Video Feedback and its Impact on the Development of Communication Skills within Social Work Education

Janine Bolger

MSc **2008**

Video Feedback and its Impact on the Development of Communication Skills within Social Work Education

Janine Bolger

A thesis submitted in partial fulfilment of the requirements of
The Robert Gordon University
for the degree of Master of Science (by Research)

February 2008

Authors Declaration

I declare that I am the sole author of this thesis and that any reference to or support from other people's writing is indicated through appropriate referencing. It has not been presented in whole or in part for assessment elsewhere. The assessment regulations have been fully considered.

Signed: …….

Date: ……

Abstract:

Video feedback has been utilised in training situations across a range of professional disciplines such as medicine and psychotherapy, and its use in developing communication and self-assessment skills has also been experimented with in social work education. In particular, the Robert Gordon University is increasingly using video feedback to prepare and assess Social Work students in readiness for practice. In order to help in future course planning and delivery this study seeks to investigate the effectiveness of video feedback in improving communication skills amongst Social Workers in training. For such purposes eleven second year Social Work undergraduates were selected as participants in a pre-test post-test design intended to collect a combination of quantitative and qualitative data. Although video feedback did not result in any significant difference in outcomes, the results suggest an improvement in areas like self-efficacy and confidence and increased awareness of the importance of core communication skills. Further research is required to clarify the role of affective skills, e.g. empathetic attunement which should underpin the communication behaviours being measured. With an increased emphasis on the teaching and assessment of communication skills, the outcome of this research has wider implications for social work education in general.

Appendices

Tables:

Graphs:

Content: **Page No.**

Relationships Between Variables continued:

Acknowledgements

I would like to appreciate my family, friends and colleagues for their ongoing patience, support and encouragement throughout the process of carrying out and writing up this research. The support and direction from Hilary Kennedy, Dundee University, over the years of learning about Video Interactive Guidance has been received with thanks. A special mention must be made of Karen Gebbie-Smith for her hard work in rating the video footage and for her ever constant enthusiasm. Finally thanks to Pedro Morago and to Professor Joyce Lishman for supervisory support.

1. Introduction

1.1 The Context for the Examination of the Use of Video Feedback within Communication Skills Programmes in Social Work Education

This thesis examines the application of video feedback in the teaching of communication skills at The Robert Gordon University. The use of video feedback in developing communication skills and associated skills of self-assessment has been experimented with for several years in social work education (Burgess et al., 1999). The video feedback approach of Video Interactive Guidance (VIG) was utilised in the Social Work Methods module for second year students prior to their first period of Practice Learning. Informal feedback from students at RGU involved in the use of video over several years had suggested that their initial anxieties over involvement in video work had been overcome following the resulting growth in confidence and a perceptible improvement in skill level. The researcher carried out a pilot study in 2004 which supported these findings and evidenced significant changes in the skill level of students after the application of video feedback.

For the purpose of teaching communication skills role-play scenarios were used throughout the programme to simulate situations commonly encountered in social work practice. The process and content of this programme will be considered in some detail later. Eleven participants (constituting one seminar group) were observed via video footage and independently rated according to set criteria in the form of 'Contact Principles' derived from VIG. Group discussion and Pre/Post Test questionnaires encouraged participants to reflect on their progress.

Although, as will be evidenced, video feedback has been utilised in the teaching of communication skills across a range of disciplines its usefulness with regard to formative and summative assessments is still under debate. Direct experience of teaching communication skills to Social Work students using video feedback techniques has suggested that although they experience anxiety during the preparation for and initial filming stages that, post programme, they report a positive attitude to participation and highlight increased skill acquisition overall. The quantifying in terms of outcomes of such advancement in skill level has rarely been considered with emphasis usually placed on the qualitative experience of those taking part. With this in mind, the intention of this research is to examine the use of video feedback in developing the communication skills of Social Work students within the classroom setting. This will also help to ensure that teaching practice will be based on the most up-to-date, valid and reliable research findings (Trinder and Reynolds, 2000). This research builds on the premise that "to meet the goals of educational programmes, students must grow and change in their knowledge, skill and attitudes. Furthermore, "to design effective programmes we need to understand how to promote this change" (Culver and Watson, 1996. p1).

1.2 The Framework for Social Work Education

In April 2002 Cathy Jamieson, the (then) Minister for Education and Young People, launched an Action Plan for the Social Services Workforce focussing on the delivery of high-quality services that respond to the needs of individuals, are reliable and based on best practice. A clear emphasis was placed on the need for a well-supported, well-trained and valued workforce who could take on the

challenging and complicated tasks expected of them (Scottish Executive, 2003).

The updated framework for Social Work Education was announced in 2003 resulting in the introduction of a new honours degree in Social Work (2004). From this time an honours degree or an equivalent postgraduate award is necessary in order to become professionally qualified to practice as a social worker. The new degree is based on a set of learning requirements that each programme must meet through its' planning and service delivery. These form the Standards in Social Work Education (SiSWE), (Scottish Social Services Council, 2006). Within this framework social work programmes are required to promote the development of transferable skills and abilities for those in training.

Transferable skills in communication are specifically highlighted throughout the SiSWE Standards along with the need for qualifying Social Workers to possess the ability to communicate clearly and accurately (Scottish Social Services Council, 2006). An emphasis is placed upon the skills development around critical reflection on practice and a professional responsibility is placed upon students to contribute to the ongoing development of skills (Scottish Executive, 2003). Furthermore, "we cannot expect students to become competent professionals unless they learn to be actively involved in constructing and reconstructing notions of good practice as they proceed" (Boud, 1999. p122). It is in order to assist students in communicating in a variety of situations whilst developing the ability to critically reflect on practice that the teaching of skills involves the utilisation of different role play scenarios. These scenarios represent a variety of practice settings (e.g. family home, social work office, hospital etc.) and service-user groups (children,

families, older people, people experiencing poor mental health or issues of disability) so that the student must exercise a range of responsibilities and draw upon all their communication skills in order to participate in the session.

The Report of the 21st Century Social Work Review "Changing Lives" sets out how services should be developed to meet the future needs of Scotland's people and recommends that Social Workers develop new ways of working and take on new roles in order to meet the changing demands of society (Scottish Government, 2006a). The Key Capabilities in Child Care and Child Protection provide learning outcomes and competencies in social work degree programmes developed by the Scottish Institute for Excellence in Social Work and are aligned to SiSWE. Specific reference is made for social workers in training to develop basic communication skills and awareness of particular aspects of communication with children. More specifically, they are required to understand the importance of verbal and non-verbal communication to their practice and to acquire some skills in active listening, recording and summarising information clearly (Scottish Government, 2006b).

The challenge then is to provide opportunities for students to develop skills based on findings from current, reliable research (Trinder and Reynolds, 2000). Such gains in skill and knowledge need to be ongoing and developmental in nature and so educators must reflect on the most effective methods of promoting such change within the programmes they create (Culver and Watson, 1996). It is useful, therefore, for a programme evaluation to be carried out and for the results to be integrated into planning for subsequent student groups either in terms of changing or enforcing strategies already in place (Hartman, 1996). This research seeks to

explore whether video feedback is an effective tool in the improvement of communication skills in Social Workers in training.

The use of video feedback in developing a variety of skills, including those of communication, has been utilised within Social Work Education over a number of years (Burgess et al., 1999). At The Robert Gordon University video feedback is a more recent tool employed in Social Work Education to prepare students for practice.

1.3 Communication and its Relevance in Social Work Practice

Communication skills are a pre-requisite to social work practice. Service Users often approach Social Work Services when in crisis and so there is the need for clarity and sensitivity on the part of the social worker as they establish a pattern of communication (Davies, 1985; Lishman, 1994). It is also the responsibility of the social worker to communicate clearly and accurately in return so that the service-user can understand what their options are and can be supported to make decisions for themselves. By communicating as clearly as possible we improve the likelihood of a positive outcome through any interaction, i.e. we can encourage others to relate to us more effectively through demonstrating desirable behaviours ourselves (Coulshed and Orme, 2006).

The social worker must gain adequate skills to help in managing situations where service users possess limited or alternative skills in communication in a way which does not cause upset or embarrassment to either party. Furthermore, McCluskey (2005) indicated that where people cannot express their concerns the 'caregiver' needs to be "alert to the indicators that accompany failed

care seeking and failed care-giving if they are to provide an effective response" (p239). It is important for the worker to understand that irrespective of the nature of the problem facing an individual or a group, e.g. mental health issues, child abuse or violence, that all crises result in the upheaval of emotions and relationships. Similarly, emotions resulting from previous care-seeking experiences, and the coping mechanisms that were employed, will be brought into the relationship (McCluskey, 2005). Such crises can highlight limitations in functioning or disrupt normal patterns of communication. "Failure to communicate well can have serious consequences" and interrupt the building of positive relationships; hinder the assessment for and provision of services and disrupt the liaison between agencies (The Higher Academy, 2004. p1). Good communication skills, in written, oral and non-verbal forms, therefore, are the basis for best practice in social work.

1.4 Communication Skills and the Social Work Interview

Social Workers spend a considerable amount of time in interview situations. The term 'interview' is simply used to describe "a conversation with a deliberate purpose, a purpose mutually accepted by the participants" (Kadushin and Harkness, 2002. p3). As in any conversation the use of positive verbal and non-verbal behaviour to exchange thoughts and feelings is crucial, however, it is how people act out their roles in society and how they interact with societal structures which gives purpose to the Social Work Interview (Kadushin and Harkness, 2002). The success of the interview depends on the skill of the social worker and so it is crucial that any teaching of communication skills takes into consideration the context of the interview. In order to understand

the expectations placed upon them when practicing in different situations students must be supported in gaining skills to elicit information in order to address the needs of service-users. "Different aspects of effective professional communication (e.g. formality of language, use of gestures or jargon, strategies for negotiation and conflict resolution) should be tailored to the audience" (Higgs et al., 2005. p5). Furthermore, social workers have a duty "to communicate with service users in a way that is not unwittingly threatening, overbearing, discourteous, ambiguous or insensitive" (Koprowska, 2005. p37). In short, communication should be carried out in a humane manner (Higgs et al., 2005). Through the practising of such skills the worker becomes more able to reflect upon their own patterns of communication.

It is important that such information about the interpersonal nature of communication and its place within the social work task is conveyed to and understood by pre-qualifying students rather than merely emphasising the regulatory demands to develop skills placed on them by external bodies. Research into emotional engagement with programmes of behavioural adaptation suggests that change is more likely to be sustained if it is informed by a meaningful experience (Maiteny, 2002).

It is apparent that the professional trainee is expected to achieve competence in performance in both generic and discipline-specific areas through the development of transferable skills. According to Spitzberg and Cupach (1989) competence in communication is about effectiveness in terms of achieving the task whilst behaving in a professionally appropriate manner. It is essential that, in exploring the most beneficial method of teaching communication skills, we encourage students to develop an understanding of what is expected of them within a variety of contexts so that they might

apply the most appropriate skills in any given situation. In deciding what is appropriate to a specific context we must ascertain what the service user seeks from a social worker. Koprowska notes that "interpersonal skills in terms of sharing information, understanding the client's perspective and sensitivity to their feelings evidently influenced client perception (Koprowska, 2005. p25).

Having examined why communication skills are important in social work practice it is necessary to consider how such skills may be evaluated. For example the Social Care Institute for Excellence raised questions in their Practice Review, "Teaching and learning in social work: Communication", as to whether competence should be assessed through observational methods (SCIE, 2004). The question of using observational methods is at the root of the approach of learning within the design of this programme. The starting point, however, must incorporate the realisation that communication skills cannot be learned purely from understanding the literature available and that, like the development of any skill, they must be practised frequently to ensure that they are kept alive. In the skills programme at The Robert Gordon University competence is assessed through observation, although reference to their application in practice skills is expected in the written work which accompanies this Social Work methods module. The complexity around the learning of communication skills arises from the affective and interactive nature of interpersonal interactions. This means that the context is always changing making it as unpredictable as the behaviour of the individuals involved in any interaction.

1.5 The Importance of Developing Reflective Practitioners

Reflective practice involves the "ongoing scrutiny of practice based on identifying the assumptions underlying it" (Fook, 2007. P363). This appears to be essential in any attempt to make professional practice more accountable. It is crucial that within social work training students are given the opportunity to reflect on their practice in terms of both the skills and values demonstrated. Workers have a responsibility to develop an awareness of how they communicate with others and to ascertain whether their interpretation of the messages sent by others through language, non-verbal and symbolic means are accurate (Lishman, 1994). It appears to be helpful that through filming the student the non-verbal interactions which transmit emotional information can be captured and used to cross-check the meaning being conveyed (Bales, 1970). "The language that is used often reveals emotions, as of course do the bodily positions and non-verbal gestures displayed during the interview." (Coulshed and Orme, 2006. p74). It is the interpretation of and reflection upon these cues that allows the social worker to identify ways of helping the service user.

2. Review of Literature

Although numerous texts have been written about or have included sections on communication skills, only one was identified on the specific subject area of video guidance and its use in developing communication skills. Electronic journals and databases provided the researcher with the majority of the background information referred to within this paper. Of particular help were the Web of Science and ASSIANET. Searches on these sites in addition to the MIMAS Zetoc Alert Service utilised by the researcher used the key words "communication skills", "video work", "video guidance", "reflection on practice" and "skills teaching".

It is important when considering how to best support the development of communication skills that the process of how we learn, unlearn and relearn behaviour is taken into account. The video feedback model also depends on such concepts. To help us understand how we learn we will look to the field of psychology and to theories of how we learn.

2.1 Theories of Learning

Theorists such as Piaget (Santrock, 2004) and Vygotsky (1962) were interested in the manner in which we develop the skills to think and learn. Piaget developed a constructivist approach emphasising that children learn better when taking on an active role in their learning and find solutions through discovery, reflection and discussion rather than through blind imitation (Santrock, 2004). Furthermore, he thought that the development of new ideas was the result of the adaptation of existing knowledge. Vygotsky (1986)

agreed that children actively construct their own knowledge but placed additional emphasis on social influences on cognitive development. Through his work on the notion of learning in the zone of proximal development he highlighted differences between what we can learn alone and that which can be learned with the support of those who are more skilled, i.e. the importance of social influences on cognitive development (Santrock, 2004).

As learning and communication refer to actions and responses they are classified as behaviours. Behavioural theories of learning identify four types of learning, those being Respondent (Classical) conditioning, a form of learning by association; Operant conditioning where behaviour is learned as a result of consequences of actions; and Observational learning (social learning theory) or modelling based on notions of learning by imitation (Coulshed and Orme, 2006). The concept of learned behaviour also incorporates the acquisition and expression of interpersonal skills. Social learning is achieved through a combination of outcome and efficacy expectations. Outcome expectations arise from the belief that certain behaviours will result in a specific outcome whereas an efficacy expectation draws on an individual's belief in their own ability to successfully produce necessary behaviours in order to achieve the desired outcome (Bandura, 1977).

Although Bandura's social learning theory has been criticised for its limitations as a result of the complexities inherent in defining an individual's performance expectations without observing the person attempting that behaviour (Hudson and MacDonald, 1986), there are some advantages in its application as it focuses on behavioural performance as observed in the present. Social or observational learning is also referred to as behaviour modelling through which "we can learn new skills or ideas; social skills can be imitated…"

(Bandura, 1977). This involves the individual cognitively representing the behaviours that they witness so that they may then go on to simulate them in their interaction with others i.e. modelling behaviour involves cognitive skills processes such as cognitive display, mental coding, mental rehearsal and aspect of transfer, whereas the rehearsal of skills involves social reinforcement and transfer elements Bandura (1977). This happens because learning takes place within social interaction and as such is developmental in its nature. Rather than look at an aspect of behaviour in isolation it considers the impact of the personal characteristics of the individual within the context of the specific environment, an aspect which is clearly reflected in the design of this skills programme. The teaching programme under study promotes development of the communicative behaviour of students through the delivery of teaching around desirable behaviours followed by opportunities to practice these skills in the context of role play scenarios. It acknowledges that people can learn from modelling themselves on other people and their behaviour and so is dependent upon behaviour modelling techniques.

2.2 Behaviour Modelling as a Teaching Tool

Decker and Mann (1974) present five aspects of behaviour modelling that they suggest contributes to the learning of a specific skill. They are: the viewing of desirable behaviour followed by the adoption of aids for retention; opportunities for the rehearsal of the desired behaviours which are created before social reinforcement is offered; and finally the transfer of skills is encouraged, i.e. the demonstrating of the desired behaviour and the practising of newly learned skills (Decker and Mann, 1974). Such aspects have been helpfully utilised in the design of this programme through the

identification of the relevant skills in relation to the role play for the session; the videoing of the skill as it is practised within the simulated context provided by the role play before reinforcement through feedback and self-reflection and lastly the identification by the participant of areas to focus on in the next role play situation.

2.3 Promoting Skills Development in Professional Training

In order to ascertain whether there had been an improvement in the level of skills demonstrated, Decker (1983) utilised 'trained' staff to analyse and rate the video footage of students after desirable behaviours had been demonstrated, practised in role-play in front of the group and commented upon by peers after the rehearsal was finished. A checklist of desirable behaviours was employed to aid the rating (Decker, 1983). Additionally, when communication skills are being taught he stated that they must also be modelled by the educators involved. Much of Decker's structure and planning of his skills programme has been emulated throughout this research project (Decker, 1983).

In promoting skills development, Culver and Watson (1996) put together a list of characteristics which should be present in order to bring about successful change. This included the identification of a clear goal that suggests change in the form of small, planned steps and includes the development of a support system for the planned changes. Finally rewards for small changes should be offered, i.e. failures should not be criticised (Culver and Watson, 1996). It can be seen then that the skills programme under study complies with such characteristics.

Much communication with service users takes place within the context of an interview and so it is essential that the learning situation provided within the skills programme reflects this.

2.4 A Microanalysis of Communication

In order to develop a shared understanding of the nature of those interpersonal skills required, students firstly need to understand the nature of communication through a microanalysis of its components. In its most basic form, it might be agreed that communication is an interaction between two or more people and is a situation where the giver of information intends to alter the knowledge state of the receiver. As communication is interactive it can be seen that it "always takes place within a relationship" and that it is also "context-related" (Koprowska, 2005. p6). It was George Herbert Mead (1936) the philosopher and social psychologist who suggested that it is mans' ability to symbolise that separates humans from animals. Language is the main contribution to the act of symbolism. When considering our skills of communication it seems that, on the whole, we take them for granted, e.g. they are habitual and we perform them unconsciously. It is probable, then, that we might struggle to identify exactly what we do and why we do it. "The problem arises, they say, because we can only communicate about communication by communicating" (Koprowska, 2005. p7). This demonstrates how complicated it is to identify or extricate one aspect of communication without considering how it impacts on or is impacted upon by another.

In order to micro analyse what happens during the process of communication, Juliet Koprowska (2000) suggests that we separate out skills into 'first-order' and 'second-order skills' (p176). First-

order skills, she explains, are those involved in the direct communication with others while second-order skills are those involved in pre and post communication i.e. in the planning and reflective phases (Davies and Barton, 2000). Communication, using first-order skills, falls into three categories: verbal, non-verbal and symbolic. It is two of the first-order skills categories, the verbal and non-verbal, which have provided a focus throughout this research. While a verbal response transmits information usually through the use of language, non-verbal communication expresses emotions (Argyle, 1990). It should be remembered that non-verbal behaviour can include aspects of speech which does not involve language or utterances, e.g. volume, pauses and space of speech (sometimes known as paralanguage) in addition to its more usual focus on body language, gestures, eye contact etc. As we are required to hear what is being said to us and to answer appropriately so we are expected to understand the emotion being conveyed and respond accordingly. It is an awareness of the importance of attuned verbal and non-verbal responses and the ability to adapt such ability that is at the focus of the development of skills in social work education.

The idea that individuals adapt their interaction in order to develop a shared understanding with others was pursued by Feuerstein, according to Kozulin and Rand (1980), through the concept of mediated learning. The idea is that through the response of an individual the other person is guided to gather, apply and transfer, to other contexts, information which they can use appropriately to solve problems. The demonstration of good communication skills by the educator reinforces such learning through modelling desirable behaviour. The medium of video recording and feedback was chosen as a vehicle to allow students to reflect upon their execution and impact of skills in simulated contexts. The evaluation

and documentation of behavioural change is a key element of individual intervention using video footage (Wels, 2004).

2.5 Video Feedback

Using video feedback involves first taking video footage of participants communicating with each other. The next stage involves the instant or delayed (depending on whether the film is to be edited or not) replay of the video footage. "The process of video review is a powerful and effective teaching tool providing guidance for experiential learning and reflective self-assessment", (Roter et al., 2004. p156). Rosenstein (2002) outlined the use of the camera to capture the 'reality' which is to be evaluated before feeding back to those involved to encourage them to reflect on their performance. This constitutes the final phase of feedback and self-confrontation

It should be noted that it is unlikely that the video footage captured accurately represents the reality of what is actually happening as it is only a snapshot of a particular event at a specific point in time. Its power and influence arises from the image portrayed and the meaning this has for the participant. Rosenstein (2002) emphasises that film footage can record useful emotional information in addition to capturing the communication skills of individuals. Film captures valuable information about emotional and communication issues ….."only film or video can record the realism of time and motion or the psychological reality or varieties of interpersonal relations", (Rosenstein, 2002. p6). Put simply, video footage can determine what the behaviour is and how it is displayed. Additionally Cooper (2004) believes that "streamed video has the potential to provide students with greater access to real life situations related to their

area of study" (p6). Implemented in its traditional form, however, there are significant logistical and methodological issues which limit the use and effectiveness of feedback utilising film footage (Roter et al., 2004). With the need for a clearer methodological approach, Video Interactive Guidance (Video Home Treatment) offers a more structured method of implementation.

Video technology in the form of video feedback appears to have been used most commonly in the training of professionals in skills in the fields of medicine, psychotherapy, education and social work (Rosenstein, 2002). However, even the field of sports sciences has compared video feedback to other methods of tuition in the development of specific skills such as the golf swing (Guadagnoli et al., 2002).

The past 20 years has seen worldwide consensus around the necessity to promote the development and application of communication skills within medical training. Video feedback has been used to develop physical responses e.g. co-ordination and communication skills (Hodges et al., 2003). Furthermore, it has been recognised that within any consultation between doctors and patients that the level of involvement is dictated by the context of their interaction (Rosenstein, 2002). Heath utilised video footage to examine the way in which doctors used body language to engage with their patients (Rosenstein, 2002). In research by Laidlaw et al (2006) video feedback was examined with regard to the impact of communication skills development on patient-doctor relationship and the application of clinical knowledge. Experienced anaesthetists were found to problem solve more quickly and make fewer errors in recording after observing their own practice on video (Byrne et al., 2002). Nurses' skills in verbal communication and in reflection improved after watching video replay of their interviews and reading

educational materials. When asked to evaluate their performance, however, the nurses offered little information with regard to their non-verbal communication focussing, instead, on their listening and counselling skills (Marita et al., 1999).

Roter et al (2004) utilised teaching and feedback techniques with 28 first year paediatric residents for four hours each week over a four week period. Interviews with simulated patients were videoed and pre and post skills teaching comparisons were made. In this piece of research video feedback proved effective in producing significant changes in communications skills in the areas identified for the students. Specific benefits in using such an approach appear to have been brought about through the presence of clearly identified behaviours for change and in the structured feedback provided during this intervention. It should be noted, however, that individual feedback was conducted via an interaction analysis system of software that presented a fully coded interview to the participant and did not therefore depend on a relationship being formed with the educator. The research was not designed, it would appear, to test the impact of feedback alone (Roter et al., 2004).

Rosenstein (2002) highlighted the use of videotapes of family therapy sessions to help the development of skills in the training of therapists. She stated that "the micro-video analysis system, if used in its entirety, can probably improve verbal and non-verbal communication skills in virtually any group of students or trainees" (Rosenstein, 2002. p52).

In Germany teacher training courses have introduced self-training techniques to improve presentation skills within the classroom setting through the use of video feedback. Kern (1978) discovered that non-verbal communication was used more frequently and to a

greater effect by the most promising trainees. However through using video feedback less talented teachers were able to recognise the difference between their own practice and that of others which subsequently led to positive changes in behaviour. Another training course utilised role play in combination with video feedback throughout twenty hours of teaching for two small groups containing four trainees each. In making comparison between these groups and the control group, changes were observed in communication skills but not in the didactic skills demonstrated by participants (Cedar and Levant, 1991).

Research into the use of video feedback with young people who experience autism reported improvements in targeted skills as a direct result of visual reinforcement (Thiemann and Goldstein, 2001). Improvements were also observed in both the social behaviour of young people with learning difficulties and in the performance of the care staff when video feedback was used to support self-management techniques in a residential facility in the Netherlands (Embregts, 2003).

Furthermore, Decker and Mann (1984) suggest that video feedback, as part of programmes based on behaviour modelling, brings about a greater level of skills development when compared to feedback given only by an educator. It might be expected then that students who are in situations where video feedback is utilised by educators will demonstrate desired behaviours more accurately compared with those who only experience feedback from the trainer. Information taken from three other studies (Forsyth, 2005; Thomson et al., 2005; Forsyth and Thurston, 2005) suggests that students using Video Interactive Guidance rate the development of their skills more highly and are seen to be more skilled by both their peers and supervisor than those students who are not taught using video

feedback. Students and mentors in this latter group appear to over-estimate their communication skills and generally appear to be lacking in awareness with regard to the nature of their skills. Perhaps just as importantly, some of the students exposed to video feedback commented on an awareness of how learning in one context can generalise to other settings (Forsyth, 2005; Thomson et al., 2005; Forsyth and Thurston, 2005).

While a number of studies have demonstrated the efficacy of video feedback research carried out by Backstein et al. (2004) suggested that after using video feedback there was no real improvement in the level of skills demonstrated in the teaching of surgical residents in the specific area of orthopaedic skills training. Although it was suggested that the use of video feedback alone was inadequate in producing change, the researchers proposed that repeated opportunities to view performance would have been more likely to bring about an improvement in surgical proficiency (Backstein et al., 2004).

2.6 The History of Video Interactive Guidance / Video Home Treatment

The approach of VIG/VHT was heavily influenced by the work of Trevarthen (1979) who studied interactions between mothers and their babies by capturing them on film. Trevarthen developed the concept of Intersubjectivity to explain the ability to respond in an attuned manner to the initiatives made by others (Trevarthen, 1979). In order to utilise such a skill one first has to acquire individual consciousness and in so doing develop an awareness of being separate from other people. This coupled with the desire and intention to communicate albeit initially through a significant other,

namely the caregiver, is known as intersubjectivity. This notion was supported by the work of Hundeide (1991) who suggested that we begin to learn the rules of engagement at an early age as emotionally expressive dialogue develops from birth and underpins communication between individuals during all stages of their development. It is assumed that communication skills act as the foundations upon which other skills can be built. It is the idea that the participant can be worked with from whatever baseline of skill they display, i.e. that it is an individualised method of learning, which makes it an attractive tool for use in the programme (Kadushin, 2002). Individual plans are formed through agreement with the subject over communication skills that can be utilised to solve problems in other areas of life.

Video Interactive Guidance originated in the Netherlands as an intensive form of treatment carried out within the home setting and was implemented as an alternative to the accommodation by the state of children experiencing severe social development problems (Kreuzer and Rader, 1999). VIG involves the application of video feedback techniques of selecting positive examples of interaction to play back to the recipient while supporting them to carry out an analysis of positive basic communication skills. An assumption is made that good communication skills are crucial to the development of all other skills. Those being recorded can influence the significance of the recorded scenes by deciding to or being encouraged to behave in a socially desirable manner. The validity of the scenes being recorded must then be checked out with the individual with regard to how representative it is of 'normal' behaviour patterns (Wels, 2004). In using the approach of VIG positive reinforcement is preferred with negative comments acknowledged and re-framed as working points for the individual.

A number of studies have indicated that rehearsal and feedback using the medium of video impacted positively on the acquisition of interpersonal communication skills. Mills and Pace, 1989 found that practice and feedback each seemed to influence different aspects of learning. Whilst practice appeared to heighten the potential to acquire information about what to do feedback seemed to increase performance scores. It was suggested that the combination of both practice and video feedback, over time, produced the greatest effect on long term performance scores (Mills and Pace, 1989). Other research into the impact of the application of Video Interactive Guidance documents significant increases in the occurrence of general skills in the form of attuned responses or specific skills such as turn taking and a decrease in discordant responses (Simpson et al., 1995).

2.7 The Contact Principles

Trevarthen's analysis of mother and baby interactions provided Biemans (Kreuzer and Rader, 1999) with a list of desirable behaviours necessary to ensure that effective communication takes place between adult and child. These behaviours were named the Contact Principles, one of the characteristic features which define Video Interactive Guidance. The Contact Principles provide a hierarchical representation of the desired behaviours beginning with **being attentive** and moving on through **positive body language** and **verbal communication**, **eye contact**, **taking turns**, and **attuned guiding and leading** (see Appendix 1, p.139). The idea is that attentiveness provides the building block for subsequent communication through body language and verbal skills which then support turn-taking and so on through the list of behaviours.

Attentiveness in its most basic form is about demonstrating through body language that we are listening and understanding what is being said. According to Egan (1986), attending to others is also conveyed through the expression of our values and attitudes. **Positive body language** can also emphasise attentiveness through the use of open posture, inclination or nodding of the head and smiling where appropriate etc. Non-verbal communication is used to support verbal messages, "they tell us something about the validity of the message, its urgency, whether it is being sent humorously, seriously, sarcastically", i.e. the process by which we communicate (Kadushin, 2002. p269). Non-verbal behaviour is best interpreted within the context offered by **Verbal Communication.** This includes the repeating, paraphrasing or summarising of what has been said, acknowledging receipt by saying 'yes' or 'mm', leaving the speaker in no doubt that they are being listened to. Sustained **eye contact** lets the speaker know that the receiver is interested in what they think and how they feel (Lishman, 1994). Failure to meet the speaker's eye might convey discomfort or uncertainty while prolonged eye contact might be seen as aggressive or intrusive. **Turn taking** or the giving of turns suggests a desire to involve the other person and to work in partnership with them. **Attuned guiding and leading** which is sometimes referred to as scaffolding or mediated learning (Kozulin and Rand, 2000), describes the way in which we facilitate and direct the gathering, transfer and application of knowledge to new situations. This is a helpful skill in that the speaker can be supported to identify appropriate resolutions for their own issues.

It is this definitive list of desirable behaviours (the Contact Principles) that are given to the students and later used to analyse and rate the video footage in preparation for feedback.

3. Methodology

3.1 Rationale and Aims of the Research

The aim of this research is to carry out a programme evaluation in order to ascertain whether the use of video feedback is potentially effective in developing the communication skills of social workers in training. "To meet the goals of our educational programmes, students must grow and change in their knowledge, skills and attitudes. To design effective programs we need to understand how to promote this change" (Culver and Watson, 1996. p1). Studies of performance in interview situations, recorded on video, have generally brought about improvements in the demonstration of communication skills and, or, improved the interview skills of professionals (Roter et al., 2004).

Despite such evidence it would seem that few training programmes have utilised video feedback. This is possibly due to cost implications around training and preparation. In addition the issue of spending more time on taped interaction at the start of the session before running out of time to view the later activity appears to be a common frustration. Finding the appropriate clip can also be time consuming within feedback (Roter et al., 2004). The positive aspect of using video replay is the way in which it allows a microanalysis of human interaction to be carried out (Bales, 1970). This means that the student can identify and understand behaviours which might contain too much information to be remembered and understood by being processed purely through memory.

Both student and educator can watch the film repeatedly to ensure analysis of all videoed interaction. For the purpose of analysis the

film footage can be viewed repeatedly if necessary by many people and at different times.

3.2 Research Question

In order that an evaluation on the effectiveness of video feedback on the development of communication skills within social work education might be carried out, the following research question will be explored:

The communication skills of social work students can be developed through the use of video feedback

This research question indicates a relationship between video feedback and skills development. Furthermore it "states that there is a relationship between variables" and it implies that an improvement is anticipated as a result of that relationship (Mark, 1996. p24).

3.3 Research Design

The attempt of the researcher to identify an association, a constant relationship between video feedback and skills development, through observation and measurement of outcomes might suggest that an experimental design would be adopted. However, only a limited number of factors could be excluded from this research situation in an attempt to control the environment and in order to carry out the research on an existing programme of teaching it was not possible to utilise a control group. Any alteration to the

programme in order to facilitate the research would be likely to invalidate the results of the evaluation.

In ascertaining the most appropriate methodological approach to employ it appeared that no one method would meet the requirements of this research. A quantitative approach utilising a pre-coded system is informative in measuring behaviours and can be improved over time to ensure accurate representation of the phenomena. As an aid to perception it allows the researcher "to identify phenomena that might not be immediately obvious to the untrained observer" (Bull, 2002. p20). Not only can it be used to aid identification of complex behaviours but through classification and labelling of behaviour a coding system will provide a common language with which to describe them.

The ease of quantifying such developments suggests that a quantitative approach should usefully be adopted (Denscombe, 2005). The advantage of utilising a quantitative approach in this research is that it allows for the researcher to reduce observed behaviour to rates of occurrence so that the changes in frequency of behaviour throughout the programme can be easily recorded (Bull, 2002).

Although the quantification of frequency of behaviour is the main focus in this research for examining the development of interpersonal communication, some exploration of the individual's experience would be useful in order to provide context to the data gathered. A qualitative approach through the self-categorisation of skill level would offer an understanding of how the participant feels about the prospect of video work and to what they attribute any change to, thereby enhancing the interpretation and understanding of any skill development which occurs. Integrating both a

quantitative and a qualitative approach allows triangulation whereby a more robust interpretation of the data allows for a level of exploration between macro and micro levels of analysis (Robson, 2002).

There is evidence that characteristics of action research are present. For example, the intention is for this research to be of practical use in the future planning of skills training. Furthermore participants are involved as practitioners with regard to identifying areas of practice which require further attention (Burgess et al., 1999). The process is cyclical in nature as the results will be fed directly back into the teaching process which should be considered as important as the integration of findings directly back into practice (Denscombe, 2005).

3.3.1 One Group Pre-test/Post-test Single Group Design

The design of this research has taken the form of a one group pre-test/post-test single group design. This design is sometimes criticised for failing "to rule out most of the threats to internal and external validity" (Mark, 1996. p148). However, it is hoped that by measuring the frequency that a student demonstrates desirable behaviours over four videos and making a comparison with the levels of change demonstrated by the other elements in the sample group, that a level of validity might be achieved. The researcher acknowledges that a pre-test/post-test comparison of eleven participants results in a relatively small amount of data. The context for the sample size will be considered in more detail shortly.

Through analysing pre-test and post-test questionnaires the researcher intends to balance the analysis of behaviour with

consideration of contextual information such as the opinions and attitudes of the participants.

3.3.2 Use of Pre-Test and Post-Test Questionnaires

Prior to the beginning of filming the sequence of the skills classes and the process of videoing and feedback was explained to all participants. Students were asked to complete a simple **pre-test questionnaire** (see p.140) allowing them to explain their attitudes towards the forthcoming video work.

The questionnaire consisted of only three questions with space left after the four possible answers for the participant to make additional comments. Questions and the list of pre-coded responses (PRs) were kept as short as possible (Denscombe, 2003):

1. How do you feel with regard to the proposed use of video?

PRs: 'Very Anxious', 'Anxious', 'Comfortable' or 'Happy'.

2. What aspect of the video work do you anticipate will be most useful to you?

PRs: 'Skills Development', 'Reflection', 'Building Confidence' or 'All of the above'.

3. What aspect of the video work do you anticipate will be lease useful to you?

PRs: 'Viewing Self', 'Peer Feedback', 'Role-Play' or 'All of the above'.

The purpose of the pre-test questionnaire was to allow the researcher to consider any relationship between progress made during the filming sessions and the attitude towards such methods on the part of any individual.

The short **Post-test questionnaire** (see p.142) consisted of seven questions relating to the participants belief of any perceived change in their skills base. In each case students could respond that they believed that their skills had 'Deteriorated', 'Remained the same', 'Improved a little' or 'Improved a lot'. Additional comments could be made:

1. Has your ability to demonstrate that you are listening.....
2. Has your ability to demonstrate open and relaxed body language.....
3. Has your ability to demonstrate appropriate eye contact.....
4. Has your ability to demonstrate appropriate verbal skills (e.g. saying yes, paraphrasing, naming etc.).....
5. Has your ability to demonstrate turn taking.....
6. Has your ability to demonstrate attuned guiding (e.g. use of distraction, making suggestions etc.).....

Question 7 asked participants whether they believed that the use of video feedback had impacted upon their skills.

Most responses could be easily organised ready for analysis as they were gained from identical formats (Denscombe, 2005). The additional comments will be presented according to any themes that occurred.

3.4 Data Collection

3.4.1 Preparation and Process

When teaching communication and interviewing skills the training of those who run the classes needs to be considered. Vassilas and Ho

(2000) suggest that "tutors themselves should consider undertaking a course on how to teach communication skills or how to run video feedback sessions" (p305). Prior to the skills classes at RGU beginning the teaching team were introduced to the principles of video feedback according to the process of Video Interactive Guidance by the module co-ordinator (the researcher) who is a qualified practitioner and supervisor in VIG.

There is some suggestion from skills training for health professionals that the most useful process consists of three key phases in the form of preparation, training and evaluation (Dickson et al., 1997). Skills acquisition supported with video feedback appears to be most effective where the component behaviours are made explicit prior to commencement (Gask et al., 1998). Before filming began each student was given the check list of desirable behaviours, in the form of the Contact Principles, that they were to be rated on. This ensured that the assessment criterion was clear to all participants (Burgess, 1999).

In order to reduce the level of anxiety caused by the prospect of seeing oneself on video in front of a group of peers, and allow constructive discussion, specific guidelines were referred to. These guidelines, known as Pendleton's rules (Pendleton et al., 1984), were applied throughout the preparation, filming and feedback phases in order to "offer a safe environment in which learners are able to assess their own performance freely…" (p306). The initial stage requires that the educator should "clarify matters of fact briefly" (Pendleton et al., 1984). The use of communication skills were discussed with the whole group prior to filming and in relation to the specific case scenario to be role played in an attempt to sensitize them through developing knowledge of the skills to be practised. For ten minutes prior to filming students were

encouraged to share ideas and to support and encourage each other in readiness for 'practice' drawing on the skills and areas for further improvement as identified by the group during the previous feedback. The group context within education "is important for effective learning but also to ensure positive outcomes since practice habitually involves collaborative problem solving" with service-users, other professionals and agencies (Baldwin, 2000. p453).

The students worked in the same pair or threesome each week, taking it in turn to role-play the social worker, in an attempt to allay any anxiety through providing consistency within the partnership. Working in the same groups was also thought to eliminate the possibility of the combination of different individuals creating an alternative impact on the development of skills and resulting in the introduction of an additional variable into the research.

The role-play took place in front of the rest of the group and the filming was carried out by the educator. Each group set the physical scene according to the setting of the role-play.

3.4.2 Filming

It has been suggested that people are conscious of being filmed for about twenty minutes (Rosenstein, 2002). However, due to time constraints of the programme it was not possible to allow this length of time prior to being filmed although participants were given several minutes to settle into the role play. Each film taken was of three minutes in length although each role-play continued for between five and eight minutes. The first two minutes of the role-play was not recorded allowing the participant some time to relax

and engage with the task. The role-play continued for three minutes post filming.

Participants were given a context in which to operate through the use of role-play scenarios, a technique familiar to social workers in training. The role play is carried out with peers taking on the role of service-users and utilising background information supplied in an attempt to emulate real practice situations. The 'simulated' service-users are coached at the beginning of each session to present the social problems outlined within each role-play situation but are not trained to behave in any standardised way. They are encouraged to respond in role to the 'behaviour' of the social worker.

The skills work followed a ten week programme whereby the nature of each role-play was dictated by the content of the preceding lecture. Each week students were presented with scenarios that might arise in the course of social work case management for a final placement/newly qualified worker. The first week was spent orienting the students to the skills programme and the use of video feedback. During the next week, participants were required to carry out an assessment on a case scenario (see Appendix 4, p.145). In week 3 students were introduced to a different family for the purpose of carrying out a Community Care assessment (see p.146). During weeks four through to ten participants were given ongoing updates on the same case scenario (see pages 147-154) and were required to use Crisis Intervention/Task-Centred approaches (week 4); Behavioural approaches (week 5); Reflect on ongoing work with the family in supervision (week 6); carry out Family Work (week 7); Key-work one of the family members (week 8); utilise Life-space and Opportunity-led approaches (week 9); and manage challenging behaviour (week 10). No individual task was considered to be more complex than any other and information

given in weeks 4-10 was minimal. However, students were expected to remember background information from the previous week.

3.4.3 Feeding Back

After each videoing session, the researcher played the film back to the participants, stopping approximately every 20 seconds to ask which of the desirable behaviours had been observed. In order to promote discussion with the student around the objectives that they have set for themselves the researcher referred to aspects of a problem based approach developed from Pendleton's rules by Kurtz et al (1998) with the purpose of motivating adults to learn. This analysis identified a process that should begin with an agenda as defined by the student, i.e. the student is encouraged to say "what he or she thinks has been done well" (Vassilas et al., 2000. p306). This integrates well with the feedback technique, derived from the recognised approach of Video Interactive Guidance which offers the first opportunity for comment to the participant who is the focus of the film footage in order to "encourage self-assessment and self-problem-solving" (Vassilas et al., 2000. p306). The second turn is offered to the group to engage them in problem-solving by encouraging them to identify what they think has been done well (Pendleton, 1984). This stage of this process is based on the understanding that "the interview is a valuable tool for the *whole* group" (Vassilas et al., 2000. p306). Finally, the third turn is taken by the tutor with an emphasis placed on positive feedback. The focus is on the outcomes identified as the object of the interview (Vassilas et al., 2000). Feedback is descriptive offering specific statements such as *'you are tilting and nodding yo*ur *head to*

demonstrate that you were listening and understanding what the service-user was saying to you'.

The educator also considers 'living examples as they occur "which addresses the performative dimension of communicative competence" (Dickson et al., 1997. p23). Living examples arise from a situation where the educator can draw attention to the fact that the specified skill is being demonstrated in real time, in the here and now. For example the educator might see the student making good eye contact on the video footage and, when they identify this behaviour or when the guider draws their attention to it they make a comment such as *'yes you are making good eye contact in this film, just like you are doing with me now'*.

The showing of video clips taken in 'real time' appeared to further the professional development of trainee teachers by allowing them to share ideas and experiences and so enhance their abilities to reflect on practice (Sharpe et al., 2003). It is intended that the immediacy of the feedback encourages greater clarity from students with regard to the skills which they have demonstrated and helps allay anxieties whilst reinforcing learning.

When shortcomings are identified ideas for improvement are highlighted through the provision of balanced feedback by identifying aspects of the interview that appeared to work and those that might be done differently. If the participant highlights a poor or limited expression of skills their opinion is recognised and a working point established. Alternative suggestions can be made and practiced during the next role-play (Vassilas et al., 2000).

At the end of each viewing participants are praised again for their progress and asked to identify an area of skill that had been

improved and an aspect which required further development for future sessions. In feedback, films may be watched repeatedly as behaviours are identified and discussed. The key is for the educator and the group to remain supportive. The educator ends the feedback session by structuring and summarising what has been learned to ensure that areas for improvement are not the only focus (Vassilas et al., 2000).

3.4.4 The Role of the Observer

Rosenstein (2002) discussed the work of Albrecht which suggested, from a sociological perspective, that the watching and recording of people is just as important as collecting their perceptions and interpretations while Erickson (1979) recommended that such observations should be carried out over time. The advantage of utilising systematic observation in order to gather data is that it is likely to be efficient; direct, reliable and rigorous in that it gathers information about what people do rather than what they say they do and it collects the data when they are doing it (Denscombe, 2005).

A key feature of this research is around participant observation in that the researcher becomes part of the group and performs a key task in the form of the application of the video feedback technique. It could be said that the observer becomes the research instrument in that "objectivity can be approached through a heightened sensitivity to the problem of subjectivity and the need for justification of one's claims" (Robson, 2002. p314). This is a helpful procedure where the group is small and where frequent but repetitive activities are the focus. As a member of the group under study the researcher can watch and listen rather than depend on

the reported attitudes or feelings of participants as the group is aware of the purpose of the researcher's presence. The presence of the Researcher also serves to eliminate the differences between what people self-report and what they actually do.

3.4.5 The Researcher as Observer

It is generally recognised that researcher bias should be guarded against through avoidance of emotional involvement with participants. This is much more problematic in the evaluation of this skills programme as its very nature necessitates involvement of the researcher over a period of weeks. The personal aspects of video feedback are determined by the manner in which the medium is applied and so it is the total performance of this 'guider' during the filming, editing and feedback stages which contributes to the end result (Wels, 1998). Dowrick and Biggs (1983) identified the power of the cameraman recognising that as the relationship between the subject and the cameraman develops, the significance and type of scene can change considerably. It is obvious, then that in this case the researcher cannot remain detached from the filming stages of this research. In order to help guard against the possibility of further bias as a result of their own involvement in observing practice, the researcher employed a rater to interpret and score the films. The rater had been previously trained in the application and analysis of the contact principles and was qualified in VIG/VHT as both a trainer and supervisor, had no prior knowledge of the students and no personal interest in the programme under evaluation.

In its most basic form this programme of skills training can be described as a process which involves "telling them what to do,

having them do it and telling them how well they did it" (Dickson et al., 1997. p23). This is supported through the examination of a paper written by Decker (1979) in which he reflects upon helpful areas of skill training: Firstly, that the task should be explained to the participant; that key points should be explained; that the task should be broken down into parts and the participant be helped to perform aspects of the skill; that the participant should be assisted in performing the whole task and finally, that praise should be given for doing the task correctly. It would appear, therefore, that the format for the design for skills programme has been tested successfully by others albeit in different practice settings as indicated in the review of literature.

3.5 Sample

3.5.1 Sampling Process

The sample taken from this total population was small in that it consisted of only eleven students making up one seminar group. Students from just one group were selected in an attempt to ensure that there was consistency in approach as a result of input from the same educator throughout. The sample was randomly selected by virtue of the students being chosen by an administrator to be in specific seminar groups for a range of subjects. As a result of the size and the nature of the pre-determined seminar groupings the selection process was more akin to a non-probability sampling technique, although, in this case, the size and the composition of the group could be predicted from the outset. While such a small group can not be representative of students in general it may be viewed as typical of an RGU student group. In addition, there would be no expectation, as a result of the interview process and academic entry requirements that are a pre-requisite of beginning

the course, that real extremes in performance would be found i.e. students in possession of either excellent or very poor skills, (Denscombe, 2005)

3.5.2 Sample Size

The population, with regard to this research, was the total number of students at this stage in the course undertaking video work within the skills module which totalled 51 students. Only one male student was represented in the group but this was in keeping with the ratio of only 5 men in the total population of 51 students undertaking the skills module. The researcher and rater are both female. Ten out of eleven participants are white Scottish as is the rater. The researcher is white and Welsh by ethnic origin. It would be both interesting and important to consider any relationship between gender, ethnicity and deportment with regard to communication skills and such issues would usually be considered during the analysis of video footage. However, the composition of this sample would prevent us from generalising findings producing an external validity problem and so these areas will not be examined (Robson, 2002).

The seminar group also provided a balance of mature and experienced students and was therefore in keeping with the process of the "principle of randomization" which occurs naturally as a result of the equal chances of each individual of being selected (Mark, 1996. p107).

3.6 Process of Analysing the Data

After the final session the video footage was viewed by the rater. As the researcher was actively involved in the observation it was

important to devise a method of collecting information in a manner which was both full and unambiguous, **"**Whatever procedure for collecting data is selected, it should always be examined critically to assess to what extent it is likely to be reliable and valid" (Bell, 1999. p103). The video footage ensured that a record was made of events as they occurred and that the account was as full as the observation itself (Robson, 2002).

The rater was provided with a DVD of footage representing the involvement of participants in **each of the three, four or five skills classes that they participated in.** The rater was not aware of whether the video clips were presented to them in the correct sequence, i.e. chronological order, or not. Each student was identified to the Rater only by their initials.

Sophisticated recording equipment is now available for the analysis of communication behaviours. Computer programmes such as THEME can "perform statistical analyses to identify sequential relationships between different behavioural categories or combinations of categories" (Bull, 2002. p25). However, even such sophisticated programmes rely on transcribing and decoding provided by human observers. A new breed of fully automated systems involving the tracking of movement by attaching 'data gloves' to participants are being developed currently. As the researcher is not trained in the application of these packages and such software is not readily accessible at the University such scientific methods of data analysis were not adopted. Instead films were analysed separately, by an independent rater, according to the Contact Principles.

The whole film was analysed as the researcher did not believe that time sampling would provide a representative picture of events

because of the limited length of the video footage in the first instance. The first film was used to establish a skills base line for each participant from which any developments could be measured. Prior experience in the field of social work or a greater breadth of knowledge effects the level of skill evident in the base line video but thereafter was not considered directly as it is the level of change evident between the first and last films that allow us to determine how successful the programme has been. Each film is watched several times by the rater in order to allow them to assess for more than one skill being demonstrated at the same time, e.g. eye contact and attending behaviour. The rater employed an event coding system to record the frequency of the occurrence of desirable behaviours. The data was recorded on a table where the desirable behaviours are listed along the top row and the time in five second intervals down the left hand side column (see Appendix 5, p.155). A new sheet is used to record data for each session where video footage was taken.

The criteria for agreeing a measurement of each of the contact principles were agreed with the rater as follows:

(a) Being attentive

this is the manner in which one conveys that they are alert to what is being said and felt by the other. This is largely evidenced through listening and responding appropriately and is value based (as previously discussed). In essence the rater looks for the participant to demonstrate "..a regard for the importance of what the client is saying along with a willingness to interact and respond to it" (McCluskey, 2005. Page 105).

(b) 'Yes body'

Here the focus is on the demonstration of characteristic postures of interest and support conveyed through body immediacy and proxemics e.g. facing the recipient, leaning forward/legs uncrossed, arms uncrossed etc. Emphasis is placed on the congruent nature of the posture which is distinguished by participants' mirror-imaging of the recipient (Trout & Rosenfeld, 1980).

(c) 'Yes verbal'

Positive verbal communication is evidenced when the participant encourages the recipient's involvement through short verbal prompts e.g. 'aha' 'mm' to indicate there is reception. Additionally when the use of language which seeks agreement (in this case, as to what has been viewed on the video footage) and avoids disagreement is demonstrated and when verbal strategies which assert common ground are utilised e.g. 'as you said', 'as you know' (Bull, 2002).

(d) Eye contact

Despite it being the availability for communication rather than the intimacy of the communication that is under consideration, only eye-contact of three seconds or longer is measured given that brief glances can be interpreted as hostile/aggressive (Siegman and Feldstein, 1985) or flirtatious and would, therefore, be recorded as a 'Discordant' response.

(e) Turn taking

"A speaking turn is defined as the uninterrupted talk of one person; it can range from a single word to a lengthy monologue" (Bull, 2002. p55). It is accepted that turn taking has occurred when an initiative has been made, received and a subsequent turn is taken by the recipient.

(f) Attuned guiding

'Attuned guiding' is recording when the interviewer supports the recipient by making appropriate suggestions/offering choices or by changing the subject.

(g) Rest

A 'Rest' is recorded where the interviewer purposefully allows the recipient time to think or to respond (verbally or non-verbally). The rater allows a maximum of 30 seconds of resting. If the interviewer had not supported the recipient using any of the skills noted above after 30 seconds then the response is considered 'Discordant'. The 30 second bar signifies a notional point, without the introduction of other supporting skills, whereby the recipient might begin to feel uncomfortable.

(h) Discordant Response

When the response of the interviewer is NOT concordant with the verbal or non-verbal behaviour of the recipient or when the interviewer becomes disengaged a 'Discordant' response is recorded.

The three minute video tape of interaction between the participant and the simulated service user is analysed in five second blocks. Each time the rater observes the demonstration of one of the above skills within each period they mark it down on the form supplied. When the rater fails to observe any of these skills they then decide whether they are observing a period of rest or a discordant response, i.e. that the participant is responding negatively through a failure to attend, make contact or give positive verbal and non-verbal messages etc. The decision as to whether a discordant

response has occurred is defined by the context in which the behaviour was demonstrated, i.e. it would clearly be inappropriate if the student smiled when the simulated service-user showed distress. In trying to distinguish patterns of interaction more fully, the rater examines the expression of the recipient in the knowledge that "careseekers read our faces and respond to what they see there" the importance of this being that "reading faces is where emotional arousal and the need for emotional regulation begins" (McCluskey, 2005. p249). The predictability of responses from participant to recipient are considered, therefore, to determine whether a pattern of interaction is present (McCluskey, 2005).

To offer structure to the interpretation of behavioural sequences for analysis, aspects of the outline for "The Calgary-Cambridge Observation Guide" were considered (Vassilas et al., 2000). For example, part one of the guide which draws on primary interview skills in the form of how the interview begins (i.e. greetings, introduction and agenda setting); the manner in which information is gathered (i.e. style of questioning, giving turns and receiving initiatives, listening, checking-out); the way in which a relationship is built (i.e. non-verbal behaviour, conveying empathy); and the manner in which explanation, future planning and termination of the interview is carried out (Vassilas et al., 2000). The aspect of the guide which most clearly applied to the stage of the interview in which filming had taken place was utilised.

For each of the three minute videos the rater adds up the final scores for each of the skills examined to provide information on the total number of initiatives demonstrated during that film which can be compared to previous or later film footage.

3.7 Statistical Analysis of the Data

The data collected is nominal in that it has been counted and categorised under the headings provided by the contact principles. The design has two conditions: pre-test and post-test. The research analysis is carried out on information gained from one group only and is parametric in nature as there are several values or levels associated with the independent variable (the use of video feedback). It was, therefore, appropriate to apply the paired t-test (Robson, 2002). The t-test is a parametric test and therefore makes some assumptions about the nature of population distribution and parameters. Given that the samples are related it is the paired t-test that was utilised, (Kinnear and Gray, 2004).

To guard against any possibility that the data might be non-parametric, however, a statistical analysis utilising the Wilcoxon signed-rank test was also undertaken (Robson, 2002). In utilising the Wilcoxon test, a non-parametric equivalent of the t-test, each participant's score prior to the use of video feedback was paired with the same person's score after the use of video feedback, i.e. related samples were used. It makes the assumption that the two scores are taken from samples with roughly the same distribution shape even though this does not assume necessarily that the population is 'normal' or that there is homogeneity of variance (Kinnear and Gray, 2004). A set of difference scores was obtained by consistently subtracting the post Video Feedback scores in each pair from the pre-Video Feedback score.

These statistical tests were carried out in order to identify any existing relationships between variables (Denscombe, 2005. p251). As the sample size is small the researcher will, for the most part,

avoid the use of percentages in reporting the findings in an attempt not to mislead the reader. By measuring the desirable behaviours demonstrated in the first and final sessions we were able to determine whether the intervention of video feedback had been successful. Making reference to the null hypothesis we will presume, unless the statistical analysis informs us otherwise, that there is no real difference between the two scores (Denscombe, 2005). In order to ascertain whether there were differences, to a significant level, between the scores obtained at pre-test and post-test stages, the paired two-group *t*-test was also administered. This test should be particularly helpful in analysing data such as this, gained from a small sample size.

As data was analysed using SPSS we first needed to establish significance. The usual format for testing this is $P \leq 0.05$. The 'P' value tests whether the null hypothesis, the assumption of 'no difference', is true (Robson, 2002. p401). So, the test for significance tells us how likely it would be that we would find the difference (or greater) due to chance variations.

3.8 Ethical Issues

Participants were informed that the researcher was requesting permission to collect video feedback data to assess the level of change in utilising such an approach in the development of communication skills. In order to respect both the rights and dignity of participants, only the video work of those who gave permission would be used although all students would be taught using the video feedback intervention as part of the skills teaching programme (Denscombe, 2005). Any student not wishing to participate could withdraw from the study at any time but would

continue to receive the same teaching input (Mark, 1996). Each participant's video work was rated independently and after the rating of data was complete, students received information pertaining to their own performance. The provision of information specific to the performance of the individual is in accordance with the Data Protection Act 1998 sections 7(1)(a), 7(1)(b) and 7(1)(c)(i). Total anonymity could not be promised as it was necessary for the researcher to match up the questionnaire responses and the video data for each participant and for the video footage to be supplied to the Rater. Confidentiality could, however, be guaranteed in that participants would not be identified by name and that individual data would not be shared. Furthermore in the writing up of this research, participants are identified only by a number (Mark, 1996).

By using role-play between participants within the classroom setting, ethical issues which might arise as a result of inexperienced trainees working with service-users to further their skills development, are overcome (Dickson et al., 1997).

4. Results

After briefly considering the methodological issues relating to the data collected, the results will be presented in summary with reference to the quantitative pre-test post-test scores of each participant's display of desirable behaviours and, in detail, through graphs of the outcomes of all video work undertaken. The inclusion of scores from all sessions should prove useful in terms of an analysis of the developmental nature of the intervention. Reference to the attitudes of participants will be made through consideration of the questionnaires completed prior to and after video feedback. The descriptive statistics will be examined before attempting to move beyond 'individual interpretations' towards a more 'universal criteria' by subjecting the data to parametric and non-parametric tests (Robson, 2002).

4.1.1 Quantitative Results

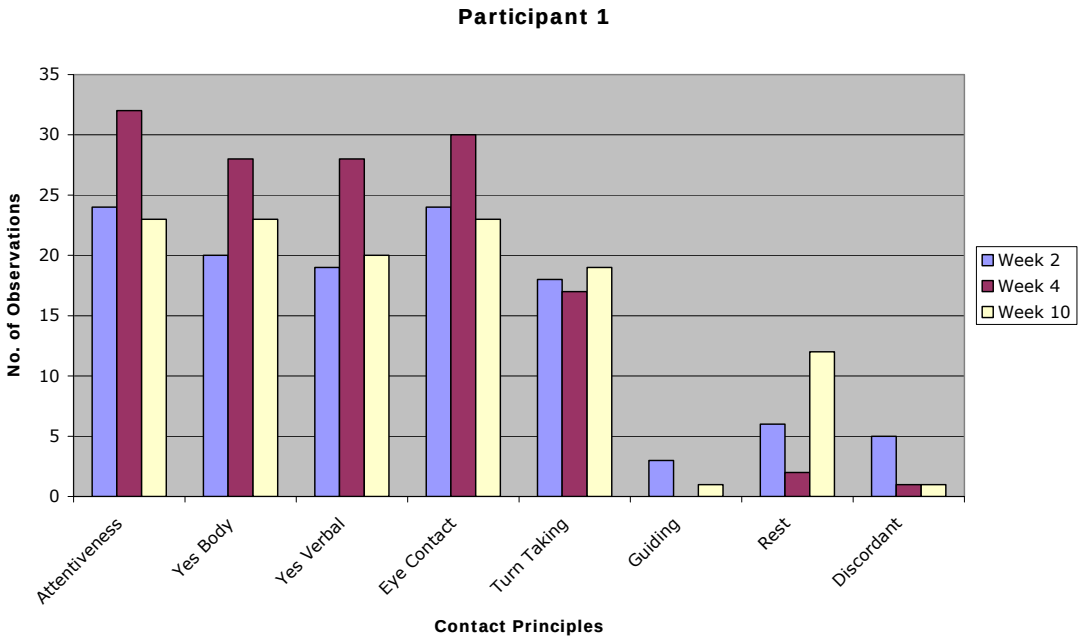
Data triangulation is provided by the employment of a mixed method approach, utilising quantitative and qualitative approaches, despite the ongoing debate as to the incompatibility of such application (Tashakkori and Teddlie, 1998). The view of adopting a more pragmatic approach of utilising "whatever philosophical or methodological approach works best for a particular research problem issue" has been adopted here given the broader theoretical base underpinning this study (Robson, 2002. p43). "Quantitative methods assume that there is a single objective reality" (Mark, 1996. p61). As such, control and measurement has been emphasised throughout the period of testing. Thus any independent researcher using video feedback and VIG should reach

the same conclusion. To this end, the use of the list of contact principles is helpful in not only identifying desirable behaviours, but in supplying clear measurements for data collection. In contrast qualitative methods of research assume that no single reality exists. In an attempt to understand the 'felt' experience of participants being subjected to VIG techniques the researcher has looked for opinions at the beginning and end of the sequence of filming.

Using SPSS software a separate graph demonstrating the performance of each participant is presented. The columns represent the desirable behaviours demonstrated over specific weeks while the rows indicate the number of observations made of such skills.

Participant 1:

As can be seen in **fig.1** and in the data gathered over skills sessions and contained in Appendix 5 (p.155), the observed occurrence of Attentiveness, Eye-contact and Guiding decreased whilst there was an increase in 'Yes-body', 'Yes-verbal and Turn Taking behaviours. The number of rest periods increased whilst the amount of discordant responses demonstrated fell.



(fig 1)

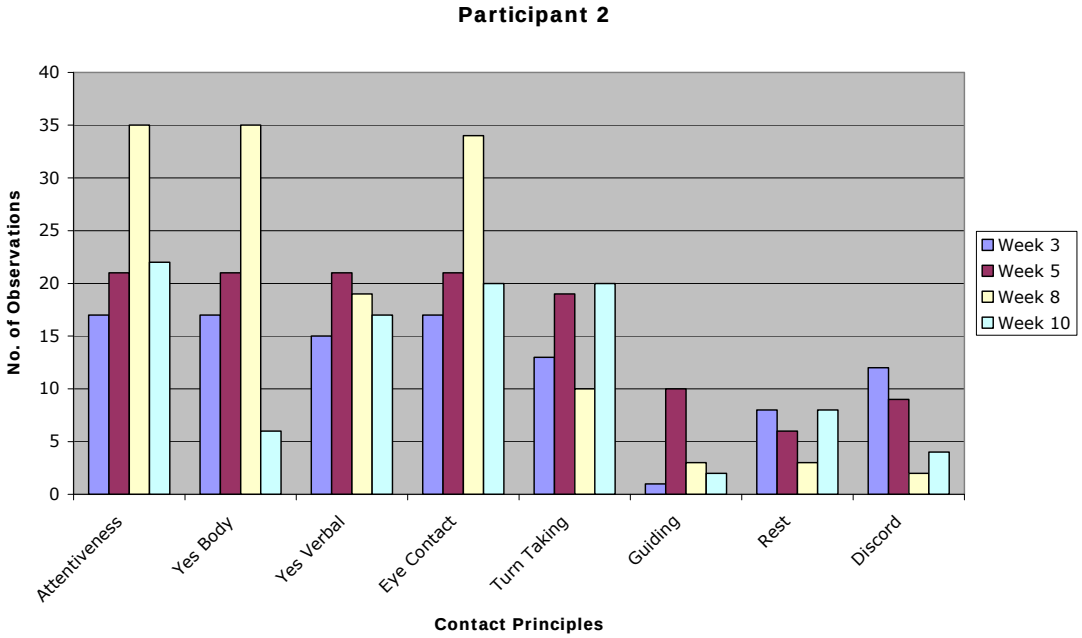
This participant appears to have reached peak performance during their second session of Video Feedback (VF) in four skill areas.

In the pre-test questionnaire this participant reported feelings of anxiety with regard to the use of Video Feedback while in the post test questionnaire they stated that their listening skills, verbal skills and ability to take turns had improved a little while their body language, eye contact and ability to lead and guide had remained the same. Participant 1 stated that they felt that using Video Feedback had brought about some improvement in their skills.

Participant 2:

As can be seen in **fig 2** and from the data contained in Appendix 5 (p.158), this participant demonstrated an increase in five out of six identified skills despite having obtained even higher scores in three of the skill levels demonstrated during session 3. Episodes of

resting remained the same while the number of discordant responses observed, fell.



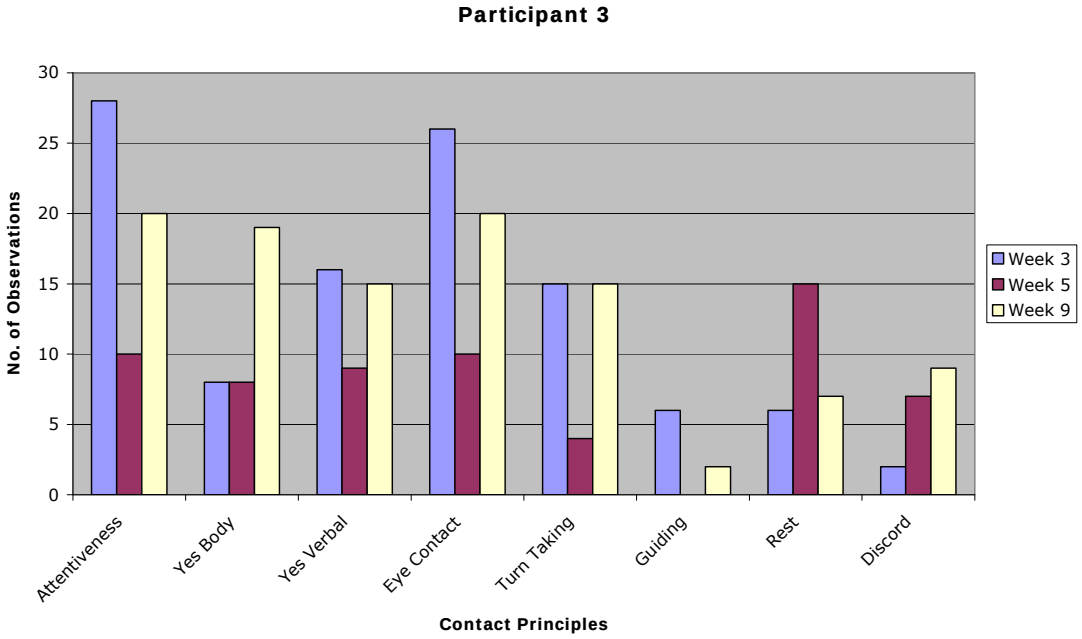
(fig 2)

Having initially reported feelings of anxiety around the use of Video Feedback Participant 2, in the post test feedback, stated that their ability to demonstrate that they were listening, use body language positively, make eye contact and use appropriate verbal skills had all improved a little while they perceived their ability to take turns and lead and guide had improved a lot. This participant felt that the use of Video Feedback had brought about a significant improvement in their skill level.

Participant 3:

From **fig 3** the data for which is contained in Appendix 5 (p.162), we can see that there is a decrease in the frequency of observations of Attentiveness, Yes-verbal, Eye-contact and Guiding; with an increase in Yes-body and no change between the number of times

that Turn Taking was observed between the benchmark and the final video. The number of observations of resting and discordant responses increased.

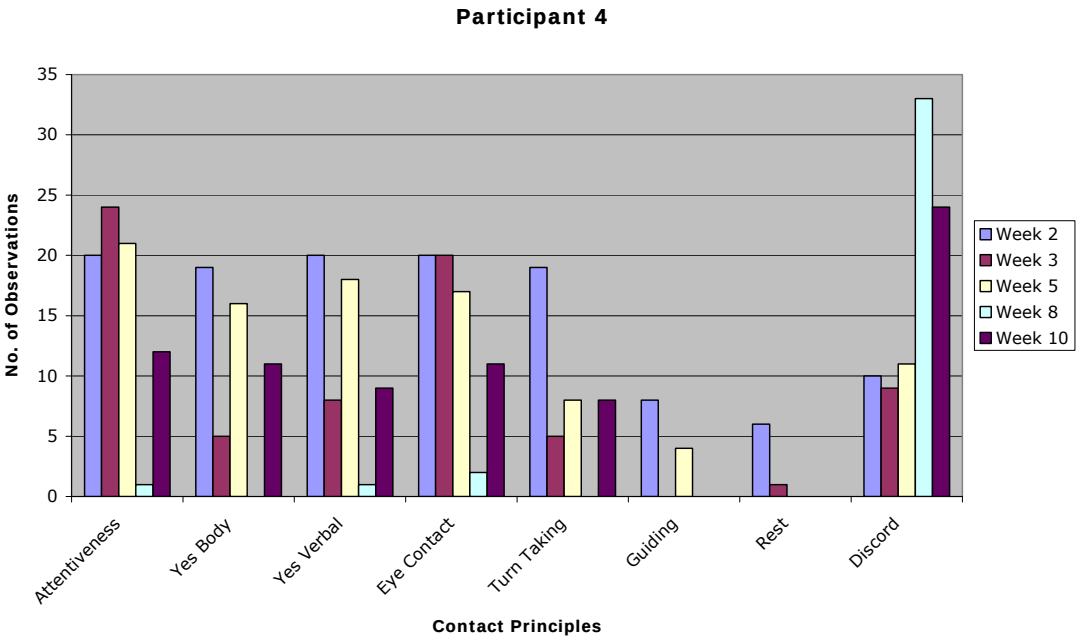


(fig 3)

In the pre-test questionnaire Participant 3 reported feelings of anxiety around the use of Video Feedback. Later, in the post test questionnaire they felt that they had improved a little in all skill areas and that overall the use of VF had brought about some improvement in skill level.

Participant 4:

Fig 4 and the data collected from the skills session and contained in Appendix 5 (p.165) shows deterioration in all skill levels during the final session. Evidence of resting decreased but the number of discordant responses increased.

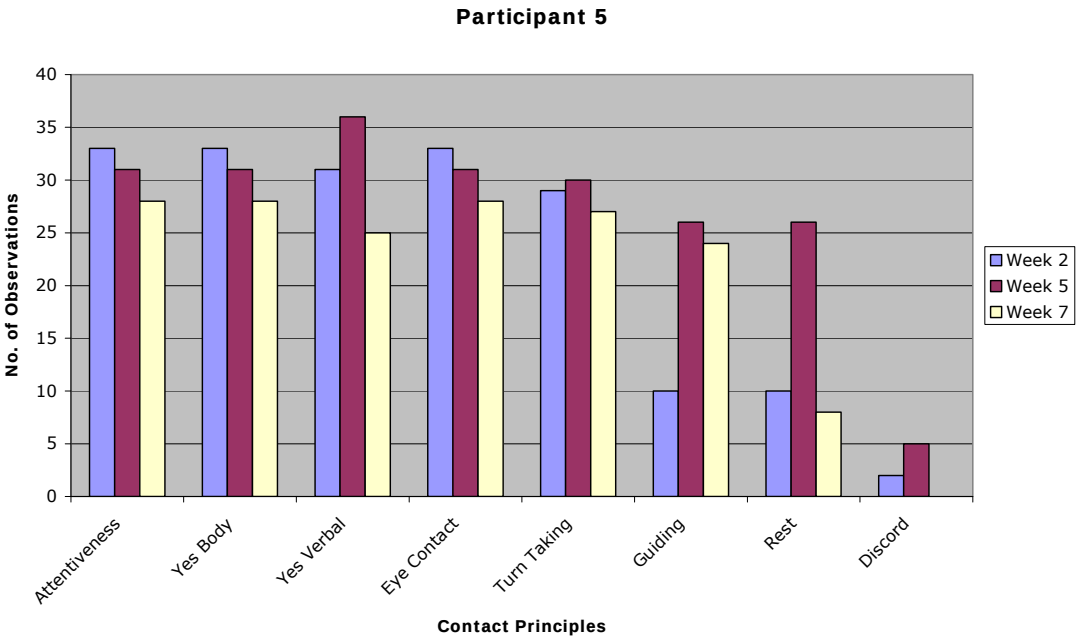


(fig 4)

In the pre-test questionnaire this participant reported feelings of anxiety around the proposed use of Video Feedback while in the post test questionnaire they stated a belief that they had improved a lot with regard to being attentive, using positive verbal skills, turn taking and leading and guiding; that their ability to demonstrate positive body language had improved a little; and their use of eye contact had remained the same. Participant 4 believed that the use of Video Feedback had brought about a significant improvement in their skill level.

Participant 5:

In **fig 5** and in considering the information contained within Appendix 5 (p.170), we can see that observed levels of desirable behaviours fell in all areas apart from that of Guiding. There was an increase in the number of discordant responses observed.

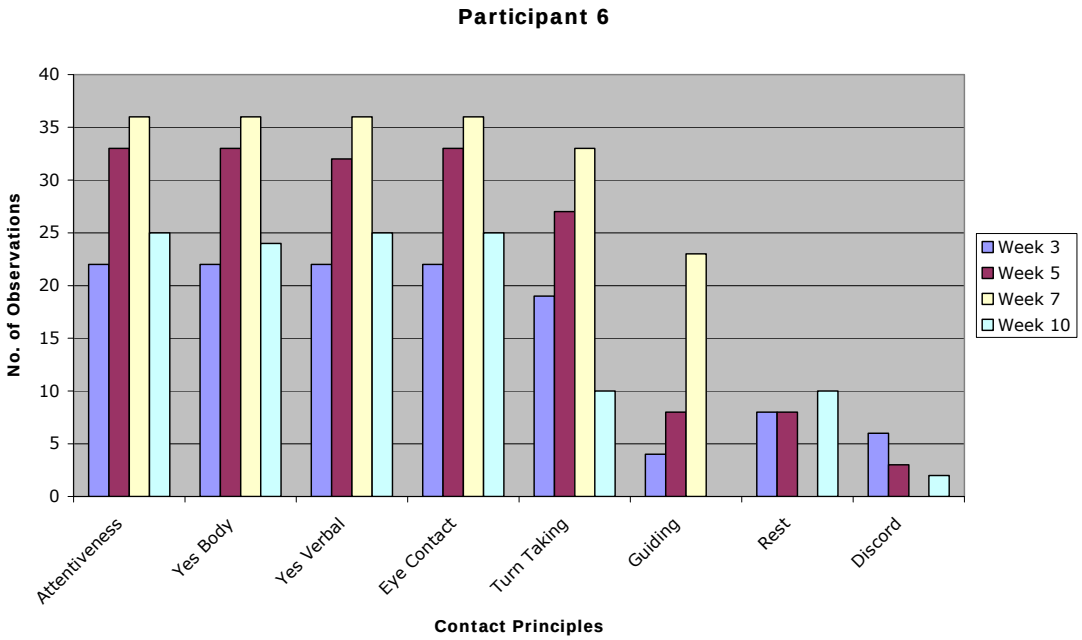


(fig 5)

This participant reported feelings of anxiety with regard to the use of Video Feedback at the onset of the programme while in the post test questionnaire they stated that their skills had improved a little in all areas. The use of Video Feedback was stated as the reason for some improvement in skills.

Participant 6:

As demonstrated by the data in Appendix 5 (p.173) translated into the graph in **fig 6,** we can see an increase in the frequency of observed occurrence of all areas of skill other than Turn Taking. The number of discordant responses also fell.

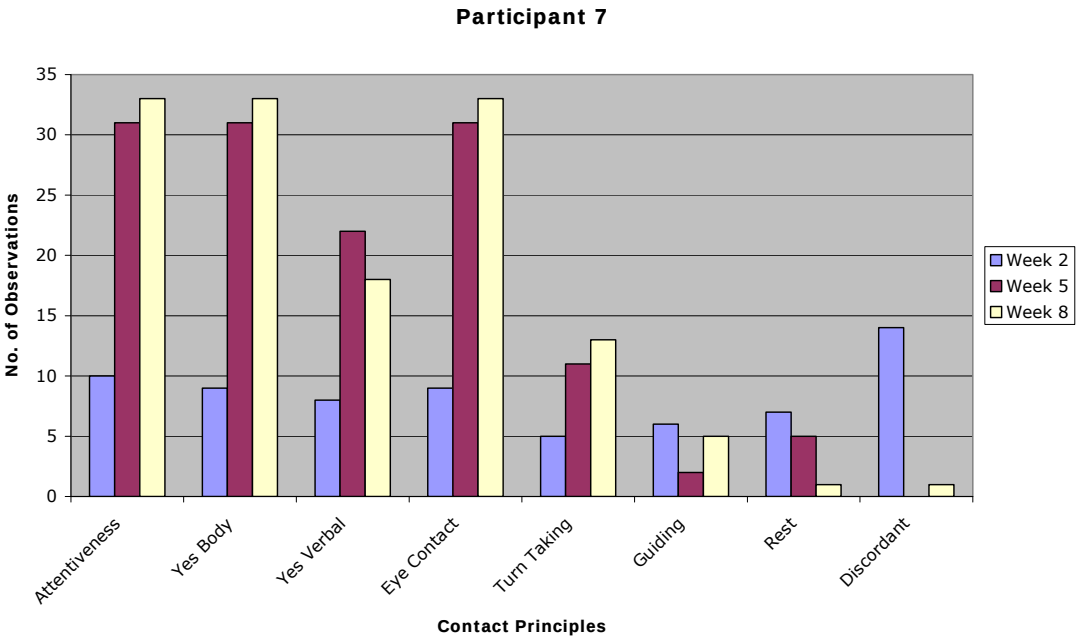


(fig 6)

In the pre-test questionnaire this participant was one of two who was unconcerned about being involved with Video Feedback. In the post test questionnaire they stated that their skill levels had improved a little in all areas apart from in the area of attuned guiding where they believed their skills had remained the same. Their perception was that the use of Video Feedback had brought about some improvement in their skills.

Participant 7:

As seen in **fig 7** the graph, which comprises of information gathered during the skills session (Appendix 5, p.177), an increase in all identified categories except for Guiding was evidenced. There were decreases in the number of discordant responses made and in the amount of rest periods demonstrated.

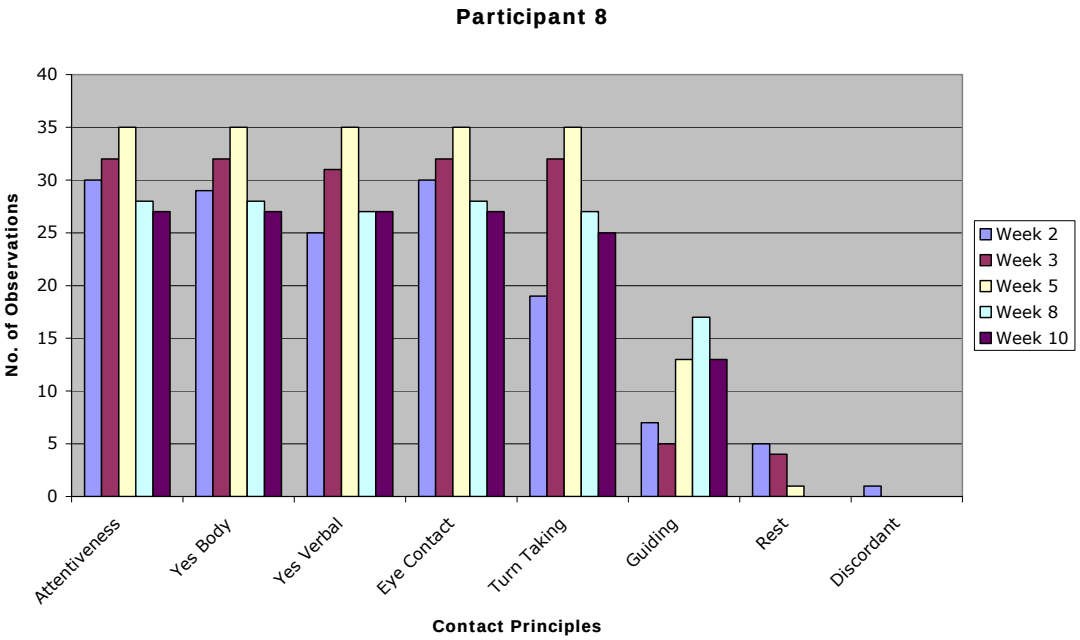


(fig 7)

In the pre-test questionnaire Participant 7 stated that they were anxious with regard to the proposed use of Video Feedback. When recording their perceptions during post test feedback this participant reported a belief that their skill levels in listening, body language and positive verbal responses had improved a lot; that eye contact and turn taking had improved a little; and their ability to demonstrate attuned guiding had remained the same. It was their belief that the use of Video Feedback had brought about a significant improvement in their skills.

Participant 8:

As can be seen through the data provided in Appendix 5 (p.180) and in graph form in **fig 8,** this participant evidenced an increase in three and a decrease in three desirable behaviours. Decreases were also observed in both resting and discordant responses.

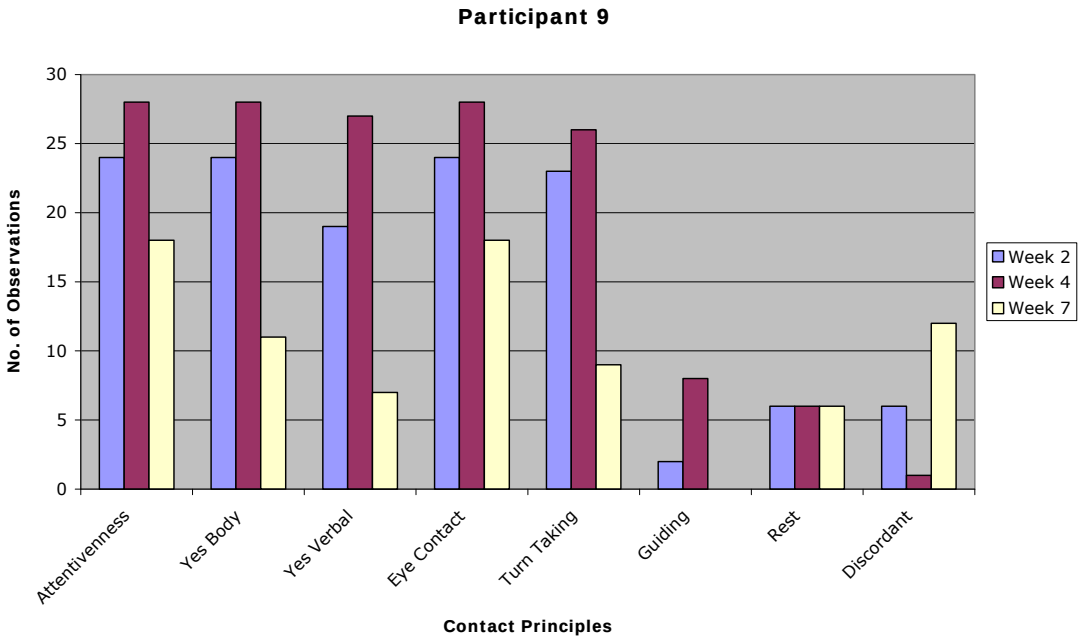


(fig 8)

In the pre-test questionnaire Participant 8 noted feelings of anxiety about the use of Video Feedback while in post test feedback questionnaire they reported feeling that their abilities had improved a little in all areas apart from in their demonstration of positive verbal skills which they stated had remained the same. In conclusion they thought that the application of Video Feedback had brought about a significant improvement in their skills.

Participant 9:

As seen in **fig 9,** and from the data in Appendix 5 (p.183), a decrease in frequency of observations in all skill areas having experienced a peak in scores across all skill levels during session 2. The number of rest periods remained the same while discordant responses increased.

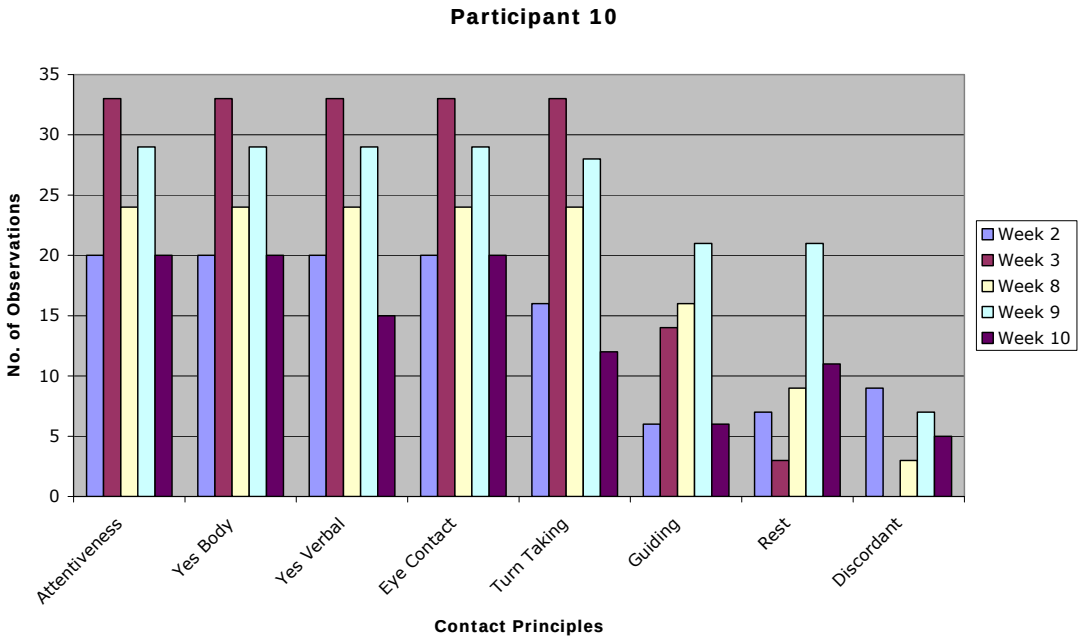


(fig 9)

In the pre-test questionnaire this participant was one of only two who did not feel anxious with regard to the prospect of using Video Feedback. In the post-test feedback this participant believed that their skills had improved a little in all areas apart from in their ability to demonstrate appropriate verbal skills which they reported had improved a lot.

Participant 10:

As shown in Appendix 5 (p.186) and represented in **fig 10,** this participant evidenced no change in all but two of the skills areas with improvement in all but one skill area demonstrated in the second session. While the number of discordant responses fell the amount of rest periods increased.

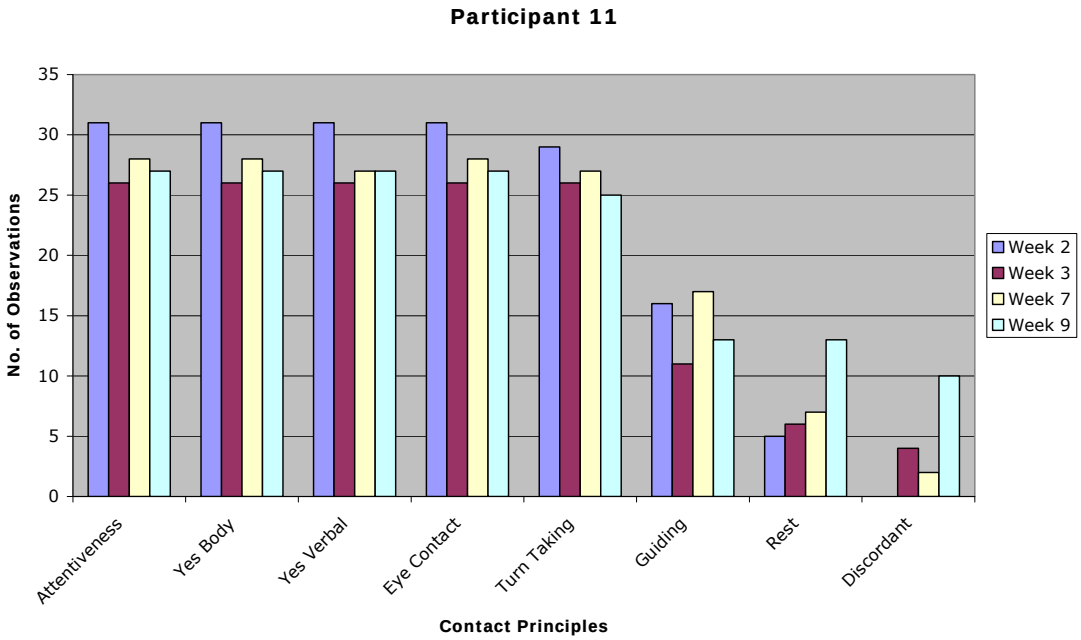


(fig 10)

In pre-test feedback Participant 10 reported on feelings of anxiety around the use of Video Feedback. Later when completing the post test questionnaire this participant commented that their abilities had improved a little with regard to all areas apart from with regard to verbal skills (which they believed had improved a lot) and in turn taking (which they believed had remained the same). In conclusion they felt that the use of Video Feedback had brought about some improvement in their level of skill.

Participant 11:

As seen in **fig 11,** and in the data contained within Appendix 5 (p.191), the frequency of observed incidences of all desirable behaviours fell with their initial session offering the highest scores in all but one area. The number of both rest and discordant responses increased.



(fig 11)

In the pre-test questionnaire this participant reported feeling anxious with regard to the proposed use of Video Feedback while in their feedback following the intervention they noted that they felt their abilities with regard to listening, body language and the demonstration of positive verbal skills had improved a lot; whereas their skills in eye contact and attuned guiding had improved a little with turn taking remaining the same. They believed that the use of Video Feedback had brought about significant improvement in their skill levels.

4.1.2 Analysis of Results of Individual Participants

Although the results are mixed and as a sample do not suggest a statistically significant increase (where $P \leq 0.05$) in the level of change displayed, there appears to be a little improvement with regard to individual performance in some areas of practice. Nine

individuals evidenced an increase in one or more skills (discounting the categories of Resting and Discordant responses). The most encouraging shift was in relation to an increase in the use of positive verbal responses by 45.5% of participants. Guiding responses; turn taking; and the use of positive body language were improved upon by 36.4% of the sample group, whilst 27.2% of individuals increased their individual level of attentiveness. The possible reasons for these changes, albeit of statistical insignificance, will be explored later.

4.1.3 The Relationship Between Variables

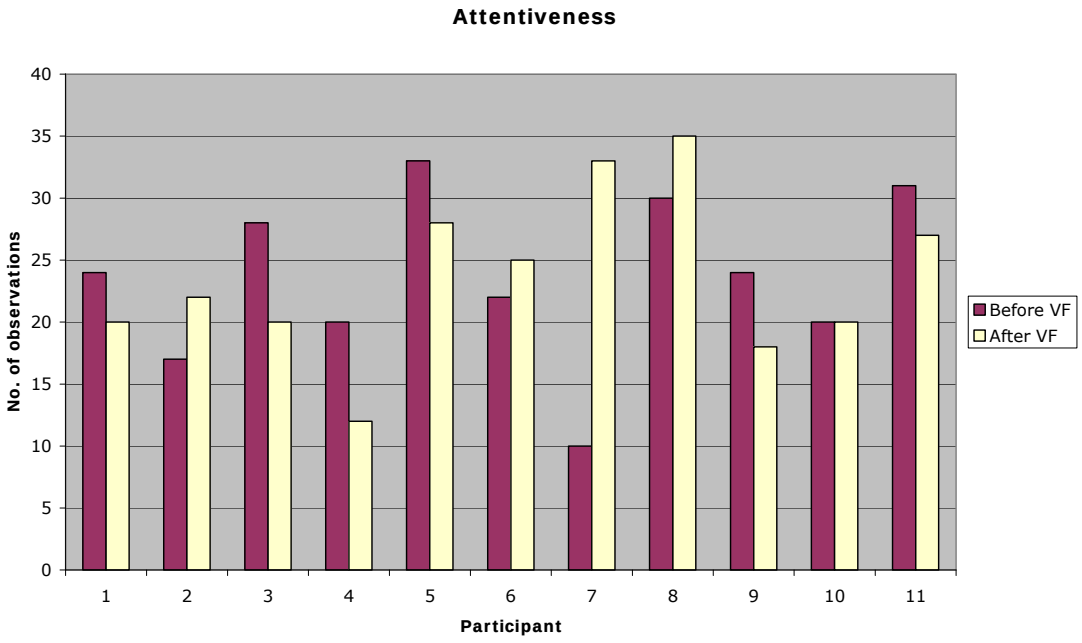
The pre-test post-test results of the data for all participants was then analysed using the Paired t-tests. The presence of outliers will be highlighted through the use of scatter plots and, rather than remove such scores from this study, the utilisation of the Wilcoxon matched pairs test will be helpful as it is more resistant to the influence of outliers than the t-test is (Kinnear et al., 2004).

The likelihood of having gained the results noted, by chance alone, will be determined by testing the statistical significance at the level $p \leq 0.05$.

Using SPSS the data will be presented according to type, e.g. specific behaviours. The columns represent the individual participants while the rows indicate the number of observations of behaviour recorded under pre-test post-test conditions.

Attentiveness

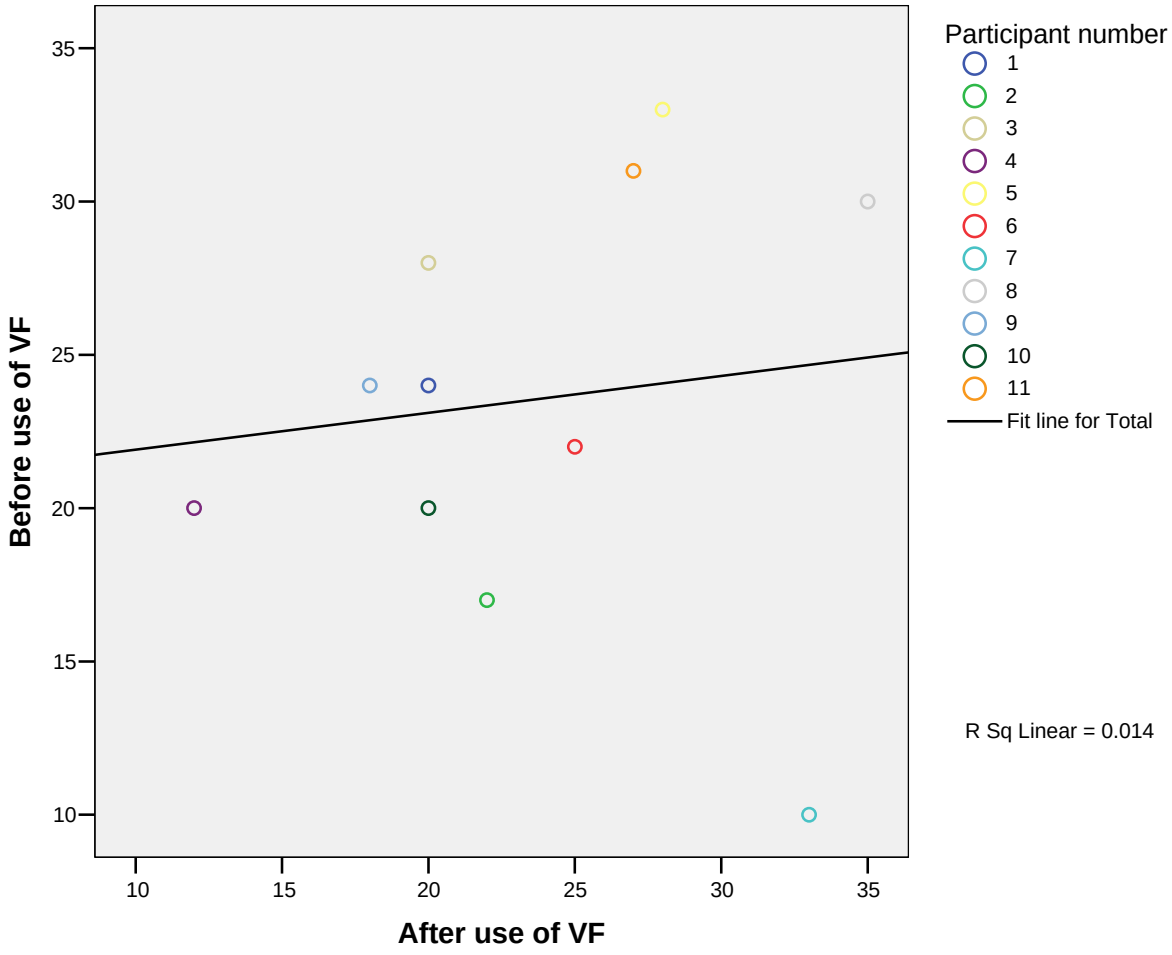
The first videos, used as a benchmark from which to measure any development, evidenced a spread of between 10 and 33 observations of attentiveness with a range of 23. After the use of video feedback a dispersion of between 12 and 35 was recorded and, as can be seen from **Output 1.1**, evidenced a range again of 23.



(Output 1.1)

In running a paired t-test the results can be reported as follows: The mean response latency for before the use of video feedback (M = 23.55, SD = 6.788) was lower than the mean calculated after the use of VF (M = 23.64, SD = 6.772). The paired-samples t test showed no significance beyond the 0.05 level: t(10) = -.034; p = 0.974 (2-tailed).

In looking at **Output 1.2** it appears that there are at least two scores which present as outliers, i.e. participant 7 who demonstrates the lowest pre-test score and participant 5 who achieves the highest pre-test score.



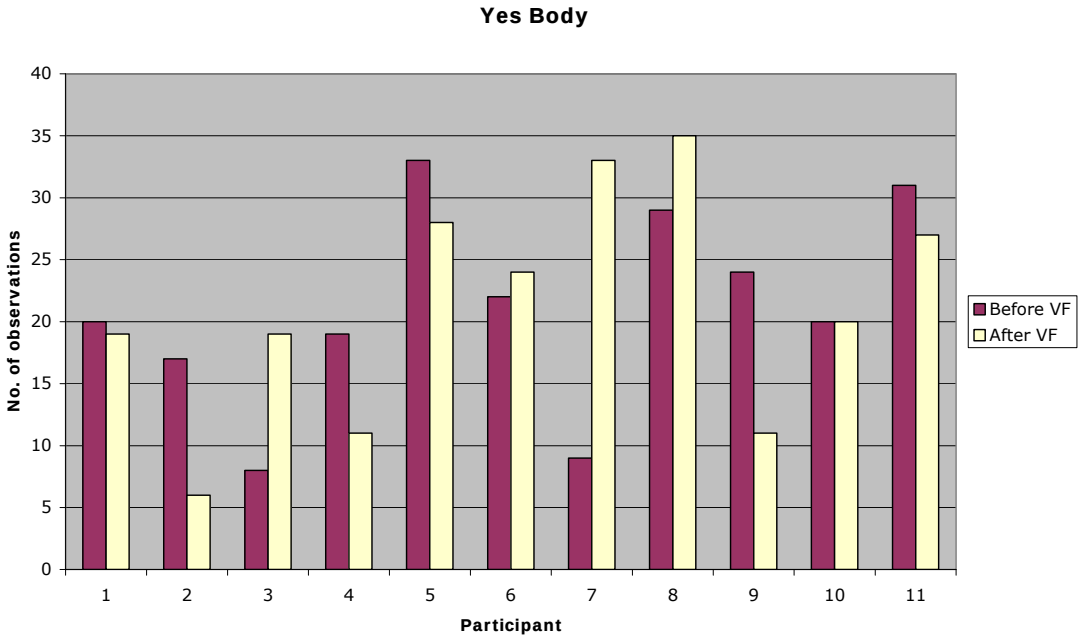
(Output 1.2)`

A Wilcoxon matched-pairs signed ranks test showed the difference between the median scores for attentiveness before and after the use of Video Feedback (the same as reported above for the paired t-tests). Test results failed to show a significance with p = 0.506 (2-tailed). For the scoring on 'attentiveness' we can see that in 6 out of 11 cases the score was greater prior to the use of VF. The differences are then ranked in order of their absolute values. The

test statistic W is the smaller sum of ranks of the same sign, (the sum of ranks were 34 for the negative and 21 for the positive ranks), so W = 21.

Yes Body

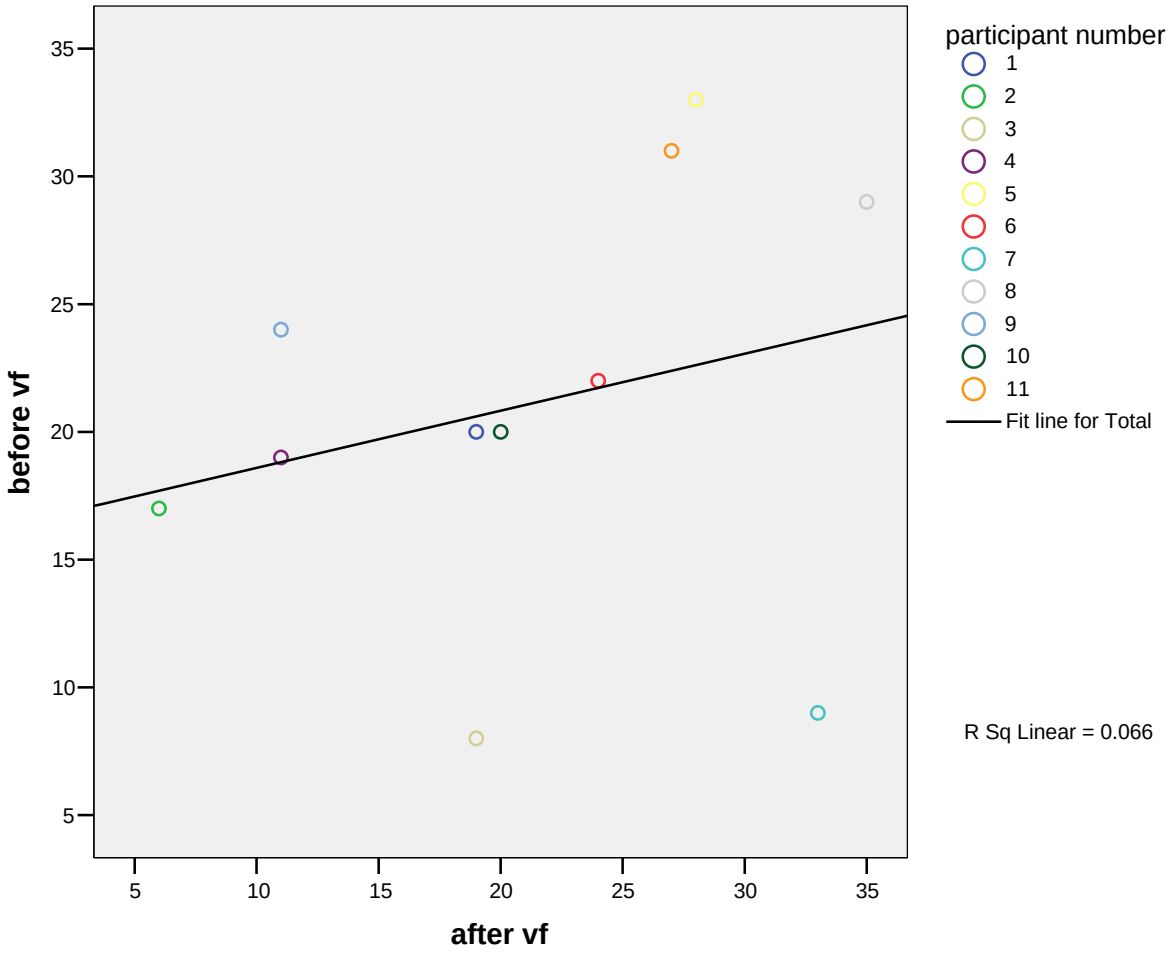
As can be seen in **Output 2.1** between 8 and 33 observations of positive body language, with a range of 25, were recorded in the initial video in comparison to a minimum of 6 and maximum of 35 (a range of 29), after participants had experienced video feedback.



(Output 2.1)

In running a paired-samples t test the mean response before video feedback was (M = 21.09, SD = 8.080) was less than the mean for after VF (M = 21.18, SD = 9.315). A paired samples t test failed to show any significance: t(10) = -.028; p = 0.978 (2-tailed).

As demonstrated in **Output 2.2** below some outliers are evident and so the Wilcoxon test will also be applied. Participants 3 and 7 achieve the lowest pre-test results and participant 5 demonstrates the highest post-test score.

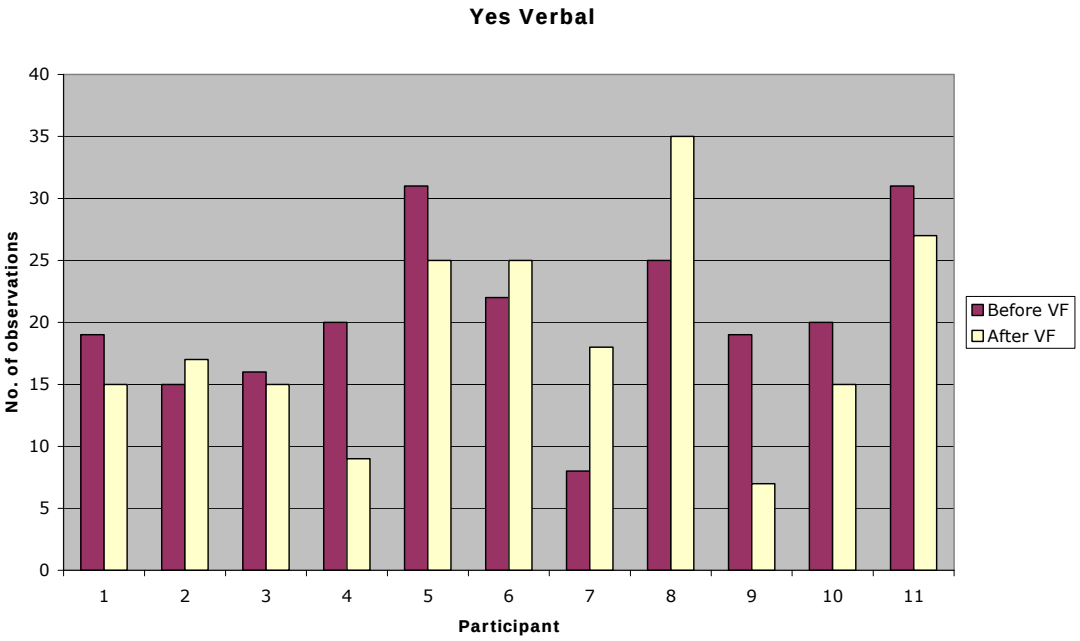


(Output 2.2)

In carrying out a non-parametric equivalent of the t Tests (Wilcoxon test; related samples), we can see that no significance has been demonstrated p = 0.760 (2-tailed). Additionally for the scoring on 'yes body' we can see that in 6 out of 11 cases the score was greater prior to the use of VF. The sum of ranks were 30.5 for the negative and 24.5 for the positive ranks, so W = 24.5.

Yes Verbal

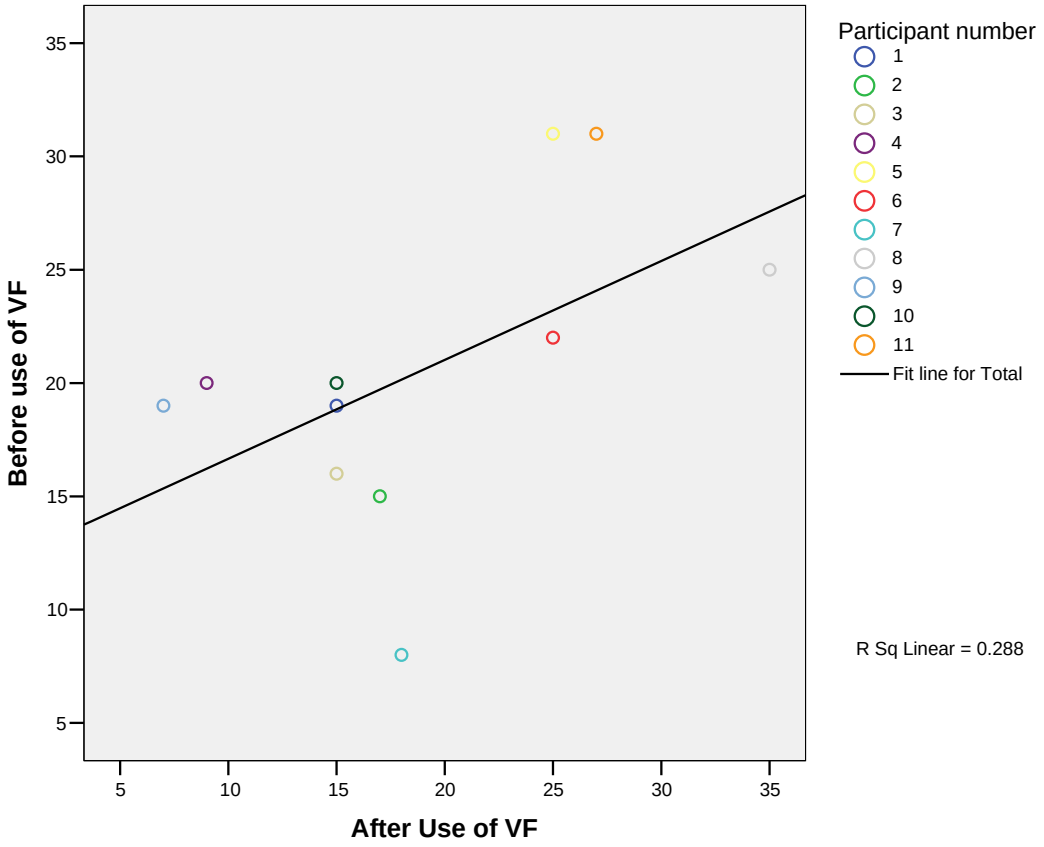
A minimum of 8 and a maximum of 31 examples of positive verbal communication, offering a range of 23, was noted on the initial films while between 7 and 35 incidents were observed in the final video with a range of 27 as can be observed in **Output 3.1** .



(Output 3.1)

In running a paired samples t test the mean response latency before video feedback (M = 20.55, SD = 6.743) was greater than the mean after VF (M = 18.91, SD = 8.300). A paired samples test failed to show significance: t(10) = 0.737; p = 0.478 (2-tailed).

Although there is evidence of a cluster in **Output 3.2**, there still appear to be some outliers and so the Wilcoxon test will be adopted. Participants 5 and 11 achieve the joint highest pre-test scores while participant 7 demonstrates the lowest number of pre-test observations.

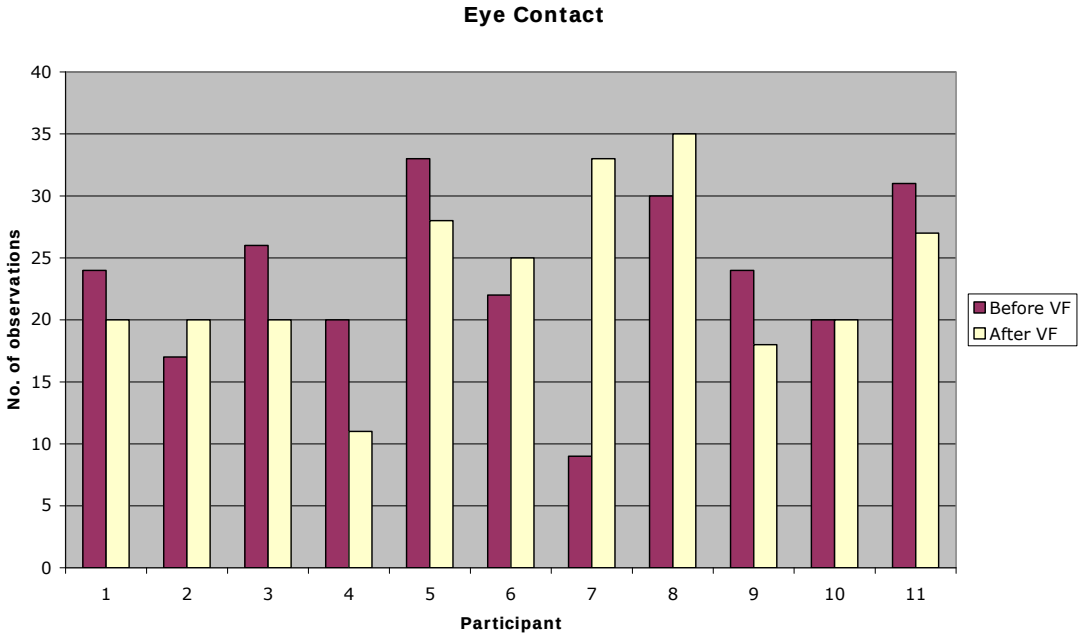


(Output 3.2)

In carrying out the Wilcoxon signed Ranks test we can see that there was no significance p = 0.328 (2-tailed). For the scoring on 'yes verbal' we can see that in 7 out of 11 cases the score was greater prior to the use of VF. The sum of ranks were 44 for the negative and 22 for the positive ranks, so W = 22

Eye Contact

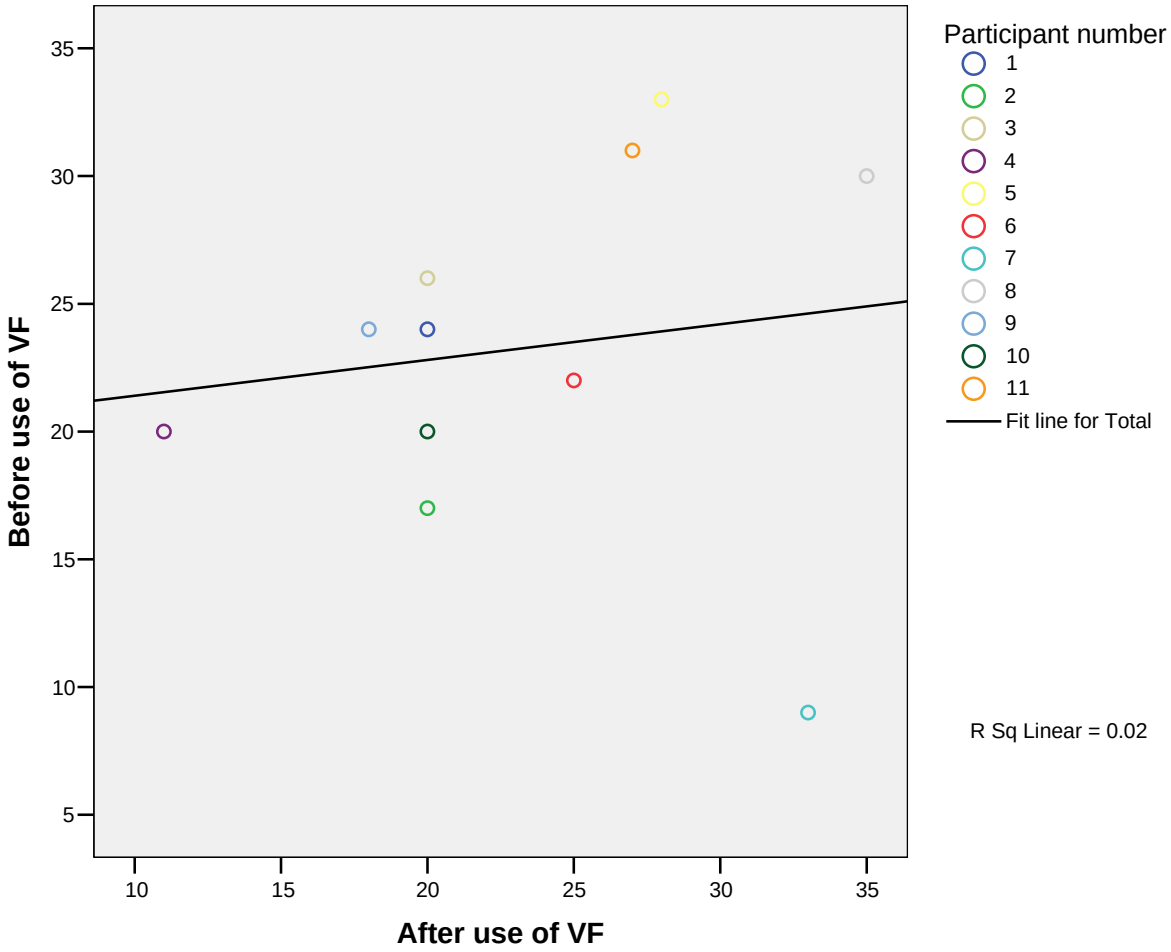
With regard to observations of eye contact, between 9 and 33 examples were recorded from the first videos in comparison to between 11 and 35 in the final films both demonstrating the same range of 24 as can be seen in **Output 4.1**.



(Output 4.1)

In running a paired samples t test the mean response latency before video feedback (M = 23.27, SD = 6.886) is less than the mean after VF (M = 23.36, SD = 7.018). A paired samples test failed to show significance: t(10) = -0.033; p = 0.974 (2-tailed).

In **Output 4.2** outliers can be identified as participant 7 who demonstrates the lowest pre-test score, and participant 5 who demonstrates the highest pre-test level with regard to eye-contact.



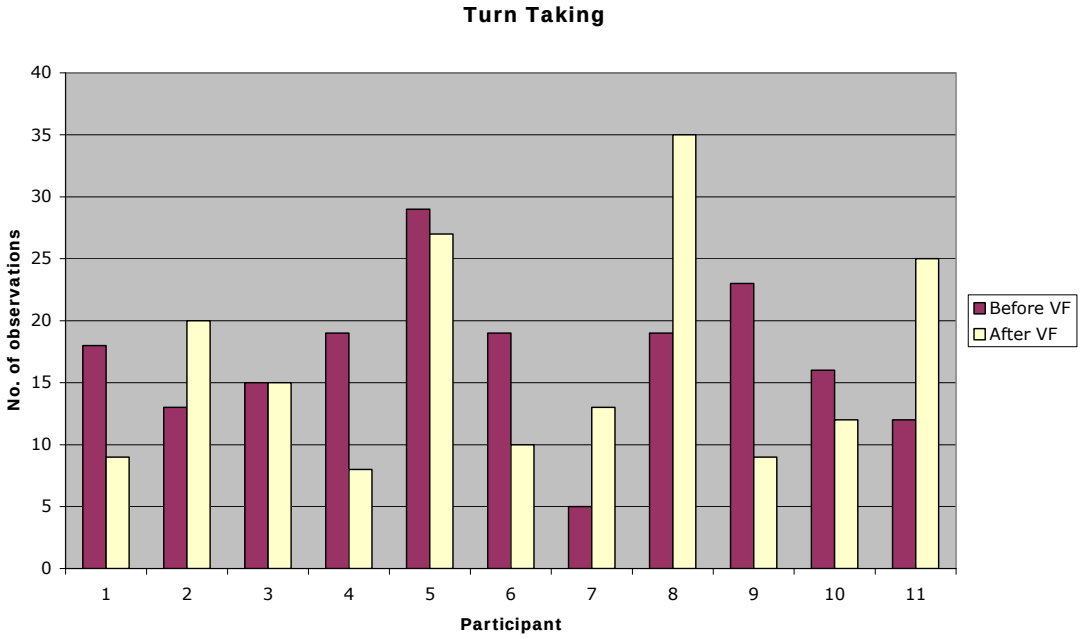
(Output 4.2)

In carrying out the Wilcoxon Signed Ranks test we can see that there is no significance p = 0.358 (2-tailed). Also for the scoring on 'eye contact' we can see that in 6 out of 11 cases the score was greater prior to the use of VF. The sum of ranks were 36.5 for the negative and 18.5 for the positive ranks, so W = 18.5.

Turn Taking

A minimum of 5 and a maximum of 29 incidents of turn taking were observed during the initial film footage giving a range of 24

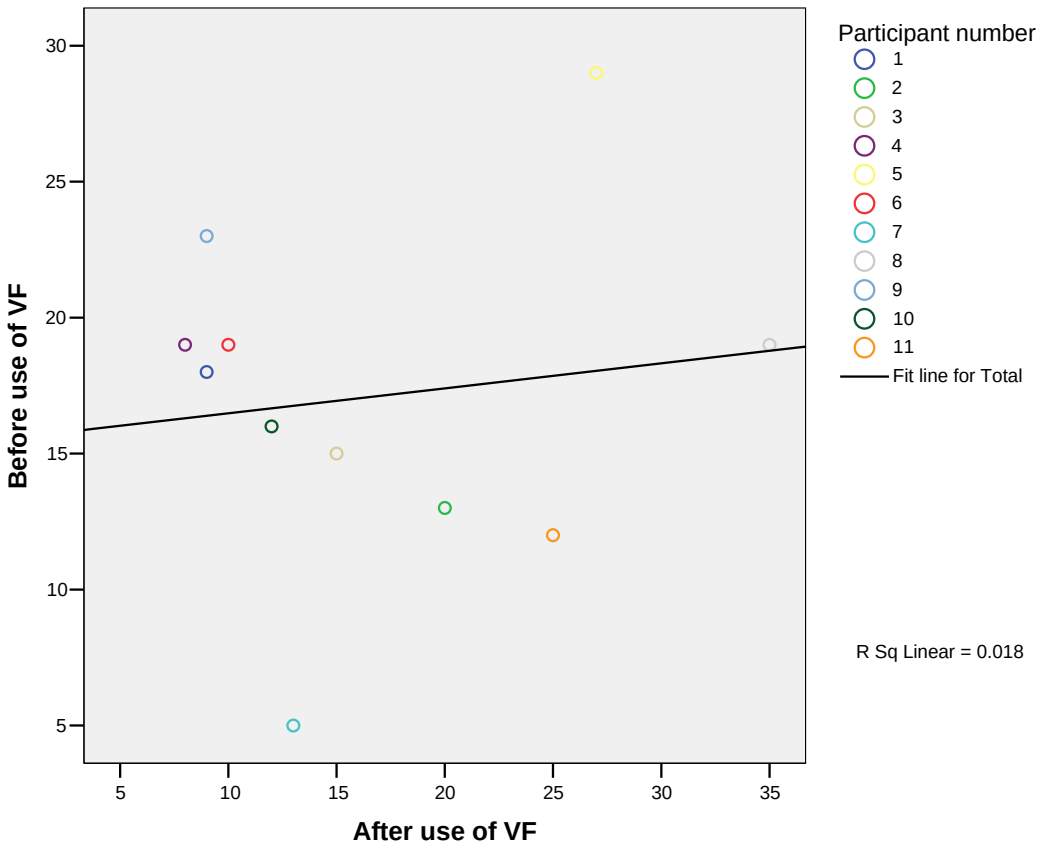
compared to between 8 and 35 in the final film with a range of 27 as can be seen in **Output 5.1**.



(Output 5.1)

In running a Paired Samples t Test the mean response latency before video feedback (M = 17.09, SD = 6.188) was greater than the mean after VF (M = 16.64, SD = 8.936). A Paired Samples Test failed to show significance: t(10) = 0.148; p = 0.885 (2-tailed).

With outliers present in the shape of participant 7 with the lowest pre-test score and participant 5 with the highest (**Output 5.2),** the Wilcoxon test will also be carried out.

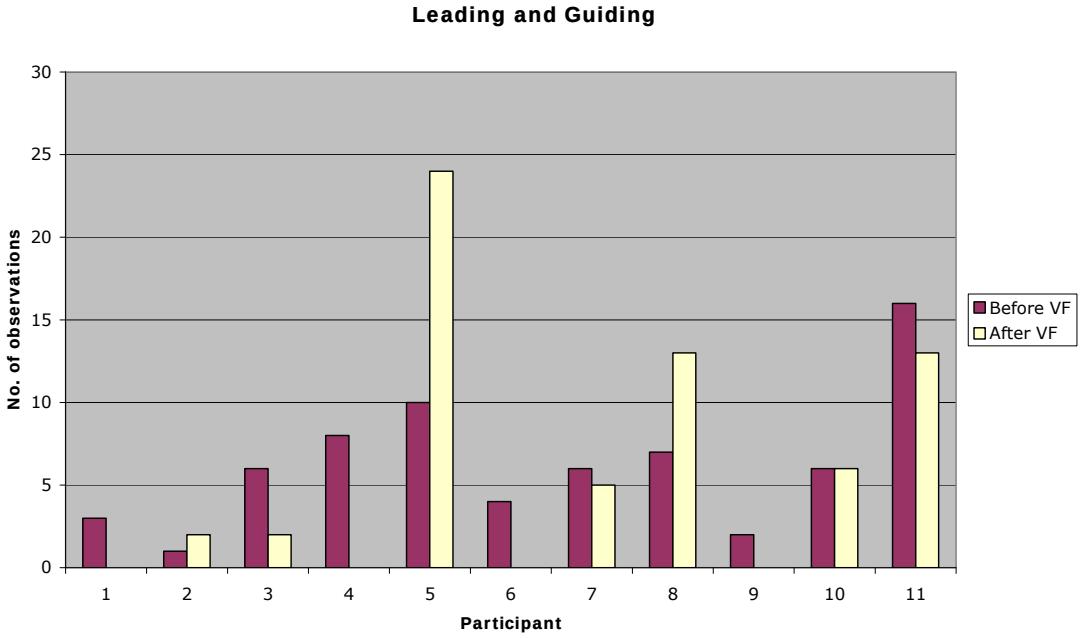


(Output 5.2)

In carrying out the Wilcoxon Signed Ranks test we can see no significance p = 0.799 (2-tailed). For the scoring on 'turn taking' we can see that in 6 out of 11 cases the score was greater prior to the use of Video Feedback. The sum of ranks were 30 for the negative and 25 for the positive ranks, so W = 25.

Leading and Guiding

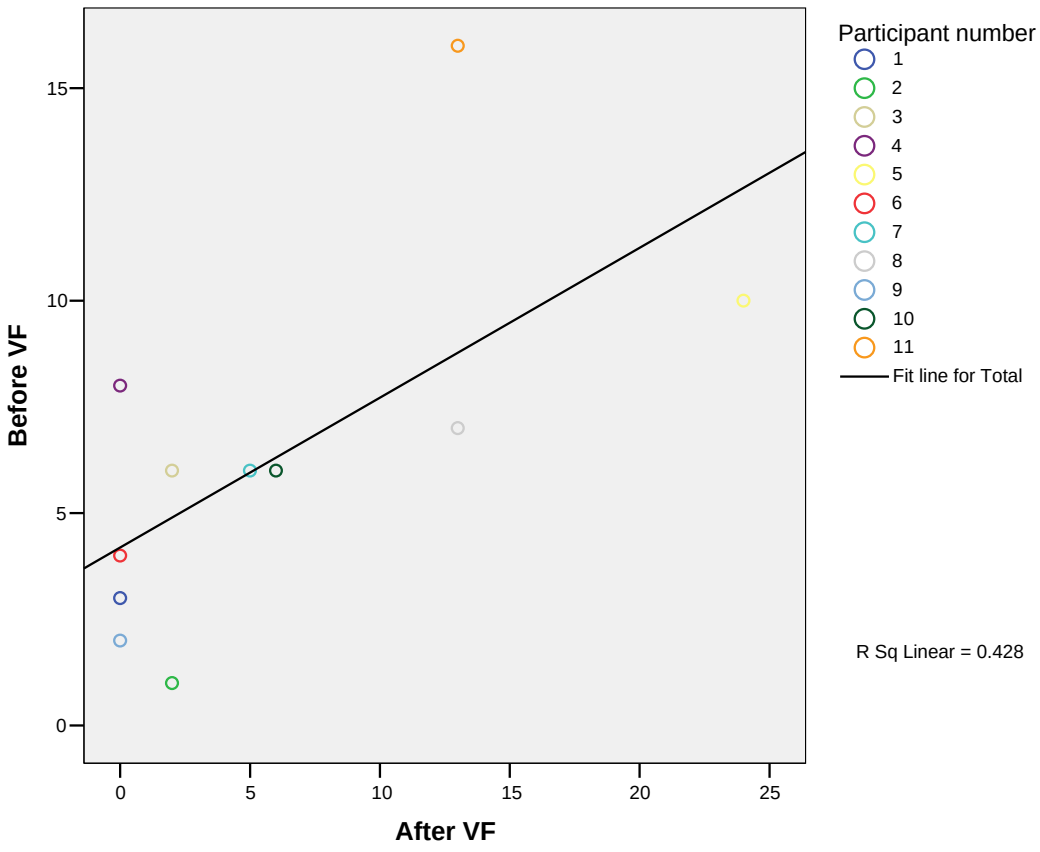
Between 1 and 16 examples, with a range of 15, were noted in the benchmark film, as demonstrated in **Output 6.1**, in comparison to a minimum of 0 and maximum of 24 in the last film displaying a range of 24.



(Output 6.1)

In running a Paired Samples t -test the mean response latency before video feedback (M = 6.27, SD = 4.174) was greater than the mean after VF (M = 5.91, SD = 7.739). The Paired Samples Test failed to show significance beyond the 0.05 level: t (10) = 0.204; p = 0.843 (2-tailed).

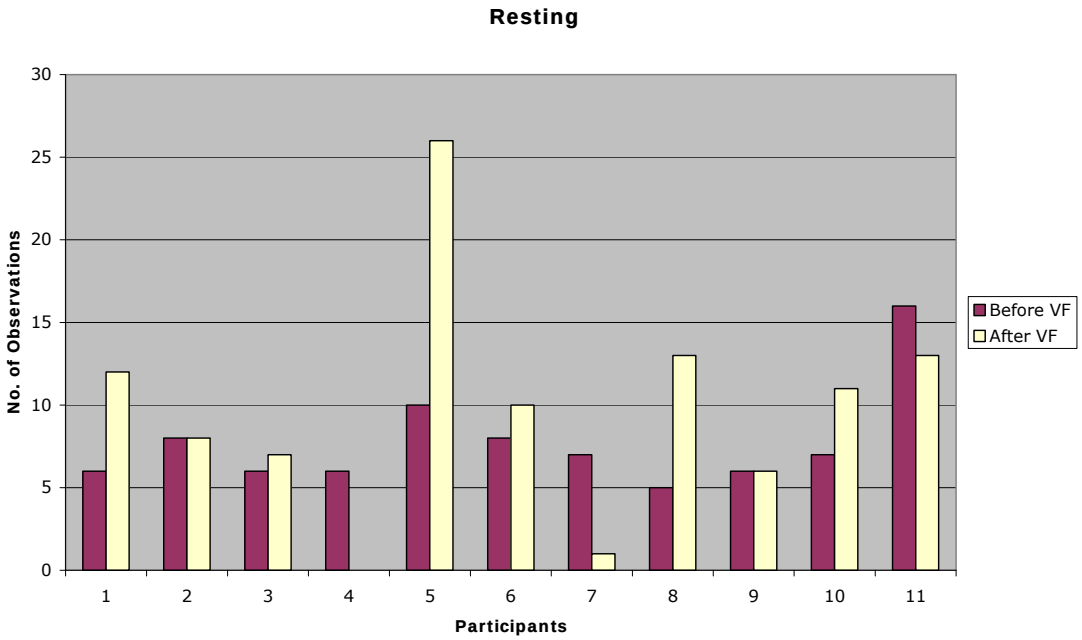
With outliers present in the shape of participant 7 with the lowest pre-test score and participant 5 with the highest (**Output 5.2),** the Wilcoxon test will also be carried out.



(Output 6.2)

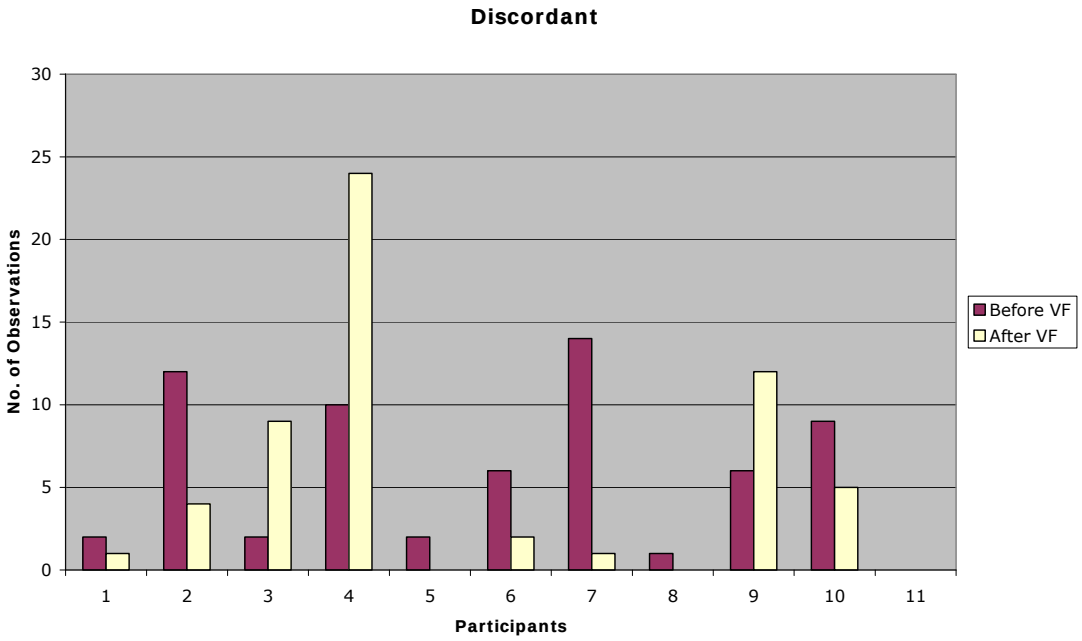
In carrying out the Wilcoxon Signed Ranks test it failed to show significance p = 0.414 (2-tailed). For the scoring on 'guiding' we can see that in 7 out of 11 cases the score was greater prior to the use of VF. The sum of ranks were 35.5 for the negative and 19.5 for the positive ranks, so W = 19.5.

When looking at the data for all participants it can be seen that in four out of the six desirable behaviours six participants demonstrate no improvement whilst in the remaining two, seven participants show that their skills level has deteriorated.



(Output 7.1)

Although 'Resting' was not identified as one of the focus behaviours with participants, the time given to recipients to respond has increased in six cases.



(Output 8.1)

The 'Discordant' responses of three participants increased after Video Feedback.

4.1.4 Analysis of Group Results (Pre-test/Post-test)

Pre-test/post-test results indicate an increase in the mean amount of observed occurrences in the case of four participants in five skill areas (Attentiveness; Yes – Body; Yes – Verbal; Eye-contact; Turn Taking) and three in the area of Guiding. However, at least one participant in each area of improvement presents a score which is considered an 'Outlier' and should, therefore, be disregarded. Further analysis of the group means finds these changes statistically insignificant (where $p \leq 0.05$). When considering the category of 'Resting' the amount of observed incidences rose from between 6% and 100% for six of the participants. In a third of incidents for five of those cases the resting time given to the recipient developed into a 'Discordant' response from the participant. This is echoed when examining the increases in 'Discordant' responses for three participants that follow a period of resting in excess of 50% of incidences. Increased observations of such patterns are of concern and possible reasons for such developments will be considered in due course.

4.2 Analysis of Qualitative Data

4.2.1 Pre and Post-Test Questionnaires

Questionnaires were utilised in order to understand the attitudes and beliefs of participants undertaking the skills training programme in a format that would elicit a judgement rather than factual information (see pages 140-144). In the pre-test questionnaire only two students did not convey anxiety; one presented the lowest score in the initial video and displayed improvement in all areas

other than Turn Taking; while a decrease in skill level in all categories was recorded for the second participant. It would appear then that the level of anxiety displayed by participants prior to filming does not necessarily correlate with either an increase or decrease in the expression of core behaviours.

When asked to consider the aspect of video feedback that participants anticipated would be most beneficial to them, four students specifically stated that they thought it would assist them in developing their skills. Three other participants documented their interest in examining their own skills in more detail acknowledging the power of microanalysis through comments such as "You don't normally see your facial expressions or slight movements you make so the video helps highlight this"; anticipating improvement in self-efficacy e.g. "Seeing what I am good at will build my confidence"; and focussing on the examination of the skills demonstrated during specific tasks e.g. "Seeing how you conduct yourself in an interview situation".

Three other participants shared a view that observing other people's behaviour would be helpful particularly with regard to examining the skills/techniques demonstrated by others. One student believed that the combination of viewing their own communication skills and those of their peers would be useful.

In anticipating what aspect of the work might be least useful to them five participants voiced concerns about seeing themselves on film, that their nervousness around being filmed could impact on their performance and that seeing themselves might in fact decrease levels of self-esteem. Two students worried about the artificiality of the exercise i.e. that "the role-play scenarios will not

reflect real life situations very well" and "being watched by others when you do it as you won't be watched by others in the future".

In the post-test questionnaire all eleven participants expressed a belief that the majority of their skills had improved as a result of experiencing video feedback through VIG. Some students commented on specific skills gained, e.g. "I can now follow on from answers given by service-users and don't just ask random questions"; the "video enabled me to see my body language/eye contact and make changes". Others identified more general changes, e.g. I "can see what I'm doing well and continue it" and "the impact (of this) on the client"; "I am aware of things that I do naturally". Comments were also made with regard to how participants felt about themselves e.g. (I) "feel more comfortable in (regard to my) own social work skills now", and how they retrospectively viewed the application of video feedback, e.g. "it was very useful after I forgot about the camera" and "getting more used to the video has made me more relaxed in general".

In matching the comments made through the questionnaires to the quantitative results gained through the observations it appears that those who achieved at a higher level tended to underestimate their achievement while low-achieving students overestimated levels of improvement, an issue that has been highlighted in other studies (Falchikov and Boud, 1989). Whatever the level of accuracy of their perceptions, it can appears that participants held a positive view of the usefulness of Video Interactive Guidance in skills training.

Finally, a brief examination of the relationship between improvement of skills and the role-play scenario will be undertaken.

4.3 Skill Improvement and Role-play Scenarios

The role-play scenario offers the student the opportunity to experience an approximation of a real-world situation where they can attempt to build a relationship with a simulated service-user (Wallace et al., 2002). After Week 3 the same scenario was utilised but "moved on in time" to provide a more realistic experience (McCluskey, 2005). Given the changing nature of the task and with reference to the findings from the Rater the relationship between task and performance should be examined.

The relationship between task and performance:

	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
P 1	✓		✓						✓
P 2		✓		✓			✓		✓
P 3		✓		✓				✓	
P 4	✓	✓		✓			✓		✓
P 5	✓			✓		✓			
P 6		✓		✓		✓			✓
P 7	✓			✓			✓		
P 8	✓	✓		✓			✓		
P 9	✓		✓			✓			
P 10	✓	✓					✓	✓	✓
P 11	✓	✓				✓		✓	

The weeks where participants experienced video feedback are identified, on the above chart, with the symbol '✓' whilst shading indicates the session in which each participant achieved their highest scores.

Only one student (participant 7) achieved their highest score in their final session while seven students gained their highest scores in their penultimate session. No more than three students achieved

their highest scores undertaking the same task. The fairly equal spread of these results would suggest, then, that the nature of the task does not specifically impact on the level of improvement demonstrated.

4.4 Summary of Results

This study evaluated a skills teaching programme which adopted group training and video feedback through VIG processes as its core intervention. Data was gathered and analysed using quantitative methods by an independent rater while triangulation was provided through responses to questionnaires in an attempt to provide participant perspectives. As a result of carrying out both parametric and non-parametric tests of the data it would appear that there has been no significant difference brought about through the use of Video Feedback during skills sessions. However, some increase in frequency in the display of core behaviours has been demonstrated in the majority of participants. This concurs with the perception of the researcher as educator, although not formally recorded, over the course of the ten week teaching programme. Responses from the pre-test/post-test questionnaires suggest an increase in the self-efficacy of participants in addition to a developed awareness of the application of core communication skills.

Further attention will now be given to exploring the possible reasons for the results as outlined above.

5. Discussion

It is surprising that the quantitative results above do not show improvement in individual behaviours and this chapter explores potential factors and focuses on issues arising from the programme design, the research methodology and the data analysis.

5.1 Critique of the Programme Design

5.1.1 The Skill Level of Participants

In this research, although some participants were more familiar than others in working with specific service-user groups, none of them had prior experience of the situations dictated by the role-play scenarios within the skills programme. However, it is obvious from the range of bench mark scores that some students were more skilled than others at the start of the programme. At the beginning of this research the level of skill demonstrated prior to the use of Video Feedback was not viewed as relevant in that it was the level of change demonstrated which was thought to be crucial. Perhaps then the importance of the level of skill at the start should not be dismissed so easily. A number of research projects around the use of this approach have highlighted particular success in improving the interpersonal skills of those with basic patterns of communication (Wels, 2004). For example, Rodebaugh and Chambless (2002) in their research into social phobias discovered that video feedback proved most useful in helping those who had negative perceptions with regard to their existing communication skills, i.e. self-efficacy became a predictor of change. Perhaps it is no coincidence then that in this research the greatest improvement

in scores was achieved by Participant 7 who scored the lowest in the rating of the pre-test videos for four out of the six desirable behaviours. Alternatively, it might be that the repeated practising of skills results in a ceiling effect. Gallinat (2005), in researching field studies of the effect of feedback frequency on performance, discovered little difference in results from weekly or bi-weekly feedback. It was concluded that workers had reached a peak in their performance and so there was little improvement left to detect.

The presence of scores which appear to be outliers, i.e. at either extreme, can be useful in providing a test of any explanation based on mainstream findings, e.g. it can test against the generality of the findings (Miles and Huberman, 1994. p26). In addition such extremes can offer protection against self-selecting biases. These outliers have also proved helpful in identifying, as noted previously, that it is those who evidenced low benchmark scores that demonstrated the highest levels of change in their scores. Alternatively, these scores might be pointing to the need to consider that those participants who demonstrated the highest initial scores may have experienced a ceiling effect at the beginning of the programme and had no space for further improvement.

5.1.2 The Use of Role-play Scenarios

Fundamental to any method of intervention is the establishing of a relationship built on mutual dependence, i.e. one as the agent of change and the other as the one seeking help (Sudberry, 2002). As has already been proposed "communication skills are essential in establishing effective and respectful relationships with service users, and are also essential for assessments, decision making and

working with colleagues and other professionals.", (SCIE, 2004. p1). Through role-play students are offered the opportunity to practice relationship building techniques.

Role-play within the classroom setting offers a safe environment in which the student is supported to experiment or take risks with regard to the practising of skills. "The major advantage of effectively devised simulations is that they can simultaneously have most of the engaging qualities of reality while being explicitly controlled and safe" (Jason et al.,1971. p343). More specifically students have been given the opportunity to examine communication skills suitable for time-limited and long-term interventions and practised them during a variety of simulations that are representative of practice based encounters as devised by the teaching team for the skills module (Richards et al., 2005). A level of control can be exercised with regard to the complexity of what the student is required to deal with in comparison to a practice situation. A criticism might be, however, that tasks might require the participant to undertake procedurally driven forms of communication which do not support other aspects of the social work task such as empowerment and involvement of service-users (Richards et al., 2005).

Simulations can be helpful in that timings can be varied and support or instruction can be offered where appropriate, (Dickson et al., 1997). The achievement of a standardisation of response from the simulated Service-user, however, is a more complex matter. Although the "validity and accuracy of performance" can be supported through the briefings held prior to the role-play, "reliability or consistency when faced with different examinees" cannot be assured (Wallace et al., 2002. p344).

5.1.3 Length of Role Play and Service User Involvement

It might be that it is the brevity of the role play during each session that has impacted on the opportunity for skill development. The technique of role play has been found, through independent evaluation of the training process of veterinary students, to assist the development of confidence around communication skills (Radford et al., 2003); to aid in identifying the strengths and weaknesses of the participant in mediation training (Cheung et al., 2004); and to build confidence for healthcare professionals in dealing with challenging situations (Thomas and Cohn, 2006). Changes in the implementation of role-play would have implications because of the set length of the programme and timings of each class it would offer the student a more realistic experience. In addition, a longer time spent in role-play might offer the participant time to relax, to present a more genuine picture of their skills. Additionally, although students were presented with the same role-play scenarios, the reliance on other students to take on the role of service-user is likely to have resulted in a lack of standardised experience within their role-plays (McCluskey, 2005). In order to increase the reliability of any assessment the use of a professional actor might have been considered "to ensure that performance is life-like and that different students are presented with a similar challenge is necessary to reduce an important source of variability in the assessment process" (Cartney, 2006. p834). Since carrying out this research the teaching team have introduced volunteer simulated service-users to the assessed videoed interview which takes place at the end of the skills module to determine the students' readiness for practice.

The notion of a more realistic situation might present an alternative context for the programme under study. As an alternative to the use of role play the assessment of skills development could involve service-users. Although the ethical considerations of such a notion have already been discussed, other research has found that clinical situations where real patients are used have elicited more precise judgements from assessors than when video taped interviews were considered (De Haes et al., 2005). Following on from this research, actors and ex-service-users have been utilised in role-play scenarios for summative assessment in readiness for the student's first period of practice learning.

5.1.4 Skills Rehearsal and Group Size

Decker (1993) discovered that the most effective skills rehearsal programme involves video feedback and takes place in small groups with only one or two observers. It was thought that this was because commitment to the behaviour was maintained whilst anxiety levels were reduced by the small group setting. Decker (1984) acknowledged the possibility of anxiety levels being increased within larger group settings but also suggested that whole group training is likely to result in a greater level of openness and a stronger commitment to the desirable behaviour(s) while smaller groups may promote a greater feeling of choice and a greater likelihood of openness with regard to improvisation. He also highlighted the fact that larger groups offered students multiple opportunities to observe the rehearsal of desirable behaviours and a greater opportunity for vicarious experience. In his research the largest group did not experience video feedback techniques and did not achieve the highest scores for behaviour reproduction. In conclusion Decker advised that rehearsals should take place in small

groups and each practice should be videoed and played back immediately to the student. Roter et al (2004) made no such claims with regard to the size of the group. Their research involved 28 participants being videoed and receiving feedback in simulated interview situations. However, the group was not used to offer peer feedback and so it might be that anxiety levels were lowered as a result of not being observed by others (Roter et al., 2004). In developing the programme at RGU practice is videoed and played back to participants before the end of the session. Groups of 10-12 students are involved in the skills development work and are encouraged to reflect on their own communication skills and those of their peers. Although participants admit anxiety at the outset, all claim to be more relaxed and confident at the final filming and so we might conclude that the student's perceptions or beliefs around their communication has changed even though their skill level might not have.

Although the size of the group might contribute somewhat to the results gained through this research, any consideration of a change in the number of participants involved should be balanced against any possible loss of the inter-personal aspects of the teaching programme.

5.1.5 Reinforcement of Learning

When using video feedback as a tool to aid undergraduates who experienced anxiety in social settings Rodebaugh (2004) found that the impact of such an approach was heightened in situations where students had been cognitively prepared prior to the filming. The skills sessions at the Robert Gordon University are held over a ten week period with a weekly group discussion about the task and

desirable communication skills prior to filming. The tutor guides participants to reflect on what they had learned from previous sessions. Through observing the video footage of other participants in addition to their own learning can be reinforced. It might be concluded that this would indeed prepare participants cognitively prior to filming. However, the exact time required for individual students to move from what might be described as a state of unconscious competence (competent but without prior thought or planning) to one of conscious competence (where the task is achieved and there is an awareness of the process and skill necessary to ensure such success) is undeterminable (Howell, 1982). It might be that some behaviours have to be deconstructed along the way and be replaced or re-built in order to produce robust skills that can be used in a variety of settings. A ten week programme offering three or four sessions of video feedback could be insufficient to allow such a process to take place.

5.1.6 Opportunities for Learning

Other relevant research has suggested that the number of peer observations conducted have a direct impact on the behaviour reproduction scores (Decker, 1983). Several students in the skills class were absent from at least one class and therefore missed the opportunity both to practice their skills and to engage in feedback with peers. Students role-played on alternate weeks making comparison of progress between sessions difficult at times. This programme evaluation would be limited if there was no consideration as to whether the number of sessions undertaken impacted upon the level of skill demonstrated at the end of the programme. From examining the data, then, two participants experienced five feedback sessions and made no improvements in

any areas between the first and last film. Four students took part in four feedbacks, two of whom demonstrated no improvement in any area between first and last films; one of those participants improved in five and one in four out of six skills areas. Five of the participants took part in only three video feedback sessions with one demonstrating no improvement in any skills area; two each improved in one area; one participant improved in four areas whilst the remaining student improved in all six areas of skill development. In stark contrast to Decker's (1983) results, it can be concluded that this research has not evidenced a clear link between the number of feedback sessions and overall improvement in skill level.

5.1.7 Long Term Impact on Professional Practice

Within this research it should be considered whether the changes in skills demonstrated are thought to be sustainable in the long term or what the actual impact of the use of them are on service-users. In addition, it would appear to be impossible to ensure that the performance of participants was not influenced by other variables in subsequent practice or teaching situations. The participant numbers would need to be greater in order to guard against "sample attrition" whereby "participants are lost to the study when follow-up measures are being made" (Robson, 2002. p161). In addition, any measures implemented for the testing of skills would need to be suitable for use on a number of occasions and the analysis of the data would need to take this into account (Robson, 2002). Even with ongoing testing the results could only be utilised to determine how fit for practice the individual would be at the point of completing their training.

Numerous behavioural programmes have discussed the relevance of ongoing practice or support sessions to encourage the sustaining of new behaviours. Thomas and Cohn (2006) reported on the skills training of forty-seven healthcare professionals where data was measured at a pre-test level, immediately after the training, and at a three and six month follow up. Although improvement was noted three months after the end of training, no significant statistical difference was discovered between skills evidenced at that stage and in the six month follow-up despite sustained reports of increased confidence from the participants (Thomas et al., 2006).

Relapses in the level of exercise taken by diabetics suffering obesity took place by the twenty fourth week of a programme and prompted the conclusion that booster sessions were necessary to maintain changes in behaviour (Tudor-Locke et al., 2004). In addition, there is some suggestion from McCluskey's (2005) research that some professionals such as those who are categorised as 'compulsive caregivers' may require ongoing support or training in order to sustain empathetic attunement in the long term.

5.2 Critique of the Methodology Employed

5.2.1 The use of the Video as an Observational Tool

It should not only be the reasons for using video feedback that are considered but also the impact of being videoed and of any changes which may have occurred as a result. In order to do this one must acknowledge the interest that individuals have in seeing images of themselves. Although, when using video feedback, we rely on such a desire in order to keep the participant interested, the level of embarrassment or fear associated with recoding and viewing one's

own behaviour must also be considered (Wels, 2004). "Video recording can arouse particular feelings, thoughts and associations on the part of those being recorded and elicit certain actions and/or reactions." (Wels, 2004. p31). In seeing images of oneself it is possible that individuals may be reminded of hidden and defended aspects of their personality. Curiosity or pure vanity, embarrassment or shame can be the response. Interest can easily result in anxiety and is accompanied with a fear of being judged. Recording and retaining visual information of individuals within society is often associated with being monitored or supervised and so it is important that participants are kept fully informed with regard to how the film is to be used and what will happen to it thereafter (Wels, 2004). The trainer needs to be aware of the possible responses to the presence of a camera and the manner in which such reactions could impact on the process.

In an attempt to allay anxieties, each week at the beginning of the skills seminar at the Robert Gordon University, students were encouraged to focus on the contact principles and on how they might be used within the context offered by the role play case study. Participants were asked to consider their achievements and their working points highlighted during the previous week. In addition they were allowed several minutes to settle into the role play prior to filming in an attempt to reduce their anxiety levels connected with the process of being videoed. In considering three separate pieces of research involving VIG, Forsyth et al (2006) discovered that although students experienced some anxiety around being videoed, they remained interested and excited with regard to the outcome. In addition, students commented that the process of being video taped and then watching the play back of the film was not as difficult as they had initially imagined. Finally, students stated that watching themselves on video actually assisted in

boosting their confidence (Forsyth, 2005; Thomson et al., 2005; Forsyth and Thurston, 2005). Such findings are supported by the qualitative information gained from this research which suggests that the participants found the process of watching themselves on film to be helpful. It might be argued that such opinions are expressed retrospectively and therefore reflect feelings experienced only at the end of the process. If this was true one would expect that as the participant became more confident and relaxed that their scores would increase. This is, however, only supported by the data from this programme evaluation for two out of the eleven participants.

In addition to the impact of being filmed, the experimental context of being observed for research purposes might, as already stated, cause embarrassment or anxiety resulting in the participant being defensive or disguising their normal practice. This is also known as the halo effect (Denscombe, 2005). The impact on performance of the knowledge that one is being observed was also discussed in research carried out on experienced physicians (Hulsman et al., 1999). Other research suggests that it takes a relatively short time to accept the presence of the camera (Rosenstein, 2002) and the approach of Video Interactive Guidance involves checking how representative the footage gained is of daily practice, with the participant. It may be appropriate to question whether it is possible during a relatively short skills programme for both the use of the video camera and the presence of the observer to be accepted by the participants sufficiently to allow the experimental setting to become naturalistic.

According to Wels (1998), the video medium has instrumental, functional and personal aspects. Although both the instrumental and functional aspects are important with regard to the recording and

replaying of images within social work training it is the personal aspect of this medium that is possibly the key to the success of using video replay in developing communication skills with social workers in training. In the case of the skills programme and associated research the way in which the individual uses their presence as a trainer or therapist should be considered. This requires more than the skills of a cameraman in filming in these situations. The manner by which the medium is applied will be crucial, requiring skill not only in filming but in guiding, editing and in feedback (Wels, 2004).

The specific approach of Video Interactive Guidance used in this research employs theories of change which use self-modelling and video feedback and so participants only viewed film of themselves and of other participants. Support for the benefits of such an approach were proposed by Ford (1997) who made a comparison of three procedures for improving teaching skills and still found that the combined effect of verbal feedback from an educator and video feedback brought about the greatest degree of change. Other studies have demonstrated that a greater amount of feedback does not necessarily bring about an increase in productivity (Leivo, 2001). Gallinet (2005) considered research where group feedback had been offered followed by individual feedback to workers. Here production increased greatly after group feedback with a significant increase again in the second phase when individual feedback was introduced. However, there appeared to be little difference in the progress brought about by either approach despite the overall changes that occurred. There is little in the literature available, though, which indicates whether it is more important developmentally for the student to see themselves on film or whether changes could be brought about just as easily by watching video footage of others communicating well.

Geertz (1973) highlighted, from a research angle, the use of the video as an observational tool to disentangle the complicated notions which often emanate from qualitative data. Although the felt experience of participants was reported upon, the main focus with regard to analysis of the information has been on the quantitative data that represents change, i.e. on the number of observation noted after the use of video feedback. If a greater emphasis was placed on the self-realisation of skills that occurred as a result of this experiment with an understanding that the thoughts and feelings of participants are an important source of data, then it can be said that the use of this intervention has been successful with all participants. As such, a "quasi-statistical approach" has been undertaken in that "phrase frequencies" were collected in order to determine the importance that participants attributed to the use of video feedback and its impact on their practice (Robson, 2002. p458).

5.2.2 Independent Rater Observations

Ratings of skill development for all participants according to the Contact Principles (p.139) and interpreted as set out by the Researcher (pages 52-54) indicate variable shifts across all areas. The Rater noted that the nature of the role-play scenario in certain weeks precluded the opportunity for the concordant demonstration of specific skills such as 'Yes' Body and Eye-contact. This was particularly evident in Week 7 when participants supported simulated Service-Users to complete Genograms and Eco-maps.

The role-play task in week 7 (Working with Families, p.151) involved the creation of Genograms and Ecomaps that required

greater periods of concentration. In response to this, the Rater reported that they made a greater allowance for the resting period in scores of participants who undertook this scenario, i.e. they did not cap it at 30 seconds before determining it as discordant.

Participants appeared to experience greater difficulties in working with their peers as simulated Service-Users when the role-play scenario involved managing more challenging behaviour. This was particularly evident in Week 10 where the observed frequency of Discordant responses surpassed that of the bench mark videos for six participants.

The results from this study are largely dependent on the observations of the rater. It should be considered, then, whether the interests or expectations of the researcher have determined the focus, i.e. perhaps the results are due to selective attention. This possibility is unlikely given that there is a framework adopted by the researcher which includes a checklist of behaviours that are considered desirable. However, it might be that as an objective observer the complete sequence has been missed or misunderstood resulting in the possibility, for example, of them only identifying the disruption and not the repair of a pattern (McCluskey, 2005).

The use of a rater, with no interest in the outcome of the research, to independently analyse the films should have safeguarded against the impact of interpersonal factors where there is a danger that through involvement with the group the researcher may develop different types of relationships with different group members. This could bring about bias in how they respond or in how the information they produce is interpreted if it were not for the fact that the researcher has no influence on how the Rater interprets the films. However, to guard against the possibility of the expectation

of a progression in skills level to determine the frequency of observation by the Rater (also known as selective encoding) the film for each student could have been numbered and placed in a random sequence (Robson, 2002). It is clear that other steps might have been taken to ensure impartiality etc., however this does not alter the fact that the results do not support the idea that the use of video feedback had significantly improved the skills level for participants.

5.2.3 The Influence of the Rater

Although the design of the research might have reduced the likelihood of any direct influence from the rater (as previously discussed), there may be other complications as a result of having someone who has not been involved in the teaching process analyse the films. McCluskey (2005) discovered that the objective assessor "often missed the complete sequence of interaction and missed out on crucial feedback from one person to the other" (p187). This raises the notion of an inter-observer agreement. The research design relies heavily for its validity on the basis of the rater being an independent person. However, this does not allow for the possibility of 'observer drift' (Robson, 2002. p343). Observer drift explains the manner in which each individual would interpret and use the instrument or schedule. Although this is more commonly used within structured observations it could be applied to the way in which the list of Contact Principles is utilised when the data from this research was analysed. In research carried out by Taplin and Reid (1973) the reliability of the observer was put to test. Participants were given different information about who was being monitored (Taplin and Reid, 1973). The poorest levels of agreement and accuracy were found in those who did not anticipate

that they were being checked. It may be, then, that by failing to employ a second rater and cross-checking their results that a more reliable picture of skills development was forfeited.

5.2.4 The Role of the Educator

It might be that the opportunity could have been created in this study to use the educator to independently rate the development of skills. Given the involvement of the educator in working through the role-play scenarios and emphasising desirable behaviours prior to filming, their overall impression of the interaction, perhaps in the role of second rater might have enhanced construct validity. The usefulness of such a notion is further considered by Gallinet (2005) who explored differences in productivity in industry between groups who had received feedback from their supervisors and those who had input from experts. Both approaches were reported as being equally effective in this study.

The contribution made by the trainer has possibly been overlooked in some of the available research although the relationship between this person and the 'subject' has been identified in the work of Biggs (1993). This is echoed in the work of Rosenstein (2002) who reminds us that the camera is not selective at the time of filming but that the skill lies with the one who analyses and edits the film. For the purpose of analysing film footage of the social work skills programme the reader should be reminded that the video material was not edited due to the relatively short length of each film clip in the first instance. Italian research which examined teaching programmes for the assessment of psychiatric disorders also suggested that it is the skill of the person giving feedback rather than the specific clinical instructions offered which results in skills

development (Berardi et al., 2003). This was also identified by practising and training Educational Psychologists who commented that the influence of the educator or guider and the depth of analysis encouraged by that individual is central to the effectiveness of the method (Jindal-Snape and Holmes, 2006). Gallinat (2005) highlighted the effectiveness of programmes where the combination of video feedback and supervisor feedback were integrated. She also considered the issue of real time viewing versus delayed viewing. Gallinat also emphasised a connection between the timing of when the film footage was watched and when the behaviour was displayed. In their research Marita et al (1999) previously discovered that it was useful to give feedback immediately after the video taping of interviews to nurses in training.

It may be, then, that the lack of progress exhibited by participants is due to a deficit in the abilities of the educator. Although the importance of the trainer or educator should not be minimised, this research attempted to at the very least equalise the impact made, i.e. through using the same approach with each participant. Also, by using the same tutor throughout, the possibility of other variables bringing about change in the behaviour demonstrated on video should be reduced. Finally, by applying the Contact Principles to each videoed situation the educator is provided with a standardised method of feeding back to participants. The researcher would argue that their relationship with the two individuals who achieved an overall improvement in their scores was no more intense than with other participants. Additionally, the independent rater was used in order to guard against over involvement. However, if a decrease in scores can be attributed to the poor skills of the trainer, an alternative explanation for the improvement in the skills of some participants must be put forward.

According to Decker (1983), achieving consistency from the trainer or educator with regard to the quality of feedback and the amount of feedback for each student was found to be difficult given that students demonstrated varying levels of skill at the start of the programme and therefore required different levels of support. In looking at the scores for the benchmark videos, it is clear that individual participants did possess levels of skill that differed from others in the group. However, by having only one educator acting as the observer and employing the same approach with each participant, it is the focus for each student rather than the level of support which differs. As previously mentioned, participants worked each week in the same pair or threesome. Although it was arranged in this way to offer consistency, it is possible that such an arrangement served to disadvantage some students. For example, participants may have initially chosen to work with a friend or someone with the same skill level. The latter case could result in the provision of fewer opportunities for development through vicarious experience. The existing level of skill might also determine the ability of the student to adapt their behaviour following the identification of desirable areas of communication through feedback (Milan et al., 2006). Alternatively, it might be as in the case of the research on teaching communication skills to experienced physicians, Hulsman et al (1999) highlighted the possibility that more practised professionals may have already developed clear patterns of communication and might, therefore, find new skill acquisition more difficult.

5.3 Critique of Aspects of the Data Analysis Process

5.3.1 Quantitative Methods of Analysis and the Development of Reflective Practice

If the development of self-realisation is one of the main aims of this research then video feedback appears to be helpful although the process by which such a state is achieved appears to involve some anxiety and pain through the initial experience of seeing oneself on film. This approach to motivating the individual is commonly utilised within programmes that involve the use of behavioural analysis to bring about change (Daniels, 1994). The employment of a strategy, such as video feedback, which encourages the student to develop skills around reflective practice and to begin the journey towards professional competence is important. Video Interactive Guidance can be seen to help link knowledge to particular activities in order to facilitate a knowing-in-action (Schön, 1987). Such a focus might suggest that collecting quantitative data is limiting the opportunity to analyse such change. It seems that this research could have encouraged students to reflect at a deeper level through collecting more comprehensive qualitative data to more adequately capture the value of their experience. This might, however, result in the creation of alternative complications in that qualitative data has been considered as "…an attractive nuisance, because of the attractiveness of its richness but the difficulty of finding analytic paths through that richness" (Miles, 1979. p399).

5.3.2 The Development of Alternative Skills

It might be that the focus on quantitative measurement of skills in this research has prevented the detection of the presence of other, more integrated and complex, behaviours.

The notion that it is easier to add new behaviours might perhaps indicate another reason for the apparent deterioration in the results of those students studied (Culver and Watson, 1996). It could be possible, as is sometimes the case when using behaviour modification programmes, that an alternative skill which has not been identified as a desirable behaviour, has been adopted. For example, although the use of the contact principles is designed to encourage the participation of the recipient, the resulting skill of developing an activating relationship is not on the list of desirable behaviours being specifically observed. An activating relationship involves seven steps in the form of observing; asking for opinions; giving ones own opinion; receiving confirming and then responding with ones own opinion; allowing the service-user to assimilate and investigate the expressed opinion of the worker; the worker then asks for confirmation about what they have said or for an alternative opinion; finally after a short discussion the worker and service-user may move the discussion on (VIG UK, 2006). Within this relationship the worker must decide when to activate or empower the client and when to compensate through asking for questions or giving an opinion. When this cycle is completed successfully the client will be seen to be more active in any discussion and problem solving exercise. This could mean that they take longer turns and that the worker listens more which might account for the longer 'Rest' periods displayed in some role-play scenarios. However, if it were the case that participants were

evidencing a new, more sophisticated skill of activating the relationship, the scores around attentiveness should be higher. As can be seen this is only the case for four out of eleven participants.

This highlights the issue of the best method of collecting data and questions how the skill of communication can be most accurately defined and microanalysed. This leads us on to addressing the categorisation of such skills.

5.3.3 Categorising Communication Skills

"Regarding communication as skill implies not only that instruction can be planned, executed and evaluated but points the way to the sorts of training method that may prove suitable" (Dickson et al., 1997. p22). It is vital that in reducing aspects of communication in order to measure them that we do not lose sight of the importance of what those behaviours convey. For example, "attunement to affect is not empathy. Attunement precedes empathy developmentally" (McCluskey, 2005. p243). Further criticism has been directed, therefore, towards the consideration of context and meaning only as specified by their categorisation (Bull, 2002). In response to this, efforts have been made to make more use of the manner in which people categorise themselves. Proponents argue that coding systems utilised by outside observers can be highly informative by offering a helpful 'aid' to perception, i.e. it can help identify behavioural patterns/sequences that might not be obvious to the untrained. The micro analytic approach to communication does centre on the following themes: "Communication is studied as it actually occurs"; "Communication can be studied as an activity in its own right"; "all features of interaction are potentially significant"; "communication has a structure"; "conversation can be

regarded as a form of action"; "communication can be understood in an evolutionary context"; "communication is best studied in naturally occurring contexts"; "communication can be regarded as a form of skill"; "communication can be taught like any other skill"; "macro issues can be studied through microanalysis" (Bull, 2002. p21-23).

5.4 Limitations of the Study

The results from this study have perhaps been limited by a range of factors identified during the process of this research. These reflect issues highlighted in relation to the methods applied and are outlined below.

5.4.1 Methodological Limitations

5.4.2 Pre-test / Post-test Design

Although used extensively the pre-test post-test single group design is believed to have a number of disadvantages which appear to pose a threat to its validity. Firstly, we cannot guard against the occurrence of other events in between the use of video feedback and so there is no way of distributing internal validity factors. Although we can make comparisons between the performances of students within the group, we cannot be certain that any progress or deterioration has not been brought about by some other variable (Mark, 1996).

5.4.3 The Introduction of a Control Group

This design might have been limited by the absence of another pre-tested control group (Robson, 2002). The inclusion of such a group might have proved useful in order to measure the changes in skill levels in both groups. However, even a control group might not have provided the research with a similar sample and so the groups would not be sufficiently well matched (Denscombe, 2005).

Even with the introduction of a control group, we would not be able to disregard the impact of the acquisition of other knowledge during this period, although no other specific skills work is carried out in the course of the semester other than that evaluated in this research. Neither can we anticipate the effect of the cohesion of the group during the weeks of working together. Finally, as the participants are working on skills development as it is an identified need and requirement for their training there is an implicit expectation that some participants will develop a greater level of skill from the outset. It is possible therefore that even with changes made to the methodology that the performance of some participants could improve for random statistical reasons which are not connected with the use of video feedback.

5.4.4 Pre and Post-test Questionnaires

The main challenge to the validity of the findings through analysis of quantitative data in this study is in the interpretation of the information contained within the questionnaires. A flaw is found in the design of the pre and post-test questionnaires which are not matched for either the number of responses (3 in the first as

compared to 7 in the second) or the nature of the questions posed. Four pre-coded responses were offered to prevent any participant from simply choosing a median answer. Pre-coded responses can be helpful in that answers are standardised (Denscombe, 2005). However, they can be experienced as frustrating and restricting by respondents; can structure responses that "bias the findings towards the researcher's rather than the respondent's (Denscombe, 2005. p160); and do not allow for the researcher to validate or explore the answers given.

"A questionnaire needs to be crisp and concise, asking just those questions which are crucial to the research" (Denscombe, 2005. p152). Although the research question and survey questions were linked (Robson, 2002), it might be that the narrow range of questions with an over-reliance on pre-coded questions has offered insufficient opportunity for respondents to explain their experience, or, to reflect in their own words on their own progress. The introduction of an individual reflective self-evaluation to accompany their video footage might allow the researcher to understand the motivation and comprehension of the participant (Cartney, 2006). Alternatively, the questionnaire could be followed up with a semi-structured interview to gain an understanding of the 'felt experience' of participants and, along with the quantitative measurements, to provide data triangulation.

5.4.5 Quantitative Measurement of Communication Skills

It might be that in reducing aspects of communication to specific micro skills, in order to measure them, we have lost sight of what those behaviours actually convey. Such categorisation while reducing observed behaviours to frequencies, limits the

consideration of context and meaning (Bull, 2002). Naturalistic observation with a qualitative analysis has become the preferred method to allow people to categorise themselves in the manner that best suits them (Bull, 2002).

5.5 Limitations Around Encouraging Reflection on Practice

Perhaps more might have been gained through making comparisons with alternative methods of encouraging reflection on ones own performance through a repeated measures design. Although the notion of repeated measures has already been utilised in this research in terms of the pre-test post-test aspect of the existing design the difference would be in the use of two groups. One would be subjected to video feedback while the other would receive an alternative intervention such as feedback but without the use of video, thus emulating a simple two group design. This would appear to be the better option than subjecting participants to two interventions in succession which might result in some kind of order effect such as a "fatigue effect" a "practice effect" or a "carry over" effect, making it difficult to ascertain which approach is actually responsible for the changes that take place (Robson, 2002. p130).

5.6 Limitations of Group Size and the impact on Skills Rehearsal

The random selection of large groups should result in a tendency for non factors not crucial to this research to eliminate themselves. However, it may be that the sample size is too small to allow for this to happen. This, in its own right might result in sampling error (Denscombe, 2005). Although statistical significance is not

predetermined by the size of the sample the chance of gaining a result which is significant is increased as the size of the sample grows because the sensitivity of the test increases. This has brought about a tendency to employ larger sample sizes irrespective of whether this is appropriate to the study or is likely to produce robust data (Robson, 2002). With regard to this research the size of the sample was pre-determined by the size of seminar groups. Although more than one group could have been used given that students were undertaking the same skills work, it would have not been possible for the researcher to have been involved with more than one group at the time. So by widening the group of participants, the standardisation of the implementation of the approach would have been sacrificed.

5.7 Limitations Caused by the Length of the Programme

Another consideration is around the length of time taken to integrate new skills into existing patterns of behaviour. It might be that the opportunity for more videoed sessions would allow students time to consolidate their learning. This cannot be proposed with any level of certainty given that participants under observation in this research appeared to achieve at a higher level in the earlier part of the programme. However, in light of Decker's (1993) research which highlighted a correlation between the number of peer observations and the levels of behaviour reproduction, the inconsistent levels of attendance of videoed sessions might have constrained skill development.

5.8 Conclusion

This research was carried out on the premise that "…we currently lack a knowledge base for the best ways of learning and teaching communication skills, since the learning processes involved are complex and have rarely been evaluated…" (Trevithick, 2004. p2). The central research question for this study is whether the implementation of video feedback techniques in a teaching programme for social work students brings about developments in the level of communication skills observed. There is a clear increase in the emphasis on the programme delivery of such skills in social work education.

The results from this programme evaluation, measured quantitatively, do not suggest that the relationship between the use of video feedback and the development of communication skills is significant, although minor changes in some skill areas can be seen. Qualitative data, in the form of the testimonies of the participants, suggests that the programme has raised the awareness of students, assisting them in improving their confidence in their practice and resulting in a greater degree of self-efficacy with regard to their professional competence. Such findings may go some way to challenge conventional views of professional practice that indicates that professionals operate only by applying formally-learned specialist or technical knowledge (Schön, 1987).

The training programme implemented at RGU has relied on the specific application of Video Interactive Guidance (VHT). In considering research available on the use of video feedback in family situations there have been suggestions that "evidence regarding the effects of VHT based on analyses of video recordings

is not yet abundant or sufficiently convincing", (Wels, 2004. p100). The methodological and logistic challenges of utilising such approaches in the teaching and assessment of communication skills has also been noted (Roter et al., 2004).

Within Higher Education more attention has been paid by researchers to the process of assessment rather than to the actual knowledge imparted and to the teaching methods employed. There has been an increased emphasis placed on the delivery of communication skills training within social work programmes resulting in the need for educators to examine practice within other professional courses. The challenge of teaching skills appropriate to the contemporary social work environment is ongoing.

Issues of process, methodology and generalisation have been considered in order to highlight the complexities inherent in the training and assessing of communication skills. It is hoped, however, that the limitations presented should not prevent the examination and reflection on this study by a wider audience. Suggestions that further research might focus on content in addition to micro-analysis, personal aspects such as attachment patterns and on the transfer of skills into practice are made in the context of developing understanding further to ensure that social work students are best equipped to benefit service-users.

5.9 Implications

5.9.1 Implications for Future Research with regard to Skills Development Programmes

In considering this particular programme and its impact, the use of a group who were subject to an **alternative teaching method** for

skills development could be helpful in further exploring the effectiveness of video feedback.

For example a group where verbal feedback is given without the reinforcement of the visual display might bring about different results which could be compared to the progress, or lack of, from those who experience video feedback. Likewise the amount of feedback could be examined, i.e. self-reflection accompanied by feedback from other participants and from the educator might be overwhelming. Although the skills of the educator were considered, feedback from an alternative person was not. However, this might provide an alternative way of examining whether change is brought about as a result of a particular approach such as video feedback, or, through the relationship developed with the educator or supervisor.

Alternatively, further research which includes a comparison with a **different method of feeding back** to students to determine the level of success or to isolate factors which are either supportive or unhelpful would be more rigorous in examining the development of skills through the use of video feedback techniques. Such a "medium is used not only as a tool for registration and/or clarification but also as the operative element for the stimulation and reinforcement of change…." (Wels, 1998. p11).

5.9.2 Future Research with Regard to the Micro-analysis of Communication Skills

The micro-analysis of communication skills in this study considered whether the posing of a question was appropriate or concordant but not if it was a 'good' question in terms of exploration of understanding, meaning or the expectations of those involved

(Richards et al., 2005). It might be, then, that research back into the broader conceptualisation of interaction as a stimulus-response sequence would allow a closer examination of the content. The more controversial structural approach (communication is related to features outwith the social context, e.g. personality etc.) might even be re-visited (Bull, 2002). This is an important area for further consideration if we agree with McCluskey (2005) that the capacity to respond empathetically is linked to the 'caregivers' specific pattern of attachment. She claims that "the consequences of inadequate caregiving can be serious in terms of establishing and maintaining wellbeing alongside social and interpersonal competence" (McCluskey, 2005. p241).

5.9.3 Future Research using Alternative Methodology

The usefulness of an approach which involves a micro-analysis of communication skills is under debate. The use of a quantitative approach which necessitates the reduction of observed behaviour to occurrences is not favoured by those who prefer more naturalistic observation accompanied by qualitative information (Bull, 2002). "The use of coding systems has also been criticized, on the grounds that such procedures are typically arbitrary, reductionist and distort the data to fit it into preconceived categories (Psathas, 1995. p20). Whatever the methodology adopted it would appear that practice can only be improved if teaching practice places sufficient emphasis on the context and meaning of communication.

Furthermore, with regard to what can be expected of social workers in training in practice and class situations, it is important that consideration be given to the question of whether the skill to communicate can be taught at all or whether it is an instinctive

response as a result of our early life experiences. McCluskey (2005) examined the relationship between empathetic attunement and attachment style in the 'caregiver', utilising an experimental design whereby half the participants received training and half did not. She found a significant correlation between effective care giving and secure attachment styles (McCluskey, 2005). In her summary McCluskey (2005) noted that there was some evidence which suggested an improvement in the response by caregivers to the emotional reactions of 'care-seekers' following even a short training programme.

5.9.4 Future Research into Sustained Changes in Practice

Future research might comprise of a longitudinal study of the same participants in periods of practice learning and in post-qualifying practice to determine whether any impact was long lasting. A follow up study might also allow for the participant to fully incorporate the developed skills into their daily repertoire. Further research into sustained practice may, at the very least, help identify the factors that promote transfer of learning from simulation to practice (Richards et al., 2005). Dickson et al (1997) identified complexities inherent in the transfer of skills developed through training into the practice setting. They suggested that the personality and learning style of the student, their feelings of self-efficacy, features of the practice setting and the role of the Practice Teacher all require consideration prior to the successful transfer of skills from the classroom to the workplace (Dickson et al, 1997). Ongoing evaluative research would be required to assess the impact of such structured training interventions.

5.9.5 Research into Effective Caregiving

It is obvious that the purpose of developing and assessing communication skills in social work students is to improve their interactions with service-users and colleagues. Social workers are required to engage and work with emotion across a variety of contexts. The key to how skills might be improved is likely to require an increase in understanding of how we regulate expression of emotion in ourselves and others. If we agree that "the goal of careseeking is effective caregiving" (McCluskey, 2005. p248) and is dependent on the worker's ability to demonstrate empathetic attunement to the service-user, then, further research with a focus on the ability of the student to negotiate the dynamics of careseeking is crucial. Building on McCluskey's (2005) work this would involve consideration of how the student is influenced by their own pattern of attachment with regard to their expectation of how they will be cared for and how they will care for others, in short, of how they will be "met as a person" (p.249).

Word Count: 26,292

References

Argyle, M., 1990. The biological basis of rapport. *The Journal of Psychological Inquiry.* 1:4

Backstein, D., Agnidis, Z., Regehr, G and Remick, R., 2004. The effectiveness of video feedback in the acquisition of orthopaedic technical skills. *American Journal of Surgery* 187(3)

Baldwin, M., 2000. Does self-assessment in a group help students to learn? *Social Work Education* 19:5

Bales, R.F., 1970. Personality and interpersonal behaviour. In: B. Rosenstein. Video Use in Social Science Research and Program Evaluation. *International Journal of Qualitative Methods* 1:3 Article 2. pp.1-34

Bandura, A., 1977. *Social Learning Theory*. New Jersey: Prentice Hall.

Bell, J., 1999. *Doing Your Research Project*. Philadelphia: Open University Press.

Berardi, D., Ceroni, G.B., Ferrari, G., Gask, L., Leggieri, G and Scardovi, A., 2003. Improving psychiatric interview skills of established GPs: evaluating group training course in Italy. *Journal of Family Practice* 20(4)

Biggs, J.B., 1993. From theory to practice: A cognitive systems approach. *Higher Education Research and Development.* Vol.12(1). P.73-85.

Boud, D., 1999. Avoiding the traps: seeking good practice in the use of self-assessment and reflection in professional courses. *Social Work Education* 18:2

Bryman, A., 2004. *Social Research Methods*. Oxford: Oxford University Press.

Bull, P., 2002. *Communication Under the Microscope.* East Sussex: Routledge.

Burgess, H., Baldwin, M., Dalrymple, J. and Thomas, J., 1999. Developing self-assessment in social work education. *Journal of Social work Education* 18:2

Byrne, A.J., Sellen, A.J., Jones, J.G., Aitkenhead, A.R., Hussain, S., Gilder, F., Smith, H.L and Ribes, P., 2002. Effect of videotape feedback on anaesthetists' performance while managing simulated anaesthetic crisis: a multicentre study. *Journal of Anaesthesia* 57(2)

Cartney, P., 2006. Using Video Interviewing in the Assessment of Social Work Communication Skills. *British Journal of Social Work 36*

Cedar, B. and Levant, R.F., 1991. A meta-analysis of the effects of parent effectiveness training. *The American Journal of Family Therapy.* Vol.8(4). P373-384.

Cheung, S.O., Cheung, K.K.W. and Suen, H.C.H., 2004. Prototype web-based mediator assessment system for role plays. *Journal of Professional Issues in engineering Education and Practice* 130(2)

Cooper, V., 2004. *Using Video in Health Sciences Teaching and Learning.* Networked Learning Conference 2004. http://www.shef.ac.uk. [Accessed 14 September 2006]

Coulshed, V and Orme, J., 2006. *Social Work Practice: An Introduction.* Palgrave: Basingstoke.

Culver,R. and Watson,T., 1996. *Teaching and Learning as a Change Process.* New York: Binghampton University.

Daniels, A.C., 1994. *Bringing out the Best in People.* New Jersey: McGraw-Hill Companies.

Data Protection Act 1998. London: HMSO.

Davies, M., 1985. Helpful and Effective Communication. In: J. Lishman. *Communication in Social Work*. Basingstoke: MacMillan. pp.6-14

Davies, M. and Barton, R., (Eds), 2000. *The Blackwell Encyclopaedia of Social Work.* Oxford: Blackwell.

Decker, P.J., 1983. The Effects of Rehearsal Group Size And Video Feedback in Behaviour Modelling Training. *Journal of Personnel Psychology* vol.36

Decker, P.J. and Mann, R., 1984. The Effect of Key Behaviours Distinctiveness on Generalisation and Recall in Behaviour Modelling Training. *Academy of Management Journal*. 27:4

De Haes, J.C.J.M., Oort, F.J. and Hulsman, R.L., 2005. Summative assessment of medical students' communication skills and

professional attitudes through observation in clinical practice. *Medical Teacher* 27:4

Denscombe, M., 2005. *The Good Research Guide*. Berkshire: Open University Press.

Dickson, D., Hargie, O. and Morrow, N., 1997. *Communication Skills Training for Health Professionals.* Cheltenham: Nelson Thornes Ltd.

Dowrick, P.J. and Biggs, S.J., (Eds), 1983. *Using video. Psychological and Social applications.* Chichester: John Wiley and Sons.

Egan, G. 1986. Kinds of Communication. In: J. Lishman. *Communication in Social Work*. Basingstoke: MacMillan. pp.15-44

Embregts, P.J.C.M., 2003. Using self-management, video feedback, and graphic feedback to improve social behaviour of youth with mild mental retardation. *Journal of Education and training in Developmental Disabilities* 38(3).

Erickson, F. 1979. Talking down. In: F, Erickson. Audiovisual Records as a Primary Source. *Sociological Methods and Research* 11:2. pp.213-232

Erickson, F., 1982. Audiovisual Records as a Primary Source. *Sociological Methods and Research* 11:2

Falchikov, N. and Boud, D. 1989. The debate. In: P. Cartney. Using Video Interviewing in the Assessment of Social Work

Communication Skills. *British Journal of Social Work 36.* pp.827-844

Fook, J. 2007. Reflective Practice and Critical Reflection. In: J. Lishman (ed). Handbook for Practice Learning in social work and Social Care. London. Jessica Kingsley Publishers. pp.363-375

Ford, J.K. (Ed). 1997. *Improving training Effectiveness in work Organizations*. New Jersey. Lawrence Erlbaum Associates.

Forsyth, P., 2005. *The Development of Student Teachers' Interaction in Skills through Video Interactive Guidance*. University of Dundee. http://www.cpeducation.co.uk/veroc/conferences/archive/30_06_06. [Accessed 12 September 2006]

Forsyth, P. and Thurston,A., (2005) *Video Enhanced Reflective Practice.* University of Dundee. http://www.cpeducation.co.uk/veroc/conferences/archive/30_06_06. [Accessed 12 September 2006]

Gallinat, J., 2005. *The Effects of video feedback of staffs' own versus others' performance on discrete-trial training skills in a Human Service setting.* Unpublished Masters Thesis, University of Nevada.

Gask, L., Goldberg, D and Boardman, J., 1998. Small group interactive techniques utilizing video feedback. *International Journal of Psychiatry in Medicine* 28.

Geertz, C., 1973. *The interpretation of cultures*. New York. Basic Books.

Guadagnoli, M; Holcomb, W and Davis, M., 2001. The efficacy of video feedback for learning the golf swing. *Journal Of Sports Sciences* 20:8

Hartman,G., 1996. *Videography, Oral History and Education*. Israel: University of Negev.

Higgs, J., Sefton, A., Street, A., McAllister, L. and Hay, I., 2005. *Communicating in the Health and Social Sciences*. Victoria: Oxford University Press.

Hodges, N.J.; Chua, R and Franks, I.M., 2003. The role of video in facilitating perception and action of a novel co-ordination movement. *Journal of Motor Behaviours* 35:3

Howell, W.S., 1982. *The empathetic communicator*. University of Minnesota: Wadsworth.

Hudson, B.L and MacDonald, G. 1986. *Behavioural Social Work: an introduction.* Basingstoke: Macmillan.

Hulsman, R.L; Ros, W.J.G; Winnubst, J.A.M and Bensing, J.M., 1999. Teaching clinically experienced physicians communication skills. A review of evaluation studies. *Medical Education Journal. 33:9*

Hundeide, K., 1991. Helping disadvantaged children. Psycho-social intervention in a third world context. London: Jessica Kingsley.

Jason, H., Kagan, N., and Werner, A., 1971. Teaching communication skills. In: J. Wallace, R. Rao and R. Haslam.

Simulated patients and objective structured clinical examinations: review of their use in medical education. *Advances in Psychiatric Treatment 8.* pp.343-344

Jindal-Snape, D. and Holmes, E.A., 2006. *Investigating Methods for Enhancing Reflective Practice used by Educational Psychologists in Training and Practising Educational Psychologists*. University of Dundee.

Kadushin, A. and Harkness, D., 2002. *The Social Work Interview: Guide For Human Service Professionals.* New York: Columbia University Press.

Kadushin, A., 2002. *Supervision in Social Work*. New York: Columbia University Press.

Kern, H.J., 1978. Teacher self-training by video feedback and analysis of non-verbal behaviour. (German). *Psychologie in Erziehung und Unterricht* 25:2

Kinnear, P.R. and Gray, C.D., 2004. *SPSS12 Made Simple.* Hove: Psychology Press.

Koprowska, J, 2000. Communication. In: M. Davies and R. Barton, eds. *The Blackwell Encyclopaedia of Social Work.* Oxford: Blackwell. Pp.177; 384; 399

Koprowska, J., 2005. *Communication and Interpersonal Skills in Social Work.* Exeter: Learning Matters Limited.

Kozulin, A. and Rand, B.Y., 2000. *Experience of Mediated Learning: An Impact of Feurstein's Theory in Education and Psychology*. Oxford: Pergamon Press.

Kreuzer, M. (Ed) and Rader, H., 1999. *Video Home Training. Monchengladbach.* Schriften des Fachbereichs Socialwezen der FNM.

Kurtz, S., Silverman, J. & Draper, J., 1998. *Teaching and Learning Communication Skills in Medicine*. In: C.Vassilas and L.Ho. 2000. Video for Teaching Purposes. *Advances in Psychiatric Treatment* 6. pp.304-311

Laidlaw, T.S., Kaufman, D., MacLeod, H., Van Zanten, S., Simpson, D and Wrixon, W., 2006. Relationship of resident characteristics, attitudes, prior training and clinical knowledge to communications skills performance. *Medical Education Journal* 40:1

Leivo, A.R., 2001. A Field Study of the Effects of Gradually Terminated Public Feedback on Housekeeping Performance. *Journal of applied Social Psychology* 31:6

Lishman, J., 1994. *Communication in Social Work*. Basingstoke: MacMillan.

Maiteny, P.T., 2002. Mind in the Gap: summary of research exploring 'inner' influences of pro-sustainability learning and behaviour. *Journal of Environmental Education Research* 8:3

Marita, P., Leena, L. and Tarja, K., 1999. Nurses' self-reflection via videotaping to improve communication skills in health counselling. *Journal of Patient Education and Counselling. January* 36:1

Mark, R., 1996. *Research Made Simple: A Handbook For Social Workers.* London: Sage.

McClusky, U., 2005. *To Be Met as a Person.* London: H.Carnac (Books) Ltd.

Mead, G.H., (Ed), 1936. *Movements of thought in the Nineteenth Century.* Chicago: University of Chicago Press.

Milan, F.B., Parish, S.J and Reichgott, M.J., 2006. A Model for Educational Feedback Based on Clinical Communication Skills Strategies: Beyond the Feedback Sandwich. *Teaching and Learning in Medicine Journal* 18:1

Miles,M., 1979. The nature of qualitative research. In: A. Bryman. *Social Research Methods*. Oxford: Oxford University Press. pp.266-285

Miles, M and Huberman, A., 1994. Sample size. In: M. Denscombe. *The Good Research Guide*. Berkshire: Open University Press. pp.26-27

Mills, G.E and Pace, W.R., 1989. What Effects Do Practice and Video Feedback Have on the Development of Interpersonal Communication Skills? *Journal of Business Communication*, Vol. 26, No. 2, 159-176

Pendleton, D., Schofield, T and Tate, P., 1984. *The consultation: An Approach to Learning and Teaching.* Oxford: Oxford University Press.

Pendleton, D., 1984. Playing back the videotaped interview and Pendleton's rules. In: C. Vassilas and L. Ho. Video for Teaching Purposes. *Advances in Psychiatric Treatment* 6. pp.304-311

Psathas, G. 1995. A comparison of different approaches of communication analysis. In: P, Bull. *Communication Under the Microscope.* East Sussex: Routledge. pp.19-20

Radford, A.D., Stockley, P., Taylor, I.R., Turner, R., Gaskell, C.J., Kaney, S., Humphris, G. and Magrath, C., 2003. The use of simulated clients in training veterinary undergraduates in communication skills. *Veterinary Record* 152:14

Richards, S., Ruch, G and Trevithick, P., 2005. Communication Skills Training for Practice: the Ethical Dilemma for Social Work Education. *Social Work Education 24:4*

Robson, C., 2002. *Real World Research*. Oxford: Blackwell.

Rodebaugh, T.L., 2004. I might look OK, but I'm still doubtful, anxious, and avoidant: The mixed effects of enhanced video feedback on social anxiety symptoms. *Journal of Behaviour Research and Therapy* 42:12

Rodebaugh, T.L. and Chambless, D.L., 2002. The Effects of Video Feedback on the Self-perception of Speech Anxious Participants. *Journal of Cognitive Therapy and Research* 26

Rosenstein,B., 2002. Video Use in Social Science Research and Program Evaluation. *Journal of Qualitative Methods* 1:3 Article 2

Roter, D., Larson, S., Shinitzky, H., Chernoff, R., Serwint, J.R., Adamo, G and Wissow, L., 2004. Use of an innovative video feedback technique to enhance communication skills training. *Medical Education Journal* 38:2

Santrock, J.W., 2004. *Child Development* (10th Edition). New York: McGraw-Hill International Edition.

Schön, D., 1987. *Educating the Effective Practitioner*. San Francisco: Jossey-Bass.

SCIE. 2004. *Teaching and Learning Communication Skills in Social Work Education.* www.scie.org.uk. [Accessed 6 September 2006]

Scottish Executive. 2003. *The Framework for Social Work Education in Scotland.* www.scotland.gov.uk/publications/2003/01/16202/17020. [Accessed 6 September 2006]

Scottish Government. 2006a. *Changing Lives: Report of the 21st Century Social Work Review.* www.scotland.gov.uk/Publications/2006/02/02094408/1 [Accessed 8 July 2008]

Scottish Government. 2006b. *Key Capabilities in Child Care and Protection.* www.scotland.gov.uk/Publications/2006/12/13102807/6 [Accessed 8 July 2008]

Scottish Social Services Council. 2006. *Education and Training*. www.sssc.uk.com. [Accessed 16 January 2007]

Siegman, A., and Feldstein, S., 1985. *Multichannel Integrations of Nonverbal Behaviour.* New Jersey: Lawrence Erlbaum Associates.

Sharpe, L., Hu, C., Crawford, L., Gopinathan, S., Khine, M.S., Moo, S.N. and Wong, A., 2003. Enhancing multipoint desktop video conferencing (MDVC) with lesson video clips: recent developments in pre-service teaching practice in Singapore. *Journal of Teaching and Teacher Education* 19:5

Simpson, R., Forsyth, P and Kennedy, H., 1995. *An Evaluation of Video Interactive Analysis in Families and Teaching situations.* Professional Development Initiatives 1993-1994. Paper 6, pp.129-154. SOED. Regional Psychological Services.

Spitzburg, B, H and Cupach, W, R., 1989. *Interpersonal Communication competence.* London. Routledge.

Sudberry, J., 2002. Key Features of Therapeutic Social Work: the use of relationship. *Journal of Social Work Practice* 16:2.

Taplin, P.S. and Reid, J.B., 1973. Effects of instructional set and experimentor influence on observer reliability. *Child Development 44.* p.547-54.

Tashakkori, A and Teddlie, T. 1998. A pragmatic approach. In: C. Robson. *Real World Research*. Oxford: Blackwell. pp.42-43

The Higher Education Academy., 2004. *Social Work Education in Scotland.* www.swap.ac.uk. [Accessed 19 September 2006]

Thiemann, K.S. and Goldstein, H., 2001. Social stories, written text cues, and video feedback: Effects on social communication of children with autism. *Journal of Applied Behaviour Analysis* 34:4

Thomas, V.J. and Cohn, T., 2006. Communication skills and cultural awareness courses for healthcare professionals who care for patients with sickle cell disease. *Journal of Advanced Nursing* 53 :4

Thomson., MacDougall., McFarlene and Bryson., 2005. *Using VIG to Assist Student Teachers' and Teacher Educators' Reflections on their Interactions with Learners and Bring About Change in Practice*. http://www.cpeducation.co.uk/veroc/conferences/archive/30_06_06. [Accessed 21 November 2006]

Trevarthen, C., 1979. *Communication and Co-operation in Early Infancy: A description of Primary Intersubjectivity*. In: M. Bullowa (Ed). Before speech. CUP. pp.1-62

Trevithick, P., 2004. Learning interpersonal and communication skills. In: J. Koprowska. *Communication and Interpersonal Skills in Social Work.* Exeter: Learning Matters Limited. pp.2-3

Trinder. L and Reynolds.S., (Eds), 2000. Evidence-*based Practice: A Critical Appraisal*. Blackwell Science: London.

Trout, D.L and Rosenfeld, H, M., 1980. Nonverbal communication. In: P. Bull. *Communication Under the Microscope.* East Sussex: Routledge. pp.24-53

Tudor-Locke, C., Bell, R.C., Myers, A.M., Harris, S.B., Ecclestone, N.A., Lauzon, N. and Rodger, N.W., 2004. Controlled outcome evaluation of the First Step Program: a daily physical activity

intervention for individuals with type II diabetes. *International Journal of Obesity* 28:1

Vassilas, C and Ho, L., 2000. Video for Teaching Purposes. *Advances in Psychiatric Treatment* 6

VIG UK. *Seven Steps in Achieving an Activating Relationship*. http://www.cpeducation.co.uk/veroc/conferences/archive/30_06_06. [Acessed 19 September 2006]

Vygotsky, L.S., 1986. *Thought and Language*. Cambridge, MA: MIT Press.

Wallace, J., Ranga, R and Haslam, R., 2002. Simulated patients and objective structured clinical examinations: review of their use in medical education. *Advances in Psychiatric Treatment 8: 342-348.*

Wels.P.M.A., 2004. *Helping With A Camera*. Netherlands: Nijmegen University Press.

Appendices

Appendix 1

Contact Principles – Video Analysis

Yes-series **ATTUNED**	**Positive responses to initiatives**
Being Attentive	Turn in response Return eye contact
"Yes" - giving (body)	Respond with: Smile Nod Friendly intonation Friendly posture
"Yes" – giving (verbal)	Talking Labelling Saying 'yes' Each making initiatives Saying what you feel Asking what you want to know
Taking turns	Receiving and returning
Co-operation	Receiving Giving help
Attuned guiding and leading	Taking initiatives Distraction Making suggestions Making choices Making plans Problem-solving

Appendix 2

Video Work – Questionnaire 1

Name:

Please answer the following questions by placing a tick in the appropriate box. Any additional comments you might wish to make can be placed in the space provided.

1. How do you feel with regard to the proposed use of video?

Very Anxious	☐
Anxious	☐
Comfortable	☐
Happy	☐

Comments .....
.....
.....

2. What aspect of the video work do you anticipate will be most useful to you?

Skills Development	☐
Reflection	☐
Building Confidence	☐
All of the above	☐

Comments .....
.....

.....

3. What aspect of the video work do you anticipate will be least useful to you?

Viewing self ☐

Peer Feedback ☐

Role Play ☐

All of the above

Comments .....
.....
.....

Thank you for taking the time to fill out this questionnaire.

Janine Bolger

Appendix 3

Video Work – Questionnaire 2

Name:

Please answer the following questions by placing a tick in the appropriate box. Please feel free to make additional comments in the spaces provided.

1. Has your ability to demonstrate that you are listening....

Deteriorated?	☐
Remained the same?	☐
Improved a little?	☐
Improved a lot?	☐

Comments .....
.....
.....

2. Has your ability to demonstrate open and relaxed body language...

Deteriorated?	☐
Remained the same?	☐
Improved a little?	☐
Improved a lot?	☐

Comments .....
.....
.....

3. Has your ability to demonstrate appropriate eye contact....

Deteriorated? ☐

Remained the same? ☐

Improved a little? ☐

Improved a lot? ☐

Comments .....
.....
.....

4. Has your ability to demonstrate appropriate verbal skills (e.g. saying yes, paraphrasing, naming etc.).....

Deteriorated? ☐

Remained the same? ☐

Improved a little? ☐

Improved a lot? ☐

Comments .....
.....
.....

5. Has your ability to demonstrate turn taking .....

Deteriorated? ☐

Remained the same? ☐

Improved a little? ☐

Improved a lot? ☐

Comments .....
.....
.....

6. Has your ability to demonstrate attuned guiding (e.g. use of distraction, making suggestions etc.).....

Deteriorated? ☐

Remained the same? ☐

Improved a little? ☐

Improved a lot? ☐

Comments .....
.....
.....

7. Has the use of video feedback impacted on your skills....

Negatively?	☐
In no way at all?	☐
Has brought about some improvement?	☐
Has brought about a significant improvement?	☐

Comments .....
.....
.....

Thank you for taking the time to fill out this questionnaire.

Janine Bolger

Appendix 4 - Case Study Scenarios

Orientation - Week 1

Students are briefed with regard to:

(a) A microanalysis of communication skills; the process of the skills sessions; use of proforma to track their own progress

(b) orientation with regard to the use of video feedback within the skills sessions

Case Study - Week 2 - Assessment

You have received a referral to the Family Centre for an Initial Assessment from the duty social worker, Children and Families Team, regarding a young mother who has requested assistance.

Amanda is 22 years old, she has a son **Jason** 18 months and a daughter **Melissa** aged 4 years. Amanda was living with her partner **Brian**, but she advises that she has thrown him out following yet another violent outburst, which has resulted in a black eye and bruising to her upper body. Amanda has little contact with her mother and would not view her as a support.

Melissa is quiet and remains close to her mother. She appears quite attentive toward her younger brother, but reluctant to engage with the social worker. She presents as pale, slightly underweight and withdrawn.

Jason smells of stale urine and his clothes are dirty, Amanda explains what little money she did have was taken by her partner to purchase alcohol. Jason is very quiet demonstrating little in the way of verbalisation. He is walking, but appears somewhat distressed.

Exercise:

*Your task is to **role-play** a home visit to interview Amanda and complete an initial assessment of need, identifying any risks/hazards that may be present together with any strengths/resources that might reduce the risk.*

Case Study – Week 3 - Community Care

Family 1 Composition:
Mary Skene aged 83
John Skene aged 84
James McDonald aged 63 (Mary's son from a previous marriage)
Jack Wilson aged 14 (James' grandson)

Family 2 Composition:
Margaret Smith aged 75 (Mary's sister)
Janet McDonald aged 45 (Mary's daughter from previous marriage)

Mary Skene suffers from dementia (second stage), she has been found wandering the street in her nightie on six occasions. She owns the house and has a reasonable income from her superannuation pension. **John Skene** married Mary 20 years ago and moved into her bungalow. He has a very small works pension. John suffers from angina and he finds himself getting more and more depressed and despairing with Mary but does not want her to go into care. **James McDonald** has not worked for 20 years and has a severe drinking problem. On occasion he is very violent towards both Mary and John, particularly when he wants money. **Jack Wilson's** parents have separated and he now lives with his grandfather James, great-grandmother Mary and John Skene.

Margaret Smith – has been a clerk for most of her life. Her husband and Mary's first husband were killed in a road accident approximately 30 years ago. Both sisters lived together with Janet and James until Mary remarried. Margaret agreed to look after Janet. Margaret has referred Janet to the Social Work Department. Janet wants a home of her own. J**anet McDonald** has moderate learning disabilities and spent much of her childhood in residential schools. She lives with Margaret and attends a day centre three days a week. Margaret has reported James' violence towards his mother and step-father to the Social Work Department. She is also suspicious that Mary's money is being taken by James.

Exercise:
*You are asked to **role-play** a meeting with members of these two households to allow you to gather information for a community care assessment for Mary and Janet. You will need to consider the knowledge and skills required to help them including how you will find out information about finances and how you might suggest the necessary referrals to other agencies*

Case Study – Week 4 - Crisis Intervention and Task-centred Practice

Sarah Jones aged 35
Richard Jones aged 55
Jody Irvine aged 15 (Sarah's daughter from previous marriage)
Callum Jones aged 8 (Sarah and Richard's son)
Grace Urqhuart (Widow) aged 55 (Sarah's mother)

The family are moving house in the next three months as Richard has been made redundant. They will be moving from the town to a rented property 200miles away in the countryside.

Sarah Jones

In the past Sarah suffered from post natal depression after the break-up of her first marriage and the birth of her daughter Jody. She attended counselling for a short period which improved her mental health until recently. Her mental health has deteriorated and at present there are times when she is unable to get up, spending the whole day in bed leaving Richard to organise Jody and Callum for school. Sarah has started to self-harm. Sarah's father died when she was 14 and she has no siblings.

Richard Jones

Richard works shifts as a security guard. He has three children from his previous marriage with who he has no contact. Richard spends a good part of his spare time in the local pub playing darts or with his friends at the race track. His relationship with Grace is volatile.

Jody Irvine

The school has sent a letter to Sarah and Richard as they have concerns regarding her sporadic non-attendance at school. To date Jody has enjoyed school, however, she has a limited social life. Jody has started to stay out late and on one occasion did not return home until the following morning. Her relationship with Richard was sound until the birth of Callum. Jody spends a great deal of time with her grandmother.

Callum Jones

Callum is a high achiever at school, sporty and has a wide circle of friends. There are concerns regarding two of his friends whose parents are known to the Police with regard to drug related issues. Callum is very attached to Sarah and will often sleep in her bed which results in Richard moving into his room.

Grace Urquhart

Grace supported Sarah through her divorce and lived with her until she married Richard when she was asked to leave. Grace has little time for Richard and did not agree with the marriage. She encourages Jody to stay and has offered to have her on a permanent basis. Grace rarely has any contact with Callum.

Sarah's GP has expressed his concern. As the social Worker attached to the GP practice you are asked to look into this situation.

Exercise:

1. *What is your assessment of this family situation?*
2. *Do you consider the family/individuals to be in crisis?*
3. *How might you apply Crisis Intervention?*
4. *Looking into the future, how might you work with the family/individuals using Task-centred Practice?*
5. *Now **role-play** the meeting where you discuss one of the two interventions (mentioned above) with family members and negotiate the initial stages of the work.*

Case Study – Week 5 - Behavioural Approaches

Sarah Jones aged 35
Richard Jones aged 55
Jody Irvine aged 15 (Sarah's daughter from previous marriage)
Callum Jones aged 8 (Sarah and Richard's son)
Grace Urqhuart (Widow) aged 55 (Sarah's mother)

You will remember the case study outlined above from last week's seminar.
Today you will focus on Jody's situation with regard to her non-school attendance.
You will remember that the school had sent a letter to Sarah (mum) and Richard (step-dad) making them aware of a pattern of sporadic non-school attendance.
Previously Jody had enjoyed school although her social life had been limited. Jody had begun to stay out late and on one occasion did not return home until the following morning. Her relationship with step-dad was sound until the birth of Callum. Jody spends a great deal of time with her grandmother.

In working with the family you have already made contact with the school to discover that Jody has not attended at all during the past fortnight. Concerned that a more serious pattern is developing you agree to meet with Jody.

Exercise:

1. *What do you think might be happening in this situation and why?*
2. *How might you wish to proceed with this assessment?*
3. *Which areas might you wish to pursue in greater detail?*
4. *Why did you choose these areas?*

*Now **role-play** an interview with Jody where you negotiate an appropriate behavioural programme with her (respondent/classical or operant /instrumental or modelling). This should include the identification of:*

- *Targets and goals*
- *Appropriate reinforcers*
- *A process for monitoring and evaluating progress*

Case Study - Week 6 - Supervision and Reflective Practice

Sarah Jones aged 35
Richard Jones aged 55
Jody Irvine aged 15 (Sarah's daughter from previous marriage)
Callum Jones aged 8 (Sarah and Richard's son)
Grace Urqhuart (Widow) aged 55 (Sarah's mother)

You will remember the above case study from previous skills sessions.

Exercise:

*You are asked to **role-play** a supervision session reflecting primarily upon your work to date with the Jones/Irvine family. You will need to highlight your knowledge and understanding and consider Dewey's Developmental Spiral and Kolb's Experiential Learning Cycle during your supervision session.*

Case Study - Week 7 - Working With Families

Sarah Jones aged 35
Richard Jones aged 55
Jody Irvine aged 15 (Sarah's daughter from previous marriage)
Callum Jones aged 8 (Sarah and Richard's son)
Grace Urqhuart (Widow) aged 55 (Sarah's mother)

You will remember the above case study from previous seminars. Since beginning your work with the family there have been a number of developments:

Sarah discovered that she was 5 weeks pregnant. However, 7 weeks into the pregnancy she has miscarried. Her feelings around this have been complicated by **Richard's** ex-partner contacting him to request that he becomes involved again with his three children (**Steven** aged 13 and twins **Kylie** and **Keith** aged 11 years) as she has breast cancer and is concerned for their future. **Jody** meanwhile is spending an increasing number of nights with **Grace**.

Exercise:

*Now **role-play** one of the following:*

1. *an interview with Sarah whereby you gain information for a Genogram of the family*
2. *An interview with Jodie whereby you gain information for an Eco Map*

Case Study - Week 8 - Keyworking

Sarah Jones aged 35
Richard Jones aged 55
Jody Irvine aged 15 (Sarah's daughter from previous marriage)
Callum Jones aged 8 (Sarah and Richard's son)
Grace Urqhuart (Widow) aged 55 (Sarah's mother)

You will recall from previous weeks some of the issues around Jody and in particular her non-attendance at school.

The situation with Jody has deteriorated rapidly. She has stopped going to school completely and is staying out late at night or all night. She refuses to say exactly where she has been but she seems to have attached herself to a small group who are older than she is. She is certainly drinking and there are suspicions that she is also using illegal drugs.

Jody's mother remains quite depressed and is unable to handle her behaviour. Jody's step-father is insistent that she has to leave the house – he and Jody have endless rows.
Grace, Jody's grandmother, would have her live with her but she is having to spend time caring for her own mother who has had a stroke.

Following discussions with the social worker it has been decided that Jody will be accommodated voluntarily to a residential unit for young people.

Exercise:

You are to be Jody's keyworker:

1. *Discuss how you might manage Jody's admission to the unit*
2. *Go on to consider your role as keyworker*
3. ***Role play** a contact with Jody in the first few days of her being at the unit. She is upset, angry and unsure of what is happening.*

Case Study - Week 9 - Life-space and Opportunity-led Work

Sarah Jones aged 35
Richard Jones aged 55
Jody Irvine aged 15 (Sarah's daughter from previous marriage)
Callum Jones aged 8 (Sarah and Richard's son)
Grace Urqhuart (Widow) aged 55 (Sarah's mother)
As the worker for Jody you have already used other approaches to help her make sense of her past experiences and understand how they impact on her present behaviour. This has not, however, resolved the situation and Jody is now living in the local children's unit. Since your last meeting with her, arrangements to stay with her mother and step-father overnight have broken down. Jody has reacted angrily to this and there have been a number of aggressive incidents within the unit.

In this role-play you are a residential worker and you enter the lounge at the Unit and witness an angry confrontation between Jody and her 'boyfriend' Ross. Two other residents (Billie-Jo and Alex) are in the room and are accusing Jody of being a 'slag' for apparently having sex with Ross. Ross has joined in the name-calling. Before you can intervene Jody physically attacks Ross.

Exercise:

*You must now **role-play** how you would intervene and attempt to de-escalate the situation. Choosing either the framework for Opportunity-led or Life-space interventions attempt to process the incident with Ross, Jody, Billie-Jo and Alex. You will be required to make a decision as to whether you work with the group as a whole, as individuals or whether you do both.*

Case Study - Week 10 - Managing Challenging Behaviour

Sarah Jones aged 35
Richard Jones aged 55
Jody Irvine aged 15 (Sarah's daughter from previous marriage)
Callum Jones aged 8 (Sarah and Richard's son)
Grace Urqhuart (Widow) aged 55 (Sarah's mother)

You are Jody's social worker within the local field work child care team. You have been made aware, through liaison with Jody's residential worker, that a violent incident had taken place within the unit some days preciously.

You receive a telephone call from your administrators advising you that Grace is at the office demanding to see you and wishes to lodge a complaint in relation to certain aspects of Jody's care.

You agree to meet with Grace in the office to enable her to air her concerns. Your initial assessment through observations you make of Grace's non-verbal cues, indicate to you that she is highly agitated.

Exercise:

Role-play your interview with Grace. Using the model of 'principled negotiation' attempt to:

- *Separate the people from the problem*
- *Focus on interests, not positions*
- *Generate options to further mutual interest*
- *Agree criteria for evaluating results*

Throughout the course of the interview you should be aware of issues pertaining to your own safety and that of others.

Appendix 5:

Participant 1 - Summary of Communication Skills

Name: P1 week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X				
10	X	X	X	X				
15	X	X	X	X				
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X		X	X			
40								X
45								X
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X			X	X			
5	X			X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X		X	X	X			
30	X			X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X				
50	X	X	X	X	X			
55	X	X	X	X				
60	X	X	X	X	X	X		
5	X	X	X	X	X			
10	X	X		X	X			
15							X	
20							X	
25							X	
30							X	
35							X	
40							X	
45								X
50								X
55								X
60								X
Total no. initiatives	24	20	19	24	18	3	6	4

Name: P1 Week 4								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5								
10	X	X		X				
15	X	X	X	X				
20	X	X	X	X	X			
25	X	X	X	X				
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X				
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X				
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X		X	X				
60								X
5	X			X				
10	X	X	X	X				
15	X	X	X	X				
20	X	X	X	X				
25	X							
30	X	X	X	X				
35	X	X	X	X				
40	X	X		X				
45	X	X	X	X	X			
50	X		X	X				
55							X	
60							X	
Total no. initiatives	32	28	28	30	17		2	1

Name: P1 Week 10								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15	X	X	X	X				
20	X	X	X	X	X			
25	X	X	X	X				
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X		X	X			
35	X	X		X	X			
40	X	X	X	X	X			
45	X	X		X	X			
50								X
55							X	
60	X	X	X	X				
5	X	X	X	X	X			
10	X	X	X	X				
15	X	X	X	X	X	X		
20							X	
25							X	
30							X	
35							X	
40							X	
45							X	
50							X	
55							X	
60							X	
Total no. initiatives	23	23	20	23	19	1	12	1

Participant 2 - Summary of Communication Skills

Name: P2 Week 3								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X		X		
30	X	X	X	X	X			
35	X	X		X				
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60							X	
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X				
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X		X				
35								X
40							X	
45							X	
50							X	
55							X	
60							X	
5							X	
10								X
15								X
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	17	17	15	17	13	1	8	12

Name: P2 Week 5								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X				
10	X	X	X	X				
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X			
50							X	
55							X	
60							X	
5							X	
10							X	
15							X	
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	21	21	21	21	19	10	6	9

Name: P2 Week 8								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X		X				
10	X	X		X				
15	X	X		X				
20	X	X		X				
25	X	X		X				
30	X	X		X				
35	X	X		X				
40	X	X		X				
45	X	X		X				
50	X	X	X	X				
55							X	
60	X	X	X	X	X			
5	X	X	X	X				
10	X	X	X	X				
15	X	X	X	X				
20	X	X	X	X				
25	X	X	X	X				
30	X	X	X	X				
35	X	X	X	X				
40	X	X					X	
45	X	X		X				
50	X	X		X				
55	X	X						
60	X	X	X	X	X			
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X		X				
40	X	X		X				
45	X	X		X				
50	X	X	X	X	X			
55	X	X	X	X				
60	X	X	X	X	X			
Total no. initiatives	35	35	19	34	10	3	2	

Name: P2 Week 10								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15							X	
20	X			X	X			
25	X			X	X			
30								X
35	X				X			
40	X			X				
45	X		X	X	X			
50	X	X	X	X	X			
55	X		X	X	X			
60	X		X	X	X			
5	X		X					
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X		X	X	X			
25								X
30	X	X	X	X	X			
35	X	X		X	X			
40	X		X	X	X			
45	X		X	X	X			
50	X		X	X	X			
55	X		X	X	X			
60	X		X	X	X	X		
5								
10	X		X	X	X			
15	X		X	X	X			
20	X	X	X	X	X			
25							X	
30							X	
35							X	
40							X	
45							X	
50							X	
55								X
60								X
Total no. initiatives	22	6	17	20	20	2	8	4

Participant 3 - Summary of Communication Skills

Name: P3 Week 3								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X		X	X				
10	X		X	X				
15	X		X	X				
20	X			X				
25	X			X				
30	X	X		X				
35	X	X		X				
40	X	X	X	X	X			
45	X		X	X	X			
50	X		X	X				
55	X		X	X	X	X		
60	X		X	X				
5	X			X	X			
10	X		X	X	X	X		
15	X		X	X	X	X		
20	X		X	X	X	X		
25	X	X		X	X	X		
30	X	X		X	X			
35	X		X					
40	X			X	X			
45	X		X	X				
50	X		X	X				
55	X	X		X	X			
60	X	X		X	X			
5	X		X	X	X	X		
10	X		X	X	X			
15								X
20	X	X		X	X			
25	X							
30							X	
35							X	
40							X	
45							X	
50							X	
55							X	
60								X
Total no. initiatives	28	8	16	26	15	6	6	2

Name: P3 Week 5								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5								
10	X	X	X	X				
15	X	X	X	X	X			
20	X	X	X	X	X			
25								X
30	X	X		X	X			
35	X		X	X				
40	X		X	X				
45	X	X	X	X				
50	X	X	X	X	X			
55							X	
60							X	
5							X	
10							X	
15							X	
20							X	
25								X
30								X
35								X
40	X		X	X				
45	X	X	X	X				
50	X	X	X	X	X			
55							X	
60							X	
5							X	
10							X	
15							X	
20							X	
25								X
30								X
35								X
40	X	X	X	X				
45	X	X	X	X				
50							X	
55							X	
60							X	
Total no. initiatives	10	8	9	10	4		15	7

Name: P3 Week 9								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15							X	
20							X	
25							X	
30	X	X		X	X			
35							X	
40							X	
45	X	X	X	X	X			
50								X
55								X
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15								X
20	X	X		X				
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45								X
50	X	X	X	X	X			
55								X
60	X			X				
5	X	X		X				
10	X	X		X				
15								X
20	X	X	X	X				
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50								X
55								X
60								X
Total no. initiatives	20	19	15	20	15	2	7	9

Participant 4 - Summary of Communication Skills

Name: P4 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X				
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X	X		
55	X	X	X	X	X			
60	X		X	X	X			
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45							X	
50							X	
55							X	
60							X	
5							X	
10							X	
15								X
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	20	19	20	20	19	8	6	10

Name: P4 Week 3								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5								X
10								X
15								X
20				X				
25	X			X				
30	X			X				
35	X			X				
40	X	X	X	X				
45	X		X	X				
50	X	X	X	X				
55	X		X	X	X			
60	X	X	X	X				
5	X		X	X	X			
10	X	X			X			
15	X				X			
20	X			X				
25								X
30	X		X	X	X			
35	X							
40							X	
45	X							
50								X
55	X			X				
60	X							
5	X			X				
10				X				
15								X
20								X
25	X			X				
30	X			X				
35	X			X				
40	X			X				
45	X	X		X				
50	X		X					
55								X
60								X
Total no. initiatives	24	5	8	20	5		1	9

Name: P4 Week 5								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X				
10	X	X	X	X	X			
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X		X	X			
35								X
40								X
45								X
50								X
55				X				
60								X
5			X	X				
10	X		X	X				
15	X	X	X					
20	X	X	X	X	X			
25	X	X	X	X	X	X		
30	X							
35								X
40								X
45	X		X					
50								X
55								X
60	X			X				
5	X	X	X	X				
10	X	X	X	X	X			
15	X	X	X	X				
20	X	X						
25	X	X						
30	X	X						
35		X	X					
40								X
45	X			X				X
50	X		X	X				
55			X					
60			X					
Total no. initiatives	21	16	18	17	8	4		11

Name: P4 Week 8								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5								X
10				X				
15	X		X	X				
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
5								X
10								X
15								X
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
5								X
10								X
15								X
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	1		1	2				33

Name: P4 Week 10								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X					
25	X	X	X	X	X			
30	X	X	X	X	X			
35								X
40	X	X		X	X			
45								X
50								X
55	X			X				
60	X	X	X	X				
5								X
10								X
15								X
20	X	X		X	X			
25	X	X	X	X	X			
30	X	X	X	X				
35								X
40								X
45								X
50								X
55								X
60								X
5								X
10								X
15								X
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	12	11	9	11	8			24

Participant 5 - Summary of Communication Skills

Name: P5 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5								
10	X	X		X				
15	X	X	X	X				
20	X	X	X	X				
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X		X				
45	X	X	X	X	X			
50	X	X	X	X	X	X		
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X	X		
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X	X	X	X	X			
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55							X	
60							X	
Total no. initiatives	33	33	31	33	29	10	2	

Name: P5 Week 5								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10	X	X	X	X				
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45							X	
50							X	
55							X	
60							X	
Total no. initiatives	31	31	31	31	30	26	5	

Name: P5 Week 7								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15	X	X		X				
20	X	X		X	X			
25	X	X		X	X			
30	X	X	X	X	X			
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35							X	
40							X	
45							X	
50							X	
55							X	
60							X	
Total no. initiatives	28	28	25	28	27	24	8	

Participant 6 - Summary of Communication Skills

Name: P6 Week 3								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X				
60	X	X	X	X				
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X				
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55							X	
60							X	
5							X	
10							X	
15							X	
20							X	
25							X	
30							X	
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	22	22	22	22	19	4	8	6

Name: P6 Week 5								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X				
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X			
5	X	X	X	X	X	X		
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X				
10	X	X	X	X				
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X		X				
30	X	X	X	X				
35	X	X	X	X				
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50							X	
55							X	
60							X	
Total no. initiatives	33	33	32	33	27	8	3	

Name: P6 Week 7								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X				
35	X	X	X	X				
40	X	X	X	X				
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X			
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X			
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
Total no. initiatives	36	36	36	36	33	23		

Name: P6 Week 10								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X				
10	X	X	X	X	X			
15							X	
20							X	
25							X	
30							X	
35							X	
40							X	
45								X
50	X	X	X	X	X			
55							X	
60							X	
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X				
40	X	X	X	X				
45	X	X	X	X				
50	X	X	X	X	X			
55	X	X	X	X				
60	X	X	X	X				
5	X	X	X	X				
10	X	X	X	X				
15	X	X	X	X				
20	X		X	X				
25	X	X	X	X				
30	X	X	X	X				
35	X	X	X	X				
40	X	X	X	X	X			
45	X	X	X	X				
50	X	X	X	X				
55							X	
60							X	
Total no. initiatives	25	24	25	25	10		10	2

Participant 7 - Summary of Communication Skills

Name: P7 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X			
10	X	X	X	X	X	X		
15	X	X	X	X	X			
20	X	X	X	X				
25	X	X	X					
30	X			X				
35	X	X	X	X				
40	X	X		X				
45	X	X	X	X	X			
50	X	X	X	X	X			
55						X		
60						X		
5						X		
10						X		
15							X	
20						X		
25							X	
30							X	
35							X	
40							X	
45							X	
50							X	
55								X
60								X
5								X
10								X
15								X
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	10	9	8	9	5	6	7	14

Name: P7 Week 5								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X				
10	X	X	X	X				
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X				
55	X	X		X				
60	X	X		X				
5	X	X	X	X				
10	X	X	X	X				
15	X	X		X				
20	X	X		X				
25	X	X	X	X	X			
30	X	X	X	X				
35	X	X	X	X				
40	X	X	X	X				
45	X	X		X				
50	X	X	X	X	X			
55	X	X		X				
60	X	X		X				
5	X	X		X				
10	X	X	X	X				
15	X	X	X	X				
20	X	X		X				
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X				
40							X	
45							X	
50							X	
55							X	
60							X	
Total no. initiatives	31	31	22	31	11	2	5	

Name: P7 Week 8								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5								
10	X	X	X	X	X			
15	X	X	X	X				
20	X	X	X	X	X			
25	X	X	X	X				
30	X	X		X				
35	X	X	X	X				
40	X	X	X	X				
45	X	X		X				
50	X	X		X				
55	X	X		X				
60	X	X		X				
5	X	X		X				
10	X	X		X				
15								X
20	X	X		X				
25	X	X		X				
30	X	X		X				
35	X	X		X				
40	X	X		X				
45	X	X		X				
50	X	X		X				
55	X	X	X	X				
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X		X				
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X	X		
55	X	X	X	X	X			
60							X	
Total no. initiatives	33	33	18	33	13	5	1	1

Participant 8 - Summary of Communication Skills

Name: P8 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10	X	X	X	X				
15	X	X	X	X				
20	X	X	X	X				
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X			
55	X			X				
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X		X				
50	X	X		X				X
55	X	X	X	X				
60	X	X		X				
5	X	X	X	X				
10	X	X	X	X				
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X			
30	X	X		X				
35	X	X	X	X	X	X		
40							X	
45							X	
50							X	
55							X	
60							X	
Total no. initiatives	30	29	25	30	19	7	5	1

Name: P8 Week 3								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15							X	
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X		X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60							X	
Total no. initiatives	32	32	31	32	32	5	4	

Name: P8 Week 5								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
Total no. initiatives	35	35	35	35	35	13	1	

Participant 9 - Summary of Communication Skills

Name: P9 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X		X				
10	X	X		X	X			
15	X	X	X	X	X			
20	X	X		X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X		X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X		X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X	X		
55	X	X	X	X	X			
60	X	X	X	X	X	X		
5							X	
10							X	
15							X	
20							X	
25							X	
30							X	
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	24	24	19	24	23	2	6	6

Name: P9 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10	X	X	X	X				
15	X	X	X	X				
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X		X	X			
25	X	X	X	X	X			
30							X	
35							X	
40							X	
45							X	
50							X	
55							X	
60								X
Total no. initiatives	28	28	27	28	26	8	6	1

Name: P9 Week 4								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15							X	
20	X	X		X				
25							X	
30							X	
35							X	
40	X	X		X	X			
45	X	X		X				
50	X	X	X	X	X			
55	X			X	X			
60	X	X	X	X	X			
5	X	X	X	X				
10	X			X				
15	X	X	X	X				
20	X	X		X	X			
25	X	X		X				
30	X			X				
35	X			X				
40	X			X	X			
45	X			X				
50	X		X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5								X
10								X
15								X
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	18	11	7	18	9		6	12

Participant 10 - Summary of Communication Skills

Name: P10 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10	X	X	X	X				
15	X	X	X	X				
20	X	X	X	X				
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X				
20	X	X	X	X	X			
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50							X	
55							X	
60							X	
5							X	
10							X	
15							X	
20								X
25								X
30								X
35								X
40								X
45								X
50								X
55								X
60								X
Total no. initiatives	20	20	20	20	16	6	7	9

Name: P10 Week 3								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50							X	
55							X	
60							X	
Total no. initiatives	33	33	33	33	33	14	3	

Name: P10 Week 4								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15							X	
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X			
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20							X	
25							X	
30							X	
35							X	
40							X	
45							X	
50								X
55								X
60								X
Total no. initiatives	24	24	24	24	24	16	9	3

Name: P10 Week 9								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15							X	
20							X	
25							X	
30	X	X	X	X				
35	X	X	X	X	X			
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55							X	
60							X	
Total no. initiatives	29	29	29	29	28	21	7	

Name: P10 Week 10								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5							X	
10							X	
15							X	
20							X	
25							X	
30	X	X		X				
35	X	X		X				
40	X		X	X				
45	X	X	X	X				
50	X	X	X	X				
55	X	X	X	X				
60	X	X	X	X	X			
5	X	X	X	X				
10	X	X	X	X	X	X		
15	X	X		X	X			
20								X
25	X	X		X				
30	X	X	X	X	X			
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X		X	X			
60	X	X	X	X	X	X		
5	X	X	X	X	X			
10	X	X	X	X	X			
15							X	
20							X	
25							X	
30							X	
35							X	
40							X	
45								X
50								X
55								X
60								X
Total no. initiatives	20	20	15	20	12	6	11	5

Participant 11 - Summary of Communication Skills

Name: P11 Week 2								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X	X		
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X				
30	X	X	X	X				
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40							X	
45							X	
50							X	
55							X	
60							X	
Total no. initiatives	31	31	31	31	29	16	5	

Name: P11 Week 3								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X			
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X			
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15							X	
20							X	
25							X	
30							X	
35							X	
40							X	
45								X
50								X
55								X
60								X
Total no. initiatives	26	26	26	26	26	11	6	4

Name: P11 Week 7								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
5	X	X		X				
10	X	X	X	X	X			
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X			
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X			
60	X	X	X	X	X			
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25	X	X	X	X	X			
30	X	X	X	X	X			
35	X	X	X	X	X			
40	X	X	X	X	X			
45	X	X	X	X	X	X		
50	X	X	X	X	X	X		
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X	X		
10	X	X	X	X	X	X		
15	X	X	X	X	X	X		
20	X	X	X	X	X	X		
25							X	
30							X	
35							X	
40							X	
45							X	
50							X	
55								X
60								X
Total no. initiatives	28	28	27	28	27	17	7	2

Name: P11 Week 7								
Time in seconds	Being attentive	'yes' body (conveying warmth)	'yes' verbal	Eye contact	Turn taking	Attuned guiding	REST	Discordant Response
							X	
5							X	
10							X	
15							X	
20							X	
25							X	
30							X	
35							X	
40							X	
45							X	
50	X	X	X	X				
55	X	X	X	X				
60	X	X	X	X	X			
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X	X	X	X	X	X		
5	X	X	X	X	X			
10	X	X	X	X	X			
15	X	X	X	X	X			
20	X	X	X	X	X	X		
25	X	X	X	X	X	X		
30	X	X	X	X	X	X		
35	X	X	X	X	X	X		
40	X	X	X	X	X	X		
45	X	X	X	X	X			
50	X	X	X	X	X			
55	X	X	X	X	X	X		
60	X	X	X	X	X			
Total no. initiatives	27	27	27	27	25	13	10	