection of individual imagination. Knowledge is often no more than an expression of the personal experience of the researcher as a human being (Morgan and Smirich, 1980)

The human nature assumptions concern the control that an individual has over his/her actions. The determinist perspective takes the view that the individual's actions are determined by the situation or environment whereas the voluntarist perspective contends that "man is completely autonomous and free-willed" (Burrell and Morgan, (1979, p.6).

The three sets of assumptions outlined above influence the final assumptions about the nature of the social sciences, which are the methodological assumptions and are concerned with how knowledge and understanding of the world is gained. The extreme position of the nomothetic in the objectivist approach "is epitomised in the approach and methods employed in the natural sciences" which focuses on quantitative techniques and poses and tests new hypotheses and laws (Burrell and Morgan, 1979, p.6). This approach seeks universal laws. The researcher does not get close to the subject. At the other end of the spectrum, the ideographic position in the subjective approach seeks an understanding of the social world which can only be arrived at by obtaining firsthand knowledge of the subject under investigation, by getting close to the subject and exploring its detail background and life history (Burrell and Morgan, 1979, p.6).

## The sociology of radical change - The sociology of regulation

The second key dimension in analysis of social theories is the dimension of sociology of regulation versus sociology of radical change. The sociology of regulation is primarily concerned with providing explanations of society in terms which emphasise its underlying unity and cohesiveness. It attempts to explain why society "tends to hold together rather than fall apart" (Burrell and Morgan, 1979, p.17). This contrasts with the sociology of radical change which is primarily concerned with "man's emancipation from the structures which limit

and stunt his potential for development" (Burrell and Morgan, 1979, p.17). The elements identified with each sociology are shown in Table 3.1 below.

Tł	The sociology of REGULATION		The sociology of RADICAL	
is concerned with:		CHANGE is concerned with:		
(a)	The status quo	(a)	Radical change	
(b)	Social order	(b)	Structural conflict	
(c)	Consensus	(c)	Modes of domination	
(d)	Social integration and cohesion	(d)	Contradiction	
(e)	Solidarity	(e)	Emancipation	
(f)	Need satisfaction	(f)	Deprivation	
(g)	Actuality	(g)	Potentiality	

Table 3.1. The regulation –radical change perspective

Source: Burrell and Morgan, 1979, p.18.

In contrast to the assumptions in the subjective-objective dimension, the sociology of regulation and the sociology of radical change are not part of a continuum, but rather "conceptualise broad sociological perspectives in the form of polarised dimension, the perspectives are necessarily separate and distinct from each other" (Burrell and Morgan, 1979, p.19). A researcher must be committed to one side more than the other and this will influence the research methods used.

Burrell and Morgan (1979) state that the two independent dimensions (subjectiveobjective and radical change-regulation) can be taken together to define four distinct sociological paradigms which can be utilised for the analysis of a wide range of social theories – the radical structuralist, the radical humanist, the functionalist and the interpretive – which are shown in the matrix in Figure 3.1. As can be seen from the diagram, each of the paradigms shares common features with the paradigms on the horizontal or vertical axis in terms of one of the two dimensions but not on the other dimension. For instance, the interpretative paradigm shares the sociology of regulation dimension with the functionalist paradigm and the subjectivist dimension with the radical humanist paradigm. To be located in a particular paradigm is to view the world in a particular way and Burrell and Morgan (1979, p.23) contend that all social theorists can be located within the four paradigms. Within each paradigm there will be much debate between theorists who adopt different standpoints. They regard each paradigm as a map for negotiating the subject area, which

provides for a convenient way of locating one's own personal frame of reference with regard to social theory, and thus, a means of understanding why certain theories and perspectives may have more personal appeal than others (Burrell and Morgan, 1979, p.24).

The functionalist paradigm in the sociology of regulation approaches its subject matter from the objectivist point of view, and the approach tends to the realist, positivist, determinist and nomothetic position (Burrell and Morgan, 1979, p.26). The interpretative paradigm attempts to understand the world as it is, to understand the fundamental nature of the social world at the level of the individual experience. In its approach to social science it tends to be nominalist, antipositivist, voluntarist, and ideographic (Burrell and Morgan, 1979, p.28). It is not proposed to look at the other two paradigms located in the sociology of radical change as they look for explanations for change and seeks to escape structures and regulations, which is not the purpose of this study. It is considered that a detailed analysis of social theories is outside the scope of this study. However, it is proposed to discuss at a later stage the paradigm adopted by this researcher.

#### **3.3** Quantitative versus qualitative research approaches

Within the research community, there have been intense debates about whether quantitative or qualitative methods are the most appropriate and "whether research can realise its aim of producing accounts that correspond to the nature of social reality" (Hammersley, 1993, vii). The debate has further expanded to consider whether combining the two methods (mixed methods) is a good thing and is "epistemologically coherent" (Howe, 1988, p.10). The dominant and relatively unquestioned methodological orientation during the first half of the 20<sup>th</sup> century was the positivist paradigm which concentrated on quantitative methods (Teddlie and Tashakhora, 2003). Philosophical thinking until the early 1960s held that the rules governing collection and analysis of empirical evidence made scientific

knowledge claims especially reliable (Benton and Craig, 2001, p.50). Whereas qualitative methods were introduced over a century ago, they did not become acceptable until the early 1960s as post positivists responded to the more obvious difficulties with positivism (Teddlie and Tashakhora, 2003). Van Maanen (1982) lists some of the sources of disenchantment with quantitative studies which include:

the relatively trivial amounts of explained variance, the abstract and remote character of key variables, the lack of comparability across studies, the failure to achieve much predictive validity, the high level of technical and notational sophistication rendering any research publications incomprehensible to all but a highly trained few (p.13).

In the period 1970 to 1985 an increasing number of researchers were critical of the positivist orientation and proposed a wide variety of qualitative methods (Teddlie and Tashakhora, 2003). Denzin and Lincoln (2008, p.vii) report that for nearly four decades a "quiet methodological revolution" has been taking place in the social sciences. The social sciences and humanities have "drawn much closer together in a mutual focus on an interpretative, qualitative approach to inquiry research and theory" (Denzin and Lincoln, 2008, p.vii). By the end of the 20<sup>th</sup> century, faculties in education have become more research conscious and an increasing number of faculty members are committed to qualitative approaches to research (Paul and Marfo, 2001). Flick (2006) finds that qualitative research is an ongoing process which is being taken up by more and more disciplines as a part of their curriculum.

Faulkner (1982) provides a useful comparison between the two approaches when he writes:

Quantitative data permit the research to discover and represent that something is happening (distributions, correlations and so on) but they do not explain the "meaning" of that happening to those who experience it. Qualitative interviews and observation allow one to learn and present what that something was, but not to the extent to which it was happening (p.85).

The purpose of this section is to explore the two approaches and discuss how they can be suited to different studies or to different elements of the same study.

Quantitative research is often based on a positivist philosophy which assumes that there are social facts with an objective reality apart from the beliefs of individuals (Firestone, 1987). Flick (2006) provides a good summary of the purposes of quantitative research which includes

to clearly isolate causes and effects, to properly operationalise theoretical relations, to measure and to quantify phenomena, to create research designs allowing generalisation of findings and to formulate general law (p.13).

It seeks to explain causes of change in social facts, primarily through objective measurement and quantitative analysis. It attempts to develop generalisations on the phenomenon studied that can be applied to a range of contexts (Libarkin and Kurdziel, 2002). The quantitative approach holds that the researcher should remain distant and independent of that being researched (Creswell, 1994, p.43). Quantitative methodology is based on the philosophy that our preconceptions need to be set aside in order to identify objective facts based on empirical observations (McEvoy and Richards, 2006). The positivist approaches share the assumption that, in natural and social sciences, "the researcher can be separated from the object of his/her research and therefore observe it in a neutral way and without affecting the observed object" (Porta and Keating, 2008, p.23). The quantitative researcher typically employs experimental and correlation designs to reduce error and bias that keeps one from clearly perceiving social facts Studies are designed in such a way that the researcher's (Firestone, 1987). influence can be excluded as far as possible (Flick, 2006, p.13). The tools for gathering and analysing data are well established and the validity and reliability of the study depend upon following pre-existing methodologies (Libarkin and Kurdziel, 2002). Conditions are controlled as far as possible. Patton (2002) explains that quantitative methods require the use of standardised measures so that the views and experiences of a group of people can fit into a limited number of responses. He points out that the advantage of this method is that the reactions of a large group of people can be measured and comparison be made between and within groups "in a succinct and parsimonious manner" (Patton, 2002, p.14).

There has been a significant increase in the amount of qualitative research in the past 20 years. It is interesting to note the change in the definition of a qualitative study during this period. Creswell (1994) describes it as:

an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants conducted in a natural setting (p.1).

However, he expands this description in a more recent work when he broadens the work of qualitative researchers to include:

Qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is inductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflexivity of the researcher and a complex description and interpretation of the problem, and it extends the literature or signals a call for action" (Creswell, 2007, p.37).

Thus, it is a situated activity that locates the observer in the world and consists of a set of interpretive material practices that make the world visible (Denzin and Lincoln 2008, p.4). Qualitative research is typically interpretative research (Creswell, 2009, p.176). Interpretivism depends on language, sense-making and the actors' reflexivity in understanding a social context (Covaleski and Dirsmith, 1990). It focuses on the context of a phenomenon, captures the individual's point of view, and examines the constraints of everyday life. Qualitative data are an attractive source of "well-grounded rich description and explanation of processes occurring in local contexts" from which it is possible to seek out causes and reasons for events and thought patterns and to arrive at "fruitful explanations" (Miles and Huberman, 1984, p.21). Good qualitative research is unconventional and this unconventionality flows from an interest in the "as yet undefined" (Van Maanen, 1982, p.20-1). Qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. The researcher's communication with the field and its members is an explicit part of the process (Flick, 2006, p.16). Those who prefer qualitative research techniques argue that "the use of human senses to

interpret phenomena are necessary for discovering new knowledge" (Daft, 1983, p.539).

Qualitative research methods include a number of interpretive techniques directed at "describing, translating, analysing, and otherwise inferring the meanings of events or phenomena occurring in the social world" (Covaleski and Dirsmith, 1990, p.543). Taylor and Bogdan (1998) suggest that the methods are not as refined and standardised as other methods. They are guidelines but never rules and "the methods serve the researcher; never is the researcher a slave to procedure and technique" (Taylor and Bogdan, 1998, p.10). These methods include case study, personal experience life story, interview, and observation that describe routine and problematic moments and meanings in individuals' lives which are studied by the researcher (Denzin and Lincoln, 2008, p.4). This encompasses a range of strategies that allow researchers to "get close to the data" (Williams and May, 1996, p.8). These strategies are concerned with the daily actions of people and the meaning that they attach to their environments and relationships. Denzin and Lincoln (2008) remind us that:

...there is no clear window into inner life of the individual. Any gaze is always filtered through the lens of language, gender, social class, race, and ethnicity. There are no objective observations, only observations socially situated in the worlds of – and between – the observer and the observed. No single method can grasp all the subtle variations in ongoing human experience (p.29).

A qualitative design continues to be emergent even after the data collection begins, and the researcher needs to remain sufficiently open and flexible to permit exploration of whatever the phenomenon under study offers for inquiry (Patton 2002, p. 255). Thus, the qualitative researcher interacts with those s/he studies, whether this interaction assumes the form of living with or observing informants over a long period of time or actual collaboration. S/he tries to minimise the distance between her/himself and those being researched (Creswell, 2009, p.175). Because qualitative data is "rich in details and context", research validity and reliability are based on "the logic of the study interpretations rather than statistical tests" (Libarkin and Kurdziel, 2002, p.78). Patton (2002, p.14) contends that validity in quantitative research depends on the instrument but that in qualitative

inquiry "the researcher is the instrument". The researcher seeks to describe and understand member's meanings and the implication that divergent meanings hold for social interaction (Gephart, 2004, p.457). Qualitative methods typically produce a "wealth of detailed information about a much smaller number of people and cases which increases the depth of understanding of the cases and situations but reduces generalisability" (Patton, 2002, p.14). Qualitative research is a form of interpretative inquiry in which researchers interpret what they see, hear, and understand (Creswell, 2009, p.176). At the heart of the qualitative approach is the assumption that a piece of qualitative research is very much influenced by the researcher's attributes and perspectives (Schofield, 1993, p.202). Thus, the biases, values, and judgments of the researcher must be stated explicitly in the research report, because as Creswell (2007, p.179) notes:

All writing is "positioned" within a stance. All research shape the writing that emerges, and qualitative researchers need to accept this interpretation and be open about it in their writing.

Whereas quantitative methods grew out of objectivist or positivist philosophy, most qualitative research approaches grew out of the constructivist/interpretivist philosophy (Caelli et al., 2003). Within this position, humans construct knowledge out of their somewhat subjective engagement with objects in their world. Spicer (2004, p.295) contrasts the two methods and Table 3.2 below lists some of the common differences between the two approaches.

Quantitative	Qualitative
Positivist	Interpretivist/postmodernist
Artificial	Naturalistic
Deductive	Inductive
Objectivist	Constructionist/subjective
Structured	Exploratory
Theory testing	Theory generating
Controlling	Subjective

 Table 3.2. Some of the commonly proposed differences between approaches

Source: Extracted from Spicer (2004, p.295).

Quantitative and qualitative researchers are typically interested in both what people do and what they think but go about the investigation of these areas in different ways (Bryman, 2008, p.594). The choice between quantitative and qualitative methods cannot be made in the abstract, but must be "related to the particular research problem and research object" and although statistics on social phenomenon may have limitations, they may nonetheless sometimes contain value as "background material in qualitative research" (Alvesson and Skoldberg, 2009, p.8). Alvesson and Skölberg (2009) consider that "it is not methods but ontology and epistemology which are better determinants of good social science", and they suggest that

these aspects of research are handled better by qualitative research which allows for ambiguity as regards interpretive possibilities and lets the researcher's views of what is explored become more visible (p.8).

Patton (2002, p.14) suggests that because the two research methods involve different strengths and weaknesses, "they constitute alternative, but not mutually exclusive strategies for research, and can be used in the same study". Instead of always separating research into qualitative and quantitative, there is a need for

integrative approaches that provide the appropriate forms of knowledge needed by decision makers located differently in society and dealing with different units of analysis (individual, group, community) (Ercikan and Roth, 2006, p.23).

In this approach, researchers should make choices regarding data sources, data construction, and analysis methods that best fit their research questions and consider using multiple approaches and modes of inquiry. Yanchar and Williams (2006) concur and suggest that there should not be a difficulty in selecting qualitative versus quantitative methods and that it was not the case of strict paradigm rigidity versus methodological eclecticism but rather that researchers should use a "critical perspective yielding contextual, coherent, and evolving investigative strategies" (Yanchar and Williams, 2006, p.10).

In carrying out research, there is now an increasing use of mixed methods which may provide a better understanding of a phenomenon than if just one method had been used (Bryman, 2008, p.624). Morgan (1998) considers that it is important to

determine the priority of each method at the start. He suggests that either the qualitative or the quantitative method will be the principal method and that the other method is a contrasting complementary method. The two methods operate according to very different time patterns and because of the difficulty in creating connections between them it is a more practical strategy to use the two methods in sequence so that "what is learned from one adds to what is learned from the other" (Morgan, 1998, p.366). The combination of qualitative and quantitative methods maximises the ability to bring different strengths together in the same project.

Critics of combined methods argue that assumptions behind qualitative and quantitative methods are fundamentally different both in terms of epistemology and ontology. However, the connection between research strategy and epistemological and ontological commitments is not deterministic and the two approaches "are capable of being put to a wide variety of tasks" (Bryman, 2008, p.604). One of the approaches to mixed methods research proposed by Spicer (2004, p.301) is a facilitative approach where one research strategy is employed in order to aid research using the other research strategy. Silverman (2006, p.48) supports this approach and suggest that one way to combine quantitative and qualitative research is to begin with a quantitative study in order to establish a sample of respondents and then use qualitative research to look in depth at key issues using some of the earlier sample. This view is reinforced by Bryman (2001, 450), who considers that one of the chief ways in which quantitative research can prepare the ground for qualitative research is through the selection of people to be interviewed.

## **3.4.** Research approach adopted in this study

The four paradigms for the analysis of social theory as shown in Figure 3.1, provide a convenient way of locating one's own personal frame of reference with regard to social theory (Burrell and Morgan, 1979, p.24). This researcher would support the nominalist and anti-positivist assumptions that reality is in the mind of the individual and that the understanding of the world is greater by looking at

events through the eyes of individuals rather than looking for universal laws. Because of these views this researcher would favour ideographic rather than nomothetic research methods in the hope of getting close to the subjects of the study.

As stated at the start of this chapter, the purpose of this study is twofold and consequently the following two objectives were established:

- 1. To measure the levels of oral and written CA among undergraduate business students, and
  - to examine differences in CA among different disciplinary groups;
  - to examine differences in CA between male and female students.
- 2. To qualitatively explore the phenomenon of oral and written CA from the perspective of students.

Whereas these objectives are complementary, it is considered that to achieve them it is necessary to use different methodological approaches in line with what has been discussed above. It is considered that a mixed approach is the most appropriate method to achieve the objectives as set out, with quantitative measures supporting and complementing the qualitative measures. Hence, quantitative methods will measure the levels of CA reported by the students surveyed (objective 1). Qualitative methods will then be employed to enrich the study (objective 2).

The first part of this study, the quantitative element, is carried out using the two instruments which were discussed in Chapter 2, namely the PRCA-24 and the WCA-24. The instruments have been used internationally and to permit comparison with international studies, the instruments are validated and tested for reliability for use in this study, and this is reported in Chapter 4. To achieve the second objective interviews will be conducted with a small sample of students. Human beings represent their lives (to themselves and to others) in the form of narrative (Bruner, 1998, p.175). By analysing the views of the interviewees, the research can make sense of how the students view CA in their lives. It is suggested that this is a novel approach to the study of CA among Irish students

and this researcher is not aware of any other Irish study which has adopted qualitative techniques and sought to explore the feelings and experiences of the individual students concerning both oral and written CA. Details of the interviews (selection process, interview guide, approach to analysis) along with the presentation of findings are provided in Chapter 5.

### 3.5. Summary

This chapter sets out some of the philosophical assumptions and paradigms underlying research and from this, the research philosophy of this researcher is set out. The overriding objective of this study is to develop an understanding of CA among Irish business and accounting students. Two specific objectives were set out, one quantitative in orientation and the other qualitative, and so, a mixed method approach is adopted. The quantitative method measures the levels of oral and written CA among undergraduate business students and then this data is analysed to examine differences in CA among different disciplinary groups and between male and female students. The results of the quantitative analysis are then used to select a sample to qualitatively explore the phenomenon of oral and written CA from their perspective. Thus, the qualitative analysis broadens the implications of the qualitative study. The next chapter reports on the conduct and findings of the quantitative phase of study.

## **CHAPTER 4**

# QUANTITATIVE DATA COLLECTION AND ANALYSIS

- 4.1 Introduction
- 4.2 Data collection
- 4.3 Factor analysis and reliability analysis of the instruments
- 4.4 Findings
- 4.5 Summary

#### 4.1 Introduction

As previously outlined, this study is undertaken in two parts. The first part, which is reported in this chapter, is quantitative in orientation and measures the levels of oral and written CA among business and accounting students in higher education in Ireland. The chapter begins by detailing the data collection process. Then the validation of the instruments is presented. The results of the analysis are examined and discussed and are considered in the light of prior studies.

#### 4.2 Data collection

To gather the quantitative data for this study, a questionnaire was designed consisting of three sections (a copy of the questionnaire is presented in Appendix A). The first section gathers data on students' background, gender and details of their programme of study. Section two contains the OCA instrument (PRCA-24), and the third section contains the WCA instrument (WCA-24). The nature and development of the instruments and their use in previous studies was described in Chapter 2. Ultimately, both instruments contain 24 statements to which students respond using a 5-point Likert scale, where 1 means "Strongly agree", 2 means "Agree", 3 means "Neutral", 4 "Disagree" and 5 "Strongly disagree".

First year students on business and accounting programmes at an Institute of Technology in Ireland were targeted to complete the questionnaire. Permission was received from senior management to carry out the study. It was decided to hand out the questionnaire to the students in class. This has a number of advantages compared to other collection methods. Firstly, a high completion rate is expected. Secondly, the purpose of the study and the nature of the questionnaire could be explained to the students and any questions could be answered. Thirdly, personal contact would reassure the students of the confidential nature of their responses and would increase the likelihood that all students present would respond. It is recognised that there may be disadvantages to students completing questionnaires in the presence of their peers. For example,

they may be unduly influenced by the responses of other students and if there is a set time allotted for completing the questionnaire they may not take due consideration in responding. The latter problem was avoided by getting the students to complete the questionnaire at the beginning of a class, with normal class activities only commencing when all questionnaires were completed and collected. Details of the population and response rates for each programme group are shown in Table 4.1 below.

Degree Programme	Population	Responses	% Response
Accounting and Finance	34	34	100%
Business and Management	138	101	73%
Marketing	91	64	70%
Other (*)	112	83	74%
Total	375	282	75%

 Table 4.1. Population and Sample Response Rate

\* Other. This group includes students on the following degree programmes: Information Systems Development, Retail and Services Management, and Transport and Logistics.

Each completed questionnaire was numbered and the responses were coded and entered into an SPSS file. The respondents' scores, as indicated on the PRCA-24, for each of the four oral contexts were calculated and the total of the context scores gives the overall OCA score. Each student's responses to the WCA-24 items were aggregated to derive an overall measure of WCA.

# 4.3 Factor analysis and reliability analysis of the instruments

Prior research has provided substantial evidence to support both the reliability and the construct validity of the PRCA-24 in the US and elsewhere (e.g., McCroskey et al., 1985; Levine and McCroskey, 1990; and Gardner et al., 2005). The instrument also exhibits high inter-item correlations and the total score correlates with other trait and outcome variables in a manner consistent with its validity

(Levine and McCroskey, 1990). There have also been a small number of studies with business and accounting students that have confirmed the validity and the reliability of the instrument (Pitt et al., 2000; Gardner et al., 2005).

Unlike the PRCA-24, the evidence on the measurement properties of the WCA-24 instrument is mixed. Although Daly and Miller (1975a) strongly believe that it captures a single construct, some studies have provided evidence questioning the unidimensionality of the instrument (Burgoon and Hale, 1983; Shaver, 1990; Bline et al., 2003). Studies testing the construct validity of the instrument with business students are scarce (Bline et al., 2003). Penley et al. (1991) in a study of business managers reported two factors for the WCA-26, with internal consistency estimates of 0.94 and 0.77. Similarly, Bline et al. (2003) who gathered data from students studying accounting found that a two-factor pattern was consistently observed. Of the two studies that used the WCA-24 only Gardner et al. (2005) report the results of any factor analysis. They identified two factors with an eigenvalue greater than 1. Ten items loaded on factor one and these mainly described a liking or enjoyment of writing. The remaining 14 items loaded on factor two and this scale typically reflected a fear of and an inability to write. The first factor had a Cronbach alpha score of 0.83 and the second factor a score of 0.93. However, given the strong theoretical basis for a single factor model, Gardner et al. (2005) also requested a single factor solution. They found that 20 items had loadings greater than 0.5 and that this model explained 37% of the variance. Also, the Cronbach alpha value for the 24 items was 0.92 with the exclusion of the four poorly loading items producing a very marginal decline in the alpha value. Thus, Gardner et al. (2005) proceeded with the single factor model in keeping with other studies.

The construct validity and the reliability of both PRCA-24 and WCA-24 have not been tested in any previous study in Ireland, thus, it was necessary to conduct both factor analysis and tests concerning the internal consistency of scales. Initially, to ensure that it was appropriate to perform factor analysis on the data, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was calculated. This measure provides a means to assess the extent to which the indicators of a construct band together. It shows the relationship between the correlations and partial correlations of the variables and the overall KMO measure should be greater than 0.80 (Sharma. 1996). The overall KMO for both the PRCA-24 and the WCA-24 was 0.93 and in the case of both instruments each variable had an anti-image correlation in excess of 0.82, indicating that each data set was suitable for factor analysis. Notwithstanding this, the appropriateness of using factor analysis must also be considered in the light of sample size. MacCallum et al. (1999) suggest that adequate sample size is not a function of the number of measured variables per se but is instead influenced by the extent to which factors are overdetermined and the level of the communalities of the measured variables. When each common factor is overdetermined (i.e. at least three or four measured variables represent each common factor) and the communalities (percentage of variance in a given variable explained by all the factors jointly) are high i.e., an average of 0.70 or higher, accurate estimates of population parameters can be obtained with samples as small as 100 (MacCallum et al., 1999). However, under more moderate conditions a minimum of 200 cases is recommended (Guilford, 1956; McCroskey and Young, 1979; Gorsuch, 1983; MacCallum et al., 1999). Additionally, the sample size may be linked to the number of variables. Nunnally (1978, p.276) suggests a ratio of 10 is to 1. The sample in this study exceeds 200 cases and the case to variable ratio is greater than 10 and thus, the sample is suitable for factor analysis.

The next issue to be resolved is to decide on the most appropriate type of factor analysis to use. There is an array of factor analysis techniques which Dillon and Goldstein (1984, p.24) classify into two groups: principal component analysis and common factor analysis. The goal of principal component analysis is data reduction whereas the goal of common factor analysis is to develop "an understanding of a set of measured variables by determining the number and nature of common factors needed to account for the pattern of correlations among the measured variables" (Fabrigar et al., 1999, p.275). Common factor analysis is therefore more appropriate for this study. There are two approaches to common factor analysis namely, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), and both approaches seek to represent the structure of correlations

among measured variables using a relatively small set of latent variables. As the objective of the factor analysis of this study is to confirm the construct validity of the PRCA-24 and WCA-24 in a new setting, confirmatory factor analysis appears to be more appropriate. However, Tait (1992) suggests that CFA should only be used when the sample studied does not deviate from previous studies. The sample in this study is different from other studies, therefore, a maximum likelihood (ML) extraction is used as it is a half way measure between EPA and CFA (Tait, 1992, p.56). Dillon and Goldstein (1984, p.73) support the use of ML and consider it "the only method for factor extraction that currently provides a sound statistical basis for testing the adequacy of the basic common factor-analytic approach".

Fabrigar et al. (1999, p.281) note that any given solution with two or more factors will have an infinite number of alternative orientations of the factors in multidimensional space that will explain the data equally well, but the solution with the best "simple structure" would be the "most interpretable, psychologically meaningful, and replicable". It is therefore necessary to rotate the factors to arrive at the solution with the best simple structure. The extracted factor matrices were subjected to oblique rather than orthogonal rotation as oblique rotations permit correlation between factors and therefore "provide a more accurate and realistic representation of how constructs are likely to be related to one another" (Fabrigar et al., 1999, p.282). The rotational technique used is direct oblimin which simplifies factors by minimising cross-loadings (Tabachnich and Fidel, 2007, p.639). Thus, in summary, factor analysis was performed on the PRCA-24 and the WCA-24 using the maximum likelihood technique with direct oblimin rotation, with the aid of the computer package SPSS 15.

In the case of the PRCA-24, the factor analysis yielded four factors with an eigenvalue greater than one. The emerging four factors are those that were expected conceptually and can be clearly identified as relating to the four communication contexts: one to one, groups, meetings and public speaking. The full factor pattern is set out in Table 4.2 (see page 62) though only salient loadings, that is loadings in excess of 0.3, are shown (Kline, 1994, p. 180).

		Factor					
		Ι	Π	Ш	IV		
1	I dislike participating in group discussions*				0.550		
2	Generally, I am comfortable while participating in group discussions				0.755		
3	I am tense and nervous while participating in group discussions*				0.749		
4	I like to get involved in group discussions				0.750		
5	Engaging in a group discussion with new				0.516		
-	people makes me tense and nervous*						
6	I am calm and relaxed while participating in group discussions	0.352			0.546		
7	Generally, I am nervous when I have to participate in a meeting*	0.834					
8	Usually, I am comfortable when I have to	0.897					
5	participate in a meeting						
9	I am very calm and relaxed when I am called	0.397		0.325			
	upon to express an opinion at a meeting						
10	I am afraid to express myself at meetings*	0.334					
11	Communicating at meetings usually makes me feel uncomfortable*	0.435					
12	I am very relaxed when answering questions	0.476					
12	at a meeting	0.170					
13	While participating in a conversation with a new acquaintance, I feel very nervous*		-0.588				
14	I have no fear of speaking up in		-0.424				
15	Ordinarily I am very tense and nervous in conversations*		-0.922				
16	Ordinarily I am very calm and relaxed in conversations		-0.896				
17	While conversing with a new acquaintance, I feel very relaxed		-0.535				
18	I'm afraid to speak up in conversations*		-0.509				
19	I have no fear of giving a speech			0.712			
20	Certain parts of my body feel very tense and rigid while giving a speech*			0.672			
21	I feel relaxed while giving a speech			0.761			
22	My thoughts become confused and jumbled when I am giving a speech*			0.668			
23	I face the prospect of giving a speech with confidence			0.792			
24	While giving a speech, I get so nervous I forget facts I really know*			0.628			
Cror	bach Alpha Value	0.90	0.87	0.87	0.88		
	bach Alpha Value for PRCA-24 (total)	0.95					
	these items are reversed goded						

# TABLE 4.2. Factor analysis of PRCA-24 with four extracted factors

\* these items are reversed coded

The four-factor solution on the PRCA-24 explains 65.5% of the variance, which is in line with values reported in other studies (Blue et al., 1998; Pitt et al., 2000; Gardner et al., 2005). The primary loading of all 24 items is on the anticipated factors. Two items cross-load (items 6 and 9) but, as can be seen, the loading on the expected factor dominated the secondary loading for item 6, leaving item 9 as the only item which has not emerged as strongly as expected.

To determine if the instrument provided one valid composite measure of OCA, a single factor solution, was requested. The resulting solution explained 46.2% of the variance, and all 24 items had loadings in excess of 0.50. This compares favourably to the findings of other studies that requested a single factor (Hutchinson et al., 1995; Gardner, et al., 2005).

Cronbach alpha values were then extracted to test the internal reliability of each of the scales associated with the four oral communication settings and the overall measure of OCA. As can be seen from Table 4.2 (see page 62) the alpha values for the four contexts range from 0.87 to 0.90 and the value for the global measure of OCA is 0.95. These values exceed the level of 0.7 which Nunnally and Bernstein, (1994, p.265) consider adequate in group research concerned with "the size of correlations and with mean difference". The values are also similar to values reported in previous studies (Simons et al., 1995; Blue et al., 1998; Pitt et al., 2000; Gardner, et al., 2005). Furthermore, the inter-correlations between the four communication settings range from 0.47 to 0.69 providing additional support for the internal consistency of the PRCA-24.

With regard to the WCA-24, given the conceptual underpinnings of the instrument, a one-factor solution is commonly imposed. The factor analysis of the WCA-24 with one extracted factor is shown in Table 4.3 (see page 64).

As can be seen, nineteen items have loadings greater than 0.5 and the loadings for the remaining 5 items ranged from 0.42 to 0.50. This model explained 39% of the variance, which is slightly more than the variance explained by the one-factor model in the study by Gardner et al. (2005). The Cronbach alpha calculated on

the WCA-24 items shows very high reliability with a value of 0.93, which is well above the acceptable value of 0.7 (Nunnally and Bernstein, 1994, p.265). Again, the results on the reliability of the single model are comparable to those reported by Gardner et al. (2005). In summary, the foregoing validity and reliability analysis clearly illustrates that the PRCA-24 and WCA-24 can be confidently used to measure students' CA in an Irish setting.

### TABLE 4.3. Factor analysis of WCA-24 with one extracted factor

		Factor I					
1	I avoid writing*	0.509					
2	I have no fear of my writing style being evaluated	0.498					
3	I look forward to writing down my ideas	0.601					
4	I prefer to answer numerical rather than essay questions*	0.421					
5	I like to do written work	0.511					
6	My mind seems to go blank when I start to write*	0.560					
7	Expressing ideas through writing seems to be a waste of time*	0.557					
8	I like to write my ideas down	0.513					
9	I feel confident in my ability to clearly express my ideas in writing	0.767					
10	I like to have my friends read what I have written	0.430					
11	I'm nervous about writing*	0.619					
12	People seem to appreciate what I write	0.603					
13	I enjoy writing	0.720					
14	I never seem to be able to clearly write down my ideas*	0.651					
15	Writing is a lot of fun	0.499					
16	I expect to do badly in courses that require written assignments*	0.709					
17	I like seeing my thoughts on paper	0.556					
18	Discussing my writing with others is an enjoyable experience	0.464					
19	I have a terrible time organising my ideas when writing an essay*	0.589					
20	When I have to write an essay I know I'm going to do poorly*	0.719					
21	It's easy for me to write good essays	0.670					
22	I don't think I write as well as most people*	0.667					
23	I don't like my written work to be evaluated*	0.650					
24	I'm no good at writing*	0.790					
Cro	nbach Alpha Value for WCA-24	0.93					
*	* these items are reversed coded						

#### 4.4 Findings

Table 4.4 (see page 66) shows the overall mean scores and the standard deviations for both OCA and WCA for the full sample in comparison to the scores reported in prior studies with business students (includes accounting students). As stated in Chapter 1, accountants are sometimes regarded as having poor communications skills. Thus, comparative data examining just the subset of accounting students is presented in Table 4.5 (see page 67).

Both tables clearly show that the results for OCA and WCA for the full sample, and the accounting subset, are very similar to the findings reported in other studies. Unsurprisingly, public speaking is the oral communication context with the highest score, and students are typically most comfortable in the one to one context. This pattern is consistent with the findings of most other studies (e.g. Stanga and Ladd, 1990; Simons et al., 1995; Gardner et al., 2005; and Arquero et al., 2007). However, the variation in the scores of the accounting students compared to those reported in a previous Irish study is noteworthy. Warnock and Curtis (1997) found that undergraduate accounting students exhibited very high levels of OCA, with a score of 72.6. This is significantly higher (p = 0.00) than the value of 63.6 reported in the current study. This highly significant (p = 0.00) difference between the two studies is present for all four oral communication settings. One possible explanation for this disparity is perhaps that students today, compared to over ten years earlier, when the Warnock and Curtis (1997) study was conducted, have a better understanding of the importance of communication skills to a career in accounting and this is resulting in students with lower levels of CA now choosing accounting programmes, compared to previously.

Study	Students	Country	One to o	ne	Gro	up	Meet	ings	Pub sp	eak	OCA		WCA	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Current study	Yr 1 Bus	Ireland	13.6	4.2	14.6	4.6	16.1	4.7	19.1	5.0	63.2	15.7	64.0	13.7
Stanga and Ladd (1990)	Yr 1 Bus	US	14.2	4.0	15.0	4.6	16.0	4.6	18.8	5.2	64.1	15.9		
Simons et al. (1995)	Sophomores	US	14.2	4.5	15.3	5.3	16.2	5.1	19.1	5.7	64.8	16.8	67.8 <sup>1</sup>	18.0 <sup>1</sup>
Hutchinson et al. (1995)	Undergrads/MBA	Australia	12.9	3.8	13.3	3.9	14.5	4.2	18.2	4.7	58.8	13.0		
Hutchinson et al. (1995)	Undergrads.	US	14.2	3.9	14.8	4.5	15.4	4.2	18.0	5.0	62.4	14.0		
Fordham and Gabbin (1996)	Yr 1 Bus	US									66.4	10.9		
Hassall et al. (2000)	Yrs 1-3 Bus	UK	13.3		13.6		17.7 <sup>2</sup>		19.3 <sup>2</sup>		63.8 <sup>2</sup>		62.4	
Hassall et al. (2000)	Yrs 1-3 Bus	Spain	13.0		15.1		20.1 <sup>2</sup>		19.9 <sup>2</sup>		68.1 <sup>2</sup>		64.2	
Gardner et al. (2005)	Yr 1 Bus	New Zealand	15.0	3.8	15.8	4.6	19.9 <sup>2</sup>	$4.0^{2}$	18.5 <sup>2</sup>	$5.0^{2}$	69.2 <sup>2</sup>	14.4 <sup>2</sup>	63.2	14.1
Arquero et al. (2007)	Non-acc disciplines	UK	13.3		13.7		17.5 <sup>2</sup>		19.2 <sup>2</sup>		63.7 <sup>2</sup>		62.5	
Arquero et al. (2007)	Non-acc disciplines	Spain	12.1		14.6		18.6 <sup>2</sup>		18.7 <sup>2</sup>		$64.0^{2}$			
US national norm	Misc	US	14.5	4.2	15.4	4.8	16.4	4.8	19.3	5.1	65.6	15.3	75.6 <sup>1</sup>	13.4 <sup>1</sup>

TABLE 4.4. The levels of CA for the full sample of business students (including accounting students)

<sup>1</sup> used 26-item version of WCA instrument with a range of 26 - 130. <sup>2</sup> in these studies the word 'interview' was used in place of 'meetings' and the word 'presentations' in place of 'public speaking'. Thus, the findings from these studies are not completely comparable.

Study	Students	Country	One to	one	Gro	oup	Meet	tings	Pub sp	eaking	OCA		WCA	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Current study	Yr 1	Ireland	13.9	4.2	14.6	4.3	16.5	4.2	18.6	4.6	63.6	14.4	66.1	14.6
Stanga and Ladd (1990)	Yr 1	US	15.0	3.9	16.0	4.8	17.0	4.8	19.6	5.4	67.5	16.0		
Ruchala and Hill (1994)	Yr 3 (pretest)	US	14.1	4.5	14.7	2.5	16.5	3.3	17.8	5.8	63.0	14.1		
Ruchala and Hill (1994)	Yr 3 (posttest)	US	12.1	4.7	14.1	3.3	15.2	3.6	14.7	6.1	56.1	14.8		
Simons et al. (1995)	Sophomores	US	14.7	4.5	16.3	5.6	17.0	5.3	20.0	5.8	68.1	17.4	$70.7^{1}$	$18.2^{1}$
Fordham and Gabbin (1996)	Yr 1	US									64.2	12.2		
Fordham and Gabbin (1996)	Yr 3	US									64.0	13.8		
Warnock and Curtis (1997)	Yr 3	Ireland	14.6	3.6	18.1	5.3	18.9	4.7	21.0	4.3	72.6	15.5		
Hassall et al. (2000)	Yrs 1-3	UK	15.0		14.7		18.8 <sup>2</sup>		$19.0^{2}$		67.5 <sup>2</sup>		67.7	
Gardner et al. (2005)	Yr 1	New Zealand	15.0	4.7	15.8	4.1	$18.2^{2}$	$4.7^{2}$	19.5 <sup>2</sup>	4.8 <sup>2</sup>	68.5 <sup>2</sup>	$14.4^{2}$	68.5	13.3
Aly and Islam (2003)	Yr 1, 3, Grad Dip	Canada	15.5	5.0	16.4	4.2	17.8	4.6	19.5	4.4	69.2	14.5		
Gardner et al. (2005)	Yr 3	New Zealand	13.9	3.2	15.1	3.6	$20.2^{2}$	$4.2^{2}$	$18.2^{2}$	5.2 <sup>2</sup>	67.4 <sup>2</sup>	11.4 <sup>2</sup>	62.3	14.1
Gardner et al. (2005)	Yrs 1-3	New Zealand	15.0	4.0	15.7	4.0	19.2 <sup>2</sup>	$4.8^{2}$	19.2 <sup>2</sup>	$4.8^{2}$	68.4 <sup>2</sup>	13.7 <sup>2</sup>	68.0	13.4
Arquero et al. (2007)		UK	15.0	4.3	14.8	3.8	18.9 <sup>2</sup>	$4.7^{2}$	19.1 <sup>2</sup>	$4.7^{2}$	67.8 <sup>2</sup>	13.4 <sup>2</sup>	67.7	12.1
Arquero et al. (2007)		Spain	13.1	4.2	15.2	4.1	19.9 <sup>2</sup>	$4.4^{2}$	19.7 <sup>2</sup>	4.6 <sup>2</sup>	67.8 <sup>2</sup>	$12.6^{2}$	64.2	11.4
US National Norms	Misc	US	14.5	4.2	15.4	4.8	16.4	4.8	19.3	5.1	65.6	15.3	<b>75.6</b> <sup>1</sup>	13.4 <sup>1</sup>

# TABLE 4.5. The levels of CA for the subset of accounting students

 <sup>1</sup> used 26-item version of WCA instrument with a range of 26 – 130.
 <sup>2</sup> in these studies the word 'interview' was used in place of 'meetings' and the word 'presentations' in place of 'public speaking'. Thus, the findings from these studies are not completely comparable.

One of the objectives of this study is to investigate if there is any variation in the levels of CA reported by students in different business disciplines and between males and females. Table 4.6 below shows the mean scores for both oral and written CA by degree programme and by gender.

Programme	Gender	One to	Group	Meetings	Public	Total	WCA
		one			Speaking	OCA	
Full Sample	Male	13.38	14.63	15.75	18.23	62.03	62.56
	Female	13.97	14.60	16.65	20.34	64.85	65.80
	Total	13.63	14.62	16.14	19.13	63.19	63.96
Acc and Fin	Male	12.16	13.89	15.53	17.11	58.68	62.95
	Female	16.00	15.53	17.73	20.53	69.80	70.13
	Total	13.85	14.62	16.50	18.62	63.59	66.12
Bus and Mgt	Male	13.42	15.10	15.93	17.85	62.05	60.61
	Female	14.67	15.18	16.67	21.18	67.63	66.72
	Total	13.90	15.13	16.22	19.15	64.21	62.99
Marketing	Male	13.03	13.76	15.03	18.45	61.18	60.79
	Female	12.48	13.69	15.45	19.00	59.76	60.23
	Total	12.75	13.72	15.25	18.74	60.46	60.50
Other	Male	14.02	14.84	16.04	19.00	63.81	66.18
	Female	13.70	14.38	17.33	20.59	63.67	68.06
	Total	13.90	14.65	16.56	19.63	63.76	66.96

 TABLE 4.6. Mean CA scores by degree programme and by gender

To test for any significant differences between the programmes, and also to test for any gender differences, ANOVA tests were performed. Initially, a two-way ANOVA test was carried out to investigate any interaction between degree programme and gender on the measures of CA. No significant interaction was identified on any of the measures: one to one (p = 0.056); group discussions (p = 0.746); meetings (p = 0.815); public speaking (p = 0.282); OCA (p = 0.197); WCA (p = 0.366). Thus, it

was possible to explore the effects of degree programme and gender separately. The only significant difference between the scores for students on the various degree programmes was in the level of WCA. Tukey's post hoc test revealed that the marketing students had a significantly lower score on WCA (p = 0.03) than the students on the other degree programmes.

The low level of variation between the different groups is contrary to the results reported in most studies with business students which have typically shown that accounting students are significantly more apprehensive than other business students (Simons et al., 1995; Joyce et al., 2006; Arquero et al., 2007). This was not found in the current study. Whereas this finding was not anticipated, an examination of the grades achieved in English by the students in their Leaving Certificate which is the final secondary school exam, and which gives some measure of their previous communication competence, shows that the scores of the accounting students were not significantly different to the grades achieved by the students on the other programmes.

It is also possible that there are other reasons which explain why the accounting students in this study have lower apprehension than accounting students in other studies. For example, the accounting students in this study take most of their classes separately from the other business students. The small class size of just 34 students may result in a more relaxed and supportive environment, thereby generating lower levels of apprehension than if they were in a larger class, which may have been the case in previous studies. Furthermore, in recent years the accounting profession in Ireland has noticeably increased its level and type of advertising for the purposes of encouraging school leavers and graduates to consider accounting careers. There has been considerable emphasis on eliminating the traditional accountant's stereotype and portraying accounting as offering a business-focused career with great opportunity for success across sectors (e.g. Chartered Accountants Ireland are using innovative radio and cinema advertisements). This may have resulted in attracting a broader set of students into accounting programmes.

With regard to gender differences, the analysis revealed significant differences in public speaking (p = 0.000). Consistent with the findings of some other studies, female students exhibit significantly higher levels of anxiety in formal oral communication settings than their male counterparts (Simons et al., 1995; Hassall et al., 2000; Gardner et al., 2005; Arquero et al., 2007). There were no gender differences relating to WCA, which is also consistent with several prior studies (Simons et al., 1995; Faris, et al., 1999; Gardner et al., 2005; Arquero et al., 2007).

As discussed in Chapter 2, some prior studies have examined the relationship between OCA and WCA. In this study a significant and positive correlation (r = 0.273, p = 0.00) is reported between OCA and WCA for the full group and this is in keeping with previous findings (Daly and Miller, 1975b; Simons et al., 1995; Arquero et al., 2007; Marshall and Varnon, 2009). The positive correlation is common to all degree programmes and is significant (p = 0.00) except in the case of the "Other" degree students. When gender is considered, a stronger correlation is reported in the full sample for males (r = 0.273, p = 0.00) than for females (r = 0.237, p = 0.05). When the gender factor is analysed by degree programme, only the Business and Management and the Marketing male students report a significant correlation (p = 0.00). These findings would suggest that individuals who have high OCA may also have high WCA especially in the case of male Business and Management and Marketing students.

To enrich the findings of the study, the data was analysed further by deriving a grouped frequency distribution for OCA and WCA scores as shown in Table 4.7 (see page 71). Students were allocated to the high group if their CA score is greater than 80 and to the low group if their score is less than 50 (approximately 1 standard deviation above and below the widely accepted average norms for both 24-item versions of the instruments). The remaining students are classified as having average CA scores.

Programme	Level of CA	00	CA	W	CA
		No.	%	No.	%
Full Sample	High > 80 Average 50 - 80	40 176	15 67	33 203	12 75
Accounting and Finance	Low < 50 High > 80 Average 50 - 80 Low < 50	48 5 22 7	18 15 64 21	35 5 25 4	13 15 73 12
Business and Management	High > 80 Average 50 - 80 Low < 50	18 63 17	18 65 17	10 75 14	12 10 76 14
Marketing	High > 80 Average 50 - 80 Low < 50	7 36 14	12 63 25	4 43 13	7 71 22
Other	High > 80 Average 50 - 80 Low < 50	10 55 10	13 74 13	14 59 4	18 77 5

**TABLE 4.7. Frequency Distribution of the OCA and WCA Scores** 

Table 4.7 shows that 15 percent of the full sample report high OCA and 18 percent report low OCA. These percentages are marginally better than those anticipated by McCroskey (1997b, p.90), who finds that normally 16 percent of the population are highly apprehensive and 16 percent report low apprehension. In the case of the Accounting and Finance students in this study, 15% experience high OCA, which is considerably lower than the 19% reported by Stanga and Ladd (1990). Interestingly, students are less apprehensive concerning writing as only 12% of the full sample in this study report high WCA.

# 4.5 Summary

This element of the study has rigorously tested the validity and reliability of two common apprehension instruments, the PRCA-24 and the WCA-24, for use in an Irish context. Additionally, the study has provided evidence of the level of both oral and written CA reported by students from a variety of business programmes at a higher education institution in Ireland. Overall the findings reveal that the students in

this study have similar levels of OCA and WCA when compared to studies conducted elsewhere. When considering different disciplinary groups, the accounting students did not report significantly different levels of apprehension compared to other business students and, indeed, report scores that are typically lower than those of accounting students in other studies. The levels of OCA increase across the continuum, the lowest in one to one, higher in groups, then meetings and the highest levels reported in public speaking. The only gender differences identified related to public speaking. Female students report significantly higher levels of anxiety in this context than their male counterparts. This study also found a significant positive correlation between OCA and WCA. This relationship is present for the full sample and for three out of four of the disciplinary groups.

In conclusion, this part of the study has provided a useful insight into Irish students' levels of CA. In so doing, it provides a relevant benchmark for further Irish studies and for comparisons with studies conducted in other countries. The quantitative data is now used to select a sample of students to interview. This qualitative approach seeks to get close to the participants and to look at CA from their perspectives. The collection and analysis of the qualitative data is reported in the next chapter.

# **CHAPTER 5**

# **QUALITATIVE DATA COLLECTION AND ANALYSIS**

# 5.1 Introduction

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- 5.2.2 Sample selection
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# 5.4 Oral communication apprehension

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- 5.5.1 Themes
- 5.5.2 Summary written communication apprehension

### 5.6 Summary

### 5.1 Introduction

As stated previously, the objective of this study is to explore the phenomenon of oral and written CA among business students in an Irish third level institution. The study is primarily interpretive in orientation and involves two phases. The first phase involved the collection and analysis of quantitative data which is presented and discussed in Chapter 4. This data is then used to select a sample of students to take part in the second phase of the data collection, which involves interviewing these students to explore their attitudes, views and opinions on oral and written communication. It is the analysis of this interview data which is presented in this chapter. As outlined in Chapter 2, quantitative data on CA has been gathered in many studies worldwide. However, this researcher is not aware of any other study where students have been interviewed to examine the phenomenon from their perspective. It is hoped therefore, that the analysis will generate rich and revealing descriptions of factors that impact on CA and of how the students feel, permitting comparisons between low, average and high apprehensives.

The remainder of the chapter is structured as follows. Firstly, the selection of the interview sample is explained and the conduct of the interviews is outlined. The process of analysing the interviews using template analysis and a thematic approach is discussed. OCA is analysed by looking at the students' views in each oral communication context in turn, and then identifying the themes emerging from the analysis. Similarly WCA is analysed by exploring the students' views on writing and then reviewing the themes emerging from the feelings and emotions they express. The chapter concludes with a summary of the significant aspects of CA revealed in the analysis.

## 5.2 Data collection

#### 5.2.1 Interviews as a method of data collection

The goal of this part of the study is to qualitatively explore CA, both oral and written, in a naturalistic manner and to look at the phenomenon through the lens of the students. The qualitative research interview attempts to "understand the world from the subjects' points of view, to unfold the meaning of peoples' experiences" (Kvale and Brinkmann, 2009, p.1). Thus, the interview is a suitable research method for this part of the study as the goal is to seek the views of the students on how CA impacts on their lives. The researcher is aware of the limitations of interviewing. For example, an interviewee may not disclose or not want to discuss matters considered too personal. This limitation may be addressed by the interviewer being alert to this possibility and eliciting the required responses by probing and asking pertinent Also, the interviewer may build a rapport with the interviewee to questions. encourage the interviewee to engage fully in the conversation. The limitations of the interviewer are also a factor. As stated previously, this study is interpretive in orientation and therefore is guided by the researcher's set of beliefs and feelings about the world. As there is no single interpretative truth (Denzin and Lincoln, 2008, p.35) this researcher's beliefs and feelings will influence how he interprets the "truth" and this may limit the validity of the research. This limitation is overcome by the critical and self-reflexive approach of the interviewer and by ensuring that the interviewees' voices are heard through the use of suitable and appropriate quotations from the interviewees to support the analysis. Despite these possible limitations, the interviews with the students should provide a rich insight into the phenomenon of oral and written CA.

#### 5.2.2 Sample selection

There are no universally agreed rules for determining interview sample size in a qualitative study. The number to be interviewed depends on "the purpose, usefulness and credibility of the study and the time and resources available" (Patton, 2002, p.245). The validity and the insights gained from the qualitative research are not so much related to the sample size but rather to the information richness of the cases. It is suggested that as many subjects should be interviewed as is necessary to find out what you need to know (Kvale and Brinkmann, 2009, p.113) and so there may be a trade off between depth and breadth (Patton, 2002, p.227). In this study, the researcher was anxious to seek depth in the interviews and to explore the variation in students' experiences/perceptions.

Alvesson and Skoldberg, (2009, p.233) suggest that "it is not the size of a sample that is interesting, but the close study of nuances in possibly quite a small number of accounts". Gaskell (2000) provides some guidance on the number of interviews to be conducted in a study. He suggests that more interviews may not necessarily imply better quality or more detailed understanding. The number of interpretations or versions of reality are limited and because the interviewees discuss matters of common concern, the issues are in part shared and common themes begin to emerge. Any initial surprises at the start of the interviewing process disappear and no new surprises or insights are forthcoming. A second issue involves the amount of material to be analysed. Gaskell (2000, p.43) feels that to properly analyse the transcripts, it is essential to "almost live and dream the interviews". For these reasons he recommends that 15 to 25 is the upper limit to the number of interviews that should be conducted by a single interviewer. In this study the intention is to go behind the scores and gain insight into what it really means to experience CA.

Seventeen students were selected for interview from the total population of 282 students who had completed the oral and written CA questionnaires discussed in Chapter 4. Given the researcher's intention to gain rich insights and explore

similarities and differences, it was decided to stratify the sample by level of apprehension and to select students for interview who had different levels of CA. Thus the interview sample includes students with high, average and low OCA, WCA or total CA. If a selected student was unable to attend, another student with a similar profile was substituted. Each interviewee was given a pseudonym to protect his/her anonymity. The details of the students interviewed and the selection criteria are shown in Table 5.1 below by level of total communication apprehension (TCA).

	Pseudonym	Male/ Female	OCA Score	WCA Score	TCA Score	Selection criteria
1	Paul	М	23	35	58	Low TCA
2	John	М	35	33	68	Low WCA
3	Eileen	F	29	57	86	Low OCA
4	Tom	М	43	47	90	Low TCA
5	Niall	М	40	56	96	Low OCA
6	Kate	F	51	60	111	Low WCA
7	Ken	М	51	55	106	Average TCA
8	Lisa	F	60	58	118	Average TCA
9	Anna	F	67	57	124	Average TCA
10	David	М	63	62	125	Average TCA
11	Ruth	F	42	89	131	High WCA
12	Daniel	М	106	55	161	High OCA
13	Emma	F	70	96	166	High WCA
14	Colin	М	75	92	167	High WCA
15	Mary	F	100	68	168	High OCA
16	Cliona	F	87	92	179	High TCA
17	Orla	F	80	108	188	High TCA

 Table 5.1. Profile of Interviewees

Eight of the interviewees are male and nine are female. As can be seen from Table 5.1 there is a significant range in scores - 23 to 106 in OCA, 33 to 108 in WCA and 58 to 188 in TCA. This range of scores should provide a wide lens on the views and

experiences of the interviewees across the spectrum of oral and written CA, from low through average to high.

#### 5.2.3 Conducting the interviews

The 17 interviews were carried out using a semi-structured format, which is like an everyday conversation but "with a purpose and a specific approach and technique" (Gillham, 2008, p.70). The same types of open questions are asked of all the interviewees, supplementary questions are asked if original questions do not elicit spontaneous complete answers, and approximate equivalent interview time is allotted in each case. Before the first interview took place, the researcher prepared an interview guide (Appendix B) which, drawing from the literature and the quantitative phase of the study, indicated the topics to be covered in the interview. The semi-structured interview is flexible and it is not necessary to stick rigidly to the guide. The more spontaneous the interview procedure, the more likely one is to obtain lively and unexpected answers from the interviewees (Kvale, 2007, p.57). This allows the researcher to develop the interview as he sees fit and should lead to a spontaneous interview procedure.

All the interviews were conducted in the Institute of Technology where the students were studying. Initially three interviews were carried out over a two day period. An informal/conversant style was used in the interviews because:

the interviewees will want to have a grasp of the interviewer before they allow themselves to talk freely and expose their experiences and feelings to a stranger (Kvale and Brinkmann, 2009, p.128).

The researcher listened attentively to each interviewee which requires:

more than one's ears; it necessitates eye contact, understanding body language, and active mental consideration of both the content (words) and context (emotions) of what is being said and not being said (Dilley, 2000, p.134).

With the permission of the interviewees, each interview was taped using a digital recorder which was small and unobtrusive. At the beginning of each interview the

nature of the study was explained, the confidential nature of it was emphasised, and the anonymity of the interviewee was guaranteed. Each interviewee was thanked for his/her cooperation and reminded that his/her participation was voluntary. It was stressed that there was no compulsion to answer any question and that the interviewee could terminate the interview at any time if he/she so desired.

The researcher was conscious of the young age of the interviewees (mostly 18 or 19). Accordingly, the initial part of each interview was devoted to discussing the interviewee's family background, schooling, friends, and hobbies. Notes were not made during the interview and eye contact was maintained at all times so as to assure the interviewee of the interviewer's full attention and interest in his/her life story. When sufficient rapport had been built up and the interviewee appeared sufficiently relaxed, the conversation then turned to the interviewee's experience and perception of CA. At the end of each interview, the interviewee was given an opportunity to review all that had been said and to comment if they so wished. The interviewee for giving his/her time, attention and cooperation so freely.

Listening to the students' accounts gave the interviewer a new confidence and perspective on the communication issues that were important to them. This led to a sense of excitement and satisfaction on the part of the researcher. The three initial interviews were transcribed, the transcripts reflected upon and the structure and sequencing of the questions reviewed. The interviewer was satisfied with the interview structure and the topics covered. However, he felt that the reactions and responses of the initial interviewees emphasised the need to put the interviewees at ease and help them to relax as much as possible. Following this, the researcher felt comfortable to proceed with the remaining 14 interviews. Each interview took 45 minutes approximately. All of the interviews were transcribed and then analysed by the researcher.

#### 5.3 Data analysis

#### 5.3.1 Approach to data analysis

The analysis of qualitative data is a process of "making sense of findings and making a structure in the data and giving this meaning and significance" (Jones, 1985, p.56) Over twelve hours of interview data resulted in approximately 300 pages of text. Each of the interviewees was encouraged to tell his/her own story. In this way the interviewer was hoping to explore how the students viewed apprehension in their lives and how they viewed communicating in the various contexts. The outcomes of the 17 interviews are 17 stories, with many commonalities but also with some unique aspects which provide rich and interesting narratives.

There are many ways of analysing the qualitative data. All the approaches to analysis are linked by "a central concern with transforming and interpreting qualitative data – in a rigorous and scholarly way – in order to capture the complexities of the social world we seek to understand" (Coffey and Atkinson, 1996, p.3). The purpose of the analysis is to uncover the common themes in the data and to transform the data into findings. This involves making sense of a large amount of data by reducing the volume and sifting through it to identify significant patterns and finding a structure to communicate the essence of what the data reveals (Patton, 2002, p.432). The result of the analysis should represent the interviewees' realities and these realities should be credible. This credibility depends on the validity of the research which "rests on the quality of researcher's craftsmanship throughout an investigation, on continually checking, questioning, and theoretically interpreting the findings" (Kvale and Brinkmann, 2009, p.249). The validation does not belong to a separate stage of an investigation, but permeates the entire research process (Kvale and Brinkmann, 2009, p.248). This process was adopted in the current study and has resulted in a reliable and credible narrative, grounded in the data.

#### 5.3.2 The process of data analysis

The data is analysed using thematic analysis which is widely used in qualitative research and is considered more flexible than other approaches, as themes can be considered before the analysis is carried out and additional ones can be added as the analysis proceeds. Issues of relevance are extracted from each interview into a spreadsheet. The researcher attaches a code to a section of text to index it as relating to a theme or issue in the data which he identifies as important to his interpretation (King, 1998, p.119). Initially, the issues extracted are put into groups by theme or sub-theme, with a column for each interviewe. When the initial coding of all 17 interviews is completed, the codes and groups are revisited and reduced to more manageable levels. The final set of codes is shown in Appendix C.

The process of coding, checking and linking is repeated many times whenever the narrative data is reviewed. When the data is reduced and displayed as detailed above, the final part of the analysis is conclusions-drawing/verification which involves drawing meaning from the reduced data. The three types of analysis activity and the activity of data collection form "an iterative, cyclical process" (Miles and Huberman, 1984, p.23).

There are no established common conventions for reporting qualitative studies (Baxter and Chua, 1998; Kvale and Brinkmann, 2009). The writing up of the narrative should not be seen as a separate stage from analysis and interpretation but rather as a continuation of it. In summarising, illustrating and producing a coherent story, the researcher continues to build his understanding of the phenomenon which in this case is CA (King, 1998, p.132). The main requirements of the resultant narrative are that the reader encounters "a resonant and evocative account" and one strategy to achieve such resonance is the inclusion of verbatim quotes which "enhances the trustworthiness" of the narrative and allows the reader to enter into the world of the interviewees (Baxter and Chua, 1998, p.82). The themes, which emerged during the coding process in this study were in some cases expected and in

others surprising. Where possible, the views and emotions of the interviewees are reviewed in the light of prior studies and in this way provide a unique insight into oral and written CA. The following section presents the students' description of their apprehension concerning oral communication.

### 5.4 Oral communication apprehension

The quantitative analysis (Chapter 4) reveals that the mean total OCA score for all the students is 63.2. Those scoring above 80 would be regarded as "high apprehensive" and below 50 as "low apprehensive". Table 5.2 below categorises the interviewees according to their total OCA levels.

Apprehension level	Interviewees	Total OCA Score		
	Paul	24		
	Eileen	29		
Low < 50	John	35		
	Niall	40		
	Ruth	42		
	Tom	43		
	Kate	51		
	Ken	51		
	Lisa	60		
A verage 50 80	David	63		
Average 50 – 80	Anna	67		
	Emma	70		
	Colin	75		
	Orla	80		
	Cliona	87		
High > 80	Mary	100		
	Daniel	106		

Table 5.2. Interviewees grouped by OCA Levels

The approach adopted is to explore the views of the interviewees in each of the four sub-contexts by level of apprehension, beginning with the low apprehensives, then the average ones and finally the interviewees who record high total OCA scores. Prior research indicates that in general, the low and average apprehensives should be more comfortable communicating in all contexts than the high apprehensives, who may have negative thoughts and feelings about communicating and who may seek to avoid conversing with others (Clevenger, 1959: Watson et al., 1994; Allen and Bourhis, 1996; Richmond and McCroskey, 1998). Where possible, the perceptions of the interviewees on communicating in each context are examined by, firstly, looking at how they feel about communicating with a friend and then communicating with a stranger.

### 5.4.1 Communicating One to One

The quantitative findings reported in Chapter 4 show that the mean score reported for this context (13.6) is the lowest of the four contexts and would indicate that the students in this study are least apprehensive communicating in this context. All the students interviewed, except one, feel comfortable when conversing with friends. They are relaxed and do not feel threatened or apprehensive. This was expected in the light of prior research. OCA scores are poor predictors of anxiety in situations where participants were likely to know one another (Parks, 1980). Students are significantly more willingly and therefore more comfortable when conversing with a friend than with a stranger (Burgoon and Hale, 1988; McCroskey, 2006; Wrench et al., 2008). Nevertheless, one interviewee, Cliona, a high apprehensive, reveals that she is very anxious even when communicating with friends: 'I am afraid of people. I am afraid of communicating.' This was unexpected and it will be evident later in the analysis that Cliona is very nervous, apprehensive and fearful communicating in all four contexts. Her responses are extreme as she describes how her apprehension affects her:

Absolute butterflies. I can feel blushing, heat rising through my body and I am sweating. I find it very hard to express myself because I have millions of thoughts, there's so much going on that I can't get everything out at once. [Cliona]

In terms of communicating with a stranger, the majority of the low and average apprehensives are calm, relaxed and assured. Ruth embodies this relaxed attitude, when she says: 'I'll go up and I'll talk to anyone.' Similarly, David points out: 'You'd probably start off a bit reserved. But that goes as soon as you get to learn more about the other person.' Emma displays the openness of some average apprehensives when she describes how she behaves with a new acquaintance: 'If there was someone I had to get to know I would just sit down and tell them about my life and then ask them questions. I would have no problems.' This is not the response of Orla who admits that if she fails to start a conversation she just 'stays quiet'. Orla's OCA score is 80 which is the upper limit of the average apprehensive threshold. It will be seen that Orla's responses in each of the oral contexts are very similar to the responses of the high apprehensives. This is expected as the thresholds are somewhat arbitrary figures and one person's response should be similar to that of another whose score is just one or two points above or below.

All three high apprehensives are fearful of talking with strangers. This fear may cause them to remain silent, as Daniel explains:

It depends on who you are talking to. If people are not friendly, I tend to be an awful lot quieter. If someone did not make it informal and comfortable I'd probably not be able to talk whatsoever. It probably would be a disaster. [Daniel]

Their difficulty in talking to strangers is well expressed by Mary, who finds it hard to open up to others: 'I am not one for starting to talk to people straight away. I am very cautious of people.' As stated above, Cliona feels nervous talking with her friends and she is also anxious talking with strangers. She has always felt this way but thinks that it has gone unnoticed because her reaction to the nervousness is to babble. This is referred to in Chapter 2 as "over-communication", where high apprehensives may conceal their fear by talking (Richmond and McCroskey, 1998, p.53). Cliona illustrates this when she says:

I can't help it. If I'm uncomfortable or nervous I'll just keep on talking. I have always been nervous. I always remember being around people I didn't know or even people I did know and being extremely hyperactive and it was because I was just so nervous, that was my reaction to it. [Cliona]

In summary, the feelings which the interviewees reveal concerning communicating on a one to one basis were generally expected. Communicating with friends or strangers poses no difficulty for most of the low and average apprehensives. Whereas most of the high apprehensives enjoy conversing with friends, they find meeting and talking with strangers potentially debilitating and their reaction may be to remain silent or over-communicate.

#### 5.4.2 Communicating in Groups

The quantitative findings reported in Chapter 4 indicate that the level of CA in this context (mean 14.6) is only slightly higher than in the one to one context. This would indicate that the interviewees are only slightly more apprehensive communicating in this context and so their attitudes to group discussions may not be dissimilar to conversing on a one to one basis. They all had experience of participating in groups in an informal setting such as in school and with friends, or in school/college group project work.

As in the one to one context, the majority of all the interviewees, irrespective of CA level, experience little difficulty in taking part in group discussions with friends or when they have a friend in the group. Most feel comfortable with people they know and as a result express themselves freely, a view best expressed by Niall: 'It would be different if there were guys in the group that you did not know well. You would be wary of what you were saying. If I knew everyone I'd just say it anyway'. Even some of the high apprehensives have little difficulty communicating in a group of friends, as Daniel explains: 'If I'm in a group that I am familiar with, I'll tell them exactly what I think of them. I'll tell them who's wrong; no this is the way to do it, that's it'.

However, a small number of interviewees are not always comfortable in a group of friends. Paul (low OCA) holds the opposite view to Niall, as he explains: 'I'd be a lot more careful in a group where I knew everybody, because I wouldn't want to offend anyone or rub them up the wrong way'. Emma (average OCA) prefers to work in a group with strangers rather than friends, as she explains: 'If they don't know me, they don't know my background, they don't know anything about me'. Her response is unexpected but is reflected by other students in the meeting and public speaking context which will be addressed later in the chapter. As expected, Cliona (high OCA) has the same burning tension as in the one to one context but feels that when communicating with a group of friends: 'I would not be happy but I'd be able to speak an awful lot easier'.

When working in a group with strangers, most of the low apprehensives are relaxed and are unaffected by the attitude of others in the group. Eileen admits to having 'no problem in expressing my views when working in a group'. Negative reactions from others in a group do not overly affect the low apprehensives, a view which Ruth explains: 'It just depends, if there is someone there that just doesn't warm to me or whatever, then I'm not going to impose myself on them'. Paul appears to be the least affected by the opinions of strangers in a group, as he explains: 'I'd be more open with strangers because I couldn't care less what somebody I didn't know thought of me'. One low apprehensive, John, would prefer to be with a group of friends, and is not relaxed conversing with strangers in a group. He is concerned with how the strangers might view him as he relates:

If you do not know them you would be thinking if you said something stupid, what would be said of you. But if you knew the people there they just slag you off and you'd be grand. [John]

Tom explains how he feels in this type of situation:

I think you are conscious of what the others are thinking when you are going to say something at first. But then as you slowly get your word in or start talking and go through the group I think that people start to relax more with each other. [Tom] In examining the perspectives of the average apprehensives, it is clear that some reflect the low apprehensives' confidence in communicating with strangers. Anna enjoys it, as she reflects: 'I like going into group discussions. You get to hear what other people think'. Lisa expresses the self-confidence of many average apprehensives when she displays her attitude to group discussion with strangers: 'If I had something to say I'd say it and if I didn't, I didn't. I don't feel under any pressure to say something.' Ken is 'a bit more reserved' when working with a new group as he would not like 'to step on someone's toes or come across as arrogant'. As with the low apprehensives any initial reticence is overcome, as David explains: 'I suppose before you start you would be slightly apprehensive but once it kicks off and you get your first few words in everything is gone and it just flows away and then you are talking on'. Orla, has a similar response: 'I am nervous and tense at the beginning but once I'd get going I'd be fine'.

In contrast to the low and average apprehensives, the high apprehensives, as expected, are uncomfortable participating in groups with strangers. They do not enjoy it, have a negative attitude towards it and sometimes cannot complete the communication task. They describe their fears in varying ways. Mary confesses: 'You don't really know how to react around people that you don't know or what you can say without insulting them'. Both Cliona and Daniel are so intimidated when working with strangers that they find it very difficult to take part in group discussions and consequently may remain silent. Cliona says: 'you wouldn't have me opening my mouth' and Daniel reports 'if I didn't know them at all, first of all, I probably wouldn't speak to them unless I was spoken to'.

Two of the high apprehensives explain how they are affected by the reactions of others in a group especially when they do not know them. They feel isolated and uncomfortable, as Mary explains: 'If it's a lot of people in the group and you don't know anybody you feel intimidated and you don't really want to say anything.' Daniel expresses a more extreme view when he describes how he would react if a member in a group laughed at him:

Cry! Well I'd probably not cry, I'd probably just shrink up into the back of the chair and that would be it. That would be me finished in that group and I wouldn't be in any group the next time. There wouldn't be any group that would want me.' [Daniel]

The reactions of the high apprehensives may be abnormal but are expected in the light of other studies (McCroskey, 1997b; King et al 1988).

In summary, as in the one to one context, all the interviewees except one, are comfortable communicating with a group of friends. The low and average apprehensives are generally comfortable when communicating in a group with strangers. They have a positive attitude to communicating and are mainly unconcerned or unaffected by the responses and behaviour of others in a group. This contrasts to the behaviour of the high apprehensives who all feel discomfort (varying levels) communicating in this context.

#### 5.4.3 Communicating at Meetings

The quantitative findings reported in Chapter 4 indicate that the level of CA in the meeting context (16.1) is higher than in the group context. This would indicate that the students are more apprehensive communicating in meetings than in groups. Twelve of the 17 interviewees had experience of attending meetings in a work setting or in connection with group projects in school, especially during transition year. However, the others had not attended any formal meetings and the feelings they express arise from the thought of attending meetings rather than actual attendance.

The majority of the low apprehensives feel comfortable at the prospect of taking part in meetings, a view well expressed by Paul when he states: 'I'd feel very comfortable. It wouldn't bother me. If I have an opinion on something I have no real problem saying it'.

The average apprehensives are or think they would be comfortable attending meetings. A number, including Kate, Lisa and Anna, feel they would suffer a degree

of initial anxiety before a meeting, which Kate expresses: 'If it was something a bit formal, I'd probably be a bit nervous going into it, but once you get started you just keep going and it's grand'. Two average apprehensives display negative attitudes to meetings. Colin, who has experience of attending meetings in a work environment, feels very uncomfortable especially when he is among strangers, as he discloses: 'If I was in a place where I didn't know the people around or if I only knew a few of them, I probably wouldn't be able to stand up and ask a question'. Orla shows her discomfort when she explains: 'If I had to talk in front of everyone, like formally talk in front of everyone, I would get very nervous'.

As might be anticipated, the high apprehensives do not feel relaxed or comfortable taking part in meetings. Mary had no previous experience of attending meetings but is fearful of the prospect. She finds that even the thought of having to partake in a meeting evokes many negative feelings. She indicates that the setting for a meeting may be a source of apprehension, as she reveals: 'If the meeting was held around a big table I would feel really intimidated. I'd think everybody would be watching me' [Mary]. The other two high apprehensives have attended meetings in a job setting and they both get extremely nervous in this context. Cliona feels a sense of panic, which she describes: 'I am dreading my turn to speak, dreading it. When it comes to my area I say "nothing to report" even if I may have something to report'. Daniel also reflects this extreme tension and even though he is proficient at his work, he still feels very anxious, as he explains:

I'd always feel very nervous. I'd be sitting back trying to look somewhat confident but inside I'd be shaking really. I was doing a brilliant job and everyone was constantly saying that I was doing a brilliant job. So confidence was not an issue whatsoever in my job but in meetings that just all disappeared. I'd know exactly what everybody was talking about. But when somebody would ask me a question, I'd know the answer in my head, I'd have a brilliant answer, but I would not be able to say it. I'd just make a mess of it. I'd just come out with jumbled words. I wouldn't be able to express myself especially if I had to stand up in front of everyone, it just doesn't work. [Daniel] In summary, the low and most of the average apprehensives are comfortable at the prospect of taking part in meetings and any anxiety prior to or at the start of a meeting dissipates quickly. However, two average apprehensives and all the high apprehensives feel very anxious and even debilitated even at the thought of attending a meeting.

#### 5.4.4 Public speaking

The quantitative findings reported in Chapter 4 indicate that the level of CA in the final oral context, public speaking, (19.1) is the highest of the four contexts. This is not unexpected in the light of prior research (Stanga et al., 1990; Simons et al. 1995; Warnock and Curtis, 1997; Hassall et. al., 2000; Borzi and Mills, 2001; Gardner et al., 2005; and Arquero et al., 2007). Public speaking includes giving a speech and making a presentation and involves speaking to a group of people in a formal and deliberate manner for a particular purpose. Most of the interviewees had some experience of speaking in public by giving a speech as a prefect, being head girl/boy in school, as a member of a debating team, or by making a presentation either in school or in college.

The interviewees with low apprehension admit to experiencing increased apprehension when having to make a speech or give a presentation compared to the other three contexts. The anxiety is manifested by nervousness beforehand and with some tension such as butterflies in the stomach. However, they expect to be able to complete the task and so any nervousness subsides when they commence the speech or presentation and they quickly begin to relax, as Paul describes: 'I get a little bit nervous. I move my hands and my body a lot. Once I'm up there and once I've said the first line, I've got it grand'. These sentiments are echoed by Eileen when she explains: 'A few minutes beforehand my palms would get sweaty and all, but nothing like where I couldn't go up. No problem doing it. It's obviously just the butterflies a few minutes before'. Their views are supported by prior research which indicates that the increased apprehension in this context may be evidenced by a greater

physiological arousal (perspiration, body and limb movement) in most people (Beatty and Dobos, 1997). However, where they feel they can meet the audiences' expectations, they experience a decrease in apprehension (Heuett et al., 2003). Tom illustrates the calmness and control of some low apprehensives while speaking, when he says:

I think that as you are going through your speech you are thinking when you are coming to the next sentence "could I change that sentence, make it easier to understand than it might be." As you are getting a point from the audience, if they are saying something to you, you might think it through in your head to give them the correct answer. [Tom]

Four of the six low apprehensives, (Paul, Eileen, Ruth and Tom) consider themselves good at public speaking. Two, John and Niall, consider they are weak at it and feel that they do not want to look bad in front of others. However, Niall is not upset if he has done a bad presentation, as he explains:

I'd just regret it and say I should have done it better. I should have got my facts together if I didn't do it well. If it went well you'd just feel very good about yourself afterwards. If it went badly there is nothing you can do. You have to live with it. [Niall]

Only one interviewee, Kate, an average apprehensive, expressed no fear of doing presentations. The remaining average apprehensives experience some anxiety about making a speech or doing a presentation. Some get nervous at the start but then relax either after they start or during the presentation, as David admits: 'You'd be nervous starting off, but as you go into it you flow'. Anna also feels this way and she relates her thoughts about a presentation she did: 'I was a bit tense at the beginning but then as it went on you are just talking and you keep going and it is over. So it wasn't that bad'. Lisa expresses similar feelings, as she outlines: 'Beforehand I'd be really nervous because you're getting up in front of your peers. But once I get up there I am grand. I actually enjoy it'. The responses of David, Anna and Lisa are supported by prior research which indicates that some average apprehensives may be anxious when engaged in public speaking (King et al., 1988). However, four of the average apprehensives report much higher levels of anxiety in this context. Ken reflects on how he feels: 'I would get nervous. I would get butterflies in my stomach and

everything but I wouldn't be so nervous that I couldn't sleep. I would always do it, though.' Colin and Orla, who both had negative attitudes to meetings, also show a negative attitude to public speaking. Colin admits: 'I do not like doing presentations. I wouldn't do them unless I had to. The audience might put you off and you wouldn't be able to do it. You'd feel stupid'. Orla is 'terrified' of the prospect of standing up in front of a group. She finds that she is 'definitely not' relaxed when giving a speech and that it is difficult to concentrate. And finally, Emma finds presenting in front of people she knows debilitating, and she outlines the torment she experiences when doing a presentation:

I would be very nervous beforehand and my hands would be sweaty. But when I'm up I don't feel anything. It's just like I am not doing it, I don't feel I am actually doing it. My knees are shaking and I would have butterflies. I wouldn't be there. I wouldn't be in my body. Its just my body would be doing it itself but it's like I would not be in my body. [Emma]

Emma's anxiety reflects the responses of two of the high apprehensives who both disclose how speaking in public affects them. It affects Cliona by talking 'absolute gibberish. I'd forget what I am saying and I might not be able to tell you one thing I said as soon as I sit down. It will be completely blanked out.' Daniel painfully explains how he responds:

I thought that I was going to get physically sick. I'd just like the ground to open and swallow me up. Pressure all over, every point of my body is just shaking and it feels horrible, especially in my stomach to the point of almost feeling like I am going to get sick. I get really cold and even afterwards my hands would be shaking and I am just going crazy. Even though I have prepared well with slides and additional notes I would not be able to elaborate on them at all. Once you get up there it all disappears, you just can't talk and its just all jumbled up and it's a disaster. [Daniel]

Only one of the high apprehensives, Mary, feels composed when doing a presentation. In contrast to the panic experienced by the other high apprehensives, her views are similar to some of the average apprehensives, as she discloses:

I'd be very nervous, definitely. But when I am up there I'd be fine. Its just getting up there is difficult and starting off in general. I am able to focus on what I am saying. I do not like doing presentations but I would get through it. [Mary] All the interviewees report greater apprehension concerning public speaking than the other three oral communication contexts. Most students feel nervous before making a speech or presentation. However, most low and average apprehensives cope with the pressure and feel they perform effectively. In contrast most of the high apprehensives find making a speech or doing a presentation very difficult and are not able to relax or perform effectively. They do not enjoy it and would avoid it if possible. Their physiological and emotional upset is much greater than experienced by the low and average apprehensives.

#### 5.4.5 Themes emerging from the oral communication apprehension data

The identification of themes is conducted in the light of the data analysis and seeks to discover aspects of the phenomenon of CA common among the interviewees.

### Evaluation

An overarching theme emerging from the data is *fear of evaluation*. Prior studies indicate that this fear can lead to increased anxiety and apprehension especially for high apprehensives who fear being perceived as not satisfactory and being rejected by their peers (Richmond and McCroskey, 1998; Gardner et al., 2005). Evaluation when communicating with others is a factor for the majority of the interviewees. However, the low and average apprehensives either look on the positive side of this or else are not over-concerned about the opinion of others, whereas, the high apprehensives are affected in a negative manner and in most cases do not perform to the best of their ability. The positive attitude of the low apprehensives is reflected by Tom when he explains his outlook on doing a presentation:

The audience is there not to evaluate me but are looking at me to listen. They are not looking at me to judge as such. I think that is the big thing, not thinking as much about what others are thinking of you, as the point you are making. [Tom] Ruth also displays a similar attitude when she explains: 'I know I'm not everyone's cup of tea but you learn to deal with these things. I'm not going to like everyone that I come across and they're not all going to like me'. However, not all low apprehensive are immune from the fear of evaluation, as is the case with John who fears evaluation by others and gets nervous in case he would say 'something stupid'.

Like the low OCAs, some average apprehensives are not concerned about the opinion of others. For example, Lisa, who admits: 'If somebody doesn't like what I have to say, that's their problem'. This lack of fear of evaluation is also reflected by Anna when she points out: 'Sometimes your view might be right but sometimes there might be flaws in your view and someone can point that out'. However, other average OCAs, such as Colin, fear criticism by their friends who they feel will judge them differently, as Colin points out: 'You'd feel a bit stupid because if you are doing a presentation, you are supposed to talk differently and act like you know what you are talking about'. Kate is also afraid of the audience reaction as she explains: 'You are always afraid you'll be wrong. I'd probably be worried that people thought that I got it wrong, and that I made a fool out of myself'. Orla has a similar reaction: 'It's the people that are sitting in front of you. It's the reaction that you get afraid of. People are waiting for you to do things wrong. They notice when you do things wrong'.

Fear of evaluation is particularly prevalent among the high apprehensives and their negative thought patterns contrast to the positive attitude of most low and average apprehensives. They feel they are unable to leave a good impression on others and so expect a negative response. Mary expects others to find fault with her work and she expresses a sense of powerlessness, as she explains: 'It is your work. People are going to start to criticise you and you have to sit there and take it. You really can't get up and leave'. She is also concerned with how others see her, as she discloses: 'If they think badly of you they are going to tell other people even if you haven't met the other person'. Cliona has similar feelings, as she confesses: 'Everyone is afraid when speaking in public that people are going to laugh at them and that people will judge them'. The remaining high apprehensive, Daniel, who finds it extremely difficult to

converse with people he does not know, displays one of the main sources of his apprehension: 'I don't want the attention on me. I don't want people looking at me and waiting for me to say something and for me to make a mess of it. Or for it to be completely stupid'.

The qualitative data suggests that the higher a person's total OCA score the more negative s/he views evaluation but when positive feedback is expected, the level of apprehension will be greatly reduced. However, where a negative attitude to evaluation is present, the intensity of the apprehension is much greater (McCroskey, 2006, p. 49). The views of the interviewees reflect this and whereas most of the low and average apprehensives generally look to the positive aspects of the feedback, the high apprehensives all expect negative feedback and feel the audience are looking for them to make mistakes. It is of interest to note that the elevated anxiety that high apprehensive feel is unlikely to be noticed by others (McEwan and Devins, 1983), a factor which may be of value when addressing the issue of treatment for the highly apprehensive students.

#### Prior experiences

The 17 interviewees come from different family and socio economic backgrounds. It is not within the frame of this study to analyse the interviewees' life experiences. However, a number of them referred to prior experiences relating to school life which had a significant effect on their sense of self and their apprehension levels concerning communication. Initially the transfer from primary to secondary school had a negative effect on Tom (low OCA) as he outlines:

I went to a very small primary school and I think the big environment in secondary school scared me a little bit. Up to third year I would just do my work and would not really talk to people as much.

However, as is shown below transition year transformed him. Daniel (high OCA), on the other hand, remembers feeling good about communicating until he was separated from all the friends he had in primary school and was put with strangers when he went to secondary school. He admits: 'That was a bit of a disaster. I was very upset with being put in with a lot of people I didn't really know'. Unlike Tom, Daniel did not complete transition year and appears not to have recovered from his negative experiences in secondary school.

Ten of the interviewees completed transition year (year between junior and senior cycle) in fourth year in secondary school. Most found this a very worthwhile experience which gave them extra confidence in meeting and conversing with others and in making speeches and doing presentations. The low and average apprehensives found it a very positive experience, as a number of them relate:

• I did not settle into secondary school until transition year. You do not do any work that year but you just get to know everybody, and that was very helpful. [Emma]

• With transition year, it is a more relaxed environment and you can get to know a lot more people. I think it opens your eyes more to the stuff around you and shows you that you can go out and relax, have a laugh, along with study as well. [Tom]

• Before transition year I would have been wary of speaking in public and if I had to stand and have someone ask for my opinion, I would just clam up. [Eileen]

The positive results of transition year which allowed the interviewees more time to communicate with their peers and developing friendships is supported by prior research. When interacting with friends, children learn many social skills, such as how to communicate, cooperate, and solve problems. As referred to earlier, communicating with close friends produces less apprehension. Children tend to have better attitudes about school and learning when they have friends there (Ferrer-Chancy and Fugate, 2007). Also, friendships impact on the development of social understanding from an early age and there is a striking connection between children's social cognition skills and their successful communication with friends. (Evangelou et al., 2009). If Daniel had availed of the opportunity to complete a transition year he may have developed friendships to replace the friends he had in primary school and improve his ability to communicate with others. However, the only high

apprehensive, Mary, to complete transition year did not gain any benefit from her year, as she recalls: 'I didn't really like it because we were the first year doing it and they didn't really have a plan so there was a lot of free time when we weren't doing anything'. Travelling and the mixing with friends during transition year did not increase her confidence and ability to communicate as it did for the low and average apprehensives.

#### Preparation and practice

Another theme emerging from the OCA analysis is the effect of *preparation and practice* for communication tasks on a student's level of apprehension. Most of the interviewees feel that preparation is vital, especially when attending a meeting or making a speech or doing a presentation and find that gaining experience at meetings and doing some presentations gives them more confidence. Niall expresses the feelings of the majority when he admits: 'If I knew about it (the topic under discussion) I'd be very relaxed'. Similarly knowing his topic if asked to give a speech or presentation is also important as he outlines:

I have to know a bit about what I am doing, I wouldn't be able to just get up there and talk about nothing like. If you were confident you knew everything and like unless someone asked you a tricky question of something like, you'd be grand, I'd imagine. [Niall]

Some feel that with preparation they can meet the requirements of the situation and, as expected, this reduces apprehension as John explains:

I'd say that was my main worry, that in case someone asked me something I didn't know and you'd look stupid like you are supposed to have all the work done. If the truth be known I wasn't that well prepared for it, so that was one of the biggest reasons I was nervous. [John]

David, who had experience of attending meetings, explains his position clearly: 'It's basically preparation. If you're unprepared, you are then going to be embarrassed or let yourself down'. Preparation is also of benefit to one of the high apprehensives, Mary, as she explains:

Put me on the spot and put me in front of a crowd of people and give me a random topic and tell me to talk about it, I wouldn't be able to do it. But if I have prepared what I am going to talk about I wouldn't have any bother doing it then. [Mary]

It is reported in Chapter 2, that skills training, particularly in the form of repeated practice may not be the most suitable form of remedy for OCA, especially for high apprehensives (Allen et al. 1989). This is the case for the two interviewees with the highest OCA scores who find that preparation and practice is of little benefit. Cliona has had the opportunity to do presentations in two other professional career programmes. This has not relieved her tension and anxiety, as she confesses: 'I am still very nervous getting up. I talk gibberish and I forget what I am saying'. Preparation is not the solution to overcoming Daniel's anxiety either as he illustrates: 'Even though you would have prepared elaborately, you just can't talk and it's just all jumbled up and it's a disaster'.

Preparation and practice may help most of the low and average apprehensives to perform to the best of their ability but it may not relieve the apprehension of some high apprehensives especially those who find communicating in some or all contexts debilitating.

#### **5.4.6** Summary – oral communication apprehension

The quantitative data analysed in Chapter 4 was used to select 17 students to be interviewed to ascertain their views on the phenomenon of OCA. The interviewees were selected on the basis of CA levels. The views of the interviewees on communicating orally in each of the four contexts and the themes discussed in this section provide a rich insight into how students with differing levels of OCA view communicating in the different contexts and strongly supports the findings in prior studies. In the next section the interviewees' views on WCA are analysed.

#### 5.5 Written communication apprehension

The quantitative analysis in Chapter 4 reveals that the mean score on the WCA-24 for all the students in the sample is 64. Those scoring above 80 are regarded as "high apprehensive" and below 50 as "low apprehensive". Table 5.3 below categorises the interviewees according to their WCA levels.

Apprehension level	Interviewees	WCA Score
	John	33
Low < 50	Paul	35
	Tom	47
	Daniel	55
	Ken	55
	Niall	56
	Eileen	57
Average 50 – 80	Anna	57
	Lisa	58
	Kate	60
	David	62
	Mary	68
	Ruth	89
	Colin	92
High > 80	Cliona	92
	Emma	96
	Orla	108

Table 5.3. Interviewees grouped	by	WCA	Levels
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Three interviewees are classed as having low WCA, nine with average levels and five with high levels. Before presenting the analysis it is of interest to note that only one of the interviewees indicated that she would avoid writing. Only Orla, who scored 108 which is just one point below the highest score of the full sample of students who completed the questionnaire, reports: 'I am not good at languages and I would avoid writing.' Her views support the findings of prior research which reports that high

writing apprehensives may avoid writing if possible (Daly and Shamo, 1978; Faigley et al., 1981; Daly and Wilson, 1983).

It is not within the terms of this study to examine the quality of writing of the interviewees. Rather the focus of the analysis is to explore the views and attitudes of the interviewees, based on their levels of WCA, concerning writing and their general writing experiences and to identify themes so as to construct a credible narrative on the effect of WCA. The analysis of the interviews is performed by comparing the views of the low, average and high apprehensives in turn and by looking at their views in the light of the findings of other studies. The analysis should provide a rich insight into the perceptions and feelings of a small sample of Irish students on WCA.

Prior studies indicate that low and average writing apprehensives have positive emotions associated with writing in contrast to the negative feelings of high apprehensives (Daly and Miller, 1975b; Daly and Wilson, 1983; Popovich and Massé, 2005; Wiltse, 2006). The three interviewees with low WCA scores reflect this positive attitude. John states: 'I would prefer to write than talk,' Tom reports: 'I really enjoy writing' and Paul, shows his enthusiasm when he reports: 'I love writing. I do, I do.' The nine interviewees with average WCA scores also reflect the positive views of the low apprehensives and either 'love writing' (Daniel), 'prefer writing to talking' (Anna and David), 'like writing' (Niall), or 'do not mind it' (Ken and Lisa, Mary). Daniel's fear of oral communication contrasts with his deep love for expressing himself in writing, as he freely relates: 'I love getting a writing assignment. I think it is pretty cool. I love putting assignments together'. [Daniel]

In contrast to the positive views of the low and average apprehensives, the high apprehensives all share a negative attitude to writing and either 'never liked writing' (Colin), feel they are 'awful at writing' (Cliona), 'hate writing' (Emma) or 'avoid it' (Orla). It is evident from the narratives of the interviewees that their level of apprehension is reflected in how they view the task of writing and this was expected in the light of prior research (Simons et al., 1995).

The findings of prior studies indicate a number of negative consequences for high writing apprehensives in that they write differently and with lower quality than low apprehensives and also they do not demonstrate as strong a knowledge of writing skills and are unlikely to have success in writing activities (Daly, 1978; Simons et al., 1995). As stated earlier, it is not part of this study to determine if the interviewees actually write effectively. Rather it seeks to explore the interviewees' views and feelings about writing including the methods they employ to complete a writing task. As expected, the interviewees' level of confidence in expressing their ideas in writing correlates with their reported levels of WCA. The low apprehensives are confident that they can express themselves as John points out: 'I'd say I'd express myself better in writing. I can write my ideas down and then read them afterwards and change them.' Paul has a relaxed view as he outlines: 'It is a form of expression to relax you. I've written a film. Me and my friend did one in fourth year. We were really bored so we just wrote a film'. The third low apprehensive, Tom, writes articles and sports reports for a local magazine. He relates: 'I have always been confident in my writing'.

Six of the average apprehensives (Daniel, Ken, Niall, Anna, Lisa and Kate) express confidence in their ability to express themselves in writing. Their views are best expressed by Daniel when he explains: 'It is a good challenge, getting something on to paper, something solid where you can really work on it and get it looking good and all that.' However, Niall's confidence in his ability to complete an essay depends on the topic, as he relates: 'It depends what the essay is about. If it's an interesting title and if it is something I have an opinion on, then it is easy enough.' The topic is also important for Kate. She hated writing English essays in school and disliked writing for a long time. However, like Niall, her negative attitude is tempered by the topic, as she explains:

I liked when we got an essay and it was something I had loads to write about. I hate being stuck with something to write. Like if you got a weird topic to do in an essay and you didn't know what to write about. [Kate] The other three average apprehensives, Eileen, David and Mary, are not confident in expressing themselves in writing. This is surprising and appears to indicate that even though they may not be apprehensive about writing, they nevertheless may not be confident or feel competent at writing. Eileen relates her feelings which resonate with David and Mary: 'Writing is not my strong point. I would not avoid it but I'd just need more time to structure an essay where I am going to have to get my points across'.

A common factor with all the low and average apprehensives is a lack of concern about the outcome of a writing task. This is best illustrated by Ken as he comments: 'One in ten essays that I write may be poor but I wouldn't worry about it'. Similarly, David admits: 'It could be the absolute biggest rubbish in the world and I wouldn't care less'.

Unlike the low and average apprehensives, the high apprehensives lack confidence in their ability to complete a writing task. Colin admits: 'I am not good at writing stuff'. Lack of confidence in his writing ability has practical implications as he explains: 'I put in my resignation notice in my part time job and I had to get someone else to write the letter for me because I just didn't know what to write'. Cliona outlines her feelings: 'I would not be confident about writing an essay. I wouldn't be confident at all.' Emma, who hates writing, expresses her desperation: 'I am dreadful. I am the worst. I am so bad at English. I am fine speaking it but I just can't write'. Orla admits: 'I have a terrible time organising my ideas. I would be very negative when it comes to essay writing'.

A common cause of writing anxiety or apprehension is a lack of knowledge or understanding necessary to complete the writing task (Clark, 2005, p.8). Some interviewees may not understand the writing process but yet successfully carry out assignments, either in a structured or unstructured manner. The low and average apprehensives adopt a variety of approaches. John is organised, as he explains: You can plan out your essay and you know what you are talking about. If you make a point you get on a roll and you just go to town on it. I do a little spider diagram.

Paul is not as organised as John but it does not cause him undue concern, as he outlines: 'It would take me a while to write down my ideas if I had a complicated essay, but I would get it eventually'. Tom, the article writer, is creative and relaxed when writing, and like Paul does not adopt a formal structured approach, as he reports: 'I wouldn't write down my ideas. I'd make it up as I went along, by creatively doing it and checking back over it'.

Similarly, some of the average apprehensives are organised and structured in how they undertake the writing task. For instance, Daniel uses spread sheets in Excel to prepare reports for a meeting which he says, with a laugh: 'are so fancy they are ridiculously over the top'. Lisa overcomes any difficulty she has in organising her thoughts by using various tools and techniques as she explains: 'I make a little bubble and just write whatever comes into my head. Then when I'm looking at them I'll organise them into groups, and then break them up into paragraphs'. Similarly, Eileen overcomes her difficulty with essays by adopting a structured approach as she outlines: 'In general I have a terrible time organising my ideas. I'm one for lists and I have to have a brainstorm, like all my ideas thrown on to a page'.

However, a number of average apprehensives do not adopt a formal structured approach. David for whom 'writing would not be my best' has reservations about the 'structural' part of writing. He realises he has a weakness in this area, as he admits: 'I'm terrible at essays. I just do the essay (in the Leaving Certificate) for the sake of doing it. I just ramble on. I am sure I got a very low mark in the essay'. Niall would approach a writing task in an unstructured way as he explains how he copes when his thoughts become jumbled: 'Once you think about it, what you are going to say, or what you are going to write, then I have to say that I could express it pretty clearly' [Niall]. Similarly Ken, who thinks he is good at writing essays, would: 'make up an essay in an imaginative way'. However, he has difficulty when asked to write on a

given topic which he explains: 'I always do imaginative things but my mind would go blank if I didn't know what I was writing about'. [Ken]

Unlike the low and most of the average apprehensives, none of the high apprehensives appear to have developed the necessary writing skills to overcome their difficulties as a number of them explain:

I'd have an idea in my head and then I probably only get a sentence or two. [Colin]

If you give me a question, I could tell you everything on the page in the book except what you want to know. I'll just blank out completely. I don't know what it is. [Cliona]

I get completely all over the place. I just jumble every thing up once it comes to a page. I don't know why. I think some stuff and then it would be out of my head again before I would write it down. To pass my English exam in the LC I had my essays all learnt off. All the poetry, essays, novels, it took me ages to learn them. [Orla]

The positive attitudes and approaches to writing of the low and average apprehensives contrast to how high apprehensives view and approach this vital element of communication. Two themes emerge from the analysis of the interviews, 'evaluation by others' and the 'effect of prior writing experiences', which are analysed in the next section.

#### 5.5.1 Themes

#### **Evaluation**

Prior studies indicate that many students fear evaluation of their writing (Daly and Miller, 1975a: Daly and Shamo, 1976; Daly and Wilson, 1983; Shaver, 1990; Riffe and Stacks, 1992). The interviewees in this study express differing reactions to evaluation of their written work. Some like it, others do not. Some prefer people they know to read their work rather than strangers, and yet others prefer strangers to evaluate what they write. Unexpectedly, the students' views would appear unrelated

to their level of WCA, their attitude to writing or their ability to express themselves in writing. For many their attitude to evaluation depends on who conducts the evaluation, such as a lecturer, a peer, a parent, an editor or whether the evaluation is for grading purposes.

Two of the low apprehensives are selective when it comes to the evaluation of their written work by others. John is very particular about who reads what he has written because he feels that his peers may ridicule what he writes. He explains:

I would write things down rather than saying them because at least you know if you're writing them its just going to be the lecturer reading them. The lecturer would appreciate it if you had something different to say but maybe in a class, if you say it out, it might sound stupid or something. [John]

Paul prefers when someone he respects, such as his father, criticises his writing: 'I don't mind if my dad does it. He is the only one that would give me a thorough opinion on what he thinks of it and I value his opinion'. Tom on the other hand is very open to evaluation as he outlines how he views criticism by the editor of the newspaper for which he writes: 'If the editor sees anything wrong with it he'd say it to you and I take it as points to learn from really. I still think of it as an experience, I'm still quite young at writing'.

Most of the average apprehensives have little difficulty with evaluation. Some like Ken are at ease with evaluation, even by friends, as he admits: 'I'd be happy to let my pals read it. I'd prefer to have my work evaluated actually'. Others may not want their work evaluated until they are satisfied that the writing is good, a view best explained by Daniel: 'I wouldn't let anyone read it unless I was happy with it and if I am happy with it, I don't care'. A number of the other average apprehensives indicated that they do not mind others reading their work. This view may not be dependent on their ability to write, as David relates: 'I wouldn't mind my pals reading it. It would not bother me at all. As long as the person reading it was capable to correct it, I would not have any bother'. Similarly, Eileen does not have a problem with her teachers, friends or classmates reading her work. She reports: 'I wouldn't have a problem with it because I know myself it is not great. I know I can't get my points strongly across and sometimes I write complete gibberish'. However, her attitude to evaluation changes if she is graded on her work: 'I would get very nervous and stressed because I'd know that it was worth something and I know I am not good at writing'. [Eileen]

Similar to the low and average apprehensives, the high apprehensives report contrasting views on evaluation. Cliona dislikes evaluation, as she explains: 'I am afraid I will make a fool out of myself, the lecturer is going to ask "who is this idiot that I'm correcting". Emma prefers if the person correcting her work does not know her. She felt embarrassed when her English teacher in secondary school corrected her work. However, when it came to her LC she felt differently as she relates: 'I didn't mind doing it because a person whom I don't even know, they don't know me, and a person who is just a number, they were correcting it for me'. Orla holds the opposite view and indicates that she prefers someone who knows her weakness at writing to correct her work. She reveals: 'If it was someone who knew I was bad at writing I wouldn't mind. But if it was just some stranger I wouldn't like it at all because I don't like being judged beforehand'. [Orla]

The interviewees in this study display a wide divergence, across and within levels of apprehension, regarding how they view evaluation. They may be selective about who carries out the evaluation, with some preferring a person they know while others prefer a stranger to do it. A number do not mind others reading their work provided they themselves are satisfied with it. The interviewees' fear of evaluation is not dependent on their self-perceived ability at writing. Even when some feel they are poor at writing, evaluation of their work does not cause them concern. The students in this study may feel that because the evaluation of their written work is normally not done in their presence, it reduces the tension compared for instance to the face to face element of oral communication evaluation.

#### **Prior experiences**

Prior experiences in writing play a significant role in WCA (Daly and Miller 1975b; Daly, 1977; Daly and Shamo, 1978; Simons et al., 1995; Clark, 2005). Some of the interviewees had positive prior experiences where others continue to feel the adverse effects of their past negative experiences. Tom is confident in his ability to write and writing articles for magazines in school boosted that confidence, as he relates:

My school was asked to contribute an article every week towards a local newspaper and my teacher saw that I had a natural flair. I have always been confident in my writing. [Tom]

Niall received encouragement at a young age and this had a positive effect on his expectations, which he describes: 'I won a book competition and was one of the few who had to read out my essay in front of a large audience in St Patrick's College in Dublin. I like to do written work'.

Their English teachers in second level had a significant effect on two average apprehensives. Anna was not always confident at writing. Her attitude to writing was affected by the assistance and encouragement she received from her English teacher, as she recalls: 'My English teacher was very encouraging and that built my confidence'. Another positive factor of her school days was the safe environment in her school where the other members of her class were supportive. In contrast, Lisa, had a critical English teacher who ruined the love she had for writing, and left her uncomfortable when writing, as she explains: 'My English teacher for the LC was a very hard marker and despite putting in long hours on an essay I would still receive a low grade'.

The high apprehensives all had negative prior experiences of writing. Orla, who avoids writing, if possible, found writing difficult throughout her school years. She was encouraged to read by her mother but she recalls having a reading difficulty, as she reflects:

I would avoid writing because I never did much reading. When I was younger my Mam would try to bring us to the library but I

would take out books and I would not look at them. I am a very slow reader. I could read but it would take me longer than someone else. I'd prefer to be outside messing around, stuck up a tree probably [Orla].

Cliona received encouragement and praise in school but yet when it came to completing a writing task she could not do it successfully. It would appear that both Orla and Cliona show that the student's own effort in over-coming writing limitations is important. Orla did not read. Cliona admits to some regrets, as she explains: 'Maybe I could have been brilliant if I had set my mind to it. But I never would have been the studious type or would have put my mind to studying'. The prior experiences of writing reported by the students is supported by the findings of prior research (Faigley et al., 1981) and indicates the importance of encouragement and support for students particularly in their early school years.

#### 5.5.2 Summary – written communication apprehension

In summary, the views and attitudes of the low and most average apprehensives contrast to those of a few of the average apprehensives and all the high apprehensives. They have positive emotions associated with writing, feel confident in their ability to express themselves in writing, successfully complete a writing assignment either in a structured or unstructured manner, and are unconcerned about the outcome of their work. This contrasts to the negative attitude of a few average apprehensives and all the high apprehensives who lack confidence in their ability to develop their ideas and feel unable to successfully complete a writing task. The interviewees report differing views on evaluation of their written work and on their prior experiences of writing, views which at times seem to be unrelated to level of WCA.

#### 5.6 Summary

This chapter has explored the views and thoughts of 17 students concerning oral and written CA. The analysis of the interviews which were semi-structured reveals insights into how students with different CA levels view communicating orally or in writing. The findings of the analysis are in most cases in keeping with the findings of prior research. However, looking at the phenomenon of CA through the lens of the students brings meaning and richness to the difficulties faced by many students who are highly apprehensive. The following chapter will summarise the quantitative and qualitative findings of the study and evaluate the strength of the study and its contribution to the literature while also acknowledging its limitations. Some recommendations for future research will be presented along with the personal reflections of the researcher.

# **CHAPTER 6**

# CONCLUSIONS

# 6.1 Introduction

- 6.2 Achievement of the research objectives
- 6.3 Limitations of the study
- 6.4 Implications of the study and directions for future research
- 6.5 **Reflections of the researcher**
- 6.6 Summary

#### 6.1 Introduction

This chapter concludes the writing up of the study. It evaluates the strength of the study and its contribution to the literature, while also acknowledging its limitations. In addition, some recommendations for future research are presented. The chapter concludes with some reflections of the researcher on his completion of the study.

#### 6.2 Achievement of the research objectives

The overriding objective of this study is to develop an understanding of CA among Irish business and accounting students. Ultimately, two specific research objectives were established, namely:

- 1. To measure the levels of oral and written CA among undergraduate business students, and
  - to examine differences in CA among different disciplinary groups, and
  - to examine differences in CA between male and female students.
- 2. To qualitatively explore the phenomenon of oral and written CA from the perspective of students.

The study has achieved its objectives. It has extensively explored the phenomena of students' oral and written CA, and in so doing has developed, from the perspectives of students, a rich contextualised understanding of this domain. Using both quantitative and qualitative research methods within an interpretive framework, the study has explored students' views on communicating orally – one to one, in groups, in meetings and public speaking - and communicating in writing.

Every aspect of the study – design, conduct and analysis – was carefully enacted. The idea of the research was conceived by the identification of a gap in the literature in that the measurement of the phenomenon of CA has not been carried out extensively in Ireland and, in particular, no published research has emanated in the 21<sup>st</sup> century identifying and exploring OCA and WCA from the perspective of business and accounting students. Following a literature review, the design of the empirical phases of the study and the collection and analysis of data were planned.

The research philosophy of the researcher was justified by the literature on research methodology. The study fell primarily within the interpretive paradigm as it sought to explore the phenomenon of CA from the students' viewpoint. To achieve the objectives of the study a mixed method approach was considered necessary. Firstly, quantitative methods were used to measure the levels of CA reported by the students. The levels of oral and written CA were measured using two internationally used questionnaires, which on testing for reliability and validity, were found suitable for use in an Irish context. This data was then analysed and compared to other studies. In the second phase of the study, the views of a small sample of students were qualitatively explored. Thematic analysis was used to analyse the data gathered from interviews with the students. Throughout the entire analysis, care was taken to ensure that the credibility and trustworthiness of the findings was safeguarded. The analysis and interpretation of the both the quantitative and qualitative data developed a deep and rich understanding of students' views on communicating with others orally and in writing.

The results of the quantitative element of the study reveal that OCA and WCA for the full sample of students are very similar to the findings reported in other studies. Unsurprisingly, public speaking is the oral communication context with the highest score, and students are typically most comfortable in the one to one context. Four disciplinary cohorts of students were surveyed –accounting, business and management, marketing, and "other". No significant variation in OCA and WCA (other than WCA for the marketing group) between the different groups was found. This is contrary to the results reported in most prior studies which have typically shown that accounting students are significantly more apprehensive than other business students. The only gender difference revealed in the analysis is that females are significantly more apprehensive in public speaking, which is in keeping with

other studies. A significant and positive correlation between OCA and WCA is reported for the full group which is also in keeping with prior studies.

While this study found that 15% of the students report high OCA and 12% report high WCA, statistics do not fully reveal the reality of the experience of these highly apprehensive students. The interviews conducted as part of this study provide a rich insight into the traumatic impact of CA on students' lives. For example, Cliona's "absolute butterflies", Mary's strong sense of intimidation and Daniel's nausea relay the dramatic feelings prompted by high OCA. While the effects of high WCA are not reportedly as intense, there is little doubt that high WCA creates a very negative disposition towards writing within students. This negative attitude is revealed by Colin who states that he 'never liked writing', by Emma who 'hates writing', and by Orla who 'avoids it'. It is clear that high CA poses challenges for business and accounting educators.

In summary, the strengths of this study lie in its novel approach in terms of combining quantitative and qualitative research methods to not only measure the levels of OCA and WCA of a group of students, but to also explore the views of the students to get closer to how they view communicating with others. As previously stated, no prior study has explored Irish business and accounting students' views on CA in such an in-depth manner and from the perspective of the students. The study was conducted rigorously at all stages. The views of the students display the range of outlooks from the positives of the low apprehensives to the dreads of the high ones. The study is rich in description and analysis and conveys the unique inner feelings of students who were open and honest in their personal accounts.

#### 6.3 Limitations of the study

This study has been limited to an exploration of a single intake of students at one Institute of Technology in Ireland and at one point in time. Thus, the findings are grounded in that particular setting and may not be generalisable to others. The students surveyed were all first year business students and so, had only left second level. They will hopefully mature during their period in third level and with appropriate interventions may experience a reduction in their apprehension. Thus, the effect of completing their degree may change the levels of CA they report.

This study employed self-report instruments to measure CA. The major short coming of these instruments is that students may not reveal their true feelings and experiences. In this study, the researcher was conscious of this possibility and encouraged honesty throughout. Furthermore, students were reassured of the confidentiality of their responses. Additionally, using alternative methods (physiological measurement and observation) to the measurement of CA could offer further insights into students' experiences of CA.

In terms of other limitations, only 17 students were interviewed as part of this study. It is possible that a larger sample of students may have provided additional insights into the phenomenon of CA. In terms of scope, the study was limited to explore students' experiences of CA. It did not delve into the origins of CA for individual students. Furthermore, it did not examine the relationship of CA with either communication or academic performance.

This study has looked at CA only from the viewpoint of the student. There are other perspectives which may provide further insights into the phenomenon such as the way other students and lecturers view the high apprehensive which would give more depth to the knowledge of the behaviour of high OCAs and WCAs which might assist them in overcoming their communication short comings.

#### 6.4 Implications of the study and directions for future research

In terms of assessing the contribution of the study, the value in documenting and communicating the range of students' experiences of CA cannot be underestimated. So many prior studies on CA among business and accounting students have been solely quantitative in orientation and the lived experiences of CA has been absent. It is only by reading student's own words that the reality of the apprehension is effectively conveyed. In particular, the study contributes to sensitising educators to the very dramatic, emotional and ultimately debilitating effect of high CA. Given the range of student experiences and the depth of fear of the high apprehensives, it is clear that a great deal of care and thought is required if educators are to appropriately design effective interventions. Indeed, whether accounting and business educators can design such interventions without the direct support and assistance of specialist communication psychologists is questionable. Inappropriate interventions could exacerbate students' level of anxiety.

The qualitative phase of the study illustrates that students are willing to discuss their communication fears, but only when in a one-to-one confidential, supportive environment. This indicates that intervention strategies may need to happen at the individual level. Clearly, such a proposal will demand significant resources which will be difficult to access in the current stringent financial environment. In the short term and at a minimum, business and accounting educators should measure the levels of CA of their students. This study has demonstrated that the PRCA-24 and WCA-24 are suitable instruments for this purpose. Further, educators should explicitly reflect on their pedagogy and the way in which they interact with students and how they encourage students to engage with each other. Creating a non-threatening, supportive classroom environment is essential to ensure that classroom activities do not heighten CA.

In terms of the accounting profession, the implications of the study's findings are quite positive. It appears that the profession's efforts to emphasise that communication is at the core of accounting careers has been understood by students entering higher education. While in the past many studies reported that accounting students had higher levels of CA than others, this was not found in the current study. More specifically, this study found that there was no difference in the CA profile of the accounting students compared to those in the other business specialisms.

There are many potential avenues for future research given the limited number of studies into CA among business and accounting students in Ireland. Some of these are aimed at addressing the limitations of the current study whereas others seek to enhance further our understanding of CA.

Firstly, research could be conducted with business and accounting students from other higher education institutions in Ireland to assess the robustness and generalisability of the current findings. Secondly, there is an obvious need to examine the relationship between CA and performance in communication tasks, and with overall academic achievement. Additionally, research which explores the link between CA and other background variables (e.g., culture, personality, socio economic status) could reveal further insights into the antecedents of CA. Thirdly, engaging in comparative research with students from outside Ireland could help identify issues of shared concern and suitable interventions. Fourthly, given the lack of qualitative research into CA there is considerable scope to utilise this approach to examine issues such as the causes and consequences of CA from the student's perspective. Finally, the findings of this study indicate that research is needed to determine which pedagogical strategies are best suited to reducing high levels of CA.

#### 6.5 Reflections of the researcher

From the perspective of the researcher, this study had both impersonal and personal dimensions. The impersonal phase involved the research into the literature on communication, its relevance to business, and the studies on CA. This was a most

interesting but time consuming aspect of the study. The personal phase brought me into close contact with 17 students in their first year of a business degree programme. I was amazed that the 17 students were so open in expressing their inner feelings and thoughts on a topic which for some evoked very strong emotions. This was the most satisfying and life changing aspect of the study. Conducting the study has heightened my awareness of the ways in which students perceive and respond to communication situations. Some students are so apprehensive that they are unable to enter a room after the commencement of a lecture because they cannot accept others taking notice of them. As a result, I now no longer direct questions at individual students especially at the start of the year. I feel it would be a deterrent to learning for high CAs if they lived under the fear of being asked a question and were too apprehensive to respond.

I am much more alert to hesitancy in students in making conversation. This has impacted on the induction programme I run for the first year students. Periods are now set aside for the students to get to know each other, so that when they commence lectures they will have a number of other students who they will know and be able to converse with. Without this bonding period students who do not communicate easily can take a number of weeks or maybe months to settle into their higher education studies.

In summary, my engagement in this research study has been a challenging, but ultimately a rewarding, learning experience.

#### 6.6 Summary

This chapter has drawn to a close the writing up of this research study, by highlighting the strengths of the study and its contribution to business education. The limitations of the study were set out and suggestions for future research outlined. The chapter concludes with the reflections of the researcher on the completion of the research.

APPENDICES

# Appendix A: Questionnaire on Communication Apprehension – Oral and Written Code Number

Thank you for agreeing to complete this questionnaire. Your responses are voluntary and will be used for the purposes of research only. You will note that there is a code number on each of the three pages. Page 1, which contains your personal details, will be detached from the remaining pages of the completed questionnaire and will be retained separately. You can rest assured that the data collected will be treated in a fully confidential manner. Please complete the details below:-

Degree Program	nme	
Student number	r	
Name		
Nationality		
Age		
Male/Female (N	M/F)	
Leaving Cert R	esults	
Total CAO Po	oints	
Accountancy	Level (H[Higher]/O[Ordinary]	
	Grade (A/B/C/D	
Business	Level (H/O)	
	Grade (A/B/C/D)	
Mathematics	Level (H/O	
	Grade (A/B/C/D)	
English	Level (H/O	
	Grade (A/B/C/D)	
Family details		
Number of	brothers/sisters	
Your place i	n the family	

Please now turn to Page 2 and complete the remaining parts of the questionnaire.

#### Dan Shanahan

Lecturer

September 2007

## Personal Report of Communication Apprehension (PRCA-24)

**DIRECTIONS:** This instrument is composed of twenty-four statements concerning feelings about communicating with other people.

Please indicate, by placing a tick in the appropriate box the degree to which each statement applies to you by marking whether you

Strongly Agree = 1; Agree = 2; are Neutral = 3; Disagree = 4; Strongly Disagree = 5
Work quickly; record your first impression and try to be as honest as possible

	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4	5
1	I dislike participating in group discussions.					
2	Generally, I am comfortable while participating in group discussions.					
3	I am tense and nervous while participating in group discussions.					
4	I like to get involved in group discussions.					
5	Engaging in a group discussion with new people makes me tense and nervous.					
6	I am calm and relaxed while participating in group discussions.					
7	Generally, I am nervous when I have to participate in a meeting.					
8	Usually, I am comfortable when I have to participate in a					
9	I am very calm and relaxed when I am called upon to express an opinion at a meeting.					
10	I am afraid to express myself at meetings.					
11	Communicating at meetings usually makes me uncomfortable.					
12	I am very relaxed when answering questions at a meeting.					
13	While participating in a conversation with a new acquaintance, I feel very nervous.					
14	I have no fear of speaking up in conversations.					
15	Ordinarily I am very tense and nervous in conversations.					
16	Ordinarily I am very calm and relaxed in conversations.					
17	While conversing with a new acquaintance, I feel very relaxed.					
18	I'm afraid to speak up in conversations.					
19	I have no fear of giving a speech.					
20	Certain parts of my body feel very tense and rigid while giving a speech.					
21	I feel relaxed while giving a speech.					
22	My thoughts become confused and jumbled when I am giving a speech.					
23	I face the prospect of giving a speech with confidence.					
24	While giving a speech, I get so nervous I forget facts I really know.					

# Written Communication Apprehension (WCA-24)

**Directions.** Below are a series of statements about writing. There are no right or wrong answers.

Please indicate, by placing a tick in the appropriate box the degree to which each statement applies to you by marking whether you

<b>. .</b>	•	•	•	•	
Strongly	' Agi	ree = 1;	Agree =	2; are Ne	utral = 3; Disagree = 4; Strongly Disagree = 5
Work qu	uickl	y; reco	rd your fi	irst impre	ssion and try to be as honest as possible.

	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4	5
1	I avoid writing					
2	I have no fear of my writing style being evaluated					
3	I look forward to writing down my ideas					
4	I prefer to answer numerical rather than essay type questions					
5	I like to do written work					
6	My mind seems to go blank when I start to write					
7	Expressing ideas through writing seems to be a waste of time					
8	I like to write my ideas down					
9	I feel confident in my ability to clearly express my ideas in writing					
10	I like to have my friends read what I have written					
11	I'm nervous about writing					
12	People seem to appreciate what I write					
13	I enjoy writing					
14	I never seem to be able to clearly write down my ideas					
15	Writing is a lot of fun					
16	I expect to do badly in courses that require written assignments					
17	I like seeing my thoughts on paper					
18	Discussing my writing with others is an enjoyable experience					
19	I have a terrible time organising my ideas when writing an essay					
20	When I have to write an essay I know I'm going to do poorly					
21	It's easy for me to write good essays					
22	I don't think I write as well as most other people					
23	I don't like my written work to be evaluated					
24	I'm no good at writing					

## **Appendix B: Interview guide**

#### Introduction.

Explanation of the purpose of the interview and the conditions and choices available to the interviewee – fully confidential, may refuse to discuss any item raised and may conclude the interview at any stage.

# Background information to relax the interviewee and to build rapport with the interviewer.

- Where born and live.
- Where went to school with particular emphasis on how enjoyed school and the friends that were made.
- Transition from primary level to secondary level any issues involved.
- Activities undertaken in school or outside school.
- Any interests or hobbies.
- Members of family, occupation of parents, place in family.
- Transition to third level ease of transition, meeting new friends, adapting to life in DIT.
- Induction day(s) in DIT good points, bad points.

The interview then moves on to discussing the interviewees' attitudes to communicating in each of the four oral contexts and the writing context.

#### One to One

- Feelings about talking with a friend compared to with strangers.
- How overcome possible difficulty talking with a stranger.
- If difficult what kind of feelings are evoked.
- Have these feelings been always there, what gave rise to the difficulties.
- What effect has evaluation.

## Groups

- Feelings about chatting in groups, and the effect of evaluation.
- Difference talking with friends compared to groups.
- If difficult what kind of feelings are evoked.
- Have these feelings been always there.
- What gave rise to the difficulties initially.

## Meetings

- Experience of attending meetings, active or just passive involvement.
- If relaxed at meetings, what is the attitude to the context.
- If not relaxed, what type of reactions and feelings are evoked.
- Always had the feelings and is the problem improving with practice.

## **Public speaking**

- Experience of giving a speech or making a presentation.
- Good or bad experience and effect of evaluation.
- Attitudes where the experience is good.
- Feelings, anxieties and emotions where the difficulty experienced with public speaking.
- Always had the difficulty, and any action taken which relieves the situation.

# Writing context

- Attitude to writing.
- Discuss any successes/failures with writing, such as writing for magazines.
- Where positive attitude, explore the thoughts and feelings to understand how

the interviewee views writing, if always felt that way.

- Where negative attitude, allow the interview to explain if avoid writing, have difficulty writing only particular written work, if always felt that way,
- Explore the effect of evaluation of their work on the interviewees

# Conclusion

The interview concludes with an offer to the interviewee to contribute any further relevant details which may contribute to the study. Then the interviewer thanks the interviewee and concludes the interview.

Oral Communication Apprehension	on Low OCA Avera									erage (	OCA			High OCA					
	Paul	Eileen	John	Niall	Ruth	Tom	Kate	Ken	Lisa	David	Anna	Emma	Colin	Orla	Cliona	Mary	Daniel		
Personality																			
Very outgoing	Y	Y			Y					Y									
Quite outgoing				Y			Y	Y											
Very talkative			Y		Y		Ν												
Not afraid to talk								Y		Y									
Shy										Ν							Y		
Always very nervous talking to people,															Y				
very quiet in school																			
Very open, people person												Y							
Shy but confident											Y								
Quiet													Y						
Cautious																Y			
One to one																			
Relaxed with a friend	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Y		
Relaxed with a new acquaintance	Y		Ν	N	Y	Y	Y	Y	Y		Y			N	Ν	N	N		
Confident can overcome initial fear			Y	Y	Y														
Find common ground	Y		Y			Y	Y			Y		Y							
Fear reducing with age										Y					Ν		N		

# Appendix C: Matrix of codes developed from the interviews

Oral Communication Apprehension			Low	OCA					Ave	erage (	DCA			High OCA					
C	Paul	Eileen	John	Niall	Ruth	Tom	Kate	Ken	Lisa	David	Anna	Emma	Colin	Orla	Cliona	Mary	Daniel		
Groups																			
Experience of working in groups	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Like working in groups											Y								
Difficult working in groups	Ν	Ν	Ν	Ν	N	Ν	N	Ν	Ν	N			N	Y	Y	N	Y		
Tense at start														Y					
Very relaxed with friends		Y			Y		Y	Y									Y		
Prefer to have a friend in the group			Y	Y	Y		Y					Ν		Y	Ν		Y		
Feel tension when working with new people			Y		Y		Y	Y		Y				Y	Y	Y	Y		
in a group.																			
Overcome tension by talking to others.			Y		Y		Y	Y		Y									
Concerned with what strangers think of me.	Ν			Y	Ν	Y	Y	N	N	N	N		N				Y		
Concerned with what friends think of me.	Y							Y					N						
Learn from other in the group.						Y		1			Y								
Initially careful when talking with strangers				Y		Y	Y	Y											
Unsure of what to say when with strangers	Y					Y		1								Y			
Intimidated so will stay quiet.														Y	Y	Y	Y		

# Appendix C: Matrix of codes developed from the interviews (cont)

Oral Communication Apprehension			Low	OCA					Ave	erage C	OCA			High OCA				
	Paul	Eileen	John	Niall	Ruth	Tom	Kate	Ken	Lisa	David	Anna	Emma	Colin	Orla	Cliona	Mary	Daniel	
Can handle negative responses from others					Y						Ŷ			N		N	N	
Careful when talking with friends in the group	Y																	
Do not want to offend them	Y																	
Disappointed in self if not able to take part in a conversation										Y								
Don't like the feeling of being alone.													Y					
When talking out loud get stuttery														Y				

# Appendix C: Matrix of codes developed from the interviews (cont)

Oral Communication Apprehension			Low	OCA					Av	erage (	DCA		-	High OCA					
	Paul	Eileen	John	Niall	Ruth	Tom	Kate	Ken	Lisa	David	Anna	Emma	Colin	Orla	Cliona	Mary	Daniel		
Meetings																			
Experience of meetings	Y	Y	Ν	Y	Y	Y	N	Y	Y	Y	Ν	Y	Y	Ν	Y	Ν	Y		
Comfortable at prospect of attending meeting	Y	Y	N	Y	Y	Y		Y	Y	Y	Y	Y	Y		N	N	N		
No difficulty when fin common ground	Y																		
Take time to settle in					Y	Y			Y		Y								
Preparation important				Y		Y				Y							Ν		
Difficult to take criticism																Y	Y		
Philosophical – do what you have to do			Y																
Only very relaxed if well prepared				Y															
Relaxed only if know others at the meeting													Y				N		
Dread when it is my turn to speak															Y				
Concentrate on your point and not what others think						Y													
Setting is important				1		ł	1	ł	1		1	1	1	Y	1		1		

# Appendix C: Matrix of codes developed from the interviews (cont)

Oral Communication Apprehension			Low	OCA					Av	erage (	DCA			High OCA					
	Paul	Eileen	John	Niall	Ruth	Tom	Kate	Ken	Lisa	David	Anna	Emma	Colin	Orla	Cliona	Mary	Daniel		
Public speaking																			
Experience of speeches and presentations	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Nervous beforehand	Y	Y	Y	Y	Ν	Y	Ν	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Nervous doing it	Ν	Ν	Y	Ν	Ν	Ν		Y	Ν	Ν	Y	Y	Y	Ν	Y	Y/N	Y		
Enjoy it	Y		Ν		Y				Y				Ν	Ν	Ν	N	Ν		
Audience there to criticise you/judge						Ν					Y			Y	Y				
you																			
Good at it	Y	Y	Ν	Ν	Y	Y	Ν		Y										
Clear mind while speaking		Y	Y	Ν	Y	Y			Y		Ν	Ν		Ν	Ν	Y	Ν		
Ok if well prepared				Y						Y	Y				Ν		Ν		
Don't want to look bad in front of others			Y	Y						Y									
Prefer to talk in front of people you			N							Ν		Ν	Ν			N			
know																			
Talk differently when doing a presentation													Y						

Appendix C: Matrix of codes developed from the interviews (cont)

Oral Communication Apprehension	Low OCA							Average OCA								High OCA			
	Paul	Eileen	John	Niall	Ruth	Tom	Kate	Ken	Lisa	David	Anna	Emma	Colin	Orla	Cliona	Mary	Daniel		
Completed Toastmasters Course/Did		Y							Y										
debating																			
Severe physiological and emotional arousal	N	N	N	N	N	N	N	N	N	N	N	Y		Y	Y		Y		
Outside myself doing the presentation												Y			Y				
Suffer from butterflies	Y	Y	Y	Y		Y		Y			Y	Y							
Stuttery/knees shake/hands sweat/face gets red/move hands	Y	Y				Y						Y	Y	Y	Y	N	Y		
Physically sick																	Y		
Read too fast							Y	Y							Y				
Say wrong words and perspire profusely															Y				
Make eye contact with audience										Y				Ν			Ν		

Appendix C: Matrix of codes developed from the interviews (cont)

Written Communication Apprehension	Low WCA						Ave	High WCA									
	John	Paul	Tom	Daniel	Ken	Niall	Eileen	Anna	Lisa	Kate	David	Mary	Ruth	Colin	Cliona	Emma	Orla
Attitude to writing																	
Love writing		Y		Y													
Prefer writing to talking	Y							Y			Y	Y					
Like writing						Y				Y							
Enjoy writing			Y														
Do not mind writing					Y	Y			Y		Y	Y					
Not good at writing							Y			Y	Y						
Just average at writing												Y					
Avoid writing							N			N					N		Y
Never liked writing														Y			
Awful at writing															Y		
Hate writing																Y	
Dreadful at writing																Y	
Negative attitude to writing														1			Y

Appendix C: Matrix of codes developed from the interviews (cont)

Written Communication Apprehension	Low WCA Average WCA									High WCA							
	John	Paul	Tom	Daniel	Ken	Niall	Eileen	Anna	Lisa	Kate	David	Mary	Ruth	Colin	Cliona	Emma	Orla
Confidence in express ideas																	
Confident	Y	Y	Y	Y	Y	Y	Ν	Y	Y	Y	N	Ν		N	Ν	N	Ν
Organised	Y	N	N		N	Y	Y	Ν	Y	Y	N	Ν		N	N	N	Ν
Creative											N						
Good at writing stories												Ν					
Terrible at essays																Y	
Planned approach		N	N	Y													
Use Spider diagram or excel sheets or mind maps or do lists	Y			Y					Y								
Take time to organise							Y										
Think about what you want to write about						Y											
Structure confusing								Y									

## Appendix C: Matrix of codes developed from the interviews (cont)

Written Communication Apprehension		WCA		_	-	Α		High WCA									
	John	Paul	Tom	Daniel	Ken	Niall	Eileen	Anna	Lisa	Kate	David	Mary	Ruth	Colin	Cliona	Emma	Orla
Evaluation by other																	
Like evaluation by teacher	Y											Y				Ν	Y
Evaluation by teacher improves your writing												Y					
Like evaluation by peers other than friends	Ν																
Afraid of others reading your work												Y					
Prefer strangers to read your work																Y	Ν
If happy with the work would not mind others reading it				Y													
Do not mind others reading my work						N	Y		Ν	Y	Y			Y			
If happy with the work then of for others to read						Y											
I write differently to the way I speak so friends would joke									Y								
Know myself it is not great/write rubbish/not good at writing								Y		Y	Y						
Like others to see my perspective		Y															
Appreciate criticism – learn from it			Y														
Do not like evaluation – afraid wrong and will look silly															Y		

## **Appendix C:** Matrix of codes developed from the interviews (cont)

Written Communication Apprehension	Low WCA Average WCA								-	High WCA							
	John	Paul	Tom	Daniel	Ken	Niall	Eileen	Anna	Lisa	Kate	David	Mary	Ruth	Colin	Cliona	Emma	Orla
Prior experiences - effect																	
Positive of good English teacher in school	Y							Y									
Negative effect of over-critical English teacher in school									Y								
Positive effect of winning competition in school						Y											
Never did much reading																	Y
Did not like it in school/never like writing/	Y													Y			
Wrote a play in secondary school		Y															
Always confident in writing ability			Y														
asked to write for magazine in school			Y														
Always like writing					Y												
Always had a reservation about writing							Y										
Not good at English, just like writing										Y							
I never worked at my writing and now I regret it															Y		
Writing was a problem the whole way through school																	Y
I was a very slow reader																	Y

## Appendix C: Matrix of codes developed from the interviews (cont)

BIBLIOGRAPHY

- AAA, (1986) American Accounting Association Future accounting education: preparing for the expanding profession, *Issues in Accounting Education*, 86(1), 168-195.
- Accounting Education Change Commission (AECC) (1990) Objectives of education for accountants: position statement number one, *Issues in Accounting Education*, **5**(2), 307-312.
- Albrecht, R. and Sach, R. (2000) Accounting education: Charting the course through a perilous future, *Accounting Education Series*, **16**, 1-72.
- Allen, M. and Bourhis, J. (1996) The relationship of communication apprehension to communication behaviour: A meta-analysis, *Communication Quarterly*, 44(2), 214-226.
- Allen, M., Hunter, J.E., and Donohue, W.A. (1989) Meta-analysis of self-report data on the effectiveness of public speaking anxiety treatment techniques, *Communication Education*, 38(1), 54-76.
- Alvesson, M. and Skölberg, K. (2009) *Reflexive methodology. New vistas for qualitative research.* London: Sage Publications Inc.
- Aly, I., Islam, M. (2003) Audit of accounting program on oral communications apprehension: a comparative study among accounting students, *Managerial Auditing Journal*, **18**(9), 751–760.
- Ameen, E., Bruns, S. and Jackson, C. (2010) Communication skills and accounting: do perceptions match reality?, *The CPA Journal*, **80**(7), 63-65.
- Andriate, G. and Allen, J. (1984) Communication apprehension in unprepared versus traditional college students, *Communication Research Reports*, 1(1), 68-72.
- Arquero, J., Hassall, T., Joyce, J. and Donoso, J. (2007) Accounting students and communication apprehension: A study of Spanish and UK students, *European Accounting Review*, 16(2), 299–322.
- Ayres, J. (1996) Speech preparation processes and speech apprehension, *Communication Education*, **45**(3), 228-235
- Ayres, J., and Hopf, T.S. (1991) Coping with writing apprehension, *Journal of Applied Communication Research*, **19**(3), 186-196.
- Ayres, J. Hopf, T, and Will A. (2000) Are reductions in CA an experimental artefact? A Solomon four-group answer, *Communication Quarterly*, **48**(1), pp.19-26.
- Ayres, J. and Raftis, S. (1992). The impact of evaluation and preparation time on high public speaking anxious speakers' thoughts, behaviour, and statecommunication apprehension. *Southern Communication Journal*, **57**, 323-327.
- Baldwin, H.J., Richmond, V.P., McCroskey, J.C., and Berger, B.A. (1983) Understanding (and conquering) communication apprehension, *Patient Counselling in Community Pharmacy*, **Nov/Dec**, 9-11.

- Baxter, J. and Chua, W.F. (1998) Doing field research: Practice and meta-theory in counterpoint, *Journal of Management Accounting Research*, **10**, 69-87.
- Beatty, M.J. and Dobos, J.A., (1997) Physiological assessment. in: J. A. Daly, J.
  C. McCroskey, J. Ayres, T. Hopf, and D.M. Ayres. (eds.) Avoiding Communication, pp.217-229, Beverly Hills, CA: Sage Publications.
- Beatty, M.J., McCroskey, J.C. and Heisel, A.D. (1998) Communication apprehension as temperamental expression: A communibiological paradigm, *Communication Monographs*, **65**(3), 197-219.
- Bennett, K, and Rhodes, S. (1988) Writing apprehension and writing intensity in business and industry, *The Journal Of Business Communication*, 25(1), 25-39.
- Benton, T. and Craig, I., 2001, *Philosophy of Social Science: The philosophical foundations of social thought*, Basingstoke : Palgrave.
- Blanthorne, C., Bhanornsiri, S. and Guinn, R. (2005) Are technical skills still important?, *The CPA Journal*, **75**(3), 64-65.
- Bline, D., Lowe, D.R., Meixner, W.F., Nouri, H., and Pearce, K (2001) A research note on the dimensionality of Daly and Miller's writing apprehension scale, *Written Communication*, **18**(1), 61-79.
- Bline, D., Lowe, D.R., Meixner, W.F., and Nouri, H. (2003) Measurement data on commonly used scales to measure oral communication and writing apprehension, *The Journal of Business Communication*, **40**(4), 266-288
- Blue, A., Stratton, T., Donnelly, M., Nash, P. and Schwartz, R. (1998) Students' communication apprehension and its effects on PBL performance, *Medical Teacher*, **20**(3), 217-221.
- Boening, C., Anderson, L. and Miller, M. (1997) Writing apprehension and academic achievement among undergraduate honours students, ERIC ED414775, 1-13.
- Booth-Butterfield, S. (1988) Instructional interventions for reducing situational anxiety and avoidance, *Communication Education*, **37**(3), 214-223.
- Borzi, M. and Mills, T. (2001) Communication apprehension in upper level accounting students: An assessment of skill development, *Journal of Education for Business*, **76**(4), 193-198.
- Bourhis, J., and Allen, M. (1992) Meta-Analysis of the relationship between communication apprehension and cognitive performance, *Communication Education*, **41**(1), 69-76.
- Bowers, J.W. (1986) Classroom communication apprehension: a survey, *Communication Education*, **35**(1), 372-378.
- Brooks, W.D. and Platz, S.M. (1968) The effects of speech training upon selfconcept as a communicator, *Speech Teacher*, **17**(1), 44-49.
- Bruner, J., (1998) *Culture, Mind and Education*, in Moon, B. and Murphy, P. (eds) Curriculum in Context, pp. 148-178, London: Paul Chapman Publishing.

Bryman, A. (2001) Social Research Methods. Oxford: Oxford University Press.

- Bryman, A. (2008) Social Research Methods.3<sup>rd</sup> ed. Oxford: Oxford University Press.
- Burgoon, J.K. and Hale, J.L. (1983) A research note on the dimensions of communication reticence, *Communication Quarterly*, **31**(3), 238-248.
- Burgoon, J. and Hale, J. (1988) Nonverbal expectancy violations: Model elaboration and application to immediacy behaviours, *Communication Monographs*, **55**(1), 58-79.
- Burk, J. (2001) Communication apprehension among Master's of Business Administration students: Investigating a gap in communication education, *Communication Education*, **50**(1), 51-58.
- Burrell, G. and Morgan, G. (1979) Sociological Paradigms and Organisational Analysis, Aldershot: Gower.
- Caelli, K., Ray, L. and Mill J. (2003) 'Clear as Mud': Toward Greater Clarity in Generic Qualitative Research. *International Journal of Qualitative Methods* **2**(2), 1-24.
- Carey, G. and DiLalla, D. (1994) Personality and psychopathology: Genetic perspectives, *Journal of Abnormal Psychology*, **103**(1), 32-43.
- Cavanagh, R., Kay, K., Klein, D., and Meisinger, S. (2006) Are They Really Ready To Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce accessed On 28/09/2010 at p21.org/documents/FINAL\_REPORT\_PDF09-29-06.pdf
- Cayton, M. (1990). What Happens When Things Go Wrong: Women and Writing Blocks, *Journal of Advanced Composition*, Vol. 10, pp.321-337.
- Chartered Accountants Ireland (CAI) (2010) Competency Statement CA Professional 2, Dublin: CAI.
- Chua, W., (1986) Theoretical constructions of and by the Real, *Accounting Organisations and Society*, **11**(6), 583-598
- Clark, D. (2005). *Toward a theory of writing anxiety*, Unpublished PhD thesis, Arizona State University, Tempe, Arizona.
- Clevenger, T, Jr. (1959) A synthesis of experimental research in stage fright, *The Quarterly Journal of Speech*, **45**(2), 134-145.
- Coffey, C. and Atkinson, P. (1996) *Making sense of qualitative data. Complementary research strategies.* Thousand Oaks, Calif.: Sage Publications.
- Collins, A. (2000) Accountants as custodians of information and knowledge, *Accountancy Ireland*, **32**(4), 16-17.
- Condit, C.M. (2000) Culture and biology in human communication: Toward a multi-causal model, *Communication Education*, **49**(1), 7-24.
- Condit, C.M. (2000a) Toward new sciences of human behaviour, *Communication Education*, **49**(1), 29-35.

- Connell, S.H., and Borden, G.A. (1987) Incorporating treatment for Communication apprehension into oral communication courses, *Communication Education*, **36**(1), 56–61.
- Council for Industry and Higher Education (2008) *Graduate Employability: What do Employers Think and Want?* London: W. Archer and J. Davidson
- Courtis, J. and Zaid, O. (2002) Early employment problems of Australian accounting graduates: an exploratory study, *Accounting Forum*, **26**(3/4), 320-339.
- Covaleski, M. and Dirsmith, M., (1990) Dialectic tension double reflexivity and the everyday accounting researcher: on using qualitative methods, *Accounting Organisation and Society*, **15**(6), 543-574.
- Crawford, M., Henry, W. and Dineen, F. (2001) Developing interviewing skills of accounting students on the Web a case study approach, *Accounting Education*, **10**(2), 207–218.
- Creswell, J. (1994) Research design. Qualitative and quantitative approaches. Thousand Oaks, Calif : Sage Publications.
- Creswell, J. (2007) *Qualitative Inquiry and Research Design. Choosing among five approaches.* 2<sup>nd</sup> ed., Thousand Oaks, Calif : Sage Publications.
- Creswell, J. (2009) Research design. Qualitative, quantitative, and mixed approaches. Thousand Oaks, Calif : Sage Publications.
- Crumbo, G. (1998) Writing apprehension and the effects of "I think I can, I think I can", Unpublished dissertation, Spalding University.
- Daft, R., (1983) Learning the craft of organisational research, Academy of Management Review, 8(4) 539-546.
- Daly, J. (1977) The effects of writing apprehension on message encoding, Journalism Quarterly, 5(4), 566-572.
- Daly, J. (1978) Writing apprehension and writing competency in business and industry, *Journal of Educational Research*, **72**(1), 10-14.
- Daly, J.A., Caughlin, J.P. and Stafford L. (1997) Correlates and consequences of social-communicative anxiety, in J. A. Daly, J. C. McCroskey, J. Ayres, T. Hopf, and D.M. Ayres., Avoiding Communication: shyness, reticence and communication apprehension, pp.21-71, Beverly Hills, CA: Sage Publications.
- Daly, J.A. and McCroskey, J.C. (1975) Occupational desirability and choice as a function of communication apprehension, *Journal of Counselling Psychology*, **22**(4), 309–313.
- Daly, J. and Miller, M. (1975a) The empirical development of an instrument to measure writing apprehension, *Research in the Teaching of English*, **9**, 242-249.
- Daly, J. and Miller, M. (1975b) Further studies on writing apprehension: SAT scores, success expectations, willingness to take advanced course and sex differences, *Research in the Teaching of English*, **9**, 250-256.

- Daly, J.A. and Miller, M.D. (1975c) Apprehension or writing as a predictor of message intensity, *Journal of Psychology*, **89**(2), 175-177.
- Daly, J.A., and Shamo, W.G. (1976) Writing apprehension and occupational choice, *Journal of Occupational Psychology*, **49**(1), 55-56
- Daly, J.A., and Shamo, W.G. (1978) Academic decisions as a function of writing apprehension, *Research in the Teaching of English*, **12**, 119-126.
- Daly, J.A. and Wilson, D. (1983) Writing apprehension, self-esteem and personality, *Research in the Teaching of English*, **17**, 327-341.
- Dearing, R. (1997) The National Committee of Inquiry into Higher Education (UK) accessed on 31 August 2010 at http://www.heacademy.ac.uk.
- Denzin, N. and Lincoln, Y. (2008) Introduction: The Discipline and Practice of Qualitative Research, in Denzin, N. and Lincoln Y. (eds.) *Strategies of Qualitative Inquiry*, 3<sup>rd</sup> ed., pp.1-43, Thousand Oaks, Calif.: Sage Publications.
- Deppe, L., Sonderegger, E., Stice, J., Clark, D. and Streuling, G. (1991) Emerging competencies for the practice of accountancy, *Journal of Accounting Education*, **9**, 257-290.
- Dilley, P. (2000) Conducting successful interviews: tips for intrepid research, *Theory into Practice*, **39**(3), Summer, 131-137.
- Dillon, W and Goldstein, M. (1984) Multivariate Analysis: Methods and applications, New York: Wiley.
- Donovan, L. and MacIntyre, P. (2004). Age and sex differences in willingness to communicate, communication apprehension, and self-perceived competence, *Communication Research Reports*, **21**(4), 420-427.
- Du-Babcock, B. (2006) Teaching business communication: past, present, and future, *Journal of Business Communication*, **43**(3), 253-264.
- Elias, R.Z. (1999) 'An examination of non-traditional accounting students' communication apprehension and ambiguity tolerance' *Journal of Education for Business*, **75**(1), 38-41
- Ercikan, K. and Roth, W-M. (2006) What Good Is Polarizing Research Into Qualitative and Quantitative? *Educational Researcher*, **35**(5), 14–23.
- Evangelou, M., Sylva, K., Kyriacou, M. Wild, M. and Glenny, G. (2009) Early years learning and development. Literature review. Research Report DCSF-RR176. The Importance of Friendship for School-Age Children. Department for Children, Schools and Families, UK.
- Eysenck, H.J. (1997) The future of psychology, in Solso, R.L. (ed.) *Mind and Brain Sciences in the 21<sup>st</sup> Century*, pp.263–301, Cambridge, Mass.; London: MIT Press.
- Fabrigar, L., MacCallum, R., Wegener, D., and Strahan, E. (1999) Evaluating the use of exploratory factor analysis in psychological research, *Psychological Methods*, 4(3), 272-299.

- Faigley, L., Daly, J. and Witte, S. (1981) The role of writing apprehension in writing performance and competence, *The Journal of Educational Research*, 75(1), 16-20.
- Faris, K.A., Golen, S.P. and Lynch, D.H. (1999) Writing apprehension in beginning accounting majors, *Business Communication Quarterly*, 62(2), 9-21.
- Faulkner, R. (1982) Improvising on a Triad, in Van Maanen, J, Dabbs J and Faulkner, R (eds.) Varieties of Qualitative Research, pp.65-101, Beverly Hills; London: Sage.
- Feeney, O. and Pierce, B. (2007) Today's management accountant honest bean counter and savvy business advisor, *Accountancy Ireland*, **39**(5), 16-18.
- Feldmann, D. and Usoff, C. (2001) Improving accounting students' perceptions about the importance of writing, *Accounting Educators' Journal*, **XII**, 1-13.
- Ferrer-Chancy, M and Fugate, A. (2007) The Importance of Friendship for School-Age Children, FCS2207, one of a series of the Department of Family, Youth and Community Sciences, Florida Cooperative Extension Service, University of Florida.
- Firestone, W. (1987) Meaning in method: The rhetoric of quantitative and qualitative research. *Educational Research*, **16**(7), 16-21.
- Flick, U. (2006) An introduction to qualitative research. 4<sup>th</sup> ed. Los Angeles; London: Sage Publications.
- Fordham, D.R. and Gabbin A.L. (1996) Skills versus Apprehension: Empirical evidence on oral communication, *Business Communication Quarterly*, **59**(3), 88-97.
- Fox, R. (1980) Treatment of writing apprehension, *Research in the Teaching of English*, **14**, 39-49.
- Gardner, C.T., Milne, M.J., Stringer, C.P., and Whiting, R.H. (2005) Oral and written communication apprehension in accounting students: Curriculum impacts and impacts on academic performance, *Accounting Education*, 14(3), 313-336.
- Gaskell, G. (2000). Individual and group interviewing, in Bauer, M. and Gaskell,G. (eds.) *Qualitative Researching with text image and sound*. A practical handbook, pp. 38-56, London : Sage Publications.
- Gephart, R., (2004), Qualitative research and the Academy of Management Journal, *Academy of Management Journal*, **47**(4), 454-462.
- Gandhi, M. (1982) An Autobiography or the Story of My Experiments with Truth, London: Penguin Books.
- Gilkinson, H. (1942) Social fears as reported by students in college speech classes, *Speech Monographs*, **9**(1), 141-160.
- Gillham, B. (2008) *Research interviews: the range of techniques*. Maidenhead : Open University Press.
- Gorsuch, R. (1983) Factor Analysis. Hillsdale, NJ: Lawrence Erlbaum.

- Graham, A., Hampton, M. and Willett, C. (2009) What not to write: An intervention in written communication skills for accounting students, *International Journal of Management Education*, **8**(2), 67-74.
- Grace, D. and Gilsdorf, J. (2004) Classroom strategies for improving students' oral communication skills, *Journal of Accounting Education*, **22**(2), 165-172.
- Gradireland (2010) Graduate Salary & Graduate Recruitment Trends Survey 2010 accessed on 11/10/10 at www.gradireland.com.
- Gray, F. (2010) Specific oral communication skills desired in new accountancy graduates, *Business Communication Quarterly*, **73**(1), 40-66.
- Gray, F., Emerson, L. and MacKay, B. (2005) Meeting the demands of the workplace: science students and written skills, *Journal of Science Education and Industry* **14**(4), 425–435.
- Guba, E. and Lincoln, Y. (1988) Do inquiry paradigms imply inquiry methodologies? in Fetterman, D.M. (Ed.), *Qualitative approaches to evaluation in education*, pp.89-115, New York: Praeger.
- Guilford, J.P. (1956) Psychometric Methods. New York: McGraw-Hill.
- Hammersley, M., (1993) Social Research: Philosophy, Politics and Practice. London: Sage in association with the Open University.
- Hassall, T. Joyce, J., and Arquero, J.L. (2006) Can you explain the numbers? The differing dilemmas of accounting and business students, *Paper presented at the Annual Conference of IAFA, Dublin.*
- Hassall, T., Joyce, J., Arquero, J. and Donoso, J. (1999) Vocational skills and capabilities for management accountants, *Management Accounting*, **77**(11), 52-54.
- Hassall, T. Joyce, J., Bramhall, M.D., Robinson, I.M. and Arquero, J.L. (2005) The sound of silence? A comparative study of the barriers to communication skills development in accounting and engineering students, *Industry and Higher Education*, **Oct**, 392-398.
- Hassall, T., Joyce, J., Ottewill, R., Arquero, J., and Donoso, J. (2000) Communication apprehension in UK and Spanish business and accounting students, *Education and Training*, **42**(2), 93-100.
- Heuett, B., Hsu, C. and Ayres, J. (2003) Testing a Screening Procedure in the Treatments for Communication Apprehension, *Communication Research Reports*, 20(3), 219-229
- Howard, G. (1994) Why do people say nasty things about self-reports? *Journal of Organisational Behaviour*, **15**, 399-404.
- Horwitz, Betty. (2002) Communication Apprehension: origins and management, Albany, NY:Singular-Thomson Learning.
- Howe, K., (1988) Against the quantitative-qualitative incompatibility thesis or dogmas die hard, *Educational researcher*, **17**(8), 10-16.

- Hsu, C, (2004) Sources of Differences in Communication Apprehension between Chinese in Taiwan and Americans, *Communication Quarterly*, **52**(4), 370-89.
- Hutchinson, K., Neuliep, J. and More, E. (1995) Communication apprehension across cultures: a test of the PRCA-24 and comparisons between Australia and the United States, *Australian Journal of Communication*, **22**(2), 59-69.
- International Federation of Accountants (IFAC) (2003) *IES3 Professional Skills and General Education*, New York: IFAC.
- Jaasma, M. (1997) Classroom communication apprehension: Does being male or female make a difference, *Communication Reports*, **10**(2), Summer, 220-228.
- Jackling, B. and DeLange, P. (2009) Do accounting graduates' skills meet the expectation of employers? A matter of convergence or divergence, *Accounting Education: an international journal*, **18**(4-5), 369-385.
- Jackson, D. (2010) An international profile of industry-relevant competencies and skill gaps in modern graduates, *International Journal of Management Education*, **8**(3), 29-58.
- Jones, S. (1985) The analysis of depth interviews, in Walker, R. (ed.) *Applied Qualitative Research*, pp.56-70, Aldershot: Gower.
- Joyce, J., Hassall, T., Arquero, J., and Donoso, J. (2006) Communication apprehension and maths anxiety as barriers to communication and numeracy skills development in accounting and business education, *Education and Training*, **48**(6), 454-464.
- Kelly, C. and Gaedeke, R. (1990) Student and employer evaluation of hiring criteria for entry-level marketing positions, *Journal of Marketing Education*, 12(3), 64-71.
- Kelly, L. and Keaten, J. A. (2000) Treating communication anxiety: implications of the communibiological paradigm, *Communication Education*, **49**(1), 45-57.
- King, N. (1998) Template analysis, in Symon, G. and Cassell, C. (eds.) Qualitative Methods and Analysis in Organisational Research, pp.118-134, London: Sage Publications.
- King, S., Andersen, J., and Carlson, B. (1988) The dimensionality of the PRCA-24: An explication of context dimensions, *Communication Reports*, 1(1), 1-8.
- Kline, P. (1994) An easy guide to factor analysis, London: Routledge.
- Klopf. D.W. (1997) Cross-cultural apprehension research: procedures and comparisons, in Daly, J. A. McCroskey, J. C. Ayres, J. Hopf, T. and Ayres. D.M. (eds) Avoiding Communication: shyness, reticence and communication apprehension, pp.269-284. Beverly Hills, CA: Sage Publications.
- Kougl, K. (1980) Dealing with quiet students in the basic college speech course, *Communication Education*, **29**(3), 234-238.

Kvale, S. (2007) *Doing interviews*. London: Sage Publications.

- Kvale, S. and Brinkmann, S. (2009) *Interviews. Learning the craft of qualitative research interviewing*. Thousand Oaks, Calif. : Sage Publications.
- Lang, N., Rowland-Morin, P. and Coe, N. (1998) Identification of Communication Apprehension in Medical Students Starting a Surgery Rotation, *The American Journal Of Surgery*, **176**(1), 41-45.
- Levine, T.R., and McCroskey, J.C. (1990). Measuring trait communication apprehension: A test of rival measurement models of the PRCA-24, *Communication Monographs*, **57**(1), 62-72.
- Libarkin, J. and Kurdziel, J. (2002) Research methodologies in science education: The qualitative-quantitative debate. *Journal of Geoscience Education*. **50**(1). 78-86.
- Mabrito, M. (2000) Computer conversations and writing apprehension, *Business* Communication Quarterly, **65**(1), 39-49.
- MacCallum, R., Widaman, K., Zhang, .S. and Hong, S. (1999) Sample size in factor analysis, *Psychological Methods*, **4**(1), 84-99.
- McCracken, G. (1988). The long interview. Newbury Park, CA: Sage.
- McCroskey, J.C. (1970) Measures of communication-bound anxiety, *Speech Monographs*, **37**(4), 269-277.
- McCroskey, J.C. (1976) The problems of communication apprehension in the classroom, *The Florida Speech Communication Journal*, **4**(2), 1-12.
- McCroskey, J.C. (1977a). Classroom consequences of communication apprehension, *Communication Education*, **26**(1), 27-33.
- McCroskey, J.C. (1977b) Oral communication apprehension: a summary of recent theory and research, *Human Communication Research*, **4**(1), 78-96.
- McCroskey, J.C. (1997a) Self-report measurement, in Daly, J. A. McCroskey, J.C. Ayres, J. Hopf, T. and Ayres. D.M. (eds.) *Avoiding Communication: shyness, reticence and communication apprehension*, pp.191-216, Beverly Hills, CA: Sage Publications.
- McCroskey, J.C. (1997b) Willingness to communicate, communication apprehension, and self-perceived communication competence: conceptualisations and perspectives, in Daly, J. A. McCroskey, J. C. Ayres, J. Hopf, T. and Ayres. D.M. (eds.) Avoiding Communication: shyness, reticence and communication apprehension, pp.75-108, Beverly Hills, CA: Sage Publications.
- McCroskey, J.C. (1997c) Why we communicate the ways we do: a communibiological perspective, The Carroll C. Arnold Distinguished Lecture, Presented at the annual convention of the National Communication Association Chicago, Illinois, 5-12.
- McCroskey, J.C. (2006) An introduction to Rhetorical Communication: A western rhetorical perspective, 9<sup>th</sup> ed. Boston, Mass. ; London : Allyn and Bacon Pearson Education Inc.

- McCroskey, J.C., Beatty, M.J., Kearney, P., and Plax, T.G. (1985) The content validity of the PRCA-24 as a measure of communication apprehension across communication contexts, *Communication Quarterly*, **33**(3), 165-173.
- McCroskey, J.C., and Richmond, V.P. (1984) Communication apprehension and small group communication, in Cathcart, R.S., and Samovar, L.A. (eds.), *Small group communication*, pp.342-356, Dubuque, IA: William C. Brown.
- McCroskey, J. Simpson, T. and Richmond, V. (1982) Biological sex and communication apprehension, *Communication Quarterly*, **30**(2), 129-133.
- McCroskey, J. and Young, T. (1979) The use and abuse of factor analysis in communication research, *Human Communication Research*, **5**(4), 375-382.
- McDaniel, S. and White, J. (1993) The quality of the academic preparation of undergraduate marketing majors: an assessment by company recruiters, *Marketing Education Review*, **3**(3), 9-16.
- McEvoy, P. and Richards, D. (2006) A critical realist rationale for using a combination of quantitative and qualitative methods. *Journal of Research in Nursing.* **11**(1), 66–78.
- McEwan, K. and Devins, G. (1983). Is increased arousal in social anxiety noticed by others. *Journal of Abnormal Psychology*. **9**2(4), 417-421.
- McKain, T. (1991) Cognitive, affective, and behavioural factors in writing anxiety, Unpublished Dissertation. Catholic University of America.
- Maes, J., Weldy, T. and Icenogle, M. (1997) A managerial perspective: oral communication competency is most important for business students in the workplace, *Journal of Business Communication*, **34**(1), 67-80.
- Marshall, L and Varnon, A. (2009) Writing apprehension among accounting seniors, *The Accounting Educators' Journal*, **XIX**, 45-65.
- Mathews, R., Jackson, M. and Brown, P. (1990) Accounting in Higher Education: Report of the Review of the Accounting Discipline in Higher Education: Volume 1, Canberra, ACT: Australian Government.
- May, G. and May, C. (1989) Communication instruction: what is being done to develop the communication skills of accounting students? *Journal of Accounting Education*, **7**(2), 233-244.
- Messmer, M. (1999) Skills for a new millennium, Strategic Finance, 10-2, Aug.
- Meyer-Griffith, K., Reardon, R. and Hartley, S. (2009) An examination of the relationship between career thoughts and communication apprehension, *The Career Development Quarterly*, **58**(2), 171-180.
- Miles, M. and Huberman, A. (1984) Drawing valid meaning from qualitative data: toward a shared craft. *Educational Researcher*. **13**(5), 20-30.
- Mitchell, G., Skinner, L. and White, B. (2010) Essential soft skills for success in the twenty-first century workforce as perceived by business educators, *The Delta Pi Epsilon Journal*, **12**(1), 43-53.

- Morgan, D. (1998) Practical strategies for combining qualitative and quantitative methods: Applications to health research, *Qualitative Health Research* **8**(3), 362-376.
- Morgan, G. and Smirich, L. (1980) The case of qualitative research, *Academy of Management Review*, **5**(4), 491-500.
- Neer, M. and Kircher, W. (1989) Apprehensives' perception of classroom factors influencing their class participation, *Communications Research Reports*, **6**(1), 70-77.
- Ng, J. Lloyd, P., Kober, R. and Robinson, P. (1999). Developing writing skills; a large class experience: a teaching note, *Accounting Education*, **8**(1), 47-55.
- Nunnally, J. (1978) *Psychometric Theory*, (2<sup>nd</sup> ed) New York: McGraw-Hill.
- Nunnally, J. and Bernstein, I. (1994) *Psychometric Theory*, 3<sup>rd</sup> ed., New York: McGraw-Hill.
- O'Mara, J., Allen, J.L., Long, K.M. and Judd, B. (1996) Communication apprehension, nonverbal immediacy, and negative expectations for learning, *Communication Research Reports*, **13**(1), 109-128.
- Pajares, F. and Valiante, G. (1997) Influence of self-efficacy on elementary students' writing, *Journal of Educational Research*, **90**(6), 353-360.
- Parks, M. (1980) A test of the cross-situational consistency of communication apprehension, *Communication Monographs*, **47**(3), 220-232
- Patton, M. (2002) *Qualitative research and evaluation methods*, 3<sup>rd</sup> ed. Thousand Oaks, Calif.; London : Sage.
- Paul, J. and Marfo, K., (2001) Preparation of educational researchers in philosophical foundations of inquiry, *Review of Educational Research*, 71(4), 525-547.
- Penley, L., Alexander, E., Jrenigan, I., and Henwood, C. (1991) Communication abilities of managers: The relationship to performance, *Journal of Management*, **17**(1), 57-76.
- Pervin, L., Cervone, D. and John, O. (2005) *Personality, theory and research*. 9<sup>th</sup> Ed. Hoboken, NJ: Wiley.
- Phillips, G. and Metzger, N. (1973) The reticent syndrome: Some theoretical considerations about etiology and treatment, *Speech Monographs*, **40**(3), 220-230.
- Pitt, L., Berthon, P. and Robson, M. (2000) Communication apprehension and perceptions of salesperson performance: a multinational perspective, *Journal of Managerial Psychology*, **15**(1), 68-86.
- Plutsky, S. (1996) Faculty perceptions of students' business communication needs, *Business Communication Quarterly*, **59**(4), 69-76.
- Popovich, M. and Massé, M. (2005) Individual assessment of media writing student attitudes: Recasting the mass communication writing apprehension measure, *Journalism and Mass Communication Quarterly*, **82**(2), 339-355.

- Porta, D. and Keating, M., (2008) How many approaches in the social sciences? An epistemological introduction, in Porta, D. and Keating, M. (eds) *Approaches and Methodologies in the Social Sciences: A pluralist perspective*, Cambridge: Cambridge University Press.
- Pryor, B., Butler, J. and Boehringer, K. (1995) Communication apprehension and cultural context: A comparison of communication apprehension in Japanese and American students, *North American Journal Of Psychology*, 7(2), 247-252.
- Quible, Z. and Griffin, F. (2007) Are writing deficiencies creating a lost generation of business writers?, *Journal of Education for Business*, **83**(1), 32-36.
- Rechtein, J. and Dixinno, G. (1998) Apprehension about writing: further results, *Psychological Reports*, **82**, 221-222.
- Research Notes, 1969, Spectra.
- Richmond, V.P. (1997) Quietness in contemporary society: Conclusions and generalisations of the research, in Daly, J. A. McCroskey, J. C. Ayres, J. Hopf, T. and Ayres. D.M. (eds.) Avoiding Communication: shyness, reticence and communication apprehension, pp.257-268. Beverly Hills, CA: Sage Publications.
- Richmond, V.P., Martin, M.P., and Cox, B. (1997) A bibliography of related practice, theory, and research in Daly, J. A. McCroskey, J. C. Ayres, J. Hopf, T. and Ayres. D.M. (eds.) Avoiding Communication: shyness, reticence and communication apprehension, pp.423-488, Beverly Hills, CA: Sage Publications.
- Richmond, V. and McCroskey, J. (1998) *Communication apprehension, avoidance, and effectiveness,* 5<sup>th</sup> edition, MA: Allyn and Bacon.
- Riffe, D and Stacks, D. (1992) Student characteristics and writing apprehension, *Journalism Educator*, **47**(2), 39-49.
- Robinson, T. (1997) Communication apprehension and the basic public speaking course: A national survey of in-class treatment techniques, *Communication Education*, **46**(3), 188-197.
- Roebuck, D. B., Sightler, K. W., & Brush, C. C. (1995). Organizational size, company type, and position effects on the perceived importance of oral and written communication skills. *Journal of Managerial Issues*, 7(1), 99-115.
- Royal Literary Fund Report on Student Writing in Higher Education, Writing matters, (2006), Co-edited by Davies, S., Swinburn, D. and Williams, G. Published by Royal Literary Fund.
- Ruchala, L.V. and Hill, J.W. (1994) Reducing accounting students' oral communication apprehension: empirical evidence, *Journal of Accounting Education*, **12**(4), 283-303.
- Russ, T. (2009) The status of the business communication courses at U.S. colleges and universities, *Business Communication Quarterly*, **72**(4), 395-413.

- Salovey, P. and Haar, M. (1990) The efficacy of cognitive behaviour therapy and writing process training for alleviating writing anxiety, *Cognitive Therapy and Research*, **14**(5), 515-528.
- Schofield, J. (1993). Increasing the generalisability of qualitative research. In Hammersley, M., (1993) Social Research: Philosophy, Politics and Practice. pp.200-205, London: Sage in association with the Open University.
- Scofield, B and Combes, L. (1993) Designing and managing meaningful writing assignments, *Journal in Accounting Education*, **8**(1), 72-85.
- Scott, C.R. and Rockwell, S.C. (1997) The effect of communication, writing, and technology apprehension on likelihood to use new communication technologies, *Communication Education*, **46**(1), 44-62.
- Scott, M.D., McCroskey, J.C. and Sheahan, M.E. (1978) Measuring Communication Apprehension, *Journal of Communication*, **28**(1), 104-111.
- Sharma, S (1996) Applied Multivariate Techniques, New York; Chichester: Wiley.
- Shaver, J. (1990) Reliability and validity of measures of attitudes toward writing and toward writing with the computer, *Written Communication*, **7**(3), 375-390.
- Siegel, G. (2000) Management accounts: The great communicators, *Strategic Finance*, **82**(1), 75-77.
- Silverman, D., (2006) Interpreting Qualitative Research: methods for analysing talk, text and interaction 3<sup>rd</sup> ed., London: Sage Publications.
- Simons, K., Higgins, M., and Lowe, D. (1995) A profile of communication apprehension in accounting majors: implications for teaching and curriculum revision, *Journal of Accounting Education*, **13**(2), 159-176.
- Smith, T and Bainbridge-Frymier, A. (2006) Get 'Real': Does practicing speeches before an audience improve performance? *Communication Quarterly* **54**(1), 111-125.
- Smith, D. and Nelson, S. (1994) Written and oral communication apprehension: Extent and influence on writing variables, *NABTE Review*, **21**, 29-34.
- Spicer, N. (2004) Combining qualitative and quantitative methods, in Seale, C. (ed.) *Researching Society and Culture*, pp.293-303, London: Sage Publications Ltd.
- Stanga, K.G. and Ladd, R.T. (1990) Oral communication apprehension inn beginning accounting majors: an exploratory study, *Issues in Accounting Education*, 5(2), 180–194.
- Stout, D. and DaCrema, J. (2004) A writing intervention for the accounting classroom: dealing with the problem of faulty modifiers, *Journal of Accounting Education*, **22**(4), 289-323.
- Tabachnich, B and Fidell, L. (2007) Using multivariate statistics, Boston: Pearson/Allyn & Bacon.

- Tait, H. (1992) Students' perceptions of teaching in relation to their approaches to studying, Unpublished PhD, University of Edinburgh, Scotland.
- Taylor, S. and Bogdan, R. (1998) Introduction to qualitative research methods: A guidebook and resource, New York: Wiley.
- Teddlie, C. and Tashakhora, A. (2003) Major issues and controversies in the use of mixed methods in the Social Behavioural Sciences in Tashakhora, A. and Teddlie, C. (ed.) *Handbook of Mixed Methods in Social and Behavioural Research*, Thousand Oaks, Calif.; London : Sage Publications
- Thomas, G., Thomas, K. and Williams, T. (1991), Communication apprehension and performance in oral briefings: Identifying dysfunctional thought patterns, in Bruno, S.J. (ed.), *Proceedings of the 56th annual convention of The Association for Business Communication*, pp. 81-94, Houston, TX: University of Houston-Clear Lake.
- Thomas, G., Tynon, W. and Thomas, K. (1994). Communication apprehension, interpretative styles, preparation, and performance in oral briefing, *The Journal of Business Communication*, **31**(4), 311-317.
- Van Maanen, J. (1982) Introduction, in Van Maanen J Dabbs J, Faulkner R (eds.) *Varieties of Qualitative Research*, pp.11-29, Beverly Hills; London: Sage.
- Vinson, L. and Roberts, C. (1993) Estimating an individual's location along the trait-state continuum: A method for improving the precision of measurement of CA using the PRCA-24, *Communication Research Reports*, **11**(1), 59-66
- Warnock, K., and Curtis, E. (1997) Oral communication apprehension: a preliminary study of accounting students, Paper presented at the Annual Conference Irish Accounting and Finance Association. Dublin City University, 1-14.
- Warnock, K, Currie, J. and Curtis, E. (2005). *Challenging the stereotype: reducing apprehension in accounting students*, Paper for presentation at the Annual Conference of the Irish Accounting and Finance Association. 1-15.
- Watson, D, Clark, L. and Harkness, A. (1994). Structure of personality and their relevance to psychopathology, *Journal of Abnormal Psychology*, **103**(1), 18-31.
- Watson, A. and Munroe, E. (1990) Academic Achievement: A Study of Relationships of IQ, Communication Apprehension, and Teacher Perception, *Communication Reports*, 3(1), 28-36.
- Whitworth, R. and Cochran, c. (1996) Evaluation of integrated versus unitary treatments for reducing public speaking anxiety, *Communication Education*, **45**(4), 306.
- Williams, M. and May, T. (1996) *Introduction to social research*. London : UCL Press.
- Wiltse, E. (2006) Using Writing to Predict Students' Choice of Majors, Journalism and Mass Communication Educator, **61**(2), 179-194.

- Wrench, J., Brogan, S., McCroskey, J. and Doreen J. (2008) Social communication apprehension: The intersection of communication apprehension and social phobia, *Human Communication*, **11**(4), 409-430.
- Wygal, D. and Stout, D. (1989) Incorporating writing techniques in the accounting classroom: experience in Financial, Managerial and Cost courses, *Journal of Accounting Education*, **7**(2), 245-252.
- Yanchar, S. and Williams, D. (2006) Reconsidering the compatibility thesis and eclecticism: Five propose guidelines and method use. *Educational Researcher.* **35**(9), 3-12.
- Zaid, O. and Abraham, A. (1994) Communication skills in accounting education: perceptions of academics, employers and graduate accountants, *Accounting Education: an international journal*, **3**(3), 205-221.
- Zhang, Q. (2005) Immediacy, humour, power distance, and classroom communication apprehension in Chinese college classrooms, *Communication Quarterly*, **53**(1), 109-124.