AN ANALYSIS OF SOCIAL INFLUENCE IN MIDWIFERY PRACTICE

Caroline J. Hollins Martin

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Department of Psychology
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ABSTRACT

That some people readily follow direction from their superiors, even when this challenges what they see as right action, has been a source of puzzlement for half a century. Obedience literature emphasises the fact that legitimate authority is a powerful and compelling force. This is particularly evident in Milgram's (1963, 1974) famous experiments where participants systematically shocked a helpless victim at the bidding of an experimenter. Asch (1951, 1955, 1956) also showed conformity in his line judgment task in which one in three participants yielded to group pressure.

This thesis reports the success that a senior midwife had at socially influencing decisions of more junior midwives, even when the outcome contravened their established views of best practice. Development of a valid and reliable, 10-item questionnaire is reported - the Social Influence Scale for Midwifery (SIS-M). The SIS-M was used to identify midwives' responses to 10 clinical decisions. Change in scores between a postal and interview condition measured the success a senior midwife had at socially influencing junior midwives' responses in a conformist direction.

Alternative explanations for the large main effect were tested by two further studies. The first, confirmed that participants' changed SIS-M responses were caused by social components of the relationship between senior and junior midwife and not education. The second, established that the social influence was transient and in response to immediate situational factors.

A qualitative analysis of participants' interview transcripts found that a strong face-to-face authority relationship repeatedly subverted what midwives believed was the best action to take. An explanation in terms of a specific culture and hierarchy was identified, with a need for midwives to think creatively and rapidly at critical moments in order to avoid sanctions. The social influence that has been shown in this thesis is sufficient justification for a critical reassessment of existing organisational structures. Without such enquiry, maternity care professionals whose job it is to focus on improving choice and control for childbearing women and promote autonomous midwifery practice, may fail to yield the desired results.
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INTRODUCTION

This study concerns midwives' obedience and conformity to the direction of a senior person. To be more specific, it analyses the willingness or unwillingness of a midwife to accept an obligation to follow the direction of a senior person over and above the preference of a woman in her care. The important Changing Childbirth Document (DoH, 1993) provides an immediate background to this thesis, and can be considered along with certain provisions regarding midwives' rules and codes of practice. The research by Milgram (1963, 1965), Hofling, Brotzman, Dalrymple, Graves and Pierce (1966) and other more recent obedience studies provide additional background and will be discussed after an examination of the midwives' statutory obligations with respect to obedience. The research by Asch (1952, 1955, 1956) and other more recent conformity studies further set the scene and will be considered in relation to midwives' conformity and compliance with group values.

The dramatic disclosures of Changing Childbirth (DoH, 1993) provided evidence that midwives often fail to offer choice, continuity and control for childbearing women. This raises several complex questions: do midwives have as their first duty the obligation of obedience and compliance to instruction of their superiors? Does the hospital environment provide clear messages that compliance and obedience are expected of midwives? Are rewards and punishments issued within the hospital environment when a midwife fails to comply with guidance offered by senior midwives? How far is it possible for a midwife to be an autonomous practitioner within a hierarchical structure?

Ample criteria have been established that specify the conditions under which a midwife can be an autonomous practitioner. Roles are clearly outlined by the Nursing and Midwifery Council in the Midwives' Rules and Code of Practice (NMC, 1998). A registered midwife:

must be able to give the necessary supervision, care and advice to women during pregnancy, labour and the postpartum period, to conduct deliveries on her own responsibility and to care for the newborn infant. This care includes preventative measures, the
detection of abnormal conditions in mother and child, the procurement of medical assistance and the execution of emergency measures in the absence of medical help. She has the important task in health counseling and education, not only for women, but also within the family and the community. The work should involve antenatal education and preparation for parenthood and extends to certain areas of gynaecology, family planning and childcare. She may practise in hospitals, clinics, health units, domiciliary conditions or in any other service (NMC, 1998, p. 25).

When a registered midwife detects abnormal conditions in the mother and child, this is the major criterion for when to seek help and advice of a senior person. At this point, the midwife must procure assistance. The rules that define boundaries between normal and abnormal conditions are clearly defined within hospital protocols and guidelines for clinical practice.

One purpose of this thesis is to find out if there is fundamental conflict for midwives between government directives to work as autonomous evidence-based practitioners and a demand for compliance with the preferences of senior staff within the hospital hierarchy. The intention is to investigate the social influence that a senior midwife can have upon decisions that more junior midwives make. This is particularly in relation to decisions that are within the midwife’s remit, pertain to normal midwifery, and which according to social policy documents (DoH, 1993; DoH, 2003; DoH, 2004) should in fact be the choice of the childbearing woman. Accordingly in this thesis, an investigation on the attitudes of practising midwives was carried out to ascertain their willingness to acquiesce with instructions from superiors that contravene their established views of best practice.
A TALE OF CONFORMITY

Suddenly somebody began to run. It may be that he simply remembered, all of a moment, an engagement to meet his wife, for which he was now frightfully late. Whatever it was, he ran east on Broad Street (probably toward Maramor Restaurant, a favorite place for a man to meet his wife). Somebody else began to run, perhaps a newsboy in high spirits. Another man, a portly gentleman of affairs, broke into a trot. Inside ten minutes, everybody on high street, from the Union Depot to the Courthouse was running. A loud mumble gradually crystallized into the dread word "dam". "The dam has broke!" The fear was put into words by a little old lady in an electric car, or by a traffic cop, or by a small boy: nobody knows who, nor does it really matter. Two thousand people were abruptly in full flight. "Go east!" was the cry that arose east away from the river, east to safety. "Go east! Go east!" A tall spare woman with grim eyes and a determined chin ran past me down the middle of the street. I was still uncertain as to what was the matter, in spite of all the shouting. I drew up alongside the woman with some effort, for although she was in her late fifties, she had a beautiful easy running form and seemed to be in excellent condition. "What is it?" I puffed. She gave a quick glance and then looked ahead again, stepping up her pace a trifle. "Don't ask me, ask God! she said". (James Thurber, 1933, in Aronson, 2003, p. 11).
CHAPTER ONE

Literature Review

Introduction
The two particular aspects of social influence analysed in this study are obedience and conformity. Conformity, in particular, has a very broad meaning, and refers to the behaviour of a person who goes along with his peers, people of his own status, who have no social right to direct his behaviour (Milgram, 1974). Obedience has a narrower application. Its scope is restricted to the action of a person who complies with authority (Milgram, 1974). Consider a recruit who enters midwifery service. She/he scrupulously carries out orders from superiors - obedience, at the same time as adopting the habits, routines and language of peers - conformity. Obedience and conformity both indicate abdication of initiative to an external source. They differ in terms of hierarchy, imitation and explicitness (following Milgram, 1974, p. 132).

1. Hierarchy
Obedience to authority occurs within a hierarchical structure in which the actor feels that the person above has the right to prescribe behaviour. Conformity regulates the behaviour among those of equal status; obedience links one status to another.

2. Imitation
Conformity is imitation but obedience is not. Conformity leads to homogenisation of behaviour, as the influenced person comes to adopt the behaviour of peers. In obedience, there is compliance without imitation of the influencing source.

3. Explicitness
In obedience, the prescription for action is explicit, taking the form of an order or command. In conformity, the requirement of going along with the group often remains implicit, with no overt requirement made by group members that
the individual go along with them. Such action is spontaneously adopted by the person. Many participants would resist an explicit demand by a group member to conform, as the situation is defined as one that consists of equals who have no right to order each other about.

The aim of this chapter is to review obedience and conformity research relevant to this particular thesis and attempt to explain the effects social influences have upon midwives’ decisions within clinical practice. There are five main sections. The first outlines relevant literature on conformity. The second gives an account and evaluation of research on obedience. The third extrapolates these different theoretical approaches into real social situations, through analysis of events such as the holocaust and the massacre at My Lai. The fourth provides possible explanations of obedience and conformity that lead to destructive consequences. The final section gives an account and evaluation of obedience and conformity research that has been carried out in hospitals. Points of disagreement are discussed, while the central features of what is regarded as social influence are specified in order to show how it can be observed within the context of this particular thesis.

**Section 1. Conformity and the Social Influence Process**
The aim of this section is to discuss conformity and to show that it is a major aspect of social influence. There are three main subsections. The first outlines a literature review of conformity experiments which represent powerful demonstrations of this particular form of social influence. The second gives an account of how underlying factors can affect rates of conformity. The third links conformity to midwifery practice, explaining how compliance may cause a midwife to reinforce a decision that may clash with her knowledge of the more appropriate course of action.

**1.1.1. Literature Review of Conformity Experiments**
Aronson (1999, p. 455) defines conformity as “a change in behavior due to the real or imagined influence of other people”. Many experiments have found that the tendency to comply can be very strong (e.g., Asch, 1952, 1956; Bickman, 1974; Pendry & Carrick, 2001). Acquiescence with a prevailing group belief or behaviour may be determined by a number of factors. Informational social
influence, or the desire to know what is right, is one such factor. This clarification in social settings can happen for many reasons. Individuals look to others to determine how to behave in circumstances that are new or alien, or in some way ambiguous, or in times of crisis, or when they feel another person has more expertise in that situation (Bickman, 1974; Deutsch & Gerard, 1955; Pendry & Carrick, 2001). A second major reason why a person may conform is because they need to be accepted, in other words normative social influence (Deutsch & Gerard, 1955). Social groups evolve certain expectations about how group members should behave, and as group members, it is often easier to go along with such beliefs in order to avoid ridicule, punishment or ostracism (Miller & Anderson, 1979). Man is a social being and in general craves social companionship and acceptance (Pendry & Carrick, 2001). This need pervades many social settings and can exert a strong effect upon behavioural responses.

People are liable to conform to normative social influence for a number of reasons (Hogg & Vaughan, 1998). The classic experiments of Asch (1952, 1956) showed that people felt pressurised to show agreement with a patently wrong decision in order to fit in with a group of strangers. Asch (1952, 1956) investigated the propensity of individuals to conform to the views of other members of a group. In his experiments, the participant was seated in a room with six other people, ostensibly other participants but in fact confederates of the experimenter. Asch explained that the purpose of the experiment was to ascertain accuracy of perception and showed the group two cards. On one card was a single line, and on the other were three lines (A, B and C) of different lengths. One of the lines (C) was the same length as that on the first card. The experimenter told the participant that their task was to match the single line with the line of equal length from the three-line card, and that they were to respond in turn with the name of the chosen line (A, B or C). For each trial, the real participant gave his response second from last in the group. Thus, he heard the responses from five confederates before providing his own. In the first two trials, the confederates all gave the correct answer and in the following 16 trials they were only correct on four occasions. In the other trials, the confederates consistently gave the wrong response, all saying, for
example, that line A was the same length as the single line, instead of the correct line C.

Asch carried out a number of variations of this basic experiment. These variations involved: inclusion of a fellow dissenter, alteration of a participant's place within the group, and changes to the group's composition. Table 1.1. summarises the main findings. There were significant individual differences in the results. Asch found that a significant minority (33%) withstood pressure from the group's confederates and always gave the correct response. A smaller percentage (8%) conformed on all trials, and the remaining (59%) fell between these two extremes and conformed in only one or two trials.

A few of the participants who conformed in Asch's experiment reported that they had in actual fact seen the wrong line as correct. Others assumed that the majority were probably correct and changed their own judgments to fit in with the majority - a classic demonstration of conformity. Others knew the correct response, but agreed in public with the majority to avoid isolation - a classic demonstration of compliance.

Table 1.1. Summary of Asch's experimental findings

(1) When asked in private, previous yielders often revert back to their private opinion.

(2) The composition and size of the group can influence the degree of conformity, e.g., when the bogus majority are undergraduates or professionals with a perceived higher social class.

(3) A majority of between 3 and 7 is sufficient to obtain conformity.

(4) Yields to conformity are inconsistent, with some participants becoming increasingly more yielding and vice versa.

(5) There are large individual differences in rates of conformity.

(6) Rates of conformity are low when tasks are difficult.

(7) A yield to group pressure can be achieved despite the consensus of the bogus majority being manifestly wrong.

(8) When the participant had a fellow dissenter, conformity to the majority was much lower.
Asch’s results showed that despite an overall yield to group pressure, there are still many individual differences. Some participants did not conform, conformity was not consistent for all participants, and the range of responses was wide. These variations are important since they suggest that Asch might have tested a number of aspects of conformity, or a much more complex situation than was first thought. Asch’s post-experimental interviews showed that many participants were clearly anxious, which stemmed partly from desire to be in harmony with the rest of the group.

Deutsch and Gerard (1955) established that group pressure is a factor in the degree of conformity and that normative and informational forces are at work. They carried out an Asch-style experiment in which three groups of participants judged the length of lines:

1. A group pressure condition in which three confederates all gave incorrect answers.
2. A no group pressure condition in which participants provided anonymous and private responses.
3. A maximum group pressure condition in which confederates pressurised participants to be as accurate as possible.

In order to manipulate the ambiguity of the situation, half the participants responded while the stimuli were present and the other half when the stimuli had been removed. Results show that a decrease in group pressure reduces conformity. The most surprising result was that 23% still conformed in the anonymous and private condition. This demonstrates that group pressure is an important factor in the degree of conformity that occurs, and shows both normative and informational forces at work. What is of interest for this thesis is whether midwives respond in a similar way to the participants in the Asch and the Deutch and Gerard studies. When pressures are brought to bear, do midwives respond to questions with answers suggested by peers (normative influence) and what effect does information have on this process (informational influence)?

Asch’s published research prompted many other researchers to investigate conformity. Crutchfield (1955) explored whether participants need to be physically present for conformity to occur. Crutchfield placed participants
in separate booths, six at a time with a visual display. Visual discrimination puzzles were projected onto each screen. Questions were asked such as, which has the greater area, a star or a circle (the circle was about one third larger in diameter). Participants pressed a button to answer and responses were displayed for all to see. They did not know that the “other” responses were fabricated by the experimenter. Crutchfield displayed to each participant answers that seemed to show that the “others”, or a substantial proportion of them, had given a wrong answer, e.g., that a star has a greater surface area than a circle with a larger diameter. This enabled Crutchfield to manipulate group pressure and consider whether the group situation is essential for conformity to occur. Crutchfield carried out his experiment on over 600 participants. He conducted various modifications, either with or without a co-dissenter, and like Asch found high levels of conformity. Experimental results are summarised in Table 1.2.

Table 1.2. Summary of Crutchfield's experimental findings

(1) The composition and size of the group can influence the degree of conformity, e.g., when the bogus majority are undergraduates or professionals with a perceived higher social class.

(2) Rates of conformity are low when tasks are difficult - compared to simple tasks.

(3) A yield to group pressure can be achieved despite the consensus of the bogus majority being manifestly wrong.

(4) When the participant had a fellow dissenter, conformity to the majority was lower.

(5) Conformity has a significant positive correlation with the personality trait of authoritarianism.

High levels of conformity may occur because of disciplinary experiences (Levy, 1999a), rather than because of normative or informational influences, or through a mixture of both. In one experiment that involved military personnel, the degree of conformity was as high as 46% (Crutchfield, 1954), which is higher than the one in three (37%) who
yielded in Asch's (1952, 1956) original study. This suggests that there might be a higher degree of conformity within organisational structures than was initially thought. Comparably, the structure of the midwifery hierarchy is not so dissimilar to the armed forces, in so far as the hospital system places great emphasis on both conformity and obedience (Hofling et al., 1966).

Over the years, researchers have used the Asch-style experiment to establish a number of reasons for why conformity occurs (e.g., Bickman, 1974; Bond & Smith, 1996; Eagly and Carli, 1981; Epley & Gilovich, 1999; Krech, Crutchfield & Ballachey, 1962; Larsen et al., 1979; Pendry & Carrick, 2001). Most recent research has been focused on the effects of in-group and out-group minorities and majorities and their effects in influencing opinions, attitudes and actions within groups (e.g., David & Turner, 2001a, 2001b; DeDreu & DeVries, 2001; Martin, Gardikiotis & Hewstone, 2002; Moscovici & Personnaz, 1980, 1986; Perez, Mugny & Moscovici, 1986; Volpato et al., 1990; Wood et al., 1994). Although these experiments are of interest, they are not relevant to the focus of this thesis. Instead, this literature review on conformity concentrates on studies which identify variables within a situation that influence conformity (e.g., Bond & Smith, 1996; Eagly, 1978; Macrae & Johnson, 1998).

1.1.2. Factors that Influence Conformity

There is widespread agreement that conformity experiments represent powerful demonstrations of situational influence (e.g., Asch, 1952, 1956; Bond & Smith, 1996; Larsen et al., 1979; Crutchfield, 1955; Pendry & Carrick, 2001). In order to understand patterns of results and to generalise from them, one has to be able to specify the underlying features and factors that affect rates of conformity.

1.1.2.1. The Effects of Priming

Recent research in the domain of perception has reliably demonstrated that it is possible to influence social behaviour through the process of priming (Bargh, Chen & Burrows, 1996; Dijksterhuis & van Knippenberg, 1998). For example, Bargh, Chen and Burrows (1996) showed that priming participants
with the stereotype of an older person (using a scrambled sentence task\(^1\))
caused them to leave the laboratory at a slower walking pace.

Epley and Gilovich (1999) also investigated whether conformity can be
elicited by unconscious priming. Participants were primed for either conformity
or nonconformity using a scrambled sentence task (presented as a
psycholinguistics experiment), and were later placed in a conformity situation.
Participants were presented with strings of five scrambled words and asked to
create a grammatically correct sentence using four of the words in each string.
These sentences contained "conformity" words: adhere, agree, comply,
conform, copy, customary, emulate, follow, habitual, imitate, maintain, mimic,
obey, oblige, respect, simulate, supportive, uniform, uphold. On completion of
the task, two confederates gave positive verbal feedback on how enjoyable
involvement in the experiment had been. Participants primed with conformity
words expressed more pleasure from partaking than those in the no prime
control group.

In a similar experiment, Macrae and Johnson (1998) primed
participants with verbs and adjectives associated with the word help: helped,
assistance, aided, supported, provided, encouraging, facilitated, promoted,
fostered and furthered. As predicted, those primed with helpfulness facilitated
the experimenter to retrieve more objects than a control from a pile of items
dropped purposely by the door. Although some instances of conformity are the
result of agonising deliberations, the results of priming experiments are more
the product of stimuli outside awareness (Epley & Gilovich, 1999).

Priming experiments raise consideration of whether a hospital
environment may cue midwives to conform. Examples of "conformity" words
are found in Altman and Orbuch's (2002) presentation at the Fifth Annual
Congress of Health Care Compliance entitled "Compliance as Risk
Management". Altman and Orbuch's paper contains statements like:

---
\(^1\) In a scrambled sentence task, participants are presented with strings of jumbled
words and are asked to make grammatically correct sentences using words from the
string. For instance, the scrambled string "is kind angry she very" could be
un scrambled to make "she is very kind" or "she is very angry".
A compliance program is a management function aimed at identification, evaluation and treatment of risks that could result in loss. At a basic level, a system of policies and procedures is developed to assure compliance with and conformity to all applicable laws governing the organisation. The guidelines specifically provide that an offending organisation may be given credit for the existence of an effective compliance program. The existence of an effective compliance plan provides evidence that any mistakes were inadvertent, and this evidence would be considered in determining whether a medical practice or health care entity has made reasonable efforts to avoid and detect misbehaviour (Altman & Orbuch, 2002, p. 9).

Attempts to explain priming effects have been made in terms of what early theorists called “ideomotor action” (Carpenter, 1874; James, 1890; Jastrow, 1908). This is a process in which thoughts about a gesture or word lead to the same pattern of activation in the Anterior Cingulate Cortex (ACC) as when a person speaks or makes the gesticulation (Paus et al., 1993). Macrae and Johnson (1998) and Bargh, Chen and Burrows (1996) show that activation of a particular mental representation triggers equivalent behavioural mechanisms. Psychologists have known for some time that many cognitive processes are beyond conscious control (Greenwald & Banaji, 1995). Attitudes, for example, may be activated by the mere presence of an object (Bargh et al., 1992; Fazio, Sanbonmatsu, Powell and Kardes, 1986), and comparisons arise automatically when one is in the presence of another person (Gilbert, Giesler & Morris, 1995). Judgments about ourselves and others are likewise open to influences beyond conscious control (Greenwald & Banaji, 1995).

Pendry and Carrick (2001) complement priming research by considering whether participants' tendency to conform to a group norm could be influenced by activation of particular stereotypes (Blair & Banaji, 1996; Macrae, Strangor & Milne, 1994). For example, the word “professor” activates the contents of the stereotype (e.g., wise) (Dijksterhuis & van Knippenberg, 1998). In a variant of the Asch (1952, 1956) conformity paradigm, Pendry and Carrick considered whether the tendency to conform to a group norm is influenced by primed categories associated with “conformity” or “anarchy”. Prior to the main experiment, participants were given a photograph of either an “accountant” or a “punk” and a short discussion took place. The photograph of the accountant depicted a man with neat appearance, dressed
in a suit, with short hair, and glasses. The photograph of the punk showed a man with spiky hair and torn clothes that were covered in graffiti.

In the main experiment, results indicate that "punk" primed participants conformed significantly less than "accountant" primed participants, which suggests that in ambiguous situations it is usual to search for the correct way to behave by location and imitation of a suitable reference point (Deutsch & Gerard, 1955). In accordance with traditional conformity explanations, participants may look to others in the group to guide their behaviour, or else resort to stereotypes that are perceived to be reliable (Higgins, Rholes & Jones, 1977). Midwives, like others, may also resort to suggestions made by a credible stereotype, particularly when a decision to be made is ambiguous. Furthermore, the decisions made have no particular correct answer and therefore could be considered ambiguous.

1.1.2.2. Personality

Features of personality affect conformity measures. Crutchfield (1955) collected relevant data on all his participants by giving them a personality questionnaire and an intelligence test. Crutchfield found that conformity showed a significant negative correlation with intellectual competence, and a significant positive correlation with authoritarianism. Barron (1953) found no significant difference between conformists and independent participants on the Minnesota Multiphasic Personality Inventory.

Krech, Crutchfield and Ballachey (1962) summarised personality factors that relate to independence versus conformity (see Table 1.3 overleaf). Significant correlations support the general view that conformers are low in self-esteem, intelligence and status and are high in anxiety and insecurity. Conversely, independents are more intelligent, less anxious and do not need the social approval of a group to the same degree as conformers (Krech, Crutchfield & Ballachey, 1962). Krech et al. showed that conformers may well be more dependent on informational and normative influence than their independent counterparts, who because of higher intelligence and a realistic output may be able to resist more successfully the implicit and explicit social pressures of group influence.
Table 1.3. Personality factors that relate to independence versus conformity (Krech, Crutchfield & Ballachey, 1962)

<table>
<thead>
<tr>
<th>Trait</th>
<th>Conformers</th>
<th>Independents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive functioning</td>
<td>Less intelligent</td>
<td>More intelligent</td>
</tr>
<tr>
<td>Motivation/emotion</td>
<td>More anxious</td>
<td>Less anxious</td>
</tr>
<tr>
<td>Self-concept</td>
<td>Lack self confidence / less insightful</td>
<td>Realistic self perception</td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td>Poor judgment of others</td>
<td>More self contained and autonomous</td>
</tr>
<tr>
<td>Attitudes/values</td>
<td>Convention/moralistic</td>
<td>More original</td>
</tr>
</tbody>
</table>

In 1974, Larsen replicated the Asch experiment in the United States and failed to obtain the same results. Larsen hypothesised that participants with “external locus of control” would conform more than those with an “internal locus of control”. Forty undergraduates at Oregon State University (20 males; 20 females) completed Rotter’s Locus of Control scale after participation in an Asch-style experimental procedure. The experimental results supported a hypothesis that relates locus of control to conformity. In a two-way analysis of variance, it was found that externals conformed at a significantly higher level compared to internals ($F = 10.60, p < .001$). This result established a link between a belief in external powerful sources of reward and conformity behaviour.

One criticism of these studies is that most of the findings are based on correlations, thus do not allow us to infer what is cause and effect. Furthermore, evidence that individuals are not consistent in their conformity or independence throws some doubt on the hypothesis that personality factors are the sole explanation as to why some are more independent than others. Situational factors such as the task or the status of the group may be just as important in determining the degree of conformity shown. Thus, it is still open to question whether a conformist personality can be defined (Larsen, Triplett, Brant & Langenberg, 1979). On the whole, there is a dearth of recent studies that relate character to tendencies to conform.
1.1.2.3. Culture

The view has long been held that conformity is to some extent a product of culture. It is also a stable feature of popular stereotypes that some national groups are conformist and submissive, while others are independent and self-assured (e.g., Peabody, 1985).

Milgram (1961) used a modified form of the Asch-type situation to compare conformity rates between Norwegian and French participants. Each participant had to judge the duration of two tones delivered through earphones. Each participant would hear the responses of five other "participants" before giving his own. On 16 of the 30 trials the judgments were wrong. Milgram reported conformity in 62% of Norwegian participants and 50% of French participants. In a second trial, participants were told that the results would be used in the design of aircraft safety signals, which linked the performance of each participant to a life or death situation. On this second trial, conformity rates were lower for both groups, but the Norwegians still scored significantly higher than the French. In a third trial, participants delivered their judgments in the belief that five other participants had heard and then recorded their responses in private. In this trial, there was a considerable drop in conformity, although Norwegian participants still conformed the more. In a fourth trial, non-conformers were targeted and criticised for not taking the majority view. There was a significant increase in conformity in both groups, with Norwegians yielding on 75% and the French on 59% of trials.

Milgram reports that there were differences in the way that each culture dealt with the critics. Norwegian non-yielders accepted much more criticism, whereas the French retaliated more. Milgram felt that these differences stemmed from disparities between French and Norwegian culture, with Norwegians more cohesive due to high levels of group identification. He maintained that the French demonstrate far less consensus in both social and political life. It should however be noted that French politics in the late 1950s was notable for its fragmented character (Williams, 1966). Whatever the explanation, Milgram showed consistent cultural differences in levels of conformity between two nations.
There have been many investigations of culture and conformity. Bond and Smith (1996) meta-analysed 133 Asch-style experiments in 17 countries. They found conformity prevalent in all societies, the more so in collectivist cultures like Norway, China and Japan (Frager, 1970) in comparison to individualist societies like the USA and France (Triandis, 1990).

Perhaps the most important criticism of much of this research is that explanations for cross-cultural differences are frequently a posteriori, and there is no direct assessment of variables that are presumed to mediate the level of conformity (Bond & Smith, 1996). It is largely a matter of speculation whether differences in conformity are due to social values that give priority to group preferences (Chandra, 1973), reaction against conformity pressures of society (Frager, 1970), or an ethos that encourages people to question the status quo (Perrin & Spencer, 1981). There is in general within this literature a lack of theoretical analysis of the processes that underlie conformity behaviour and the relevance of cultural conditions to such processes (Bond & Smith, 1996).

Conformity responses of British citizens are relevant to this particular thesis, given that the majority of midwives in North Yorkshire studied in this thesis are of British origin. Perrin and Spencer (1981) argued that the classic Asch studies of conformity might not be universal but rather reflect the culture of the USA in the 1950s. Of interest is whether British participants demonstrate the same level of compliance to the unanimous majority in a procedural replication of the Asch study. Compliance was found in only one out of 396 critical trials that involved British student participants (Perrin & Spencer, 1981). The Asch effect was, however, demonstrated where participants and settings were selected so that personal costs of not yielding to the majority would be high. Thus, levels of compliance similar to those found by Asch were shown by youths on probation where the confederate group and the experimenter were probation officers, and also by alienated black youths where the experimenter was white (Perrin & Spencer, 1981).

In lengthy post-experimental interviews, the participants assured the debriefer that they had never heard of the Asch paradigm. Therefore the best explanation for the dramatic reversal of Asch's results is offered in terms of cultural differences and changes over a relatively short period of history. It is
therefore inappropriate to generalise about levels of conformity of a nation since historical contexts change. Larsen (1974) conducted a study shortly after the period of student militancy that started in the 1960s and reported rates of conformity approximately half that of Asch’s participants in the 1950s (a mean error rate of 2.17, compared with 4.41 across the Asch groups).

What is striking is that the students in Perrin and Spencer’s study did not respond to unanimous group pressure by complying with the majority. Similarly, Lalancette and Standing (1990) observed little conformity in students at Bishop’s University, Canada. What is of interest to this thesis, is whether midwives will perceive costs from failure to comply and conform like Perrin and Spencer’s probationers and West Indian groups, or whether they will fail to respond to social pressure, like the students in Perrin and Spencer and Lalancette and Standing’s studies.

1.1.2.4. Status
Status is another dimension that influences levels of conformity. Larsen et al. (1979) hypothesised that participants in an experiment would conform more to high status collaborators than to peers. Results showed a significant interaction effect between sex and status of collaborator, which showed that status was a more salient variable for males. Whereas all male participants in the high status condition made some status-relevant comment about the collaborators, only one female made such a comment. An example was: “I recall starting to feel strange being the only freshman in the group and figured it must just be me, because all the seniors and grad students were agreeing to the answer...” These observations supported the sex-linked salience of the status of the collaborators, as shown by the experimental results (Larsen et al., 1979).

One possible link between status and social influence is described by Berger and Zelditch (1985) in their “Expectations States Theory”, according to which group members quickly develop an expectation of the performance ability of peers. Expectations act as psychological anchors for successive behaviour, with higher status members allowed to initiate more ideas and to be more influential. They are often unjustifiably seen as more proficient in other areas as well. In this cumulative way, status differences are reinforced...
and magnified, with stability maintained. According to “Expectation States Theory”, external markers (like ethnicity and sex) often act as status characteristics from which performance related attributes are inferred (Berger & Zelditch, 1985; Kiesler & Sproull, 1992; Shaw, 1981).

Bickman (1974) showed that requests from perceived authority stimulate greater levels of compliance. In a field experiment, participants were stopped in the street by an experimenter dressed in one of three ways: a civilian, a milkman, or a security guard. Passers-by were asked to pick up a paper bag, give a dime to a stranger, or move away from a bus stop. The results indicate that the participants complied more with the guard than with a civilian or milkman. For results see Table 1.4.

Table 1.4. Percentage of participants who obeyed for each style of dress and condition (Bickman, 1974)

<table>
<thead>
<tr>
<th>Style of dress</th>
<th>Paper bag</th>
<th>Dime</th>
<th>Bus stop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Civilian</td>
<td>14</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>Milkman</td>
<td>14</td>
<td>64</td>
<td>14</td>
</tr>
<tr>
<td>Guard</td>
<td>22</td>
<td>82</td>
<td>20</td>
</tr>
</tbody>
</table>

A plausible analysis of social power indicates that the guard's power was most likely to be based on perceptions of legitimacy (Bickman, 1974). It is also possible that uniformed authorities (e.g., high status midwives) have more legitimate social power within their institutional context than the guard in this study. Legitimate power is usually defined in terms of roles or positions in which the agent has the right to prescribe behaviour in a given domain. When a civilian approaches someone on the street and orders him to give someone a dime (or pick up a bag, etc.), the person given the order is likely to dismiss
the civilian as someone who is playing a practical joke and thus not comply with the order. Someone in a guard's uniform, however, is likely to be taken more seriously. This is someone in a responsible job, who is perceived as doing something beneficial for society and who is usually trusted. Thus, the guard has a degree of legitimacy that is associated with his uniform that may not be directly related to the functions of his role (Bickman, 1974). On the basis of this cueing, it is plausible to consider that a senior midwife may have greater legitimacy than someone of lower status. First, the organisation has vested such power on her, and second, her rank is differentiated from those of lower position by a change in colour or style of uniform.

Bushman (1984) replicated Bickman's experiment by means of a "no authority" condition, in which the confederate was unshaven and wore an old pair of greasy overalls, an old baseball cap, and work shoes. In a "status authority" condition, the confederate dressed as a business executive, was shaven, and wore a conservative two-piece business suit, white shirt, a conservative tie, and dress shoes. In a "role authority" condition, the confederate was dressed as a firefighter, and wore a firefighter's uniform. Results show that 44% of the participant's complied with the request from the dishevelled confederate, 50% the business executive, and 82% the firefighter (see Table 1.5).

Table 1.5. Percentage of participants who obeyed for each uniform and condition (Bushman, 1984)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Compliance</th>
<th>Noncompliance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>No authority</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Status authority</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Role authority</td>
<td>41</td>
<td>82</td>
</tr>
</tbody>
</table>

Bickman (1974) proposed that a uniform that signifies a respectable role acts as a stimulus to conformity, because in the role authority condition, the confederate noted that the majority of participants looked at the fireman's
badge and then complied. Joseph and Alex (1972) point out that uniforms serve to identify the wearer's status, group membership, and legitimacy. They view the uniform "as a device to resolve certain dilemmas in complex organisations - namely, to define their boundaries, to assure that members will conform to their goals, and to eliminate conflicts in the status sets of their members. The uniform serves several functions: it acts as a totem, reveals and conceals status, certifies legitimacy, and suppresses individuality" (Joseph & Alex, 1972).

The idea that uniforms represent authority (Bickman, 1974) is consistent with judgements of communicator trustworthiness and credibility concerning occupation (Hurwitz, Miron & Johnson, 1992; Ostermeier, 1967; Swenson, Nash & Roos, 1984). Thus, a person may decide to inhibit a behaviour or stimulate it, dependent upon how he/she believes a particular kind of behaviour will be judged by the authority figure. Viewed in this light, a uniform that represents authority may be a significant determinant of a midwife's conformity behaviours. What these experiments demonstrated, is that the amount of compliance shown by a person is in part determined by the authority they ascribe to the person giving the orders, as indicated by their attire and its institutional significance.

1.1.2.5. Gender Differences

Crutchfield (1955) and Krech et al. (1962) hypothesised that women conform more than men on the grounds that male and female gender roles are different and promote such a divergence. In some early conformity experiments, it was indeed found that females tended to conform more than males (e.g., Crutchfield, 1955; Endler, 1966; Geller, Endler & Wiesenthal, 1973; Hollander, Julian & Haaland, 1965). The general explanation for these differences has by and large centred around the cultural stereotype of the female as passive, compliant, and agreeable (Javornisky, 1979). In a baseline Asch-type experiment and in Crutchfield's replications, it was found that:

(1) Females scored higher on a measure of conformity.

(2) As tests proceeded, the differences between male and female scores widened.
(3) High-conformist females tended to find it easier to accept the conventional female role.

(4) Female dissenters were characterised by marked signs of conflict in their feelings about the conventional feminine role. They also had lower socialisation scores on a personality test (Gough, 1960).

In persuasion research that does not involve group pressure, there is scant empirical support for sex differences (O'Keefe, 2002); in group pressure conformity research, there is support in some studies (Eagly, 1978; Eagly & Carli, 1981). Table 1.6. overleaf lists group pressure conformity studies that report a test of sex differences (Eagly, 1978). Of these 60 studies, 38 (63%) reported no difference between the sexes and 20 (33%) found females to be significantly more conformist.

This review suggests fairly strong evidence for sex differences among conformity studies that involve group pressure. However, these results may be artifacts of contextual features of specific social influence experiments or, in some measure, the product of genuine differences between the sexes. Among process explanations, there are three main views: (a) that the superior verbal ability of females predisposes them to be influenced (e.g., Eagly, 1978; Endler, 1966; Larsen, 1974), (b) that sex roles prescribe differences in yielding, with the female role implying submissiveness to influence (e.g., Eagly, 1978; Hollander, Julian & Haaland, 1965; Whittaker, 1965), and (c) that females' greater concern with interpersonal aspects of situations, in particular with maintaining social harmony (Tannen, 1991), predisposes them to be influenced (e.g., Eagly, 1978; Geller, Endler & Wiesenthal, 1973).

More recent studies also point to the possibility that females conform slightly more than males, although these differences are small and may have more to do with the task or gender of the experimenter (Wren, 1999). This suggests that the very early experiments may be flawed or reflect male/female stereotypes at that time. Once again, this indicates the importance of historical context. More careful studies (e.g., Javornisky, 1979; Sistrunk & McDavid, 1971) have shown that women conform more than men when:
Table 1.6. The effect of participant sex on conformity: group pressure studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Females more conforming</th>
<th>No significant Difference</th>
<th>Males more conforming</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Allen &amp; Levine (1969)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Beloff (1958)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Bem (1975)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Breger &amp; Ruiz (1966)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Chandra (1973)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Coleman, Blake &amp; Mouton (1958)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Costanzo &amp; Shaw (1966)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) Crano (1970)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Crutchfield (1955, Study 1)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12) DiVesta &amp; Cox (1960)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(13) Endler (1965)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(14) Endler (1966)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15) Endler, Coward &amp; Wiesenthal (1975)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(16) Endler &amp; Hoy (1967)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(17) Endler et al. (1975)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(18) Endler, Wiesenthal, Geller (1972)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(19) Ex (1960)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(20) Frager (1970)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(21) Gerard, Wiesenthal, Conolley (1968)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(22) Gillan, Gillan, Slatin (1970)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(23) Hollander, Julian, Haaland (1965)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(25) Jovick (1972)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(26) Julian, Regula, Hollander (1968)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(27) Julian, Ryckman, Hollander (1969)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(28) Kanareff &amp; Lanzetta (1960)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(29) Kanareff &amp; Lanzetta (1961)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(30) Klein (1972)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(31) Landsbaum &amp; Willis (1971)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(33) McDavid &amp; Sistrunk (1964)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(34) Meyers &amp; Arensen (1968)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(35) Nahemow &amp; Bennett (1967)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(36) Nakamura (1958)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(37) Phelps &amp; Meyer (1966)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(38) Reiten &amp; Shaw (1964)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(39) Ross, Bierbrauer, Hoffman (1976)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(40) Rotter (1967)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(41) Sistrunk, Clement, Ulman (1972)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(42) Sistrunk &amp; McDavid (1965)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(43) Smith (1970)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(44) Steinke &amp; Rogers (1963)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(45) Stone (1973)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(46) Stricker, Messick, Jackson (1970)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(47) Tumaere (1968)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(48) Tuddenham (1958 Study 1)</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>(49) Tuddenham (1958 Study 2)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(50) Tuddenham (1961)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(51) Tuddenham (1958 Study 2)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(52) Tuddenham et al. (1958)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(53) Vaughan &amp; Taylor (1966)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(54) Vidulich &amp; Bayley (1966)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(55) Vidulich &amp; Stabene (1965)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(56) Whitaker (1965)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(57) Wiesenthal et al. (1976)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(58) Wiesenthal et al. (1973)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(1) The task is male-oriented.
(2) The experimenter is male.

Sistrunk and McDavid (1971), in an Asch-style experiment, subjected male and female participants to group pressure in a task in which they were asked to identify various stereotypic male and female items, e.g., wrench (male), stitching (female). Mixed groups of participants were exposed to semi-ambiguous items that are by tradition associated with masculine or feminine behaviour. As predicted, males conformed more on female items, females conformed more on male items, and on neutral items scores were similar2.

Javornisky (1979) also showed that conformist responses vary as a function of the sex-relatedness of the content under discussion. In an Asch-style experiment, participants were asked to identify brand names of consumer items. The group situations involved three confederates and one participant (n = 48). Additionally, 74 participants completed a matched questionnaire in private. Results showed that the sex of confederates made no significant difference to levels of conformity. However, the number of incorrect conformist responses varied as a function of the sex-relatedness of the items. Possible explanations are that conformity responses may increase on issues in which one’s own sex is perceived to be uninterested or inexperienced (Eagly, 1978), that task items may be more difficult for females (Sistrunk & McDavid, 1971), and/or the information involved in the task may be more familiar to males, e.g., sports (Geller, Endler & Wiesenthal, 1973).

Differences in conformity between the sexes are found to be significant in some studies (e.g., Chandra, 1973; DiVesta & Cox, 1960) and non-significant in others (e.g., Javornisky, 1979; Johnson & MacDonnell, 1974; Phelps & Meyer, 1966). Such inconsistent findings cannot be used to hypothesise whether female midwives would perform differently from male midwives on conformity measures. Moreover, the vast majority of midwives are female; therefore this hypothesis becomes extremely difficult to test.

2 Sistrunk and McDavid (1971) propose that male-related activities more often include judgments about political and economic affairs, or about geometric designs suggestive of mechanical and mathematical relevance. Female activities concern domestic management, design, or family affairs.
1.1.3. Conformity and Midwifery

The review of the literature has shown that levels of conformity can differ as a function of situational manipulations and differ between individuals in the same setting. Research shows that within groups, people are susceptible towards varying their behaviour as a result of social influence from other people (e.g., Asch, 1952, 1956; Bond & Smith, 1996; Pendry & Carrick, 2001).

Conformity is a relevant issue, since an alternative viewpoint may conflict with a midwife's opinion of the right course of action. This makes conformity and its relationship to clinical decision-making in midwifery an important issue. The rhetoric of "woman-centred care" advocated in social policy documents (DoH, 1993; DoH, 2003; DoH, 2004), may be difficult to attain when individual midwives work in groups amongst influential others. When the majority of group members reinforce a decision, this may clash with a midwife's knowledge of the appropriate course of action. Experiments suggest that group members influence conformity. This may have a profound effect upon whether a midwife supports a healthy childbearing woman's request for a home confinement, to ambulate during labour, to opt for a specific method of pain relief or have numerous significant others present at her birth. When the pregnancy is normal, none of these options is hazardous to maternal or fetal outcome and for that reason ought to be the choice of the childbearing woman. Consequently, junior midwives may be presented with a moral conflict between a drive to conform with what is suggested by others and their role as advocates for women.
Section 2. Obedience and the Social Influence Process

The aim of this section is to discuss obedience and show that it is a major aspect of social influence. There are four main subsections. The first outlines a literature review of obedience experiments that represent powerful demonstrations of this particular form of social influence. The second gives an account of situational determinants of obedience and shows that levels can vary as a function of situational manipulations within the environment. The third discusses individual differences in obedience behaviour and shows that levels differ among people within the same setting. The fourth links obedience to midwifery practice, explaining conflicts that arise between a prerequisite for obedience to authority and the restrictions this may impose on a midwife’s ability to provide flexible woman-centred care.

1.2.1. Literature Review of Obedience Experiments

Research on obedience to authority has been confined to the study of the direct and immediate power relationship between the authority in charge and the individual who carries out his/her requests. In the classic Milgram (1963, 1965) experiments, an experimenter gives direct orders to a participant in the role of teacher to administer shocks to a victim. This parallels the situation in many natural field settings, such as a hospital where a physician may order a nurse to give “unauthorised” medication to a patient (Hofling et al., 1966) or a factory where a supervisor orders a subordinate to pass a defective product (Kilham & Mann, 1974).

Milgram (1963, 1965) wanted to discover how far people would be prepared to go to carry out the requests of an authority figure. He designed a bogus experiment on the pretext that the purpose was to study the effect of punishment on memory. Milgram carried out 19 variations of his experiment and compared results with those of a baseline voice feedback condition (see Table 1.7. overleaf).
Table 1.7. Percentage of participants who showed full obedience in experimental and baseline conditions (Milgram, 1974)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage of participants who showed full obedience to the end of the experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>1. Remote victim</td>
<td>65</td>
</tr>
<tr>
<td>2. Voice feedback (baseline)</td>
<td>62.5</td>
</tr>
<tr>
<td>3. Victim near</td>
<td>40</td>
</tr>
<tr>
<td>4. Victim touching</td>
<td>30</td>
</tr>
<tr>
<td>5. Voice feedback (new baseline)</td>
<td>65</td>
</tr>
<tr>
<td>6. Change of personnel</td>
<td>50</td>
</tr>
<tr>
<td>7. Experimenter absent</td>
<td>20.5</td>
</tr>
<tr>
<td>8. Women</td>
<td>65</td>
</tr>
<tr>
<td>9. Victim contracts for release</td>
<td>40</td>
</tr>
<tr>
<td>10. Dissociation from Yale</td>
<td>47.5</td>
</tr>
<tr>
<td>11. Participant chooses shock level</td>
<td>2.5</td>
</tr>
<tr>
<td>12. Learner demands to be shocked</td>
<td>0</td>
</tr>
<tr>
<td>13. Ordinary man gives orders</td>
<td>20</td>
</tr>
<tr>
<td>14. Participant as bystander</td>
<td>68.75</td>
</tr>
<tr>
<td>15. Authority as victim</td>
<td>0</td>
</tr>
<tr>
<td>16. Two authorities contradict commands</td>
<td>0</td>
</tr>
<tr>
<td>17. Two authorities: one as victim</td>
<td>65</td>
</tr>
<tr>
<td>18. Two peers rebel</td>
<td>10</td>
</tr>
<tr>
<td>19. Peer administers shocks</td>
<td>92.5</td>
</tr>
</tbody>
</table>

In Milgram's baseline voice feedback condition, the participant was introduced to another man who was alleged to be another participant, but in fact was a confederate of the experimenter. The confederate had been specially trained to respond in a particular way during the experiment. The experimenter (dressed in a white coat) told the two men that they would be assigned a role as either teacher or learner, and the teacher would then proceed to teach the learner to remember a list of word pairs. The two men drew lots to decide who was to take each role, but in fact this was rigged so that the genuine participant always became the teacher. The participant then
saw the learner being strapped into a chair and electrodes attached to him (electrical connections), which were linked up to a shock generator. The learner at this point mentioned that he had heart trouble but the experimenter assured him that, “although the shocks can be extremely painful, they cause no permanent tissue damage”. The participant was then shown into a separate room where the shock generator was placed on a table. The participant was told that each time the learner made a mistake in recall of the list of word pairs, he was to administer a shock by pressing one of the thirty switches on the shock generator. The first switch was labelled “15 volts-mild shock” the next “30 volts” and so on up to “450 volts” and the participant was told to press the 15 volt switch first and then move one switch up the scale each time the learner made a mistake. When all the instructions were clear, the session began.

Milgram wanted to know how far up the scale of shocks the participants would go when told to continue by the experimenter. This was despite the sound of cries and pounds on the wall from the learner asking the participant to stop giving the shocks and, later, the learner’s complete silence. The results were unexpected and dramatic, with 62.5% (Experiment 2) and 65% (Experiment 5) of the men in the baseline condition proceeding up to the 450 volt level. At the end of the session (when the participant had reached 450 volts or had refused to continue) the true purpose of the experiment was revealed and the participant was told that no shocks had in fact been delivered to the learner.

Milgram manipulated a number of variables within the basic experimental procedure and found that certain factors altered levels of obedience from the baseline results of 62.5% and 65%. For instance, when the victim was placed in the same room, in close proximity (thus he was visible as well as audible), obedience dropped to 40% (Experiment 3). Moreover, if the victim demanded to be let free at 150 volts, while the participant was ordered to move the victim’s hand onto the plate, levels of obedience dropped to 30% (Experiment 4). In efforts to explain these reduced levels of obedience when the victim is brought closer, it is possible that the visual cues associated with the pain expressed trigger empathetic responses and give the participant a more complete grasp of what is experienced. In a
further condition, the proximity of the experimenter was reduced (he left the laboratory and gave his orders over the telephone); obedience then dropped to 20.5% (Experiment 7). This shows that the actual physical presence of an authority figure is an important factor in a participant's obedience or defiance. Characteristics of the experimenter were altered from a somewhat dry, technical looking man to a rather soft and unaggressive one, which reduced levels of obedience to 50% (Experiment 6). This result was not statistically significant when compared to the baseline condition and indicated that a change of personnel had little effect on levels of obedience.

Milgram found that obedience was virtually identical between men and women (65%) (Experiment 8), although there were many feminine styles in conflict management, with many of the female participants reporting that the experience was similar to unspecified problems with childrearing. Milgram does not enlarge upon his explanation for the difference in style of conflict found between male and female participants. It is of interest to note that out of the three other experiments that have studied gender differences in obedience (Shanab & Yahya, 1977; Kilham & Mann, 1974; Sheriden & King, 1972), none provide an adequate explanation for similarities or differences. Due to the more recent ethical codes that restrict replication of the Milgram-style experiment, relatively few social psychologists have followed up Milgram's pioneering work on obedience. As a result, the present body of research is too restrictive to allow for an adequate understanding of gender and its relationship to obedience.

In Experiment 9, the participant signed a general release form that stated: "In participating in this experimental research of my own free will, I release Yale University and its employees from legal claims arising from participation". At the same time, the confederate learner states that because of his heart condition, he can agree to be in the experiment only on the condition that the experiment be halted on his demand. Even so, 40% of the participants continued to obey the experimenter to the end of the board, disregarding the contractual limitation the victim had attached to his participation. Although 40% is less than the baseline, some participants were aware of the injustice being done to the victim, but they still allowed the experimenter to handle the issue as he saw fit.
To control for effects due to the respect and awe participants might have for Yale University, Milgram moved his experimental apparatus to the nearby industrial city of Bridgeport (Experiment 10). The idea was to test whether obedience was tied to the participants' perception of the reputation of the institution. In order to make this comparison, the Bridgeport experiments were conducted in an office building, by an unimpressive firm that lacked social and professional esteem. Although obedience was somewhat reduced (47.5%), the result did not differ significantly from that achieved in the equivalent condition at Yale. This suggested that the orders of the authority figure might be seen as legitimate when they occurred within some sort of institutional structure, but it need not be a distinguished establishment.

When the participant, instead of being instructed, was free to select any shock level on whichever of the trials, compliance with the given instructions dropped to 2.5% (Experiment 11). This showed that participants were not by and large inclined to make the victim suffer. Whatever led to the issue of shocks at the highest level cannot be explained by an autonomous generation of aggression, but by transformation of behaviour that comes about through obedience to orders. When the learner demanded that the experiment continued, despite his discomfort and complaints of a heart condition, obedience dropped to zero (Experiment 12). This showed that participants would shock the learner on the authority's command but not on the learner's demand. In this context, the learner possessed less right over himself than the authority had over him. He became part of a total system that is controlled by a senior person, whose authority is seen to be legitimate as orders are undisputed and perceived to be credible.

When the authority figure was replaced by someone who appeared simply as another participant, obedience dropped to 20% (Experiment 13). When the participant refused to go along with his instructions, the experimenter acted as if he were disgusted by this refusal and took over in person administration of the shocks (Experiment 14), increasing obedience to 68.75%. Interestingly, all of the participants protested against the demands of the co-participant, with five taking physical action against him. This attitude sharply contrasts with the deferential politeness participants invariably displayed to the experimenter in the other conditions. In comparison, when the
high status experimenter was placed in the victim's position, obedience dropped to zero (Experiment 15). This confirms that the response is to a designated authority, rather than to just anyone. An overall explanation is that action flows from the higher end of the social hierarchy to the lower; that is the participant is responsive to orders from a level above his own, but indifferent to signals from below.

In Experiment 16, two authorities contradicted each other's commands, and obedience dropped to zero. Therefore, when the signal from the higher level is confused, the coherence of the hierarchical system is destroyed, along with its efficacy in behaviour regulation. To test whether authority resides in the designation of rank, or is instead dependent upon the actual position within the hierarchy, two equal authority figures “flipped a coin” for who was to play victim (Experiment 17). Results show that the experimenter in the role of victim fared no better than anyone else (65%). In other words, when the experimenter commanded a participant to administer shocks to his colleague, the colleague's protests had no more effect than those of an ordinary person. One explanation might be that when a high status person directs an individual's behaviour, there is a need for them to find a coherent chain of command. This line becomes evident only when there is a clear hierarchy that lacks contradictions and incompatible elements.

In a "two peers rebel" condition (Experiment 18), Milgram examined whether group influence can release the participant from authoritarian control. The basic study was replicated but with the participant placed in the midst of two peers who defy the experimenter and refuse to punish the victim against his will. In this condition, obedience dropped to 10%. This showed that group influence can release a person from authoritarian control and allow that person to act in a direction congruent with his values and personal standards.

In Milgram's last condition (Experiment 19), the naïve participant was removed from the actual act of shock issue to the victim; another participant (a confederate) fulfilled this role on instruction. In this circumstance, obedience levels increased to 92.5%. This dramatic result may be because the role of bystander absolved the participant from responsibility; first, the legitimate authority has given full warrant for actions and, second, she/he has not committed any brutal physical acts.
In general, the results of Milgram's experiments provided overwhelming evidence that the majority of people are unable to defy orders of authority and will proceed to administer painful electric shocks when commanded to do so. Parker (2000) advises careful consideration of Milgram's results, since particular factors may have maximised obedience in these specific instances. First, participants volunteered to take part in the experiment, which makes it feasible that this would create an obligation not to disrupt the experimental process. Second, the authority figure was a prestigious scientist with a cover story that credited the study as an important scientific quest (Milgram, 1965). Both of these points are relevant to hospitals where employees are paid for their role and those who issue the requests typify credible, trustworthy and reliable professionals.

Milgram's research on obedience was followed by a succession of studies. Holland (1967), in a similar experiment, studied obedience levels of American psychology students at Connecticut University. There were three conditions: Milgram's baseline design but with two experimenters; a variation in which the participant was asked to guess what the experiment was about; and a condition in which the participant was told that the shocks administered were 10% of the voltage stated on the dial. The latter conditions were designed to test the effects of suspiciousness upon levels of obedience (see Table 1.8).

**Table 1.8. Percentage of participants who showed full obedience in experimental and baseline conditions (Holland, 1967)**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage of participants who showed full obedience to the end of the experiment %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baseline with 2 experimenters</td>
<td>75</td>
</tr>
<tr>
<td>2. Asked to figure out what the experiment is about</td>
<td>55</td>
</tr>
<tr>
<td>3. Told shock given is 10% of what stated on dial</td>
<td>80</td>
</tr>
</tbody>
</table>

(n = 20 in each condition)
Milgram's results were replicated with obedience of Condition (1) participants just slightly higher than those who took part in Milgram's baseline Experiment 5 (75% versus 65%). In Condition (2), attempts to arouse participants' suspicion failed to eradicate obedience to the experimenter. These participants were asked to guess the purpose of the experiment and to act naively and keep their thoughts private. It is conceivable that this "cueing" of participants led to earlier disobedience. That is, it simply took Condition (1) participants longer to guess what was going on, if they were going to at all, and then arrive at some course of behaviour. The participants in Condition (3) were told that the shock levels were one tenth of what they appeared. Post-interview data accounts for the high level of obedience (80%), with many suspicious that they were the only real participants in the experiment and that there was no shock at all.

Mantell (1971) used three variations of Milgram's experiment to test obedience levels of West German men: (1) Milgram's baseline condition, (2) a model variation which was identical to the baseline condition in every way, except beforehand the participant was asked to observe the process, remain quiet and not interfere, (3) a self-decision condition that removed experimenter compliance pressures. Mantell's results are shown in Table 1.9.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage of participants who showed full obedience to the end of the experiment (%)</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baseline</td>
<td>85</td>
<td>46</td>
</tr>
<tr>
<td>2. Model variation</td>
<td>52</td>
<td>25</td>
</tr>
<tr>
<td>3. Self-decision</td>
<td>7</td>
<td>30</td>
</tr>
</tbody>
</table>

Mantell's baseline sample of 85% is higher than Milgram's 65% of participants who were obedient to the end of the shock board. Although this difference is stated to be statistically nonsignificant, it is suggested that the
disparity may have occurred because the Munich sample included a small subgroup of 7 “beatniks” or “hippies”, all of whom were run in the baseline condition; of this subgroup, 6 threw all 30 levers.

Condition (2) focused attention on the effect that prior observation of the experiment had on participants’ obedience levels when they actually became the teacher. In this modeling legitimization condition, 52% of the participants completed the experiment, which showed that having time for thought reduced levels of obedience of some but not all. This may be due to the extra time that permitted reflection upon action and careful consideration of behaviour.

In the self-decision condition (Condition 3), levels of obedience were dramatically reduced to 7%, which is comparable to Milgram’s 2.5% (Experiment 11). This result confirmed that the majority of people are not on the whole inclined to make another suffer. Therefore, the key issue appears to be located in the authority figure. When one sees an order as legitimate and submits to it, the responsibility is transferred and the “good citizen” becomes enmeshed in a perfidious situation from which she/he cannot extricate her/himself. The various experimental variations described by Milgram and the three described here all involve situational variations. They differ from one another primarily in the intensity of destructive behaviour produced or released.

Comparably, Sheriden and King (1972) elicited obedience in an experiment, in which the learner-victim was substituted by a puppy that actually received real graded shocks. Participants were told that the experiment involved measurement of Critical Fusion Frequency (CFF) in puppies. The shocks given produced effects that included attempts to run, howls and yelps. Typical responses to the first voltage level included foot flexion and occasional barks. The second level produced attempts to run and vocalisation, and the final level resulted in continuous barks and howls. The typical response of participants was to indicate distress when asked to give shocks to the puppy; these included gestures that coaxed the puppy to escape the shock, shuffles from foot to foot, puffs and weeps. For results see Table 1.10. overleaf
Table 1.10. Percentage of participants who showed full obedience in experimental conditions (Sheriden & King, 1972)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage of participants who showed full obedience to the end of the experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Males</td>
<td>54</td>
</tr>
<tr>
<td>2. Females</td>
<td>100</td>
</tr>
</tbody>
</table>

(n = 13 for both groups)

Levels of obedience obtained from male participants (54%) were quite close to those obtained by Milgram under comparable conditions of feedback from the victim (40%), with the authors concluding that there was no statistically significant difference between their investigation and that of Milgram's similar condition.

A further refinement on previous studies included recruitment of female participants, as well as males. Without exception, female participants complied with instructions to shock the puppy all the way to the end of the scale. The difference between obedience levels of male and female participants was statistically significant (Yates' $X^2 = 5.41, df = 1, p > .02$). This result differs from Milgram (1974) who found no gender difference in levels of obedience observed between males and females.

In a classroom, when females were asked to predict how far the "average woman" would go in shocking the puppy, 86% believed that they would shock no higher than 150v and none as high as 450v (Sheriden & King, 1972). This is a similar result to Milgram's predictive studies which showed that the majority have little insight into people's predisposition towards obedience to authority. Milgram (1974) found that all 110 respondents (100%) in his expected behaviour study predicted that they would disobey the experimenter. Psychiatrists, graduate students and college sophomores saw their reactions as flowing from empathy, compassion and a sense of justice. But they show little insight into the web of forces that operate in social context.

In a Milgram-style experiment, Kilham and Mann (1974) showed that Australian participants were more obedient when requested to communicate
an order to hurt another, than when asked to follow direct instructions. In the transmitter condition, the naïve participant was required to relay the experimenter's command to a stooge executant who, without protest, carried it out. In an executant condition, the naïve participant was similarly asked to follow the requests of the experimenter. The aim was to test the general hypotheses that the individual in the transmitter role, because she/he is one step removed from the act, is more obedient to commands than the participant in the executant role. The general level of obedience in the two executant conditions was found to be lower than in the transmitter conditions (see Table 1.11).

Table 1.11. Percentage of participants who showed full obedience in experimental conditions (Kilham & Mann, 1974)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage of participants who showed full obedience to the end of the experiment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Male transmitter</td>
<td>68</td>
</tr>
<tr>
<td>2. Female transmitter</td>
<td>40</td>
</tr>
<tr>
<td>3. Male executant</td>
<td>40</td>
</tr>
<tr>
<td>4. Female executant</td>
<td>16</td>
</tr>
</tbody>
</table>

(\( n = 25 \) for each condition)

The passive participants (transmitters) may be more obedient than the active participants (executants) because those who actually shock the victim appear unconcerned; this models behaviour to the passive participants to continue adhering to orders. Since the appropriate norms of conduct in the laboratory are unknown, some form of social comparison may take place (Festinger, 1954). Secondly, the introduction of the passive participant's role changes the structure from a three-person to four-person organisation, thus increasing the businesslike quality of the situation. Thirdly, because there is another who participates in and shares the activity, the active participant is better able to diffuse responsibility. In real organisations, the transmitter role is often regarded as a minor one that entails little or no responsibility. Beyond
the mundane, routine tasks the transmitter performs in an organisation, acting as a channel for relaying orders, she/he also fulfils a most important secondary function: in carrying out duties she/he serves to further legitimise and reinforce the authority of the experimenter.

Shalala (1974) used a crude Milgram-type paradigm to examine obedience behaviour of military personnel in the presence of "unlawful" orders of a superior. This experiment was an attempt to approximate the character of the "My Lai" massacre during the Vietnam war. Seventy male troops were obtained from various units at Fort Knox, Kentucky. Table 1.12. shows the results of a baseline experiment and six variations.

Table 1.12. Percentage of participants who showed full obedience in experimental and baseline conditions (Shalala, 1974)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Shalala</th>
<th>%</th>
<th>Milgram</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baseline</td>
<td>68</td>
<td>68</td>
<td>62.5</td>
<td>62.5</td>
</tr>
<tr>
<td>2. Baseline less proximity</td>
<td>80</td>
<td>80</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>3. Authority with questionable legitimacy</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>4. Self-decision with one unassertive low status experimenter and another significant legitimate authority</td>
<td>49</td>
<td>49</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>5. Self-decision in which told beforehand that he was &quot;the first man to try this after many others had refused&quot;</td>
<td>33</td>
<td>33</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6. Self-decision in which time was not a constraint. No hurry variable</td>
<td>43</td>
<td>43</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7. Self-decision to continue when experimenter unexpectedly has to leave the room</td>
<td>20</td>
<td>20</td>
<td>20.5</td>
<td>20.5</td>
</tr>
</tbody>
</table>

(n = 10) (n = 40)
Shalala provides similar explanations for obedience to Milgram. Participants in both studies were influenced by the demands of an authority figure, the acceptance of full responsibility by the experimenter, the group pressures, the availability of means to do harm, the pressures of the situation, and the lack of perceived choice in the matter (Shalala, 1974). The last point is important because in both experiments the participants could have stopped at any time. There are however, important differences between the perceived “lack of choice” for the civilians in Milgram’s test and the soldiers in this study. Milgram (1974) was impressed by the amount of wholesale obedience that an authority figure is able to elicit in situations where legitimacy is simply suggested and discipline implied. This is not the case in the military environment. What a soldier understands, and at least publicly accepts, is the right of authority to command and his own duty to obey. Possession of discipline by the individual soldier assures the army that its purposes and aims will be achieved. Yet, results do not vary considerably from Milgram’s comparable conditions.

Shanab and Yahya (1977) extended Milgram’s original work to test differences in obedience between gender and age group within Jordanian culture. The participants were allocated to groups according to sex and age (6-8, 10-12, 14-16 years). The instructions issued to the experimental group were identical to those used in Milgram’s paradigm, with the teacher participants administering shocks to confederate learners each time the latter made a mistake in a paired-associate task. The participant in the control group was given free choice of whether or not to administer punishment when the learner made a mistake. It was reasoned that persistence in administering shocks beyond Level 14, labeled “dangerous shock”, reflected over-obedience on the part of the participant because at this level the learner experienced pain and protested against the punishment given. Results of Shanab and Yahya’s experiment show that participants in the experimental group, regardless of age or sex, delivered more shocks than controls (see Table 1.13. overleaf).
Table 1.13. Mean shock levels administered and frequency of overobedience (Shanab & Yahya, 1977)

<table>
<thead>
<tr>
<th>Item</th>
<th>Age group 6-8</th>
<th>Age group 10-12</th>
<th>Age group 14-16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Percentage obedient to the end</td>
<td>69%</td>
<td>E C</td>
<td>84%</td>
</tr>
<tr>
<td>Mean number of shocks over 20 levels</td>
<td>18.2</td>
<td>6.0</td>
<td>18.3</td>
</tr>
<tr>
<td>Mean number of shocks over all 7 levels</td>
<td>5.3</td>
<td>1.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Frequency of overobedience</td>
<td>12</td>
<td>4</td>
<td>14</td>
</tr>
</tbody>
</table>

Note. E = experimental and C = control. (n = 16 in each of the 12 groups)

Subsequent statistical analysis supported this observation. The results of a three-way analysis of variance performed on the mean number of shocks given over 20 levels yielded a highly significant main effect of type of instructions $F(1.180) = 278.70, p < .0001$. The main effects were not significant for age, $F(2, 180) = 1.16, p > .05$, or sex $F(1,180) < 1$. Shanab and Yahya's results support other studies that used similar controls to test whether obedience was a function of the orders given and not other variables (e.g., demand characteristics of the situation). The most important feature of Shanab and Yahya's (1977) study is that the participants were children (6-16), whereas in Milgram's and other obedience studies, adults were commonly used. Thus, the similarity in findings between this study and other studies carried out in western cultures is particularly impressive; this experiment showed not only that obedience and overobedience are also observed in Jordanian culture but that such behaviour manifests very early in life.

Meeus and Raaijamakers (1995) carried out a series of 19 experiments on administrative obedience, called the Utrecht studies. The design involved an experimenter (a researcher at the university), the participant, and a confederate (who acted as a person who had applied for a
job). The experimenter and the participant were in the same room and the applicant communicated through a microphone. The participant was told that the procedure was focused on the relationship between psychological stress and test performance. If the applicant passed the test, he would get the job; if not he would remain unemployed. The participant was asked to make negative remarks about the test performance and denigrate the applicant’s personality, despite the latter’s protests. These became more vehement during the course of the procedure (1-15 stress remarks). In Baseline Experiment 1 (see Table 1.14), 91% of participants obeyed the experimenter

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage of participants who made negative remarks to the end of the experiment</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baseline 1</td>
<td>91</td>
<td>24</td>
</tr>
<tr>
<td>2. Control (allowed to choose how long they continued)</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>3. Baseline 2</td>
<td>83</td>
<td>18</td>
</tr>
<tr>
<td>4. Participants are personnel officers</td>
<td>93</td>
<td>15</td>
</tr>
<tr>
<td>5. Given a written description of the experiment and asked if they would make all the stress remarks</td>
<td>9</td>
<td>44</td>
</tr>
<tr>
<td>6. Experimenter absent</td>
<td>36</td>
<td>22</td>
</tr>
<tr>
<td>7. Two peers rebel</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>8. Told two weeks in advance what experiment is about</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>9. Legally liable for consequence of actions</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>10. Legally liable and told someone had sued</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>11. Told legally liable and provided with cover</td>
<td>67</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 1.14. Percentage of participants who showed full obedience in experimental and baseline conditions (Meeus & Raaijmakers, 1995)
to the end, and made all the stress remarks. In Baseline Experiment 2, a replication of Experiment 1, a similar result of 83% was found, with no explanation for the difference provided. In percentage terms, there was a high level of obedience.

Many participants found it unpleasant and stressful to carry out the task. Almost all the participants broke off the procedure once or twice to enter into discussion with the experimenter. Most participants executed their task in a neutral and official manner and 75% stated post-interview that they were relieved that the victim was not a real applicant and that they thought the treatment was unfair. Nevertheless, the stress experienced by the participant was not sufficient to cause disobedience. The explanation for the high level of obedience should not be sought solely in the inability of the participants to resist the scientific authority, but in their attitude to social institutions and their distant relationship from fellow citizens (Meeus & Raaijamakers, 1995). This more recent study also showed that the authority of the scientific expert remains considerable, in spite of the considerable gap in time since Milgram's first study in 1963.

The only recent piece of research on obedience found from a search of peer-reviewed journals and research-based databases, was a Chinese study by An and Liu (2003). This analysed children's behavioural patterns in response to the authority of parents, teachers and adults. Children and teenagers (aged 7-17) from urban and rural areas were told 11 dilemma stories about children and their parents, teachers, or adults. The results showed that children and teenagers changed their behavioural tendency from obedience to disobedience to the authority with increased age: 7-8 year old children mainly obeyed authority figures, 13-14 year old teenagers presented a significant decline in obedience tendencies, and those aged 17-18 years mainly disobeyed authority figures. Female children and teenagers were more obedient to parents' authority than male children. Furthermore, the teenagers and children from rural areas were more obedient to the authority of parents and teachers than those from urban areas. Statistical details of significant differences between groups is not available, with an abstract alone available for viewing on the Psychinfo Database. The rest of this study remains untranslated.
Since Meeus and Raaijmakers' (1995) experiments, there has been a decline in interest in laboratory-based obedience experiments, possibly due to the ethical controversy that has been aroused by them (Aronson, 2003). Over the years, the Milgram-style experiment has been the target of both criticism (e.g., Orne & Holland, 1968; Warwick, 1982) and praise (e.g., Miller, 1995; Zimbardo, 1974). Debates over obedience studies cover the ethics of such research (Warwick, 1982) and the controversy over the use of deception versus role play (Freedman, 1969; Greenwood, 1983). Nonetheless, the results of such research makes it feasible to consider that a midwife might choose to obey authority in preference to engaging in an argument that defends a woman's request for a particular style of delivery or method of pain relief during labour.

Obedience research has relevance to disciplines outside psychology (Blass, 1991, 2002; Krackow & Blass, 1995). Its continuing interest is due to the fundamental and far-reaching implications about human nature that have been drawn from it and the apparent power of situational determinants to override personal dispositions (Milgram, 1974; Mastrioanni, 2002). Whether broad lessons about the primacy of situational determination can be drawn from obedience research hinges on a clearer understanding of just what has and has not been demonstrated in obedience experiments and how to best account for these findings.

1.2.2. Situational Determinants of Obedience

There is widespread agreement that obedience experiments represent a powerful demonstration of situational influence (Blass, 2002; Meyer, 2003). Modifications in the physical and social arrangements in the setting of the obedience experiment can have powerful effects upon the level of social influence exerted.

1.2.2.1. Dissent of Others

Intervention by others can cause a reduction in participants' levels of obedience. Milgram found that when two confederates refused to continue part way into the shock series, 90% of participants followed suit (Milgram, 1974, Experiment 18, Table 1.7). Closer analysis of the experimental situation...
points to two factors that may contribute to the effectiveness of the group. First, peers may instill in the participant the possibility of dissent, when it may not have occurred to them as a possible option. Second, the lone participant may question whether his defiant action is a deviation from the norm or a common occurrence within the laboratory.

In Meeus and Raaijmakers (1995) “two peers rebel” condition, three participants turned up at the laboratory. Two of these participants were confederates of the experimenter and the third was a naïve participant. As the test progressed, both confederates began to protest and disobeyed the experimenter at Stress Mark 10 (there were 15 in total). The proportion of participants who obeyed to the end of the experiment was 16%, which is a dramatic reduction in comparison to the 91% who obeyed to the end in the baseline condition (Experiment 1, Table 1.14). Milgram found a similar drop in obedience levels in his “two peers rebel” condition (Experiment 18, Table 1.7), in which 10% of participants proceeded to the end of the shock board.

1.2.2.2. Proximity of the Authority Figure and Victim

Proximity of the authority figure to the participant has a pronounced effect on the level of obedience observed. When the authority figure left the laboratory after the start of the experiment and then gave his orders over the telephone, obedience dropped from 62.5% in the baseline condition to 20.5% of participants cooperating to the end of the shock board (Milgram, 1974, Experiment 7, Table 1.7). Meeus and Raaijmakers (1995) also showed a drop in obedience from 91% in their baseline condition, to 36% of participants who cooperated to the end of the experiment in the absence of the authority figure (Experiment 6, Table 1.14).

Proximity of the victim to the participant also has a pronounced effect on the level of obedience observed. When the victim was placed a few feet from the participant in the same room (so that he was visible as well as audible), 40% showed full obedience to the end of the shock scale (Milgram, 1974, Experiment 3, Table 1.7). Furthermore, in a touch-victim condition, only 30% of participants continued to the end of the experiment (Milgram, 1974, Experiment 4, Table 1.7). Empathetic cues and denial have been cited as
accountable for the diminished obedience that results from the closeness of the victim (following Milgram, 1974, p. 53):

**Empathetic cues** - In the remote conditions, the victim’s suffering possesses an abstract quality for the participant. In contrast, it is possible that visual cues associated with the victim’s suffering trigger empathetic responses in the participant and give him a more sensitive appreciation of the victim’s experience.

**Denial** - The remote condition allows the participant to put the victim out of his mind. In the proximity condition, his inclusion in the immediate visual field renders him a continuously salient element for the participant. The mechanism of denial can no longer be brought into play.

1.2.2.3. The Influence of Status on Obedience

When another participant assumed authority in the absence of the experimenter, only 20% of participants (4/20) continued to administer to a 450-volt shock (Milgram, 1974, Experiment 13, Table 1.7). It is probable that this is because the command of a peer is not as legitimate as one from a higher-status experimenter. Shalala (1974) supports this finding in an obedience experiment with military personnel at Fort Knox; when a private served as an experimenter in place of a lieutenant colonel, there was a significant drop to 25% in obedience to shock the learner (Experiment 3, Table 1.12).

Such results make it plausible to consider that high-status individuals may influence obedience of midwives. Trieman (1977) carried out a survey in many countries around the world, in which citizens were asked to allocate prestige scores to various occupations (see Table 1.15). In Trieman’s study, doctors received top prestige rates and nurses scored somewhat lower (Johns, 1996). One explanation for the powerful social influence of high-status individuals is that perceived rank has a self-confirming effect on communication patterns, since high-status members talk more, have more influence and produce more conformist behaviour from others (Kiesler & Sproull, 1992).
Table 1.15. Standard prestige scores for various occupations in the USA

<table>
<thead>
<tr>
<th>Score</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>78</td>
<td>College and university teachers; physicians</td>
</tr>
<tr>
<td>72</td>
<td>Architects; lawyers</td>
</tr>
<tr>
<td>70</td>
<td>Dentists</td>
</tr>
<tr>
<td>69</td>
<td>Chemists</td>
</tr>
<tr>
<td>67</td>
<td>Bank officers and financial managers</td>
</tr>
<tr>
<td>66</td>
<td>Psychologists; airplane pilots; chemical and mechanical engineers</td>
</tr>
<tr>
<td>63</td>
<td>Controllers and treasurers</td>
</tr>
<tr>
<td>62</td>
<td>Accountants</td>
</tr>
<tr>
<td>60</td>
<td>Clergymen; economists</td>
</tr>
<tr>
<td>57</td>
<td>Elementary school teachers</td>
</tr>
<tr>
<td>56</td>
<td>Stock and bond salesmen; painters and sculptors</td>
</tr>
<tr>
<td>55</td>
<td>Office managers; draftsmen</td>
</tr>
<tr>
<td>54</td>
<td>Librarians; registered nurses</td>
</tr>
<tr>
<td>52</td>
<td>Sales managers (non-retail); actors</td>
</tr>
<tr>
<td>51</td>
<td>Computer programmers</td>
</tr>
<tr>
<td>50</td>
<td>Radio and television; airline stewardesses</td>
</tr>
<tr>
<td>49</td>
<td>Real estate agents and brokers</td>
</tr>
<tr>
<td>48</td>
<td>Bank tellers</td>
</tr>
<tr>
<td>45</td>
<td>Musicians and composers</td>
</tr>
<tr>
<td>44</td>
<td>Insurance agents, brokers and underwriters</td>
</tr>
<tr>
<td>43</td>
<td>Automobile mechanics</td>
</tr>
<tr>
<td>40</td>
<td>Farmers; policemen and detectives</td>
</tr>
<tr>
<td>39</td>
<td>Foremen</td>
</tr>
<tr>
<td>38</td>
<td>Receptionists</td>
</tr>
<tr>
<td>37</td>
<td>Air traffic controllers</td>
</tr>
<tr>
<td>34</td>
<td>Funeral directors</td>
</tr>
<tr>
<td>33</td>
<td>Mail carriers; truck drivers</td>
</tr>
<tr>
<td>31</td>
<td>File clerks</td>
</tr>
<tr>
<td>23</td>
<td>Bar tenders; waiters</td>
</tr>
<tr>
<td>22</td>
<td>Garage workers and gas station attendants</td>
</tr>
<tr>
<td>14</td>
<td>Newsboys</td>
</tr>
<tr>
<td>13</td>
<td>Garbage collectors</td>
</tr>
</tbody>
</table>

Note: Scores range from 92 to -2. They are derived from studies of occupational prestige carried out in many countries around the world and applied to the 1970 US Census Detailed Occupational Classifications.

1.2.2.4. Effect of Chosen Versus Imposed Situations

Whether or not individuals have elected to place themselves in a situation may determine the impact of social influence. Not only do situations affect the person, but persons may also influence situations through choices made (Olweus, 1977; Roth, 1995; Wachtel, 1973). It has been shown that dispositional measures are better predictors of behaviour within self-selected situations, in comparison to those that are not of that person's choice (Emmons, Diener & Larsen, 1986; Snyder, 1983). Although Milgram's participants (as well as those in most replications) were volunteers, it is highly unlikely that they would have chosen to be in an obedience experiment had its exact details been disclosed to them beforehand. Once the experiment is underway and its presumably distasteful procedures become evident
(Milgram, 1974, p. 165), psychological mechanisms inhibit and keep the participant in the situation even if they want to leave (Blass, 1991).

1.2.3. Individual Differences in Obedience

1.2.3.1. The Role of Locus of Control

Locus of control is a propensity or bias to see the world in the terms of perceived control. People with an internal locus of control believe that their own actions determine the rewards that they obtain, while those with an external locus of control believe that their own behaviour does not matter much and that rewards in life are in general outside their personal control (Rotter, 1966). Holland (1967) demonstrated a link between locus of control and obedience to authority using Rotter’s (1966) internal versus external control (I-E) dimension. In Holland’s (1967) experiment there were three conditions (discussed earlier in text, see Table 1.8, p. 43):

1. A methodological replication of Milgram’s voice feedback condition.
2. A variant of Milgram’s voice feedback condition in which the participant was asked to figure out what the experiment is about.
3. A variant of Milgram’s voice feedback condition in which the participant was told that the learner would receive one tenth of the voltage indicated by the shock labels.

Two experimenters were present in all three conditions. The first experimenter prepared the participant for their role and provided relevant information for each of the conditions. The second experimenter did not know what information had been given to each participant and ran the same trial for each condition.

Results show that Condition 2 yielded the lowest rates of obedience - 55% compared to 75% in Condition 1, and 80% in Condition 3 (see Table 1.8). A significant I-E x Condition interaction showed that the drop in obedience in the Condition 2 was largely due to the obedience scores of participants who achieved high scores on the internal locus of control scale. In comparison, participants who scored high on external locus of control showed similar levels of obedience in all three conditions. In Condition 2, the reduction in internals’ obedience may have occurred because the participant felt coerced and
manipulated by the first experimenter's request to figure out what the experiment is about, consistent with the results of other studies on the relationship between I-E and social influence (Strickland, 1977). These results are consistent with the theoretical view of the internal as one who believes that his or her outcomes are under their own personal control (Hans, 2000; Holland, 1967). Conversely, in Holland's (1967) experiment, externals displayed less reluctance to continue on in the experiment and required less prodding in order to shock the victim. In effect, externals demonstrate marginally more obedience than internals.

1.2.3.2. Cross-Cultural Differences
Another feature that alters level of obedience is culture. In Milgram's baseline condition, 62.5% of American male participants proceeded to the 450-volt level (Experiments 2, Table 1.7). In West Germany, Mantell (1971) showed that in a Milgram style baseline condition, 85% of Munich men continued to the end of the shock board (Experiment 1, Table 1.9). In Shanab and Yahya's (1977) Jordanian sample, 73% of participants continued to the end of the shock board (see Table 1.13). In Sydney, Australia, Kilham and Mann (1974) found a considerable drop in levels of obedience in comparison to other cultures, with only 40% of male participants obedient to the end of the experiment (Experiment 3, Table 1.11). In Utrecht in the Netherlands, Meeus and Raaijmakers (1995) found 91% of participants obedient to the end of the experiment (Experiment 1, Table 1.14). But they accounted for the higher percentage of obedience in terms of an alteration in experimental design from Milgram's original baseline condition (see p. 50 for a description). The comparative results are summarised in Table 1.16. overleaf.

Explanation for these differences in obedience rates may be due to a disparity in obedience ideology that contributes to a predisposition to obey or defy authority. Sociological explanations link culture and emotion to ideas about how to feel about certain events (Frijda & Mesquita, 1994; Radcliffe-Brown, 1965; Russell, 1991; Wierzbicka, 1984). What feels good is not just an individual reaction but also an incorporation of culture-specific values about what is acceptable. Individualistic cultures place emphasis on individual success, while collectivist societies reward collective achievement (Triandis,
Table 1.16. Summary of experiments which show cultural differences in obedience

<table>
<thead>
<tr>
<th>Experimenters</th>
<th>Nation</th>
<th>Percentage of male participants who showed full obedience to the end of the experiment %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milgram</td>
<td>America (New Haven)</td>
<td>62.5</td>
</tr>
<tr>
<td>Mantell</td>
<td>West Germany (Munich)</td>
<td>85</td>
</tr>
<tr>
<td>Shanab &amp; Yahya</td>
<td>Jordan (Amman)</td>
<td>73</td>
</tr>
<tr>
<td>Kilham &amp; Mann</td>
<td>Australia (Sydney)</td>
<td>40</td>
</tr>
<tr>
<td>Meeus &amp; Raaijamakers</td>
<td>Netherlands (Utrecht)</td>
<td>91</td>
</tr>
</tbody>
</table>

1989). It is possible to make a distinction between cultures along this dimension (Hofstede, 1980; Schwartz, 1994). Collectivists may in general be more obedient than individualists because they attach greater importance to collective goals and are more concerned about how others regard and are affected by their behaviour. Furthermore, child-rearing practices in collectivist societies emphasise obedience and proper behaviour (Bond & Smith, 1996). The dearth of literature on just how individualism-collectivism relates to the process of obedience requires further clarification.

1.2.3.3. Gender Differences

There are mixed reviews with regard to gender differences in obedience. Milgram (1974) and Shanab and Yahya (1977) found that neither age nor sex differences altered obedience rates, which is inconsistent with results obtained in at least two other studies. Thus, Sheriden and King (1972) reported that more American females than males complied with instructions to give shock, whereas in contrast Kilham and Mann (1974) found that Australian females were less obedient than Australian males. A more recent untranslated Chinese study by An and Liu (2003) found female children and teenagers more obedient to their parents than males. In an attempt to make sense of these inconsistent and inconclusive results, it is not possible to attribute
disparity in outcome to difference in age, because Shanab and Yahya recruited much younger participants than Milgram, but closer in age to those who took part in Sheriden and King and Kilham and Mann’s studies. The comparative results of the experiments that showed gender differences in obedience are summarised in Table 1.7.

<table>
<thead>
<tr>
<th>Experiment</th>
<th>Percentage of participants who showed full obedience to the end of the experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milgram</td>
<td>% Women</td>
</tr>
<tr>
<td>Shanab &amp; Yahya</td>
<td>65</td>
</tr>
<tr>
<td>Kilham &amp; Mann</td>
<td>73</td>
</tr>
<tr>
<td>Sheriden &amp; King</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1.17. Summary of experiments which showed gender differences in obedience

Also of relevance are the inconsistent results found in studies of sex differences in persuasibility (Becker, 1986; Eagly & Carli, 1981; O’Keefe, 2002). One factor that has been proposed as potentially underlying the observed sex differences in persuasibility is the sex of the investigator. One review has reported evidence suggesting that although female researchers tended to find no sex differences in persuasibility, male researchers tended to find women more easily persuaded than men (Eagly & Carli, 1981). This evidence is debatable, and other analyses of research literature seem not to have confirmed this influence of the researcher’s sex on the findings (Becker, 1986). Perhaps the most that can be said at present is that the investigator’s sex may explain the observed sex differences in persuasibility, but the issue is very much an open one (O’Keefe, 2002).
1.2.4. Obedience and Midwifery

The review of the literature has shown that levels of obedience can vary as a function of situational manipulations and differ among individuals within the same setting. Research shows that under situational pressures and within hierarchical relationships, people have a propensity towards obedience to authority. For this reason, academic interest persists. It continues to inspire research (e.g., Meeus & Raaijmakers, 1995), influence conceptualisations about war atrocities (e.g., Blass, 1991, 2002; Meyer, 2003) and motivate analyses of cult suicides such as Jonestown (e.g., DeAngelis, 2002; Kahalas, 1998; Osherow, 1978) and Heavens Gate (Brown, 1997; Gleick, 1997; Hedges, 1997).

Obedience experiments highlight superordinate-subordinate relationships in which people become agents of a legitimate authority to whom they relinquish responsibility for their actions (Blass, 1993; Krackow & Blass, 1995). Once they have done so, their actions are no longer guided by their own values but by the desire to fulfill authority’s wishes. Studying obedience to authority is a complex issue, since legitimacy, as defined by rules, may come into conflict with a practitioner’s view of what is or is not morally appropriate. This makes obedience and its relationship to clinical decision-making in midwifery an issue worthy of study.

The rhetoric of “woman-centred care”, with choice provision and informed consent directed by Changing Childbirth (DoH, 1993) and the reference guide to consent for examination or treatment (DoH, 2003), is difficult to achieve in a hierarchy that appoints people to positions of authority. Once in position, authority has the power to redefine norms and objectives (see Haslam, 2001; House & Shamir, 1993; Shamir, House & Arthur, 1993), which may conflict with what a woman wants from her personal birth experience. From the results of obedience experiments, it would seem reasonable to hypothesise that high status midwives (for instance ward sisters and managers) have significant power to influence obedience of those more junior. This may have a profound effect upon whether a woman is permitted a “waterbirth”, a particular style of pain relief, adoption of alternative positions in labour or several “birth partners” present at the birth. None of these activities present a threat to maternal or fetal outcome and therefore ought to be “client
led". As a result, junior midwives may be presented with a moral conflict between a drive for obedience to authority and their role as advocates for women. What obedience experiments show is that the majority of people are likely to relinquish their cognitive and social moral competence and therefore lose the capacity to decide in favour of another.

Results have shown that the tendency to obey is often very strong (e.g., Milgram 1963, 1965, 1974; Shanab & Yahya, 1977; Meeus & Raaijmakers, 1995). Such laboratory experiments are often criticised for their lack of ecological validity, since they are performed under very rigid and controlled situations. This makes it difficult to argue that they represent realistic social situations. With this in mind, section three analyses some demonstrations of conformity and obedience in non-laboratory settings.

**Section 3. Obedience and Conformity Outside the Laboratory**

Milgram believed that it was essential to use the results of experiments to make sense of social relationships (Milgram, 1974). As a result, many researchers have analysed incidences of obedience and conformity. The focus of this literature review is on examples of obedience and conformity from the Holocaust (Blass, 1991, 1992, 1993, 2002; Mastrioanni, 2002; Miller, 1995) and My Lai (Kelman & Lawrence, 1972; Shalala, 1974). Many other events could have been selected, for instance, the mass suicides at Jonestown (e.g., Chichester, 1988; DeAngelis, 2002; Kahalas, 1998; Maaga, 1998; Osherow, 1978) or Heaven's Gate (e.g., Brown, 1997; Gleick, 1997; Hedges, 1997; Heaven's Gate, 2005).

**1.3.1. The Holocaust**

Milgram’s obedience studies are widely presented in literature as integral to understanding the behaviour of Holocaust perpetrators (e.g., Blass, 1991, 1992, 1993, 2002; Browning, 1998; Lagnado & Dekel, 1992; Lifton, 1994; Mastrioanni, 2002; Miller, 1995; Milgram, 1974). Miller (1995) surveyed 50 psychology and sociology textbooks and found that 43 of the 50 mentioned Milgram in connection with the Holocaust. Miller reports that "well over half" make no reference to possible problems with generalising Milgram's findings, and those that do pass judgment, "almost all take an explicitly pro-Milgram
The conventional conclusion emphasised in textbooks is that by manipulating aspects of the social situation, many ordinary people are obedient to the point that they will commit terrible crimes.

“What made thousands of Nazis willing to follow Hitler’s orders and send millions of Jews to gas chambers, is what Milgram’s research showed to be blind obedience and the outcome of situational forces that engulf anyone” (Zimbardo & Gerrig, 1999, p. 793). Milgram saw the Holocaust as a figurative example for his experiments and during an interview was recorded as saying:

> On the basis of having observed a thousand people in the experiment and having my own intuition shaped and formed by these experiments... if a system of death camps was set up in the United States of the sort we had seen in Nazi Germany, one would be able to find sufficient personnel for those camps in any medium sized American town (in Blass, 2000, p. 36).

The point Milgram makes is that obedience and conformity may express basic propensities of humankind and that no society is immune from their impact.

Three examples of obedience and conformity that occurred during the Holocaust are cited to illustrate an application of Milgram’s experimental findings. Browning (1998) writes of several kinds of actions in which men of the Reserve Police Battalion 101 in Germany showed forms of obedience and conformity with extreme and unpredictable outcomes. The large-scale massacre of Jews was frequently carried out by individual German policemen. Browning estimates that between 10% and 20% opted out of shooting Jews during some of these actions (Browning, 1998). The remaining 80-90% who cooperated is a higher proportion of obedient participants than Milgram achieved within the laboratory setting (62.5% in baseline Experiment 2 - see Table 1.7). In effect, this percentage is nearer the 91% baseline achieved in Meeus and Raaijmakers (1995) Experiment 1 (see Table 1.14). These instances of compliance are corroborated by the testimony of other policemen and police force records, with actions relatively well organised and participants exposed to the observation of peers and superiors (Browning, 1998). The accuracy of Browning’s figures is substantiated by Arthur Miller, who stated that: “The effort to integrate the processes identified by Milgram from the obedience paradigm with a remarkably detailed set of historical records is an intriguing exercise in ecological validity” (Miller, 1995, p. 45).
A second example of obedient action involved the rounding up and deportation of Jews to extermination camps. While the bulk of the killing was left to staff in the camps, the roundups themselves were far from bloodless and benign. Policemen reported that it was standard practice to be ordered to shoot the very young, elderly or sick, who might have excessively slowed the process. Many policemen reported mitigating the violence and cruelty of their actions during these roundups and deportations, where they operated in small groups under less direct supervision (Mastrioianni, 2002). Browning (1998) bases his assertion that diminished proximity to authority led to less compliance with the violent behaviour by policemen and prosecutors during these deportations. This finding is also consistent with Milgram's Experiment 7, when obedience dropped from the baseline 62.5% (Experiment 2) to 20.5% when the authority figure left the room (see Table 1.7). It should, however, be noted that Mastrioianni (2002) reports that these events are comparatively difficult to corroborate because of the nature of the deportations, involving as they did, smaller, less closely supervised groups of policemen operating more independently.

A third distinctive feature of Milgram's obedience paradigm is the sequential nature of the shocks. The learner's suffering intensifies in a gradual and piecemeal fashion. Milgram considered this manner of giving shocks as one of the factors "that powerfully bind a participant to his role" (Milgram, 1974, p. 149). The importance of this unfolding process as a facilitator of obedience in Milgram's laboratory has served to alert us to the vital role played by the step-by-step escalating process that the Nazis used in the victimisation of the Jews (Blass, 2002). The process of destruction unfolded in a definite pattern, a step-by-step operation. The steps of the destruction process were introduced in the following order. At first, the concept of the Jew was defined. Second, segregation plans were formulated. Third, the Jews were concentrated in ghettos. Finally, the decision was made to annihilate European Jewry. Mobile killing units were sent to Russia, while in the rest of Europe the victims were deported to killing centres. It was the bureaucratic destruction process that finally led to the annihilation of 5 million victims (Hilberg, 1985, p. 47).
Some psychologists who have been interested in the ecological validity of Milgram's studies in relation to the Holocaust, did not take a scientific approach (e.g., Browning, 1998; Mastroioanni, 2002; Miller, 1995). Their work is not the result of a careful and systematic comparison of the behaviour of Milgram's participants and Holocaust perpetrators, but instead flows from understanding of historical events that are used to validate the results. Milgram himself appreciated the dramatic power of his studies (Milgram, 1974, p. 198) and was receptive to the insights that resulted from extrapolations to shocking events. Social scientists should, however, be vigilant in ensuring that the dramatic aspects of the studies do not retard systematic and critical evaluation of the case for ecological validity.

Results of these observations may have important implications for events that happen in hospitals. Within midwifery, values are not just dissimilar to those held by the German regime when the Holocaust occurred, they are diametrically opposite. However, the human propensity towards obedience and conformity may cause a midwife to overlook the personal preferences of the women for whom they care. It is these smaller, far more mundane events that are the concern of this thesis.

1.3.2. My Lai
Kelman and Lawrence (1972) likewise studied the forces of obedience and conformity at My Lai. The My Lai incident occurred during the Vietnam War in 1968, when the US Eleventh Light Infantry Brigade went into combat. The 150 soldiers, led by Lieutenant William Calley, stormed into the hamlet and four hours later killed more than 300 civilians. The only American casualty was a soldier who accidentally shot himself in the foot (Kelman & Lawrence, 1972). Lieutenant Calley did not deny that he committed the acts for which he was tried and convicted, but claimed that he was merely obeying orders (Shalala, 1974). He contended that superior orders required him to kill all the inhabitants at My Lai. Allegedly, those were the orders issued by Captain Medina. Calley based his defence on provisions of the Manual for Court Martial which read:
Any person subject to this chapter who...willfully disobeys a lawful command of his superior officer shall be punished, if the offence is committed in time of war, by death or such other punishment as a court martial may direct (p. 9, sec. 169, in Shalala, 1974).

This result is consistent with Milgram’s (1974) finding that obedient participants deferred responsibility for shocking the victim to the experimenter. The relinquishing of responsibility to the authority figure is a central feature of Milgram’s “agentic state” explanation of his obedience findings. In the “agentic state”, the participant must resolve conflict created by his desire on the one hand to please the experimenter, and on the other to refrain from harming the victim. Any conflict experienced is resolved either through disobedience, or by relinquishing responsibility for one’s own actions to the experimenter.

1.3.3. The Similarity Between Laboratory and Naturally Occurring Situations

The question arises as to whether there is a significant association between what has been studied in the laboratory and the forms of obedience in the Nazi Epoch and events such as My Lai. The difference between these situations are enormous, yet the differentiation in scale, numbers, and political context may turn out to be relatively unimportant as long as certain essential features are retained. The essence of obedience consists in the fact that a person comes to view himself as an instrument for carrying out another person’s wishes, and he therefore no longer regards himself as morally responsible for his actions (Milgram, 1974). Some may describe this deferral of responsibility as an attributional bias (Jones & Nisbett, 1972; Mitchell & Kalb, 1982; Fiske & Taylor, 1991; Ross, 1997). Such attributions are concerned with the process whereby an individual assigns responsibility for action to another person, in order to allay challenge to their own self image. The bias comes from the tendency to ignore one’s own behaviour and instead allocate responsibility for the unacceptable action to another person.

The adjustment of thought and the types of justification experienced by a person may be similar, whether they occur within a psychological laboratory, the police force, army or a hospital. The question of generalisability, therefore, is not resolved by enumerating all the manifest similarities between laboratory
experiments and real events. Uncovering the psychological processes involved may be achieved by carefully constructing a situation that captures the essence of obedience and identifying significant cause and effect relationships.

1.3.4. Relevance for Understanding Social Influence in Midwifery

It is important to stress that obedience and conformity are essential components for efficient group action; otherwise there will be failure to achieve the level of cooperation needed for achievement of common goals. Within the organisation of hospitals, people seek out suitable advice and follow orders that are typically well informed and of good intention. Were the reverse true, patients would fail to receive appropriate medication and treatment. Prosocial obedience and conformity are often essential for a positive outcome, e.g., a midwife who responds to instruction to administer an anti-hypertensive drug to a preclamptic woman, or a team of theatre staff who cooperate to deliver a fetus safely by caesarian section. If the reverse were true, antisocial disobedience could result in a catastrophe.

Of interest to this thesis, are the more subtle forms of obedience, e.g., a midwife ignoring the harmless request of a childbearing woman for a water birth or extra visitors during her delivery. When such safe requests conflict with the views of a senior member of staff, junior midwives may perceive a requirement for obedience or conformity. Within this context, the senior person might be viewed as Milgram’s authority figure, the childbearing woman as Milgram’s confederate (Mr. Wallace) and the junior midwife as a participant in the obedience process. Alternatively, this junior midwife may not wish to go against the generalised group consensus of how this woman’s labour should be managed. This would be conformity.

Section 4. Explanations of Destructive Obedience and Conformity

1.4.1. How Do We Explain Milgram and Asch’s Results?

1.4.1.1. Milgram’s Agentic Theory

Milgram sought to explain his outcome from a sociocultural perspective; he claimed that we live in a hierarchy, i.e., a society based on the idea that individuals are ranked in terms of their power and importance. In turn, this
creates a socially obedient environment (Milgram, 1974). Authority figures like senior midwives and doctors are senior within the hierarchy of hospital culture.

Milgram proposed that we have two states of consciousness: the "agentic state" and the "autonomous state". In an "autonomous state", there is awareness of the consequences of action and therefore an individual voluntarily engages in or disengages from the behaviour. In the "agentic state", individuals see themselves as agents of others, i.e., as subordinates in an otherwise hierarchical system, and as a result they surrender individuality.

In Browning’s (1998) pre-trial enquiries of the Reserve Police Battalion 101 (see 1.3.1), he reports that these were ordinary men, e.g., barbers, clerks, metal workers, salesmen etc. As "ordinary" Germans, they were autonomous in so far as they were independent and made their own decisions. As members of their group, they were "agentic" in so far as they were subordinate to their officers and military discipline.

1.4.1.2. The Social Influence of External Variables (Status, Credibility & Trustworthiness)

There are many significant constituents that link to the hierarchy and individual success at socially influencing another person. Status, credibility and trustworthiness of a person are cited as external variables that may have a profound effect upon the amount of agreement an individual can secure. Empirical evidence supports the proposition that in general more attention is paid to high status and credible individuals. Following Hovland, Janis and Kelly (1953), social psychologists have recognised that the acceptance of a communication is often influenced by judgments made about a communicator's expertise and trustworthiness (Hurwitz, Miron & Johnson, 1992). Other studies have examined the relative importance of expertise and trustworthiness (Birnbaum & Stegner, 1979; Hass, 1981; McGinnies & Ward, 1980).

Birnbaum and Stegner (1979) found that the credibility of an unbiased source of high expertise tends to have greater weight on a participant's decision than a biased source of high expertise. It was also found that participants' judgments became more biased towards the source when that person had expertise. Similarly, McGinnies and Ward (1980) reported that
participants' judgments were influenced more by a trustworthy non-expert source, than by an unknown expert source, which led these researchers to conclude that trustworthiness of the source was more important than expertise. Subsequent researchers have generally confirmed the finding that a source perceived as highly credible will be more persuasive than one of low credibility (see Hass, 1981, for a review).

Judgments of a communicator's expertise and trustworthiness are likely to be influenced by a great many factors; research to date leaves us rather far from a comprehensive picture of possible determinants. For the most part, researchers have focused on the effects of the message or what impact delivery characteristics have on credibility judgments (O'Keefe, 2002). Receiver judgments of communicator trustworthiness and especially expertise are found to be significantly influenced by information concerning the communicator's occupation, training, amount of expertise and the like (e.g., Hurwitz, Miron & Johnson, 1992; Ostermeier, 1967; Swenson, Nash & Roos, 1984).

1.4.1.3. Compliance
Asch (1951, 1956) debriefed his participants and reported that many had conformed in the experiment but did not believe that the judgments of the others were necessarily correct (Perrin & Spencer, 1980). He pointed to the likelihood of a dual situation, in that:

(a) Participants outwardly agreed with the group (they behaved in an expedient manner).

(b) Inwardly they disagreed.

Asch called this compliance, i.e., individuals agree with the majority but do not alter their private beliefs. Conformity at this level is transitory and is only observable as long as the “team” is physically around.

A conformity process may in part influence change to a person's opinion. Kelman (1958) postulated that some individuals both inwardly and outwardly agree with the group and therefore change their fundamental attitude to identify with the group and its beliefs and values. For example, when two midwives work together, one may take a proactive view about active
management of labour (e.g., accelerating labour through use of intravenous syntocinon). Over time and exposure to this midwife’s views, the other midwife may be influenced to adopt a similar attitude.

1.4.1.4. Deindividuation

Zimbardo, Haney and Banks (1973) conducted a study of prisoner-guard behaviour. The purpose of the study was to investigate behaviour in a very small structured social environment with clear role expectations, such as a prison. Zimbardo, Haney and Banks (1973) created a mock prison in the basement of the Psychology Department at Stanford University. Twenty-four male, volunteer students were involved in a prison role-play exercise. After being truthfully informed of the purpose of the experiment and given personality tests (Adorno’s F scale), Zimbardo, Haney and Banks (1973) selected two groups of emotionally stable matched participants. On the toss of a coin, one group was assigned to the role of guard (complete with security guard uniform, stick and polarised sunglasses) and the other group was assigned to the role of prisoner. The latter were identified as such by being strip searched, de-loused and given baggy, nondescript prison clothing with a number on it. The guards were allowed to run the prison as they pleased, but were forbidden to physically abuse prisoners.

The study began with "prisoners" being arrested unexpectedly by "guards" at their place of residence. In full view of their neighbours, they were handcuffed and taken in a police car to the mock prison. Zimbardo, Haney and Banks (1973) planned to observe the developing relationship between prisoner and guards over a two-week period. Unfortunately, they had to stop the study after six days because prisoners were becoming stressed and depressed, while guards were becoming increasingly spiteful and brutal. Guards continually harrassed and humiliated prisoners. They used psychological techniques to undermine prisoners' confidence, such as making them wear nylon stocking caps, putting them in shackles and waking them up at night for roll call.

The prisoners for their part initially revolted, but soon became docile and passive in the face of the increasing brutality of the guards. When they did communicate with each other, it would in general be about prison matters.
rather than about themselves. Some prisoners had to be released from the study early because they began to show symptoms of emotional disturbance, e.g., uncontrolled screaming and hysterical crying. In contemporary culture, Zimbardo would have been sued for breaching ethical codes and for the psychological trauma his participants experienced.

In a document presented to a committee on prison reform, Zimbardo (1971) described the effects of the experience on the participants. "In less than a week, the experience of imprisonment undid (temporarily) a lifetime of learning; human values were suspended, self concepts were challenged, and the ugliest, most base, pathological side of human nature surfaced". Guards behaved aggressively while prisoners were apathetic. Zimbardo felt that a number of aspects had influenced the behaviour of participants:

(a) Uniforms resulted in deindividuation of the participants: uniforms can bring about anonymity and a consequent lack of personal awareness.

(b) Roles within society bring with them expectations regarding attitudes and values.

The Zimbardo, Haney and Banks (1973) experiment demonstrates that social roles can have a powerful influence over behaviour, a finding which is in keeping with the social identity tradition (e.g., Haslam, 2001; Reicher & Potter, 1985; Tajfel & Turner, 1979; Turner, 1982). Guards have authority and "expect" to be obeyed, while the role expectation of a prisoner is that of obedience. The study does not just show that prisoners obeyed guards but that the participants in the study were obedient also to their social roles. Uniforms in turn reinforce social roles; a finding also shown by Bickman (1974), Bushman (1984) and Joseph and Alex (1972).

In a more recent prison experiment, Reicher and Haslam (in press) collected observational and psychometric data which showed that as prisoners gained a sense of shared social identity, so leadership of their group became increasingly apparent. In contrast, as the guard's sense of social identity declined, so did their leadership. The relevance of this for midwives is that when they share a strong sense of social identity there may be a collective call to be led. When senior staff use descriptions that clarify a
shared identity of “we-ness”, this may raise a group consensus to validate leadership projects which then become the norm and are laid down in protocol. This in turn may mitigate against a healthy childbearing woman having her individualised needs met. At times, particularly in a crisis situation, strong leadership is useful; however when the labour process is normal, interference of a strong leader may obstruct a childbearing woman from having her personal preferences met.

1.4.1.5. Social Identification

An alternative explanation of identification comes from psychoanalysis. According to Freud (1921), people in anxiety-provoking situations may resort to defence mechanisms, i.e., an unconscious response to deal with the situation. When there is group pressure, identification may be used to avoid being the odd one out. Identification with the group is better than coping with the feelings of inadequacy and doubt that accompany being isolated. This is similar to Kelman’s explanation, but there are fundamental differences. Freud’s identification results from anxiety, the identification behaviour is automatic, in that it is triggered by the stress of the situation. Kelman saw it as a fundamental change in attitude, i.e., an enduring organisation of beliefs, feelings and behavioural tendencies. For instance, a midwife may start to accelerate labours via use of intravenous syntocinon, which is contrary to her previous belief in natural physiological birth. This midwife may have conformed, because through exposure to the other midwives and their views about active management of labour, she has come to identify with the group norm. Specifically, she has experienced a major attitude change.

Literature on social identification shows that an external message has more influence if it comes from the desirable group (Abrams, Wetherell, Cochrane, Hogg & Turner, 1990). In the Abram et al. (1990) experiment, using an Asch-style paradigm, confederates masqueraded either as studying the same degree as the participant (psychology), or a differing degree (ancient history). More conformity was found in the ingroup than outgroup condition, when the participant thought he/she was studying the same degree as the confederate (consistent with van Knippenberg & Wilke, 1988; Wilder, 1990).
Self-categorisation has been shown to be a fundamental part of social orientation towards others (Tajfel, 1979; Turner & Haslam, 2000), with individuals influenced by reputation, attitudes and judgments, dependent on the level of social identification they feel (Haslam, 2001; Oldmeadow, Platow, Foddy & Anderson, 2003). Social identification influences the degree to which people like and trust each other, communicate effectively, are able to persuade and influence each other, seek and cooperate and are able to act collectively (Haslam, 2001, p. 56) (Table 1.18).

Accordingly, when an individual is female, a health care worker and a midwife, self categorisation with the ingroup identity is likely to define and limit her behaviour, i.e., promote conformity to shared ways of behaving. Many laboratory studies have shown that conformity to small group norms can be obtained in about a third of participants (e.g., Asch, 1952, 1956; Bond & Smith, 1996; Pendry & Carrick, 2001). Research into group behaviour also points to a phenomenon known as “group think”, i.e., the way people adopt a qualitatively different mode of thinking as a member of a group (Janis, 1982), thus providing the group with a consensus on shared norms of how to behave (Reicher & Potter, 1985).

Category membership causes ingroup members to pay more attention to ingroup messages than those from the outgroup (David & Turner, 1996).

<table>
<thead>
<tr>
<th>Perceived Similarity</th>
<th>Trust</th>
<th>Ability (and desire)</th>
<th>Mutual influence to communicate</th>
<th>Ability (and desire) to co-operate and act collectively</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self Categorisation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared</td>
<td>high</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Non-shared</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
</tbody>
</table>

Table 1.18. Some predicted effects of variation in the context-based self-categorical relations between two or more people (Haslam, 2001, p. 56)
with several other studies confirming this effect (e.g., Alvaro & Crano, 1997, Clark & Maass 1988, Martin 1988). Haslam (2001) suggests that social identification plays a key motivational role in relation to a range of important organisational behaviours. Tyler (1998, 1999) and Tyler and Blader (2002) make a case for the individual internalising the values and goals of the organisation by defining them as part of self. Tyler (1999) conducted a multinational study of 650 employees to find that internalised values were a significant predictor of rule-following (compliance), extra role activities and loyalty. An individual's sense of pride is linked more strongly to rule following, while respect is associated with a tendency to engage in extra role helping behaviour. Findings fit perfectly with the social identity approach, since pride derives from high status of an organisation; members are motivated to preserve collectively its positive reputation by adherence to shared norms and rules (Tyler, 1999). Pride in the group as a whole motivates group members to act in a uniform manner (Tyler, 1999).

When others are seen to share self-category membership with the perceiver, they are seen as qualified to inform them about aspects of social reality relevant to the ingroup (Haslam, 2001). As well as this, the perceiver expects them to hold similar views to themselves and is motivated to resolve any difference in opinion (Tajfel & Turner, 1979; Turner, 1987). Individuals who categorise themselves in terms of a common social identity, discuss and negotiate their differences with an expectation and motivational pressure to reach agreement. Thus, it seems reasonable to predict that two midwives who share category membership, will be motivated to reach agreement about decisions they make.

1.4.1.6. Binding forces

Kelman and Hamilton (1989, p. 128) describe the role of binding forces in explaining obedience and conformity that may produce damaging consequences. They define binding forces as “those elements of the situation that psychologically tie the individual to the authority’s definition of the situation”.

Binding forces are reinforced by the presence of other situational factors such as peer-group pressure, being observed, chain of command,
ambiguity of the situation, the presence of an authority figure, and the possible negative consequence of disobedience. When the situation is ambiguous or novel, people often look to others for guidance on how to behave. O'Leary and Aronson (1983) demonstrated this in an experiment in which they placed a sign in a shower block, asking that male students conserve water by turning the shower off while soaping up. When a role model was absent, 6% complied with the request. When one confederate modelled this behaviour, compliance increased to 49%, and when two, 67%.

Binding forces are elements of the situation that tie the participants psychologically to another's definition of the situation; the other may be a commanding officer or a trainer, for example. When the model for behaviour is a significant authority figure and a person does not have the time or the ability to contemplate their actions carefully, the likely result is that they will bow to the perceived legitimate power of the authority figure and all that they represent (Milgram, 1974). The My Lai massacre in the Vietnam War serves as a real world example of this. The words of one of those who participated in the massacre exemplifies the impact of binding forces (Kelman & Hamilton, 1989, p. 126):

**Q** Why did you do it?

**A** Why did I do it? Because I felt like I was ordered to do it, and it seemed like that, at the time I felt like I was doing the right thing, because, like I said, I lost buddies.

Similarly, in the case of the Holocaust, one member of Battalion 101 spoke of being called a “weakling” by his peers for trying to escape taking part in the execution of Jews.

Kelman and Hamilton (1989) suggest that in such situations an individual’s behaviour is influenced by rule and role orientation. Rule orientation is understood as promoting stronger ties with authority figures, out of a sense of powerlessness and as a result of loss of individual power. This can happen in a disciplined group, for example within teams in a hospital organisation. Rule-bound individuals find it very difficult to challenge authority figures. They accept, therefore, without question the authority’s definition of the situation. Within this context, role orientation is based on the idea that
roles bring with them expectations and specify functional aspects of behaviour, e.g., midwives are expected to obey and carry out orders issued by superiors. In turn they expect to be obeyed by those they direct.

1.4.1.7. Graduated Commitment
One aspect of Milgram's experiments was that the participant's involvement was graduated, i.e., progressive involvement took place over a number of trials. Milgram (1974) described the laboratory hour as an unfolding process in which each action influences the next. The first switch was labelled 15 volts (mild shock), the next 30 volts and so on up to 450 volts. The participant was instructed to commence with pressing the 15-volt switch and move up one switch each time the learner made a mistake. This basic Foot-In-The-Door (FITD) procedure is deceptively simple (Burger, 1999). Participants in the experimental condition are asked to perform a small request, one to which virtually everyone agrees. At some later point, participants are presented with a larger request. The second appeal is typically called the target request because securing agreement to this plea is the true purpose of the procedure. Many papers on FITD procedures have been published (e.g., Beaman et al., 1983; DeJong, 1979; Dillard et al., 1984; Fern et al., 1986; Weyant, 1996; Yu & Cooper, 1983). Most of these reviews address one basic question: does the FITD procedure reliably increase the probability that a participant will agree to the second request? (Burger, 1999). The answer to this question appears to be a qualified "yes" (Burger, 1999). Each of the reviews identifies numerous studies that replicate the basic FITD phenomenon, with each of the three meta-analyses concluding that the FITD effect occurs more often than would be expected by chance (Beaman et al., 1983; Dillard et al., 1984; Fern et al., 1986). One review points out that the size of the effect is relatively small, overall $r$ range $= .09 - .17$ (Burger, 1999). The presence and strength of the manipulation is dependent upon the specific processes used to create the FITD effect (see Table 1.9. overleaf).
Table 1.19. Psychological processes affecting compliance in the foot-in-the-door situation (Burger, 1999)

<table>
<thead>
<tr>
<th>Psychological Process</th>
<th>Potential Effect on foot-in-the-door</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Perception</td>
<td>Enhances effect</td>
</tr>
<tr>
<td>Reciprocity Rules and Reactance</td>
<td>Reduces effect</td>
</tr>
<tr>
<td>Conformity to Norm</td>
<td>Reduces or enhances effect</td>
</tr>
<tr>
<td>Consistency Needs</td>
<td>Enhances effect</td>
</tr>
<tr>
<td>Attributions</td>
<td>Reduces or enhances effect</td>
</tr>
<tr>
<td>Commitment</td>
<td>Enhances effect</td>
</tr>
</tbody>
</table>

Reviews and analysis demonstrate that there is more to this simple procedure than initially meets the eye (Beaman et al., 1983; Burger, 1999; DeJong, 1979; Dillard et al., 1984; Fern et al., 1986). Such evidence supports the view that the FITD paradigm may be an important vehicle in promoting the effectiveness of obedience experiments (Blass, 2002). In relation to organisations such as hospitals, with all their careerism, favouritism and bureaucracy, it is not surprising that individuals eventually reach positions where their commitment may translate into obedience, i.e., carrying out wishes of senior midwives or physicians over and above the wishes of the women they care for.

Section 5. Social Influence Within Hospitals

There are only four papers worthy of mention that specifically relate conformity and obedience to nursing (Hofling et al., 1966; Krackow & Blass, 1995; Nursing Editor's Survey, 1974; Rank & Jacobson, 1977). None of these directly applies to midwives. The first paper published, is the pioneering experiment on nurse acquiescence to inappropriate physician orders, carried out by Hofling et al. (1966).
1.5.1. The Hofling et al. Experiment (1966)

Hofling et al. (1966) viewed their study as a conceptual replication of the research performed by Milgram (1963, 1965, 1974). In effect, they found that most nurses would knowingly administer a drug overdose to a patient when ordered to do so by a physician. Hofling et al. (1966) built their experiment around an irregular order from a doctor to a nurse. The doctor ordered the nurse to administer an obviously excessive dose of medicine to a patient on her ward. The medication order was transmitted by telephone by an unfamiliar person, in violation of hospital policy. The prescription was “unauthorised”, that is, it had not been placed on the ward stock list and cleared for use. The experiment was also deliberately run on nightshift when staffing was at its lowest, so the nurses involved would find it difficult to consult with others about the order they had received. Of the 22 nurses, based on two hospital sites, 21 would have given the medication as ordered, had the experimenter not intercepted them. The telephone calls were invariably brief, averaging two minutes in length, exclusive of the time spent looking for the drug in the medicine cabinet. Essentially, no resistance was expressed to the caller and no attempt was made to delay administration of the medication.

It appears that nurses face this type of conflict fairly frequently (Hofling et al., 1966; Levy, 1999a, 1999b, 1999c; Stapleton et al., 2002a). In post-experimental interviews, Hofling et al. (1966) found that 15 of the participants spontaneously recalled experiences of a similar nature. When asked, the remaining 7 could recall being given similar inappropriate orders by doctors. Therefore, the conflict posed by the Hofling et al. (1966) experimental procedure seems to have been a realistic and significant one.

In explaining their results, Hofling et al. (1966) note that nurses generally hold two types of motivation. First, they wish to be considered professional people in their own right. This active orientation involves the mastery of a body of knowledge, application of intelligence and exercise of judgment, and the assumption of the responsibility for patients. This type of motivation is reinforced by nurse education (particularly in the current climate of accountability (Dimmond, 2002a; Newton & Johnson, 2000), by reflection on practice (Burns & Bulman, 2000; Rolfe, Freshwater & Jasper, 2001; Taylor, 2001) and by evidence-based practice (Dawes, 1999; Evans & Haines, 2000;
Reynolds & Trinder, 2000). Second, they wish to be respected by physicians, to receive praise and approval, and to avoid blame and retaliation. A majority of the nurses reported experiencing physicians' "displeasure" when they had offered resistance to inappropriate orders. This motivation was clearly shown in the deference and courtesy shown by the nurses in the telephone conversations with the physician ordering the drug overdose (Hofling et al., 1966).

Hofling et al. (1966) suggest that there is evidence of self-deception amongst nurses. In general, nurses believe that consideration of patient welfare and their own professional honour will outweigh automatic obedience to doctors' orders. As supportive evidence, Hofling et al. (1966) present the results of two questionnaire studies that were conducted in parallel with the main experiment. The participants consisted of 12 graduate nurses and 21 degree program students. The "main experiment" was described and the participant was asked to write down exactly what they would say and do in such a situation. They were also asked to provide a rationale for their behaviour and to estimate what other nurses would do if faced with the same conflict.

Ten of the 12 graduates and all 21 nursing students reported that they would have refused to give the medication overdose. Rationales cited for their refusal to comply with the "hypothetical" situation included dosage discrepancy, violation of hospital policy and the need for a written order. Most participants felt that other nurses would have also refused to administer the overdose. The discrepancy between the hypothetical responses of nurses and the actual behaviour when faced with the real situation is striking. This result may occur because the questionnaire investigation does not focus on the relevant situational aspects of the conflict situation but rather upon the character of the autonomous individual. Furthermore, when asked to predict their own behaviour, participants may prefer to present themselves favourably. This is a form of impression management, described by Schlenker (1982), Tedeschi (1981) and Schaller and Conway (1999). Survey instruments that attempt to measure socially undesirable behaviours almost always contain these self-presentational biases (Kline, 2000a). Nevertheless, this does not mean that survey data are not useful.
1.5.2. The Rank and Jacobson Study (1977)

In 1977, Rank and Jacobson attempted to replicate the results of the Hofling et al. (1966) experiment, and found a much lower rate of compliance. This may be because they modified significant aspects of the experimental situation. Rank and Jacobson (1977) point to two possible problems with the experimental design employed by Hofling et al. (1966). First, the experimental participants had no information concerning the drug they were asked to administer (the nurses were told to administer “Astroten” an imaginary drug that they had never heard of before). Rank and Jacobson (1977) argue that this makes the nurse totally dependent on the physician for information about appropriate behaviour. A well-known drug would have reduced this dependence. Secondly, the participants in the Hofling et al. (1966) experiment were not able to interact with other nurses in the hospital. In fact, any attempt to discuss the issue with other nurses on the ward was taken as an indication of noncompliance. The experiment was run purposely at times when the ward was largely deserted by other staff. Rank and Jacobson (1977) view this lack of contact as very unusual in general hospitals. They hypothesised that when nurses have the opportunity to interact naturally with one another, they will not administer an overdose merely because a physician orders them to do so.

Thus, Rank and Jacobson (1977) attempted to replicate the Hofling et al. (1966) study with two significant changes. Nurses were asked to administer 30 milligrams of Valium in an intramuscular injection, and the participants were also freely allowed to interact with other nurses on the ward concerning the medication order. Valium is a well-known drug, and the dosage ordered significantly exceeded the recommended dose (2-10 mg.), as defined in the Physician’s Desk Reference (PDR). Thus, if they wished, the nurses could consult the PDR for an authoritative reference on the proper dosage. Otherwise, the Rank and Jacobson (1977) study followed the procedure set down by Hofling et al. (1966). A total of 18 nurses in two hospitals participated in the modified design. Both hospitals were private, non-profit organisations, one with 200 and the other with 500 patient beds. The larger hospital dealt mostly with “middle class”, and the smaller one “working class” patients. Otherwise, the two hospitals were described as “typical”.

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Rank and Jacobson (1977) reported results that appear to be strikingly different from those of Hofling et al. (1966). Of the 18 nurses who participated in the study, only two were rated as fully compliant. These nurses retrieved the prescribed amount of drug from the medicine cupboard, broke it open and prepared to give it to the patient. The non-compliant nurses all attempted to check the dosage or the order in some way: three attempted to contact their supervisor, one attempted to call the pharmacy, and 12 attempted to recontact the physician who gave the order. Neither the background characteristics of the nurses or the patients appeared to relate to the rate of compliance of participants. Of course, the small sample size limits the power of any such test.

In order to understand the results found by Rank and Jacobson (1977), it is important to consider carefully the definition of non-compliance used in the study. The mere questioning of the order was counted as non-compliance (this was also the criterion used in the Hofling et al. (1966) study). Sixteen out of 18 participants met this criterion in the Rank and Jacobson (1977) study. However, of the 16 noncompliant nurses, 10 actually took the prescribed amount of drug out of the medicine cupboard and held it in their hands. Furthermore, seven of the non-compliant nurses indicated at the post-experimental interview that they would have gone ahead with the administration of the drug had the physician insisted. This fact is critical to the interpretation of the Rank and Jacobson (1977) results. Non-compliance will depend, in part, on the physician not insisting that their order be followed. If the physician does insist upon compliance, and is able to maintain surveillance over the nurses’ behaviour, actual rates of compliance could be higher. The compliance rate, might in fact approach that recorded in the Hofling et al. (1966) study.

To a great extent, the ability of physicians to insist that their orders be followed may depend upon their being able to maintain surveillance over the behaviour of the nurses. In most cases, physicians are not expected to maintain surveillance and would not choose to expend the effort necessary to check nurse compliance. Also, nurses quite frequently choose not to confront a physician directly about orders that seem inappropriate. Instead, they may “delay” compliance as long as possible, or “forget” the orders entirely (Levy,
One of the participants in the Hofling et al. (1966) experiment admitted this at the post-experimental interview. It should be noted that in the case of the administration of medicine, nurses must record their action on patient charts, which physicians can check to determine if their orders have been followed.

Another aspect of the definition of non-compliance used in the Rank and Jacobson (1977) study deserves attention. The interaction of the target nurse with other nurses on the ward is taken to be a critical determinant of ultimate non-compliance. Rank and Jacobson (1977) report that for the participants in their experiment, interaction proceeded in three steps; first, group concern, then discussion, and finally group consensus concerning the prescribed overdose. The other nurses were generally supportive of the nurse's decision to re-check the dosage and sometimes suggested that the order be re-checked. Of course, this action assumes that the nurses consulted will themselves be low in acquiescence and will be willing to assert their independence. It is at least possible that the other nurses will recommend that the physician's order be followed. Such a situation would lead to a particularly high rate of compliance with the inappropriate order. The Hofling et al. (1966) study provided no data on this issue, since their participants could not consult with other staff concerning their dilemma and none attempted to do so. The Rank and Jacobson (1977) study is also distinctly limited in scope. Only two hospitals were included in the study. Furthermore, it is not explicit about the number of nurses consulted by their participants and the degree of consensus in the group.

Rank and Jacobson (1977) list some additional factors that might contribute to the difference in outcome of their study when compared to Hofling et al. (1966). First, they note that the two studies are separated by about 10 years. In recent years, there has been a greater emphasis upon the doctor and nurse as part of a medical team (Fraser & Cooper, 2003; Henderson & McDonald, 2004; Page, 2000; Wickham, 2004). Also, the role of physician as ultimate legitimate authority on medical matters has been increasingly questioned by both nurses and lay persons (see, for example Bates 1970; Milman 1977; Turnbull, Holmes & Shields, 1996). However, a recent qualitative paper by Kirkham (1999) discusses the culture of midwifery
in the National Health Service in England. In this paper, Kirkham states that there are still considerable pressures to conform, an assessment supported by Stapleton et al. (2002a). A further qualitative paper by Ahern and McDonald (2002) also supports the belief that nurses feel obligated to follow physicians’ orders at all times. This makes it questionable whether nurses are more assertive than they were fifteen years ago, even though an increased number of nurses enter the clinical area with degrees.

Second, malpractice suits are on the increase (Dimond, 2002a). Participants in both the Nursing magazine (1974) survey and in the Rank and Jacobson (1977) experiment, mention the threat of malpractice suits as one reason for non-compliance.

Third, a structural change has occurred in hospitals recently, with many converting to the unit dose method of dispensing medication, which has eliminated undesignated medication from the wards. It has also modified the decision-making process in determining medication dosages, since drugs are administered in “standard” unit dosages.

Overall, the results of the Rank and Jacobson (1977) study found much lower rates of compliance than the Hofling et al. (1966) study, probably due to the modified situational aspects of the experimental situation. Nevertheless, the major finding that half the nurses in the Rank and Jacobson (1977) study confessed that they would implement the directed overdose of valium prescribed by a senior person, indicates that acquiescence within nursing practice is a salient issue.

1.5.3. The Nursing Editor’s Survey (1974)

In 1974, the magazine Nursing conducted a survey of its readership on ethical and interpersonal problems, which included several questions of relevance to the issue of compliance with inappropriate orders. In spite of the limitations of survey data, the results are described below because of the large number of nurses involved. The survey had approximately 11,000 respondents, which was about 10% of the total readership of the magazine at that time. The sample is not representative of American nurses in general, as many would subscribe to more professional nursing publications. This in itself makes these
nurses somewhat atypical. Yet, 11,000 respondents constituted a significant proportion of American nurses.

The American Nursing Association (ANA) ethical code states: “The nurse acts to safeguard the patient when his care and safety are affected by incompetent, unethical and illegal conduct of any person”. As is clear from the Hofling et al. (1966) study, this code is difficult to follow in some situations, particularly when dealing with a physician. The nurses were asked, “What would you do if a doctor insists that a patient be given an excessive dosage of a drug?” The results were as follows: 42% of the respondents declared that they would refuse and tell the physician to give it himself; 53% indicated that they would check with the supervisor and follow her advice; only 5% stated that they would give the drug. Open-ended items on the questionnaire allowed respondents to provide comments. Responses indicated that some nurses would administer the drug dependent upon how much they respected the competence of the doctor involved and also upon the particular drug involved.

In the survey, more graduate than diploma level nurses claimed that they were appalled by the idea of giving the excessive dose of drug. About two-thirds of the master's degree nurses, one-half of degree nurses and two-fifths of student nurses said they would refuse to administer the medication. As well as rating themselves low on acquiescence, the more educated nurses stated that they might feel resentful towards the physician and "used as a servant". Nearly 80% of the sample of respondents felt that doctors sometimes treated them in a servile manner.

Respondents were also asked about their legal responsibility, if they administered an overdose of a drug at a physician's insistence. Approximately 40% of the sample of nurses correctly indicated that the nurse, the physician, and the hospital all have legal responsibility; 35% incorrectly believed that only the nurse and the physician were responsible, and 16% of the nurses erroneously thought that only the doctor is responsible in this situation (the remaining 9% did not respond to this question).

1.5.4. The Krackow and Blass Survey (1995)

Krackow and Blass carried out a similar survey to the Nursing editor's survey (1974) in the USA in 1995, with the aim of finding patterns of attribution in a
more contemporary climate of legal accountability. They wanted to identify whether a higher proportion of nurses would be sensitised to the issue of legal responsibility, and whether this would significantly influence nursing practice. The major significant finding was that nurses who were obedient relinquished a high proportion of accountability to the physician. The increase in visibility of malpractice cases makes this a salient issue (Dimond, 2002a).

Using Milgram’s obedience work as a background, the Krackow and Blass (1995) survey explored nurses’ compliance with carrying out physician orders that could potentially harm a patient. Attribution of responsibility for potential harm to the patient was found to differ significantly as a function of compliance in a manner consistent with Milgram’s “agentic state” concept (see Subsection 1.4.1.1, p. 67).

Questionnaires were sent to 500 registered nurses asking them to recall the most recent time they either carried out or refused to carry out an inappropriate order by a physician. Of the 500 questionnaires sent, 116 were returned. Forty-eight contained explanations for non-completion, such as “I never received an inappropriate order,” or “I cannot recall such an incident”. Out of the remaining 68 questionnaires, 37 (54%) were completed by nurses who had refused to carry out what they perceived to be an inappropriate order, and 31 (46%) by those who had carried out such an order. The Allocation-of-Responsibility measure yielded two significant effects, with nurses overall attributing most of the responsibility to the physician (58.61%), less to themselves (39.82%), and least to the patient (1.57%). The second significant finding was a Compliance x Focus of Responsibility interaction, which qualified the main effect. Compliant nurses assigned more responsibility to the physician (68%) than to themselves (32%), but among the non-compliant nurses, responsibility was more evenly split.

These findings indicate that Milgram’s obedience work may still be highly relevant to the nurse/physician relationship. Blass (1991, 1992, 1993, 2002) has noted that scholars designate legitimacy and expertise as salient attributes of the authority figure in Milgram’s (1963, 1965, 1974) obedience paradigm. Although findings in the Krackow and Blass (1995) study indicate that the physician is primarily perceived by the nurse as legitimate authority, a survey by Raven and Haley (1980) indicates that nurses respond most to the
expert power of the physician, with informational power second. Expert power stems from the target attributing superior knowledge or ability to the agent. In other words, the agent knows best and knows what is correct, i.e., the senior person points out their expertise and experience regarding drug administration. In contrast, informational power is the result of persuasiveness of the information communicated by the agent to the target, i.e., the senior person indicates the basis for techniques citing available evidence, hospital data or journal references and so forth. A possible explanation for this discrepancy is that the Raven and Haley (1980) survey was hypothetical, while the Krackow and Blass (1995) survey addressed perception of power at the time of a real incident. It may be easier for nurses to imagine yielding to a physician because of his advanced medical training or because he shares additional information, than it is to imagine yielding strictly on the basis of an authority-subordinate relationship.

The major significant finding in the Krackow and Blass (1995) survey is that allocation of responsibility differed as a function of compliance. Although all respondents assigned more responsibility for harmful consequences to the physician than to themselves, nurses who were obedient accepted less responsibility for themselves (32%) than did nurses who were defiant (48%). The former relinquished a higher proportion of responsibility to the physician (68%) than did the latter (52%). These results are consistent with Milgram’s (1974) finding that participants who were obedient accepted less responsibility for shocking the victim than did those who were defiant. Milgram’s obedient participants assigned some of the responsibility to the experimenter, with one difference, many shifted responsibility to the victim. That is, the victim was responsible for causing the participant to punish him because he foolishly made mistakes in recalling the word pairs. In comparison, the nurses in the Krackow and Blass (1995) survey ascribed no responsibility to the patient because the recipient could not make a “mistake”.

In the Krackow and Blass (1995) survey, both compliants and non-compliants assigned minimal and equal amounts of responsibility to the patient. Relinquishing responsibility to the authority figure is a central feature of Milgram’s (1974) “agentic state” (as discussed in Subsection 1.4.1.1, p. 67). One difference is that in Milgram’s study, the participant’s perception of the
“victim” as a volunteer and as an active participant, made it possible for participants to impose responsibility on the learner. In contrast, in the Krackow and Blass (1995) survey, the victim's role was a passive one, with compliance in carrying out the physician order not related to any response on the part of the patient. Even with this difference, because many respondents assigned responsibility for harmful consequences to the physician, the pattern of responsibility attribution is still consistent with the "agentic state" conceptualisation. The fact that one-half of the respondents in the Krackow and Blass (1995) survey carried out inappropriate orders, indicates that in spite of societal changes in perception and acceptance of authority, the obedience paradigm was still relevant in 1995.

1.5.5. The Overall Relevance of Obedience and Conformity Experiments to Nursing

In many ways the dilemma faced by nurses when they confront doctors is similar to the experience of participants in the Milgram (1963, 1965, 1974) and the Asch (1951, 1952, 1955, 1956) experiments. Milgram's work is particularly relevant to the issue of group influence and consensus in conferring resistance to inappropriate orders.

There are three variations of Milgram's experimental procedures that are of interest for the study of group effects. The first variation is Experiment 18 (see Table 1.7), in which the participant was placed in the role of teacher with two other confederates who defied the experimenter and refused to punish the victim against his will. One confederate read the lists of word pairs that the learner was to remember, and the other provided feedback as to whether the answer was correct. The first confederate was programmed to comply with the experimenter's request up to the 150-volt level, and the second continued on to the 210-volt level, a point upon which he also refused to continue. Only 10% of the participants in this experimental variation were fully obedient. This is the lowest rate of compliance found in any of Milgram's variations. Most of the naïve participants pulled out of the experiment after the second confederate refused to continue (at the 210-volt level). This result is consistent with findings in conformity literature, which shows that the presence
of even a single deviant confederate significantly decreases the amount of conformity exhibited by participants (e.g., Asch 1952, 1956; Crutchfield, 1955). Obviously this factor is relevant to a staff nurse faced with a physician's inappropriate order. The support from even one or two "defiant" nurses would drastically reduce compliance. Milgram (1974) suggests that there are several factors that contribute to the effectiveness of disobedient models:

1. The defiant models show the participant that non-cooperation is possible (this possibility may not have occurred to the participants).
2. The defiant models behaviour defines the act of administering shocks as improper.
3. The defiant models show that negative consequences are minimal.
4. Since the defiant models remain in the laboratory after withdrawing from the experiment, the participant is liable to their disapproval if he continues to administer the shocks.

The second variation of these applied studies relevant to the analysis is Experiment 19 (see Table 1.7), in which Milgram set up a situation where another teacher actually administered the electric shocks. The naïve participant was given a subsidiary task that contributed to the experiment but removed him from the actual act of shock administration. More than 90% of participants were obedient in this condition. Milgram interprets these results primarily in terms of diffusion of responsibility. This has also been shown in studies by Darley and Latané (1968), Rosenthal (1964) and Latané and Rodin (1969), with larger groups associated with a decrease in the likelihood of gaining help (Latané & Nida, 1981). In these studies about helping behaviour, explanations are provided in terms of viewing the responsibility as belonging to someone else. In a similar way, the nurse may offload responsibility to the prescribing physician. However, there is one vital difference: in Milgram's Experiment 19, the participant did not deliver the shocks, while the nurse actually attempted to administer the drug in the Hofling et al. (1966) study.

In the third relevant variation, Milgram also found that the experimenter's physical presence was important for the high levels of obedience. Obedience rates dropped sharply from 62.5% in the baseline
experiment to 20.5%, when the experimenter gave his orders over the telephone from the adjoining room (Experiment 7, see Table 1.7). Milgram (1974) observed that a number of experimental participants, when not under direct surveillance by the experimenter, did not follow instructions. These participants administered lower levels of shock and did not escalate the shock levels as required by the task. Some of these participants assured the experimenter over the telephone that they were indeed following instructions to the letter. Without direct challenge to the legitimate authority figure, these participants managed to undermine the purpose of the experimenter. Nurses faced with an inappropriate order might also take this approach. Levy (1999a) and Barry (2001) discuss the use of covert strategies used to circumvent confrontation. “As a group often subservient to hierarchical control, midwives in an informed choice study were frequently seen to use covert tactics to subvert the power of more influential others, or to persuade obstetricians and other powerful figures towards a particular form of action” (Levy, 1999a, p. 586). Kitzinger, Green and Coupland (1990) call this “hierarchy maintenance work”.

It is important not to overemphasise the similarities between the Milgram paradigm and the interaction involved in nurse-physician relationships. There are a number of important differences. First, participants in Milgram’s experiments were confronted with a completely new experience. Most had had no previous experience with “scientific experiments”. One reason why Milgram was able to obtain such high rates of compliance was conceivably because the scientific “aura” of the situation overwhelmed the participant, with the experimenter in the white lab coat, the unfamiliar technology and machinery. Such situations are familiar to nurses on a day-to-day basis. Furthermore, once nurses have left university, they become quite familiar with the difficulties incurred within hierarchical relationships, such as those between the nurse-physician or junior-senior midwife.

Second, in the Milgram experiment, the major sanction for disobedience comes from within the individual. The participant has “volunteered” and agreed to obey the orders of the experimenter. Milgram (1974) notes that compliance is not dependent upon coercion, but follows from the individual’s sense of commitment to his role. Commitment should not be
broken without “good reason”, but what counts as that? In a sense, this is a core question. A major difference is that nurses appear to be conscious of the probability that physicians or senior nursing staff will punish lack of obedience. Researchers have found that the current health care system continues to promote and reward “traditional” behaviour in nurses, and that nurses feel powerless to alter the status quo (Ahern & McDonald, 2002; Corley & Goren, 1998; McDonald, 1994; Mohr, 1996). There is also evidence of nurse hostility toward physicians. Possibly of interest, the Nursing magazine survey found that it was the younger, better-educated, more assertive nurses who were more likely to report hostility toward physicians.

Third, Milgram describes his obedient participants’ entry into the “agentic state”. In this state, there is a shift in feelings of responsibility, in which the obedient participant feels responsible to the figure directing him, but feels no responsibility for the actions that the authority prescribes. This is probably not the case for the majority of nurses who face inappropriate orders from physicians. In many ways, nurses behave rationally. They evaluate the expertise of the physician, seek support from their peers and evaluate the nature and order in terms of their own knowledge. Most are acutely conscious of their responsibilities, both legal and moral. That nurses so often end up complying with the physician’s orders, speaks clearly of the power that senior staff are able to wield in a situation. As was noted in the discussion of the Nursing survey, a substantial minority of the respondents (16%) thought that physicians alone are responsible for the consequences of their orders.

1.5.6. Problems with Previous Research
Having reviewed four major studies that have analysed the social influence relationships between nurses and senior staff, the limitations of this research can be enumerated. The major difficulty with the experimental work of Hofling et al. (1966) and Rank and Jacobson (1977) is the very limited sample of hospitals and nurses used in the research. Across the two studies, only two hospitals and 40 nurses were included. Furthermore, these hospitals may or may not be typical of hospitals in general. The sample of nurses drawn in each hospital may or may not be representative of the entire nursing staff, and possibly not of American nurses in general. One by-product of this limited
sample size is that it is not possible to provide careful tests of the influence of nurse background characteristics on rates of compliance with inappropriate orders. In addition, it needs to be considered whether the culture of American nursing is relevant or even transferable to midwifery culture in the UK, or offers parallels that can aid understanding of the problem in a British context.

The large survey conducted by the Nursing magazine (1974) has an adequate sample size (approximately 11,000), but again may not represent American nurses in general. Respondents in this survey selected themselves at two points. First, by being readers of the magazine, and second by choosing to take time to send their responses to the survey. Survey data such as that provided by Nursing (1974) and Krackow and Blass (1995) are also subject to problems of self-presentational bias, particularly on sensitive matters such as professional ethics, where respondents can be expected to bias their responses in a socially desirable direction. Thus, we would expect these nurses to rate themselves as far less compliant than they would actually be in practice.

Finally, Rank and Jacobson (1977) suggest two important factors that influence resistance to an inappropriate physician's request, namely, individual assertiveness and the support of other nurses in the hospital. The support of other nurses presupposes a resistance to inappropriate orders and the motivation to express an opinion publicly. In other words, these nurses themselves must be assertive. Unfortunately, Rank and Jacobson present little evidence directly relevant to this point and have no specific measure of either individual or group assertiveness.

Also, to account for the remarkable difference in results between the Rank and Jacobson and Milgram studies, it is important to recognise that Rank and Jacobson did not pressurise participants' to administer the drug. In contrast, the experimenter in the baseline Milgram experiment demanded that the participant continue. He also stayed to maintain surveillance over electric shock administration. The face-to-face nature of associations between experimenter and participant, and the persistent demands for obedience, may have removed a perception of choice about partaking from the participants' mindset.
To sum up, when physicians make improper requests of nurses in the hospital, nurses are confronted with conflict between the physician's legitimate authority and their own professional standards. Hofling et al. (1966) have reported high rates of compliance with such inappropriate orders by physicians. However, other researchers (Krackow & Blass, 1995; Nursing Editor's Survey, 1974; Rank & Jacobson, 1977) have reported much lower rates of nurse compliance to inappropriate orders from physicians. The actual rate of compliance with inappropriate orders seems to be related to situational factors and to the degree of social support nurses receive from their peers. These studies inform us that the concept of acquiescence in nursing is a salient issue and worthy of address. Before moving to the explicit study and hypotheses to be tested in this thesis, it is important to define the concepts of acquiescence and resistance. The operationalisation of these variables will be described later.

1.5.7. The Concepts of Resistance and Acquiescence

The ability to be able to say "no" to inappropriate requests has generally been considered to be part of assertive behaviour (Alberti & Emmons, 1974; Bishop, 1996; Chenevert, 1994; Hermon, 1978). For the present analysis, a difference is identified between a readiness to speak up to others, i.e., challenge another's opinion (resistance), and a readiness to be influenced by another (acquiescence), particularly when the response may be an inappropriate behaviour in terms of the institutional context. The difference between conditions of obedience and acquiescence is that the former refers to a behavioural response to an instruction from a person in authority, while acquiescence includes aspects of consideration and agreement with that person; this includes both conformity and obedience responses.

Within the context of this thesis, an inappropriate behaviour is one that denies a childbearing woman a particular safe and unproblematic choice during her maternity care, e.g., water submersion for pain relief during labour or extra visitors in the delivery room.

The assertiveness involved in resistance is non-compliance or disobedience to the request of a senior person. In effect, it is an attempt to challenge the opinion of the other person. When that target person is a senior
midwife or physician, then resistance may be particularly difficult to maintain, as confirmed by Milgram (1961, 1963, 1964, 1965, 1974) and others (e.g., Kilham & Mann, 1974; Meeus & Raaijmakers, 1995; Shalala, 1974). Milgram confirmed that such obedience occurs in response to authority, with action flowing from the higher end of the social hierarchy to the lower and not the other way round (Experiment 15, see Table 1.7).

In contrast, the lack of assertiveness involved in acquiescence is compliance with or obedience to the request of a senior person. In effect, this involves minimal attempts to challenge the opinion of the other person. What research on this matter has shown, is that acquiescence appears to be easier than resistance. Few individuals will behave with complete resistance or acquiescence when presented with an opinion by a senior midwife. Most will engage in some form of interaction before providing agreement or disagreement. A continuum of engagement will therefore appear, with different levels of interaction observed between individuals.

1.5.8. Conclusions to the Literature Review
The route to this thesis is inseparable from my own biography. Much of my working life has been spent as a midwife where I gradually became aware of authority/subordinate relationships within the workplace. As a practitioner these were part of everyday working life. Later as a graduate in psychology, I began to see these practical issues from a perspective influenced by social scientific literature. I asked questions about my working life with the aid of this literature and posed critical questions about the writing from the vantage point of my experience as a midwife. This process was given a new significance when Changing Childbirth (DoH, 1993) provided clear evidence that women's preferences were frequently frustrated by what I perceived were the same authority structures. For that reason, this thesis is concerned with an urgent issue of practice and draws on the practical and academic resources that I have acquired.

Most of the studies described in the literature reviewed above (both on conformity and obedience) were almost exclusively based in the laboratory. Those that were not, in particular the Hofling et al. (1966) and the Rank and Jacobson (1977) studies, clearly illustrate power relationships between senior
and junior hospital staff. Yet, neither of these studies were focused specifically on the power of senior staff to socially influence the decisions and behaviour of midwives. The role of the nurse and midwife differ considerably, with spheres of practice clearly outlined by the Nursing and Midwifery Council (NMC, 2004). The fundamental difference is that midwives are trained to work as independent and autonomous practitioners, while the majority of nurses are not. What remains unknown, is whether the working environment of the individual midwife truly affords them the autonomy that is claimed.

The common theme apparent in much of the literature review is that numerous participants perceived an obligation to follow direction from an authority figure over and above a subordinate’s appeal. It was of interest to know whether midwives perceive a similar obligation to follow direction from a senior person in preference to a childbearing woman’s request. The dramatic disclosures of Changing Childbirth (DoH, 1993) gave evidence that midwives often fall short at providing choice, continuity and control to childbearing women, with specific reasons for this failure unspecified. Hence, the aim of this thesis was to focus on how subordinate midwives perceive and respond to guidance from those in authority. Of particular interest was the response behaviour displayed when a senior midwife (the author - a lecturer in midwifery) attempted to influence a subordinate to respond to a clinical decision in a particular way.

The results of the literature review inform us that choice provision may be difficult to achieve in a hierarchy that appoints people to positions of authority. For that reason, a formal test was devised to measure the social influence a high status midwife had upon decision-making in midwifery practice. Particularly in relation to decisions that are within the midwife’s remit, pertain to normal midwifery, and which according to social policy documents (DoH, 1993; DoH, 2003; DoH, 2004) should in fact be the choice of the childbearing woman.

1.5.9. Rationale for, and outline of, the studies contained within this thesis
The rationale for the studies reported in this thesis, was to investigate whether midwives acquiesce with proposals from superiors that contravene their
established views of best practice. Results may help explain the difficulties midwives have in providing women with choice and control during their childbearing experience. A flow-diagram of the studies is presented in Figure 1.1. below.

Figure 1.1. Flow diagram of the studies within this thesis

Development of the Social Influence Scale-Midwifery (SIS-M)

This chapter discusses the development of the Social Influence Scale (SIS-M). The SIS-M is a 10-item scale developed to measure the effects of social influence in the context of midwifery. The SIS-M was sent to 323 midwives based at 7 hospital sites; it was self completed by 209 and returned via the post. (Chapter Two)

Measuring Social Influence of a Senior Midwife on Decision-making in Maternity Care - Experiment One

This chapter describes a study intended to test whether midwives' decisions are influenced by a senior midwife. The SIS-M was self-completed and returned via the post by 209 midwives. Interviews were then conducted with 60 midwives in which a senior midwife asked the 10 SIS-M questions again whilst making her preferred responses explicit. The interview was a condition in which the senior midwife introduced information intended to influence the junior midwives' responses to SIS-M questions in a conformist direction.

The following research questions were answered:

(1) Are junior midwives' decisions socially influenced by those who have higher status in the workplace?

(2) Does position within the hierarchy alter a midwife's susceptibility to social influence from a senior person?

(3) Do midwives prioritise acquiescence with a senior person over and above providing choice and control to childbearing women? (Chapter Three)
Alternative Explanations for the Social Influence Effect

Two further studies were carried out to test alternative explanations of the social influence effect.

(i) The Workbook Study - Study Two

This was intended to ascertain whether decision changes in the first experiment were caused by social components of the relationship between junior and senior midwife, or education shared during the interview discourse. The same information as was presented in the interviews was presented in the form of a workbook, completed in private by 60 midwives. This showed no social influence effect.

The following research questions were answered:

(1) Was the information shared during the interview condition of Study One effective at influencing change to midwives' decisions?

(2) Does position within the hierarchy alter midwives' susceptibility to educational influence?

(ii) The Post-Interview Study - Study Three

The post-interview study tested the durability of the social influence obtained during the interview. It sought to observe whether the participating midwives simply went along with what the senior midwife suggested or whether they actually altered their opinions to fall in line with her point of view (compliance or opinion change). The SIS-M was completed by 50 midwives 9-months after the interview with the senior midwife. The results showed that midwives reverted to their pre-interview responses.

The following research questions were answered:

(1) Did the subordinate midwives just comply with the recommendations of the senior midwife or did something more complex occur that effected a permanent change to their judgements?

(2) Were situational factors important forces in holding the midwife to her acquiescent role? (Chapter Four)
A Qualitative Analysis of the Midwives' Comments

To find out how the participating midwives perceived the input from senior staff and to build up a picture of the nature of the psychological processes that may be involved in superordinate/subordinate relationships, the comments and assertions made during the interviews were analysed. Twenty interviews were transcribed.

Particular attention was given to the following questions:

(1) What are midwives' attitudes towards providing woman-centred care?

(2) What situational aspects of a maternity hospital promote such a pronounced social influence effect?

(3) What are midwives' psychological responses to social influence from a senior member of staff? (Chapter Five)

Discussion and Conclusions

This chapter discusses the overall results of the thesis and the practical consequences for evaluating the care midwives offer to childbearing women, particularly in terms of providing choice and control during their birth experience. An overall conclusion includes suggestions on how to reduce social influence from senior staff that inhibits junior midwives from being advocates for safe choices of childbearing women in their care. (Chapter Six)

1.5.10. Ethics

At commencement of the research, ethical approval was sought from the appropriate authority structures. The hospital authority representative informed the author that approval from the maternity managers must be sought. Authorisation to conduct the study and full cooperation was attained
from all seven clinical managers. The study was explained and participants asked if they wanted to partake. After agreement the participant was asked to sign a written consent form. All 209 midwives willingly did so. What follows is a series of studies, in which participants were not asked to conduct an act that would compromise their integrity. Unlike the Milgram studies, the experimenter contact time was placid, gentle and friendly, with participants permitted to withdraw from procedures at any time. In the studies that follow, not one person complained, withdrew or sought post interview counselling. This endorses the view that ethical consideration was given to participant experience.
CHAPTER TWO

Development of the Social Influence Scale-Midwifery (SIS-M)\(^3\)

2.1 Introduction

Pregnant women should be faced with an increase in choice over the clinical management of their pregnancy (Department of Health, 1993, 2003, 2004; National Institute for Clinical Excellence, 2003) with midwifery-led care in the forefront of current practice innovation and option. Midwives are independent, accountable and highly trained autonomous practitioners. However, the impact of authority figures, particularly senior clinical staff, on the midwife’s clinical judgements has seldom been explored. Given the broad scope of practice competence expected from the modern midwife (NMC, 2004), and that early experimental observations have shown that nurses make erroneous and life-threatening judgements due to conformity pressures (Hofling et al., 1966), it is surprising that this area of research has commanded relatively little research attention.

One explanation for this dearth of research may be the lack of a reliable measure to assess conformity to authority among midwives. Hence, a 10-item self-report scale, the Social Influence Scale for Midwifery (SIS-M) was developed, in order to assess the impact of senior authority figures on midwives clinical decision-making. The SIS-M was used to gain new insights into the acquiescent behaviour of midwives in the practice environment and the relationship of such behaviour to maternal outcomes. The SIS-M is a 10-item self-report scale that was specifically developed for use as the dependent variable in the research reported in this thesis. The items of the SIS-M are shown overpage in Table 2.1. overleaf.

Table 2.1. The Social Influence Scale for Midwifery (SIS-M)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>I believe that guidelines are unnecessary when labour is progressing normally.</td>
</tr>
<tr>
<td>(2)</td>
<td>I would argue with the consultant if he refused to support a home confinement when a mother with a healthy pregnancy is keen to have one.</td>
</tr>
<tr>
<td>(3)</td>
<td>I would follow a senior member of staff’s request to rupture a woman’s membranes if this was the decided course of action.</td>
</tr>
<tr>
<td>(4)</td>
<td>I would administer oxytocin to a woman desiring a normal labour if it was a requisite of the guidelines for routine labour.</td>
</tr>
<tr>
<td>(5)</td>
<td>I believe that it is acceptable for a women to have more than one ‘birth partner’ present during labour when the unit policy states only one person at a time.</td>
</tr>
<tr>
<td>(6)</td>
<td>I would automatically commence cardiotocography if it was requested by a senior member of staff.</td>
</tr>
<tr>
<td>(7)</td>
<td>In general I would challenge a senior member of staff if they decided to override a decision I made regarding normal labour.</td>
</tr>
<tr>
<td>(8)</td>
<td>I would conceal my opinion from a consultant obstetrician when my stance about carrying out elective section for social reasons differs.</td>
</tr>
<tr>
<td>(9)</td>
<td>I would allow a women to have her two friends and husband present during labour and delivery if this is what she wanted.</td>
</tr>
<tr>
<td>(10)</td>
<td>Informed choice for women is an idealised dream when the reality is that we know what is best for women in labour.</td>
</tr>
</tbody>
</table>

The full 10-item questionnaire can be viewed in Appendix One. A glossary of terms has been provided in Appendix Two to aid understanding of the specific obstetric terms used. The SIS-M was used to measure social influence in the four conditions of the present study. Each condition represented a situation in which either there was or was not social influence brought to bear on the midwife during her decision-making process.

2.2. Participants
A total of 209 midwives were recruited from 7 maternity hospitals in North Yorkshire. Participants were eligible for inclusion if they were currently practicing midwifery in some shape or form. All participants were volunteers and signed a written informed consent prior to taking part in the study. The age range was 21-60 years. All the participants had the basic educational
qualifications to fulfill the registration requirements of the United Kingdom, Nursing and Midwifery Council register for practising midwives. Participants were randomly selected to represent the structure of the midwifery team at large. The hierarchical system in the profession is pyramidal. E grades have least responsibility, earn less money and function as part of a team led by senior midwives. G grades have more status and are ward managers or community team leaders (sisters). F grades are intermediate in status; they take charge when the G grade is absent and function as a team member when present.

2.3. Development of the Dependant Variable - the SIS-M.
The SIS-M was developed using discriminatory item analysis and exploratory factor analysis approaches to data. The SIS-M is scored using a 5-point Likert scale based on the level of agreement with each statement. Five of the items of the SIS-M are reverse scored and the possible range of scores is 10-50 where a score of 10 is least conformist and a score of 50 is most conformist, e.g.

(5) I believe that it is acceptable for a woman to have more than one “birth partner” present during labour when the unit policy states only one person at a time.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores^4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

The SIS-M initially contained 28 items generated from a focus group of practising midwives. These midwives provided work-related examples of situations where they had acquiesced with the direction of an authority figure, in situations where their private views differed. Responses were transcribed into 28 questions, with the Likert scales organised so that half of the questions measured conformity and the other half nonconformity.

^4 Note: In the example SIS-M question, five represents maximum conformity and one least. The scores are just for illustration and are not shown on the actual SIS-M questionnaire.
Conformity Questions = 1, 2, 3, 7, 8, 10, 11, 13, 14, 18, 20, 24, 27, 28
Nonconformity Questions = 4, 5, 6, 9, 12, 15, 16, 17, 19, 21, 22, 23, 25, 26

The original 28-item questionnaire can be viewed in Appendix Three. Several processes were used to refine the SIS-M Version One.

2.3.1. Discriminatory Analysis

Internal validity was assessed using discriminatory item analysis. Clark-Carter, (1997, p. 96) recommends “examining each item to distinguish between high and low scorers”. This process involves taking each statement relevant to a dimension and finding out whether two groups differ in the way they respond to it. Each question was assessed on the Likert scale to distinguish between high and low compliance groups, with a frequency of 4 or 5 in the high score and 1 or 2 in the low score groups assessed. When frequencies of high and low scorers are equal or nearly equal, the item fails to discriminate and is removed from the scale. Conversely, “when there is a clear difference between numbers of high and low scorers, items distinguish and are retained” (Stevens, 1996, p. 34).

The SIS-M Version 1 was sent to midwives based at York District Hospital. Fifteen scales were self-completed and returned in the post. Accordingly, scores were summed and frequency of high and low scorers assessed (see Table 2.2 overleaf). Questions 9 and 16 were removed and the scale restructured to form SIS-M Version 2.
Table 2.2. Item analysis conducted to assess internal validity of SIS-M Version 1

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Group</th>
<th>High</th>
<th>Low</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>12</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>13</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>12</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>14</td>
<td>0</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>11</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>14</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>12</td>
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<tr>
<td>13</td>
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<td>15</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>14</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>9</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>13</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>0</td>
<td>11</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td></td>
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<tr>
<td>26</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>0</td>
<td>14</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

Note: questions in bold were removed because they do not discriminate between high and low score groups.
2.3.2. Internal Reliability

According to Kline (2000b, p. 11), "If a test is to be valid, i.e., measure what it is intended to measure, then internal consistency must be high". Internal reliability was measured using a Pearson Correlation. This process selects p values, with items retained with scores “between 0.2 and 0.8 and a correlation of the item with a total score beyond 0.3" (Kline, 2000b, p. 173). Accordingly, items; 2, 3, 6, 7, 12, 14, 16, 21, 24 were removed, which left 18 questions on the scale (see Table 2.3 overleaf).
Table 2.3. Pearson Correlation conducted for item analysis SIS-M Version 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Pearson Correlation (total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.34</td>
</tr>
<tr>
<td>2</td>
<td><strong>0.01</strong></td>
</tr>
<tr>
<td>3</td>
<td>0.27</td>
</tr>
<tr>
<td>4</td>
<td>0.61</td>
</tr>
<tr>
<td>5</td>
<td>0.31</td>
</tr>
<tr>
<td>6</td>
<td><strong>0.09</strong></td>
</tr>
<tr>
<td>7</td>
<td>0.23</td>
</tr>
<tr>
<td>8</td>
<td>0.36</td>
</tr>
<tr>
<td>9</td>
<td>0.52</td>
</tr>
<tr>
<td>10</td>
<td>0.54</td>
</tr>
<tr>
<td>11</td>
<td>0.54</td>
</tr>
<tr>
<td>12</td>
<td><strong>0.09</strong></td>
</tr>
<tr>
<td>13</td>
<td>0.55</td>
</tr>
<tr>
<td>14</td>
<td><strong>0.00</strong></td>
</tr>
<tr>
<td>15</td>
<td>0.37</td>
</tr>
<tr>
<td>16</td>
<td><strong>0.20</strong></td>
</tr>
<tr>
<td>17</td>
<td>0.51</td>
</tr>
<tr>
<td>18</td>
<td>0.50</td>
</tr>
<tr>
<td>19</td>
<td>0.40</td>
</tr>
<tr>
<td>20</td>
<td>0.36</td>
</tr>
<tr>
<td>21</td>
<td><strong>0.06</strong></td>
</tr>
<tr>
<td>22</td>
<td>0.36</td>
</tr>
<tr>
<td>23</td>
<td>0.58</td>
</tr>
<tr>
<td>24</td>
<td><strong>0.23</strong></td>
</tr>
<tr>
<td>25</td>
<td>0.67</td>
</tr>
<tr>
<td>26</td>
<td>0.70</td>
</tr>
<tr>
<td>27</td>
<td>0.40</td>
</tr>
<tr>
<td>28</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Note: questions in bold were removed as below Kline's criteria of 0.3.
2.3.3. External Validation

Kline (2000b, p. 23) recommends external validation to indicate "where the test might be lacking or contain irrelevant material for population". Ten academic psychologists rated the questions for representation of conformity on a continuum of 1 (low conformity) - 10 (high conformity), e.g.

(1) I believe that guidelines should be used when labour is progressing normally.

(This statement is assessing desire for external decision making via issue of prescriptive guidelines)

Low 1 2 3 4 5 6 7 8 9 10 High

The validation questionnaire can be viewed in Appendix Four. Means were calculated and items that rated below 6.5 were excluded from the scale. Accordingly, questions 4, 5, 6, 11, 14, 15, 17, 19, 20, 21, 23, 24\(^5\) (see Table 2.4 overleaf) were removed, which left 10 items on the scale. The scale was restructured to form SIS-M Version 3.

\(^5\) Note: Questions in bold were also removed by the internal reliability test.
Table 2.4. Result of external validity assessment on SIS-M Version 2

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.6</td>
</tr>
<tr>
<td>2</td>
<td>8.5</td>
</tr>
<tr>
<td>3</td>
<td>7.1</td>
</tr>
<tr>
<td>4</td>
<td>3.9</td>
</tr>
<tr>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>6</td>
<td>4.1</td>
</tr>
<tr>
<td>7</td>
<td>6.6</td>
</tr>
<tr>
<td>8</td>
<td>8.7</td>
</tr>
<tr>
<td>9</td>
<td>8.3</td>
</tr>
<tr>
<td>10</td>
<td>8.2</td>
</tr>
<tr>
<td>11</td>
<td>4.4</td>
</tr>
<tr>
<td>12</td>
<td>8.1</td>
</tr>
<tr>
<td>13</td>
<td>8.2</td>
</tr>
<tr>
<td>14</td>
<td>4.3</td>
</tr>
<tr>
<td>15</td>
<td>3.6</td>
</tr>
<tr>
<td>16</td>
<td>8.3</td>
</tr>
<tr>
<td>17</td>
<td>4.5</td>
</tr>
<tr>
<td>18</td>
<td>8.3</td>
</tr>
<tr>
<td>19</td>
<td>5.7</td>
</tr>
<tr>
<td>20</td>
<td>3.3</td>
</tr>
<tr>
<td>21</td>
<td>3.4</td>
</tr>
<tr>
<td>22</td>
<td>8.3</td>
</tr>
<tr>
<td>23</td>
<td>3.8</td>
</tr>
<tr>
<td>24</td>
<td>4.4</td>
</tr>
<tr>
<td>25</td>
<td>6.7</td>
</tr>
<tr>
<td>26</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Note: questions in bold were removed because they rated below 6.5
2.3.4. Test Retest

Kline (2000b) recommends a test-retest to assess scale reliability. Scores from 24 participants were correlated on two separate occasions with a 5-week time gap. The questionnaires were scored out of 50 and a Spearman rank correlation coefficient calculated 0.78, at p < 0.01.

Results support agreement between score sets at 61.5%, which according to Clark-Carter (1997) qualifies the questionnaire as a reliable measuring tool. At this point SIS Version 3 was renamed the Social Influence Scale for Midwifery (SIS-M). Before it could be considered a psychometrically robust instrument for assessing acquiescence of midwives, Kline (1999) recommends principal components factor analysis to assess construct validity. Nunnally (1978) advocates this as a sensible practical procedure; that the first item trial is by item analysis and that factor analysis of items be carried out on the refined and briefer item set (Kline, 2000b). Accordingly, the instrument's underlying factor structure was assessed using both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The aim was to identify: (1) whether the underlying factor structure of the SIS-M is uni-dimensional or multi-dimensional, (2) whether the SIS-M is internally consistent, and (3) whether EFA and CFA methods concur in accounting for the most parsimonious factor model of the SIS-M.
2.3.5. Structural Validity
The study was carried out in the 7 maternity units of North Yorkshire: York District Hospital, Harrogate District Hospital, Scarborough Hospital, Bridlington Maternity Unit, Malton and Norton District Hospital, Whitby Hospital and the Friarage Hospital in Northallerton. The researcher sent the SIS-M by post to every midwife employed by the North Yorkshire Consortium.

2.3.5.1. Data Collection
The SIS-M was sent to 323 midwives based at the 7 hospital sites in North Yorkshire (see Table 2.5). The SIS-M was self-completed by 209 midwives (65%) and returned in the post (see Table 2.6 overleaf). Participants were allocated to groups according to grade of employment (see Table 2.7 overleaf).

Table 2.5. Maternity units and numbers of midwives sent the SIS-M

<table>
<thead>
<tr>
<th>Maternity Unit</th>
<th>SIS-M sent</th>
</tr>
</thead>
<tbody>
<tr>
<td>York District Hospital</td>
<td>105</td>
</tr>
<tr>
<td>Harrogate District Hospital</td>
<td>59</td>
</tr>
<tr>
<td>Scarborough Hospital</td>
<td>56</td>
</tr>
<tr>
<td>Bridlington Maternity Unit</td>
<td>15</td>
</tr>
<tr>
<td>Malton and Norton District Hospital</td>
<td>12</td>
</tr>
<tr>
<td>Whitby Hospital</td>
<td>10</td>
</tr>
<tr>
<td>Friarage Hospital (Northallerton)</td>
<td>66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>323</strong></td>
</tr>
</tbody>
</table>

109
### Table 2.6. Postal SIS-M questionnaire returns

<table>
<thead>
<tr>
<th></th>
<th>(SIS-M) sent</th>
<th>Returns 1st send</th>
<th>Returns 2nd send</th>
<th>Total returns</th>
<th>Return %</th>
</tr>
</thead>
<tbody>
<tr>
<td>York District Hospital</td>
<td>105</td>
<td>53</td>
<td>21</td>
<td>74</td>
<td>70</td>
</tr>
<tr>
<td>Harrogate District Hospital</td>
<td>59</td>
<td>25</td>
<td>7</td>
<td>32</td>
<td>54</td>
</tr>
<tr>
<td>Scarborough Hospital</td>
<td>56</td>
<td>30</td>
<td>3</td>
<td>33</td>
<td>59</td>
</tr>
<tr>
<td>Bridlington Maternity Unit</td>
<td>15</td>
<td>12</td>
<td>3</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>Malton and Norton District Hospital</td>
<td>12</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>83</td>
</tr>
<tr>
<td>Whitby Hospital</td>
<td>10</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>Friarage Hospital (Northallerton)</td>
<td>66</td>
<td>23</td>
<td>15</td>
<td>38</td>
<td>58</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>323</strong></td>
<td><strong>160</strong></td>
<td><strong>49</strong></td>
<td><strong>209</strong></td>
<td><strong>65</strong></td>
</tr>
</tbody>
</table>

### Table 2.7. Participant groups according to grade of employment

<table>
<thead>
<tr>
<th>Group</th>
<th>Grade</th>
<th>Number in group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>E</td>
<td>89</td>
</tr>
<tr>
<td>Group 2</td>
<td>F</td>
<td>58</td>
</tr>
<tr>
<td>Group 3</td>
<td>G</td>
<td>54</td>
</tr>
<tr>
<td>Group 4</td>
<td>Manager</td>
<td>8</td>
</tr>
</tbody>
</table>

| Total = 209 |
2.3.5.2. Internal Consistency

The internal consistency of the SIS-M was investigated by running a Cronbach alpha reliability analysis (Cronbach, 1951). A Cronbach alpha measures the extent to which the items within the scale are really measuring the same thing (Kline, 2000b). Alpha reliability coefficients range from 0 to 1.0, with higher values indicative of improved internal consistency. While there is no set value that must be obtained, alpha reliability coefficients of 0.60 are generally considered to be adequate for this type of instrument (Nunally, 1978), with Kline (2000b) and George and Mallery (2003) preferring results nearer 0.70.

The Cronbach’s alpha of the SIS-M was found to be 0.61 for time 1 (Pre-Interview Questionnaire), 0.68 for time 2 (Interview) and 0.65 for time 3 (Post-Interview Questionnaire), with all three exceeding Nunally’s criterion for acceptable instrument internal reliability. Since an increase in the alpha value is partially dependent upon the number of items on the scale (Kline, 2000b), were it to be lengthened then the coefficient may be raised. The items on the SIS-M were purposely limited since it was designed for use in an interview intended to last around one hour. Were the scale to be used in further studies, it is recommended that additional internal reliability analysis be conducted.

2.3.5.3. Exploratory Factor Analysis - Principal Components Factor Extraction Procedure

A principal components factor extraction procedure was chosen, which is consistent with previous research on screening measures (Jomeen & Martin, 2004a; Karimova & Martin, 2003; Martin & Newall, 2004). For a Principal Components Analysis (PCA), sample sizes should be 10 times larger than the number of items (Child, 1990), or a total sample size of no less than 100 (Hatcher, 1994; Kline, 2000a), 150 (Hutcheson & Sofroniou, 1999) or 200 (Gorsuch, 1983). Such inconsistencies in the estimated sample sizes clearly show that this procedure is not restricted to the specific aspects of the measure under investigation. As it happened, the 209 10-item questionnaire returns met all of the abovementioned criteria. Accordingly, exploratory factor analysis was performed on the SIS-M. The criterion chosen to determine that an extracted factor accounted for a reasonably large proportion of the total variance was based on an eigen value greater than one. A direct oblimin
oblique rotation procedure (West, 1991) was chosen due to the possibility that extracted factors may be correlated. To determine the condensed factor structure, a coefficient level of 0.30 was taken to indicate a substantive item factor loading. The PCA resulted in emergence of four factors with eigen values greater than one (see Table 2.8).

Table 2.8. Results of principal components extraction method

<table>
<thead>
<tr>
<th>Component</th>
<th>Total</th>
<th>% of variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.28</td>
<td>22.81</td>
<td>22.81</td>
</tr>
<tr>
<td>2</td>
<td>1.58</td>
<td>15.80</td>
<td>38.61</td>
</tr>
<tr>
<td>3</td>
<td>1.18</td>
<td>11.76</td>
<td>50.37</td>
</tr>
<tr>
<td>4</td>
<td>1.04</td>
<td>10.43</td>
<td>60.80</td>
</tr>
<tr>
<td>5</td>
<td>.88</td>
<td>8.77</td>
<td>69.57</td>
</tr>
<tr>
<td>6</td>
<td>.82</td>
<td>8.17</td>
<td>77.74</td>
</tr>
<tr>
<td>7</td>
<td>.71</td>
<td>7.05</td>
<td>84.80</td>
</tr>
<tr>
<td>8</td>
<td>.54</td>
<td>5.43</td>
<td>90.23</td>
</tr>
<tr>
<td>9</td>
<td>.54</td>
<td>5.38</td>
<td>95.61</td>
</tr>
<tr>
<td>10</td>
<td>.44</td>
<td>4.40</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The direct oblimin oblique rotation with loading criterion of 0.3 produced a four-factor terminal solution and a pattern matrix with all items loading onto four factors. These were labelled: Conformity (F1), Client Control (F2), Personal Control (F3) and Non-conformity (F4) (see Table 2.9 overleaf).

It is usual to regard factor loadings as high if they are greater than 0.6 and moderately high if they are above 0.3. (Kline, 1999). The positive or negative signs were interpreted as identical because they simply score at the opposite end of the scale (Kline, 1999). Kline (1999) recommends that Cattell's Scree test is an additional solution for selecting the correct number of factors. Consequently, a Scree test was carried out, which illustrates four factors with
### Table 2.9: PCA extraction method: showing the pattern matrix of items loading onto four factors

<table>
<thead>
<tr>
<th>Question</th>
<th>Component 1 (Conformity)</th>
<th>Component 2 (Client Control)</th>
<th>Component 3 (Personal Control)</th>
<th>Component 4 (Non-conformity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.193</td>
<td>-0.007</td>
<td>0.685</td>
<td>-0.013</td>
</tr>
<tr>
<td>2</td>
<td>-0.195</td>
<td>-0.121</td>
<td>-0.024</td>
<td>0.806</td>
</tr>
<tr>
<td>3</td>
<td>0.775</td>
<td>-0.019</td>
<td>-0.127</td>
<td>-0.053</td>
</tr>
<tr>
<td>4</td>
<td>0.766</td>
<td>0.001</td>
<td>0.118</td>
<td>-0.151</td>
</tr>
<tr>
<td>5</td>
<td>0.058</td>
<td>-0.790</td>
<td>0.014</td>
<td>0.123</td>
</tr>
<tr>
<td>6</td>
<td>0.609</td>
<td>-0.094</td>
<td>0.113</td>
<td>0.298</td>
</tr>
<tr>
<td>7</td>
<td>-0.088</td>
<td>-0.282</td>
<td>0.657</td>
<td>0.177</td>
</tr>
<tr>
<td>8</td>
<td>0.225</td>
<td>0.349</td>
<td>0.183</td>
<td>0.576</td>
</tr>
<tr>
<td>9</td>
<td>0.031</td>
<td>-0.853</td>
<td>0.147</td>
<td>-0.141</td>
</tr>
<tr>
<td>10</td>
<td>-0.226</td>
<td>-0.357</td>
<td>-0.496</td>
<td>0.380</td>
</tr>
</tbody>
</table>

eigen values above one and a possible point of inflection between the fourth and fifth factor (see Figure 2.1 overleaf).

The subscale domain of **Conformity** (items 3, 4 and 6) pertains to compliance or obedience with prescribed orders; **Client Control** (items 5 and 9) with desire to influence the choices of childbearing women; **Personal Control** (items 1, 7 and 10) with rejection of external influence; and **Non-conformity** (items 2 and 8) with arguing with authority figures over care decisions.
2.3.5.4. Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is a special case of structural equation modelling, which tests the fit of an a priori specified model against the data. Since exploratory factor analysis will always attempt to produce a factor structure, CFA is useful in determining if the model accounts for most of the variance within the model specified. In this way, CFA can determine if the model offers an acceptable good fit to the data. Comparatively, PCA is an example of "exploratory factor analysis", while CFA is a special case of structural equation modeling to test a model; in this case, against the uni-dimensional single-factor model comprising a global dimension of conformity.

CFA represents a statistical technique that is both powerful and reliable in determining the underlying factor structure of measures used in a broad range of clinical practice (Martin, Lewin & Thompson, 2003; Martin, Tweed & Metcalfe, 2004), including obstetrics and gynaecology (Jomeen & Martin, 2004).
Consequently, CFA was performed on the 10-item scale to test the a priori specified hypothesis that a four-factor correlated model would offer a significantly better fit to the data compared to a uni-dimensional single-factor model (comprising a global dimension of conformity). The CFA was conducted using MPlus version 3 (Muthen & Muthen, 1998-2004).

The results of the CFA revealed that a uni-dimensional model of conformity offered a poor-fit to the data using standard model fit statistical conventions (Hu & Bentler, 1995) (Satorra-Bentler scaled $\chi^2$ (d.f. = 35) = 128.25, $p < 0.001$, comparative fit index = 0.54, root mean square error of approximation = 0.11). A comparative fit index of 0.9 or greater indicates a good fit to the data (Marsh, Balla & McDonald, 1988). A root mean square error of approximation with values of less than 0.08 indicates an acceptable fit to the data (Browne & Cudeck, 1993). A statistically significant $\chi^2$ indicates that a significant proportion of variance is unexplained by the model tested (Bentler & Bonett, 1980). However, the four-factor correlated model was found to provide a good fit to the data, Satorra-Bentler scaled $\chi^2$ (d.f. = 29) = 54.53, $p = <.001$, comparative fit index = 0.9, root mean square error of approximation = 0.06.

CFA findings suggest that the SIS-M comprises four sub-scales that measure distinct but correlated domains of Conformity, Client Control, Personal Control and Non-conformity (see Figure 2.2 overleaf).

Obviously, these domains are comprised of relatively few items (2-3 items per factor). However, they have been observed to offer an excellent fit to the data and provide a sound psychometric basis for developing the SIS-M into a multi-dimensional measure of conformity with the addition of further items.

2.3.6. Scale Development Conclusion
The SIS-M was demonstrated to be a potentially useful measure of conformity for research into midwifery practice and behaviour. The current investigations have revealed that the SIS-M has additional potential in terms of development as a multi-dimensional measure of conformity. A multi-dimensional measure of conformity would be extremely valuable in determining the specific domains of
obedience and conformity that differentially impact on the acquiescent behaviour of midwives, and may also be evaluated in terms of predictive potential of maternal outcomes.

To justify using the one-dimensional SIS-M in the present study. The PCA and CFA have shown that the 10 items of the SIS-M might appropriately be described in terms of 4 dimensions or subscales. This means that the four subscales behaved differentially when confronted with external criteria. The issue of whether a construct is one dimensional or not does not seem to be unequivocally defined, but the understanding seems to be that if a test is one dimensional, the items measure the same phenomenon (Cronbach, 1984). For example, it is not unusual that domain specific items intended to measure the same phenomenon tend to be one-dimensional and that this results in a
strong first factor. That is to say, a so-called general factor that accounts for a substantial part of the variance among the items. This is then followed by a gradual decrease of the explanatory power of the subsequent factors. In other words, most items should have considerably higher loadings on the first factor than on subsequent factors (Carmines & Zeller, 1979). The PCA results of the present scale assessment support this statement. Further justification for using the one-dimensional SIS-M, is the fact that the test retest results present a reasonable correlation between the two observation points. Empirical observation that the internal consistency of the 10 items was satisfactory (according to Nunally, 1978) further supports the case.

A further pertinent issue against the current use of the SIS-M as a four sub-scale instrument concerns the number of items per sub-scale. The range between two and three items per sub-scale represents a critically small number of items to obtain optimal validity and reliability. Future revision of the SIS-M into a longer version may facilitate the development of the instrument into a multi-dimensional scale with useable sub-scales based on those identified in the factor analysis of the original version.

In conclusion, the SIS-M has enormous potential as both a unitary and multi-dimensional measure of conformity to facilitate insight into the impact of perceived authority on midwives' behaviour, clinical decision-making and ultimately, clinical effectiveness.
CHAPTER THREE

Measuring Social Influence of a Senior Midwife on Decision-making in Maternity Care: Study One

3.1. Introduction - Study One

This thesis deals with communication processes between midwives, with particular focus on how subordinates perceive and respond to the guidance of a person in authority. Of particular interest is the response behaviour displayed when a senior midwife attempted to influence a subordinate to respond to a clinical decision in a specific way.

Interest was initiated by a UK social policy document - Changing Childbirth (DoH, 1993). In the late 1980s, pressure groups - the NCT (National Childbirth Trust) and AIMS (Association for Improvements in the Maternity Services) - had voiced to the government their discontent about active management of labour that did not take women's wishes into account (Cross, 1996). In 1992, the House of Commons Health Committee commissioned a national research study chaired by Nicholas Winterton. The Winterton Report provided evidence that many women felt disempowered in relation to choice and control over their birth experiences. In 1993, the UK government produced the Changing Childbirth Report, which firmly placed choice and control in the hands of women:

The woman must be the focus of maternity care. She should be able to feel she is in control of what is happening to her, and able to make decisions about her care, based on her needs, having discussed matters fully with the professionals involved. (DoH, 1993, p. 9).

Changing Childbirth (DoH, 1993) has presented midwives with the ongoing challenge of developing a woman-centred service, within an environment underpinned by hierarchical control. A time scale of 5 years was proposed; however, many maternity units still fall short of agreed targets (ENB, 1997). This study examines the issue of whether a midwife, who refuses a particular request from a childbearing woman, can legitimise this by invoking justification of instructions from a senior. The major complaint that emerged from Changing Childbirth (DoH, 1993) was that the decisions made often did not reflect the preference of the woman. This practice violates the provision of “women-centred care” on two counts: first, that a woman should be provided with informed choice; second, that the woman should be in control of her birth experience.

The choice provision directed by Changing Childbirth (DoH, 1993) may be difficult to achieve in a hierarchy that appoints people to positions of authority. Once in position, authority has the power to redefine norms and objectives (Haslam, 2001), which may or may not conflict with a childbearing woman’s choice to have a particular style of pain relief, to adopt alternative positions in labour, or to have several “birth partners” present at her birth. None of these activities present threat to maternal or fetal outcome and therefore ought to be “client-led”. This raises the important issue of what salient features within the environment of a maternity unit make it difficult for midwives to perceive an appropriate response as one that is the preference of a particular woman in her care.

The literature review has shown that within hierarchical relationships, individuals have a propensity towards obedience to authority, 65% depending on experimental variation (Milgram, 1974, see also Holland, 1967; Mantell, 1971; Sheriden & King, 1972; Kilham & Mann, 1974; Shalala, 1974; Shanab & Yahya, 1977; Meeus & Raaijmakers, 1995). This parallels the situation in many natural field settings, such as a hospital where a physician may order a nurse to give “unauthorised” medication to a patient (Hofling et al., 1966). Asch (1955) also showed conformity in his line judgement task with one in three (37%) participants yielding to group pressure (see Bond & Smith, 1996 for reviews). Interest in obedience and conformity has also been extrapolated from laboratory studies in order to further our understanding of social influence.
in the wider world (e.g., Blass, 1991, 1992, 1993; Mastrioanni, 2002; Meyer, 2003).

These issues can be located within a broader and well-established research agenda. Obedience experiments highlight the importance of superordinate-subordinate relationships in which people become the agents of a legitimate authority to whom they relinquish responsibility for their actions (Krackow & Blass, 1995). Once they have done so, their actions are no longer guided by their conscience and by their perception of best practice, but by the adequacy with which they have fulfilled authority's wishes. Such experiments show that the majority readily relinquish their cognitive and social moral competence and therefore lose the capacity to decide in favour of a person lower in the hierarchy (Milgram, 1974). Hence, junior midwives may be presented with moral conflict between a drive for obedience to authority and their role as advocate for women. This makes obedience and its relationship to clinical decision-making in midwifery a highly significant issue.

To date, no study has examined social influence within midwifery practice. Accordingly, an attempt has been made to provide insight into the dynamics of social influence of superiors upon the decisions of more junior midwives. A formal test was devised to measure the effects of social influence from a high status midwife on decision-making within midwifery practice. The intention was to test a subgroup of highly qualified nurses, specifically midwives, and to determine their degree of acquiescence with suggestions made by a senior midwife. The focus was upon decisions that were within the midwives' job remit, pertained to normal care and should more often be the choice of the childbearing woman. Of particular interest was the response behaviour of the junior midwife when a senior midwife attempted to socially influence her decision via an authoritative communication that advised on a particular aspect of an issue.

Meeus and Raaijmakers (1995) instructed participants to insult a job applicant and obtained 91% obedience. Likewise, when a senior midwife makes a suggestion to a junior midwife, this may be interpreted as an instruction. Alternatively, the junior midwife may conform to normative social influence and feel pressurised to agree with the decision in order to fit in with the group, as shown in the classic Asch (1952, 1956) experiments.
It was anticipated that the participating midwives would perform high on a measure of social influence, by showing acquiescence with direction offered by a senior midwife during an interview. In this particular study, the authority figure has been changed from a psychologist to a person of the same social identity, i.e., a midwife, specifically a lecturer in midwifery. This position has significant relative status and is equivalent to midwifery manager (Fuell, 1999). The role is associated with extensive educational qualifications and is senior in the hierarchy to all of the midwives who participated in the study. Accordingly, it seemed reasonable to anticipate a large social influence effect from the senior midwife during the interview condition of the study. This study addressed three research questions:

1. Are junior midwives' decisions socially influenced by those who have higher status in the workplace?

2. Does position within the hierarchy alter a midwife's susceptibility to social influence from a senior person?

3. Do midwives prioritise acquiescence with a senior person over and above providing choice and control to childbearing women?

3.2. Method - Study One
3.2.1. Participants
The study assessed a representative sample of 60 midwives, recruited from the 7 maternity units of North Yorkshire. These individuals were randomly selected from the 209 midwives who had participated in the scale development study reported in Chapter Two. All of the participants were volunteers and had signed a written informed consent statement prior to involvement in the study. The total number of midwives approached and who satisfied the inclusion criteria was 62. Two declined the offer made, making the sample size 60. Participants were assigned to three experimental groups (20 E, F and G grades), as this represented a cross-section of the midwifery population as a whole (for explanation of the grading structure see p. 100)
3.2.2. Sample Sizes

It was difficult to obtain the large sample sizes required (n = 60). Managers of the 7 maternity units in North Yorkshire were approached and appointments made to discuss authorisation for data collection to commence. Each case was taken before a committee and after four months in total, permission was granted for the study to begin. Each midwife was personally invited by the researcher to participate in the study. Individual appointments and rooms were booked at each of the maternity units. The researcher negotiated time-out of her work schedule in order to carry out data collection; this included travel hours to the hospital site and enough time time to comfortably conduct the interview. Many of the interviews took place in the evenings, at weekends and during night shifts.

3.2.3. Dependent Variable

Appropriate validity and reliability tests were performed in the construction of the SIS-M (discussed in Chapter Two). The SIS-M is scored using a 5-point Likert scale based on level of agreement with each statement. Five of the items of the SIS-M are reverse scored and the possible range of scores is 10-50 where a score of 10 is least conformist and a score of 50 is most conformist. An example is given below:

(2) I would argue with the consultant if he refused to support a home confinement when a mother with a healthy pregnancy is keen to have one.

<table>
<thead>
<tr>
<th>Scores</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

7 Note: The scores are just for illustration and are not shown on the questionnaire.
3.2.4. Design

The study used a longitudinal within-participants design. The observations were taken at two points described below:

**Condition One (C1) - The Pre-Interview Questionnaire**

At the first observation point, the Pre-Interview Questionnaire (see Table 2.1 & Appendix One) was used to measure participants' responses to the 10 SIS-M questions in a situation in which the midwife provided her own opinions with no social influence applied. The questionnaire was sent as a self-complete postal survey to 323 midwives; 209 (65%) were returned.

**Condition Two (C2) - The Interview**

At the second observation point, after a 12-month time gap, the Interview Schedule (see Appendix Five) was used to measure 60 participants' responses to the 10 SIS-M questions in a situation where social influence was brought to bear by the senior midwife. The senior midwife, by making her preferred responses explicit, endeavoured to socially influence the participating midwife's SIS-M responses in a conformist direction and accordingly increase SIS-M scores.

For each SIS-M question asked, the participating midwife was placed in a virtual clinical situation. The objective was to convey a situation as close to clinical reality as possible and by doing so improve the ecological validity of the experiment. First, a short plausible clinical case study was presented. Second, after reading the short case study, the senior midwife introduced items of information intended to support her argument. In this way, the authority figure attempted to influence the midwife's responses to the questions in a conformist direction.

Having heard the senior midwife's point of view, the midwife was asked to select her response to the SIS-M question on the 5-point Likert scale provided. All 10 SIS-M questions were addressed in this format. On interview completion, the midwife was debriefed and contact details provided. Sixty individual consecutive interviews adhered strictly to the same process.

The Pre-Interview Questionnaire (C1) provided a baseline against which the Interview (C2) measure was compared. The change in SIS-M
response between the private and public condition substantiated whether social influence from the senior midwife was successful at causing the participant to acquiesce with her point of view. Both measures were scored and compared to ascertain whether or not the senior midwife was successful at socially influencing the midwives' SIS-M responses in a conformist direction.

It was also predicted that high status midwives would show less acquiescence with the direction offered by the senior midwife during the interview condition. Dividing the participating midwives into grades of employment (20 E, 20 F, 20 G grade) allowed the experimenter to test whether social influence interacts with grade of midwife.

3.2.5. Format of the Interviews

The interviews were carried out within the participating midwife’s clinical area of employment, often in empty delivery suites and ward side rooms. One condition of the selected environment was its suitability for tape recording the event. Consent was sought vis-à-vis recording the interview; no one refused. On average, the interview process lasted approximately one hour. SIS-M question two (Q2) has been selected to illustrate the process:

**Interview Excerpt**

A case study was presented to the participating midwife before each SIS-M question, e.g., in Q2:

Ann Priestly is a 39-year-old primigravida attending the antenatal clinic at 24 weeks gestation. Having discussed the idea of a home confinement, Ann and her husband decide they would like to investigate this as an option. Blood pressure, urinalysis, scan, medical and surgical history all appear at the moment uncomplicated. The consultant obstetrician expresses disapproval when the idea of a home confinement is raised stating that although Ann is healthy her age may bring problems.

---

8 A glossary of terms has been provided in Appendix Two to aid understanding of the specific obstetric terms used.
A senior midwife read aloud information intended to influence the participating midwife's response in a conformist direction, e.g., in Q2 items introduced were:-

**Item 1** - The organisation we work within imposes a system called Risk Analysis, which is designed to provide optimum care to childbearing women. According to this system Ann would be safer having her baby in hospital.

This item was designed to remind the participant that “safety scoring identifies factors which increase risk of adverse outcome” (Enkin, Keirse, Neilson, Crowther, Duley, Hodnett & Hofmeyr, 2000, p. 49). The aim was to arouse fear of potential complications, even when the woman in the virtual case study clearly has a healthy pregnancy.

**Item 2** - Ann is a reasonable woman, one of 95% who accepts advice of professionals, even when option of having her baby in hospital is second best.

This item reminds the participant that most people seek expert advice on matters they know little about. Likewise, the woman in the virtual case study is likely to appeal to the expert who disapproves of home confinement.

**Item 3** - Midwives often struggle to maintain good relationships with consultants, which could be damaged through challenge, particularly if things go wrong.

This item highlights that work associations are important and that arguments may be destructive for future relationships.

**Item 4** - The organisation places consultants in the position of highest authority therefore it is unfair and unsupportive to attempt to control what he considers is best management.

This item suggests that it is ambiguous to expect a consultant to lead care in one situation and not another.
The general intention was to make explicit the preferred response of the senior midwife to the SIS-M question. On this issue, the interviewer Strongly Disagreed with the question asked.

(3) I would argue with the consultant if he refused to support a home confinement when a mother with a healthy pregnancy is keen to have one.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

Throughout the interview process, each question was preceded with different case studies and items of information. The complete interview schedule can be viewed in Appendix Five.

3.3. Results - Study One

The participating midwives’ global SIS-M scores were calculated according to study condition and grade. Scoring was simply a cumulative operation that assigned a score of 1-5 to each of the 10 SIS-M responses; five represents the most conformist response and one the least. A score of 50 represents 100% acquiescence with the senior midwife’s opinions during the Interview (C2). The principal data on these inventories can be viewed in Appendix Six.

By inspection of the total SIS-M scores, it became evident that there were large disparities between the private (CI) and public (C2) measures. Consequently, an analysis of variance (ANOVA) was carried out to determine whether there were significant differences in SIS-M scores between the grades and conditions.

A 3 (E, F & G grade midwives) x 2 (Condition) ANOVA was carried out. There was a significant main effect for condition, (F (1,57) = 249.62, p = 0.001), with higher scores on the public measure (for means and standard deviations see Table 3.1 overleaf). No significant interaction between grades and conditions was found (F (2,57) = 0.59, p = 0.56). No effect of midwife grade was observed (F (2,57) = 2.12, p = 0.13). The results of the ANOVA test showed that the means from the private and public conditions are significantly different from each other. Figure 3.1. overleaf illustrates this schematically.
Table 3.1. Means and standard deviations of scores on the SIS-M as a function of condition type and midwife grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Condition</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private (C1)</td>
<td>Public (C2)</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>23.75 (3.82)</td>
<td>35.10 (6.21)</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>23.55 (4.59)</td>
<td>36.95 (5.46)</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>21.65 (3.66)</td>
<td>33.75 (5.72)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22.98 (4.09)</td>
<td>35.27 (5.86)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3.1. Schematic illustration of mean scores on the SIS-M as a function of condition and midwife grade
A correlation of the Pre-Interview Questionnaire (CI) and Interview (C2) measures reveal that not only did SIS-M scores increase significantly (see Table 3.2), but also that they did this in a linear fashion, as shown by the significant positive correlation between the two conditions (see Figure 3.2 overleaf).

Table 3.2. Correlation between Pre-Interview Questionnaire (CI) and Interview (C2) SIS-M scores

<table>
<thead>
<tr>
<th></th>
<th>C1 Total</th>
<th>C2 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C1 Total Pearson Correlation</strong></td>
<td>1.000</td>
<td>0.319*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.013</td>
</tr>
<tr>
<td>N</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td><strong>C2 Total Pearson Correlation</strong></td>
<td>0.319*</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)
Figure 3.2. Graph illustrating the positive linear correlation between the Pre-Interview Questionnaire (CI) and Interview (C2) SIS-M scores

Note: Each "petal" of the sunflower represents a correlation score. Therefore a sunflower with 6 petals represents 6 identical scores. The fit line illustrates the linear correlation is positive.

For the present analysis, a difference was identified between a readiness to speak up to others, i.e., challenge another's opinion (resistance), and a readiness to be influenced by another (acquiescence). The disparity between conditions of obedience and acquiescence is that the former refers to a behavioural response to an instruction from a person in authority, while acquiescence includes aspects of consideration and agreement with that person (for further explanation see Chapter 1, Subsection 1.5.7, p. 92). In the present study the senior midwife did not explicitly command the junior midwife to respond in a particular way. She simply shared her preferred SIS-M response with the junior midwife and then asked for her viewpoint.
Table 3.3. presents an overall picture of the participating midwives' acquiescent or resistant responses to social influence from the senior midwife. An increase in acquiescence is evident from the rise in number of participating midwives who acquiesced with what was recommended by the senior midwife in the public condition (C2). The overall increase in numbers of acquiescent midwives is markedly evident in all 10 SIS-M questions.

Table 3.3. Increase in numbers of midwives who acquiesced with the views of the senior midwife in the interview (C2) by SIS-M question

<table>
<thead>
<tr>
<th>SIS-M Question</th>
<th>Acquiesced in Private CI n = 60</th>
<th>Acquiesced in Public C2 n = 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>39</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>48</td>
</tr>
<tr>
<td>5*</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>57</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
<td>43</td>
</tr>
<tr>
<td>9*</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>44</td>
</tr>
</tbody>
</table>

Mean 7.5 40

* = There were proportionally high levels of resistance to questions 5 and 9

The total mean SIS-M scores from the present study (see Table 3.1) were converted into percentages so that a direct comparison could be made with Milgram's Experiment 7 and 2 (see Table 3.4 overleaf).
Table 3.4. A comparison of Condition 1 and 2 results with Milgram’s (1974) experiments 7 & 2

<table>
<thead>
<tr>
<th>Experiments</th>
<th>Private Condition %</th>
<th>Public Condition %</th>
<th>Percentage Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milgram</td>
<td>20.5</td>
<td>62.5</td>
<td>42</td>
</tr>
<tr>
<td>Hollins Martin</td>
<td>46</td>
<td>71</td>
<td>25</td>
</tr>
</tbody>
</table>

For the purpose of emphasising the amount of social influence a high status midwife can have upon junior midwives’ decision-making, *Table 3.5.* shows the percentage of participants who acquiesced, resisted or neither agreed or disagreed in the Pre-Interview Questionnaire (C1) and Interview (C2). This is discussed later on (p. 132).

Table 3.5. Percentage of participants who acquiesced, resisted or neither agreed or disagreed in the Pre-Interview Questionnaire (C1) and Interview (C2)

<table>
<thead>
<tr>
<th>SIS-M Question</th>
<th>Condition 1 (Pre-Interview Questionnaire)</th>
<th>Condition 2 (Interview)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acquiesced %</td>
<td>Resisted %</td>
</tr>
<tr>
<td>1</td>
<td>28</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>72</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>52</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>67</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>92</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
<td>55</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>95</td>
</tr>
<tr>
<td>8</td>
<td>28</td>
<td>44</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>83</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>80</td>
</tr>
</tbody>
</table>

n = 60 participants in both C1 and C2
Note: SIS-M questions can be viewed in *Table 2.1*
3.4. Discussion - Study One

Results showed that after the study intervention, midwives scored significantly higher on a measure of social influence. The intervention was targeted at making responses more conformist and was successful in this respect. Social influence might have resulted from at least three probable sources. First, through obedience that stems from an authority figure (Milgram, 1974). Second, from perceived group pressure to conform and “be like others” (Asch’s, 1952, 1956). Third, as a consequence of the participating midwife perceiving the senior midwife as a credible, expert and trustworthy source of knowledge (Hass, 1981). The change in response from a prior private answer to the one recommended by the senior midwife provided insight into the participating midwife’s individual style of conflict resolution.

On viewing Table 3.4, it can be seen that the 71% SIS-M score in the public measure (C2) is similar to the 62.5% Milgram (1974) obtained in his laboratory Experiment 2 (Table 1.7); which also represents a condition in which an authority figure directs a participant to respond in a particular way. This comparison is not exact since the two situations some what differ.

The similarities between the two studies lie in their success at producing acquiescent behaviour from participants. The measure of 46% SIS-M score obtained from the private measure (C1) (see Table 3.4) is comparable to Milgram’s Experiment 7, in which the experimenter absented himself from the laboratory with a consequential decline in participants’ obedience to 20.5% (see Table 1.7).

There are of course fundamental differences between Milgram’s experiment and the present study. In this experiment, the authority figure simply shared her preferred SIS-M responses with the participating midwife, whereas Milgram issued direct orders. Had the senior midwife similarly demanded obedience from the junior midwife, levels of acquiescence may have been raised. Also, in the present experiment the midwives’ social influence scores were measured using a scale, whereas Milgram’s percentages were calculated on participants who administered up to the maximum shock.

Results of the analysis of variance showed no significant effect for midwife grade. Whether the midwife was employed at E, F or G grade made
no difference to the success of the social influence in changing participants' viewpoints. The failure to find any effect due to relative position within the hierarchy may have been because the interviewer's status was higher than all three groups of E, F and G grade midwives. Had the interviewer been an F grade results may have differed. If one considers that a senior midwife was able to obtain acquiescence from junior midwives, it is reasonable to assume that a midwife of lesser rank could also obtain cooperation as long as the participant was "a grade or more below" in the hierarchy. Equally, just as Milgram did not elicit the same amounts of obedience from all participants, the senior midwife was unable to obtain matching levels of acquiescence from all of the midwives.

Milgram's (1974) experiments (see Chapter One) confirm that obedience occurs in response to authority, with action flowing from the higher end of the social hierarchy to the lower, with the participant responsive to signals from a level above his own, but indifferent to those below it. Within this study all the participants were lower in status than the interviewer, therefore one could anticipate a large social influence effect. Comments made by several participants confirmed the relationship of status to obedience:

"I am more likely to do what a senior person says. Their decisions are more valid because of their position".

"I would listen because after all she is more experienced than me".

Pro-social obedience and conformity is essential within hospitals, as people seek out suitable advice and follow orders that are typically well informed and of sound intention. If they did not do this, patients would fail to receive appropriate medication and treatment. For example, a midwife who failed to respond to instruction to give an anti-hypertensive medication may cause an eclamptic fit. However, there are occasions when a person in authority expresses a preference that should be the personal choice of the woman concerned, quite simply because no dangerous consequences would result from her preferred option. Examples might be a woman who wants multiple birth partners present at her delivery, a water birth or entonox for pain
relief. In such situations, obedience or conformity with another midwife’s view constitutes failure to provide woman-centred care.

The Pre-Interview Questionnaire (C1) focused attention on what participants said they would do when placed within specific clinical situations. This provides clear information on how these midwives expected their behaviour to unfold in the given set of circumstances. Acquisition of this information allowed assessment of the impact of the Interview (C2). In other words, the result of the private measure (C1) provided a benchmark from which to see how much or how little could be learned from the experiment. The disparity that is evident between how the participating midwives expected to behave in the given circumstances and what actually occurred in the public measure (C2), presents the problem of accounting for the gap. Is this prior belief an expression of ignorance about actual behaviour or does it perform some definite function in social life? What has been shown is the propensity of midwives to see themselves in a favourable light, with their care provision taking into consideration the personal preferences of the childbearing women in the case studies. All three groups of E, F and G grade midwives performed with remarkable similarity in predictions of their own behaviour.

SIS-M question 6 has been selected to example the amount of social influence a high status midwife can have upon a junior midwives’ decisions. In SIS-M question 6, in the private measure (C1) only 17% of the participants agreed they would automatically commence cardiotocography (CTG) when a senior member of staff requests it. In contrast, during the public condition (C2) 95% of the participants agreed with the request. That is, during the interview, an additional 78% of the midwives acquiesced with the senior midwife’s suggestion to perform the CTG (see Table 3.5). Similarly, in the private measure (C1) 55% of the participants disagreed that they would follow the senior person’s direction to commence the CTG. In contrast, during the public measure (C2), only 2% of the junior midwives resisted social influence.

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9 Note: The National Institute for Clinical Excellence guidelines (NICE, 2001) state in section 2.3. For a woman who is healthy and has had an otherwise uncomplicated pregnancy, intermittent auscultation should be offered and recommended in labour to monitor fetal well-being. Current evidence does not support use of admission CTG in low risk pregnancy and it is therefore not recommended. In section 2.2 it states that the provision of accurate information in these circumstances is essential to allow the woman to make the right decision.
from the senior midwife. The two remaining midwives opted out of answering the question by providing a neutral response. That is to say, they neither agreed or disagreed with the senior midwife.

So what are the assumptions that underlie these midwives predictions of their own behaviour in the private measure (C1)? First, that midwives by and large consider themselves committed to the rhetoric of woman-centred care. Second, that unless influenced by a resolute senior person the midwife is pre-eminently the source of her own behaviour. The midwife acts in a particular way because she has decided to do so. Her behaviour flows from an inner core of her person, from a place where values are weighted, best action is assessed and resultant decisions are translated into action. The results of the private measure (C1) inform us that most midwives start with such presuppositions when asked to think about their own behaviour in a given situation. They focus on their own autonomous character rather than on the situation in which they find themselves and their sense of their own competence. With this view, they are likely to expect themselves to behave in a resistant manner to the influence of a senior midwife and to act in the interests of the childbearing women for whom they care.

The fact is, that the Interview (C2) results have shown that midwives feel obliged to acquiesce with a senior person because of the presence of powerful situational forces. What is clear is that when conflicts arise, acquiescence with the senior person is often prioritised over playing advocate for the childbearing woman's choice. Another important observation based on a descriptive account of the data, is that fewer midwives changed their stances in questions 5 and 9 (see Table 3.3):

(5) I believe that it is acceptable for a women to have more than one “birth partner” present during labour when the unit policy states only one person at a time.

(9) I would allow a women to have her two friends and husband present during labour and delivery if this is what she wanted.

This may be because midwives find it easier to resist social influence from a senior person in specific situations. In these two questions, a number of participants' comments showed that resistance to the senior midwife's
direction occurred because they found it easier to defend these particular decisions. For example, one midwife commented:

This is different for me because it is not litigation. This is more about the woman's choice and not disempowering her as soon as she walks through the door. So I would be prepared to actually be an advocate on this one and emm keep the folk in (visitors in the delivery room), unless she herself said she wanted them out. It could be actually that these sisters of hers, she needs them, I find this acceptable.

Quite simply, it is easier to justify allowing extra people in the delivery room because there are no direct obstetric complications that can arise as a result of this action. In the other questions, fear of negative obstetric consequences from a particular decision may have caused participants to appeal to another for guidance on how to behave, consistent with the experimental findings of O'Leary and Aronson (1983). As Milgram (1974) put it, when a person does not have the time or the ability to contemplate their actions carefully, the likely result is that they may bow to the perceived legitimate power of the authority figure and all that they represent.

Some Implications for Practice

These results have important consequences for evaluating the care that maternity care providers offer to childbearing women. The clear fact that a hospital hierarchy is in place makes it predictable that those who are senior in the chain of command will influence acquiescence of more junior staff. This conflicts with the idea that midwives should work as autonomous woman-centred practitioners.

One response to these findings is that senior hospital staff should be made aware of the characteristics that affect a subordinate's perception of their direction. A second response would be for midwifery officialdom to provide clearer definition of roles and responsibilities for each member of staff, as this would reduce confusion over the limits of each practitioner's responsibilities. As midwives often perceive a duty to acquiesce with direction
offered by a senior person over and above playing advocate for women’s choice, another solution would be to flatten the hierarchy.

If this response is considered unworkable, those who are higher in the hierarchy must do for the subordinate what she cannot do for herself in terms of interpreting direction from authority. Senior staff should be required to incorporate the women-centred element into their direction. They ought to be unambiguously accountable for the direction that they give. Such guidance must include the preference of the childbearing woman to whom it relates, as long as it is a safe option and does not present a serious threat to mother or fetus. Clearly the question arises as to how this may be done. If the senior member of staff wants a task undertaken that ignores an input from the childbearing woman, that individual must have the integrity to tell the junior midwife during the decision-making process that this is the case. If the decision excludes the childbearing woman from having a choice about the care she is to receive, the commissioning senior person should admit that this is so. This would allow the junior midwife to know the truth before electing to acquiesce. If the junior midwife then proceeds to submit to the senior person’s point of view, they would also quite clearly be responsible for the decision to exclude the woman from the decision-making process.

To ensure a fair hearing takes place, a schedule could be devised in which the decision to be made is clearly identified and recorded, e.g., Mrs X has requested a home confinement. In this to-do list, the professionals involved would be expected to record that they have provided the woman with evidence-based information upon which to underpin an informed choice. Once this has been done, the choice of the childbearing woman may be clearly written in black and white. Any obstructions to the choice are then clearly outlined, e.g., implications of cost, lack of facilities or staff, risks to mother or fetus etc. The actual outcome decision is then unambiguously recorded. Lastly, all three parties sign the schedule, i.e., the childbearing woman, the care providing junior midwife and the senior member of staff. Without a doubt, such procedures would make it extremely difficult for maternity care staff to ignore the childbearing woman’s opinion without providing significant reasons for doing so.
These solutions are a response to the findings of the present experiment, which supported the hypothesis that junior midwives will acquiesce to direction offered by a senior person. The results raise several further questions: (1) What specific variables in the environment of a maternity hospital produce such a pronounced social influence effect? (2) What are some of the ingredients of those conditions that make it difficult or even impossible for subordinates to perceive the appropriate response as one that is evidence-based and/or the personal preference of a particular woman in her care?

3.5. Conclusions - Study One

It was predicted that midwives would perform highly on a measure of social influence by acquiescing with the direction offered by the senior midwife in the public condition. Social influence was measured by comparing the midwives' SIS-M scores between two conditions: (C1) a private postal condition, and (C2) an interview in which a senior midwife made her preferred responses explicit. The senior midwife was repeatedly successful at socially influencing midwives to acquiesce with her point of view; consequently the first research hypothesis was supported.

It was also hypothesised that position within the hierarchy would affect midwives' susceptibility to social influence from a senior person. Dividing the interview participants into grades of employment allowed the researcher to test whether SIS-M scores interacted with grade of midwife. Results showed that midwives of differing employment grades performed no differently on the measure of social influence, hence the second hypothesis was not supported.

Results also showed that a senior midwife was able to influence decisions that should in fact more often be the choice of the childbearing woman at the centre of the care provision; hence the third research hypothesis was supported. What is clear is that when a hierarchy exists, the senior person is likely to socially influence decisions that are made. That is, the senior person is likely to take the lead over the care that is given, even when another has built up a picture of the childbearing woman's birth values and personal preferences.
Since complicated procedures often get in the way of clear scrutiny of the phenomenon itself, it is important to clarify and rule out potential alternative explanations for the large main effect observed in the present experiment. It may be a mistake to believe that obedience or conformity are the only cause for midwives to acquiesce with senior members of staff. What is obviously questionable is whether the participating midwives' SIS-M decisions were changed by social components of the relationship between the junior and senior midwife, or by the education that was shared during the interview discourse; it is important to rule this out as a possibility. It is also important to know if the participating midwives just complied with the recommendations of the senior midwife for an easier life. Specifically, whether they just went along with what the senior midwife suggested while holding a different opinion. This has important implications for midwifery practice, since the answer would inform whether the junior midwife would make a different decision were she allowed to work as an autonomous practitioner who is independent of hierarchical control. This is the focus of the next chapter (Chapter Four).
CHAPTER FOUR

Alternative Explanations for the Social Influence Effect

4.1. Introduction - Studies Two and Three

The findings of the first study are of important clinical value. The data showed that a senior midwife was significantly successful at socially influencing midwives' decisions. A situation was created in which an authority figure socially influenced junior midwives to perform an observable action, i.e., to change views they claimed in private in order to agree with what was proposed by a senior midwife. This concurs with the observation that nurses will agree with an irregular order from an authority figure (Hofling et al., 1966) and feel pressurised to conform (Ahern & McDonald, 2002; Kirkham, 1999; Stapleton, Kirkham & Thomas, 2002).

The subject matter of any psychological investigation obviously requires interpretation by the investigator. It is not simply "given". This inevitably poses problems for explanation. It is therefore simplistic to assume that obedience and conformity are the only cause for a midwife's acquiescence with direction given by an authority figure. Since complicated procedures often get in the way of clear scrutiny of the phenomenon, it is important to clarify and rule out potential alternative explanations for the large main effect observed in Experiment One.

Consequently, two further studies were designed: The first – Study Two - sought to ascertain whether decision changes in the first experiment were caused by social components of the relationship between junior and senior midwife, or by education shared during the interview discourse. The second - Study Three - tested the durability of the social influence obtained during the interview. It sought to observe whether the participating midwives simply went along with what the senior midwife suggested or actually altered their opinions to fall in line with her point of view (compliance or opinion change).
4.2. The Workbook Study - Study Two

The second study was intended to extend the observations of Study One. A workbook study sought to ascertain whether decision changes in the above experiment were caused by social components of the relationship between junior and senior midwife, or by the impact of educational material provided during the interview discourse.

Hofling et al. (1966) noted that nurses generally wish to be considered professional people in their own right. This active orientation involves the mastery of a body of knowledge, application of intelligence and exercise of judgment, and the assumption of taking responsibility for patients. This type of motivation is reinforced by nurse education, particularly in the current climate of accountability (Dimmond, 2002b; Newton & Johnson, 2000), reflection on practice (Burns & Bulman, 2000; Rolfe, Freshwater & Jasper, 2001; Taylor, 2001) and evidence-based practice (Dawes, 1999; Evans & Haines, 2000; Reynolds & Trinder, 2000).

Blass (1991, 1992, 1993, 2002) noted that scholars designate legitimacy and expertise as salient attributes of the authority figure in Milgram's (1963, 1965, 1974) obedience paradigm. Although the findings of Experiment One indicate that the senior midwife was primarily perceived by the junior midwife as a legitimate authority, Raven and Haley (1980) showed that nurses respond most to expert power of a senior person and to informational power only second. Expert power stems from the target attributing superior knowledge or ability to the agent. In other words, the agent knows best and knows what is correct, i.e., the senior person points out their expertise and experience regarding the issue under address. In contrast, informational power is the result of persuasiveness of the information communicated by the agent to the target, i.e., the senior person indicates the basis for techniques citing available evidence, hospital data or journal references and so forth. It may be that the participating midwives acquiesced with the senior midwife’s suggestions because she used informational power.

10 The main findings of Study Two have been reported in: Hollins Martin, C. J. & Bull, P. (2004). Does status have more influence than education on the decisions midwives make? Clinical Effectiveness in Nursing, 8 (3-4), 133-139.
as opposed to yielding strictly on the basis of an authority-subordinate relationship.

During the course of the interview, participants may have been influenced by the senior midwife's position in the social hierarchy, as shown by Milgram (1963, 1965, 1974), and/or because receiver judgments are influenced by factors such as occupation, training or amount of expertise (Hurwitz, Miron & Johnson, 1992; Ostermeier, 1967; Swenson, Nash & Roos, 1984). The intention was to differentiate between demands of the social relationship and the educational material shared during the interview discussion, as causes of participants' changed SIS-M stances. Hence, a formal test was devised to measure the extent to which the educational material was responsible for generating change in the midwives' decisions.

A method is presented that evaluated midwives' reactions to the information shared between senior and junior midwife during the interview. In this second study, the same information given to the junior midwife during the interview was given in a workbook designed for completion in the absence of social influence from the senior person. The study addressed two research questions:

(1) Was the information shared during the interview condition of Study One effective at influencing change to midwives decisions?

(2) Does position within the hierarchy alter midwives' susceptibility to educational influence?

4.3. Method - Study Two

4.3.1. Participants

A group of 60 midwives matched to Study One were consecutively recruited from the 7 maternity units of North Yorkshire. This number was randomly selected from the remaining 147 midwives who had participated in the scale development study described in Chapter Two. All participants were volunteers and had signed a written informed consent statement prior to taking part in the study. The total number of midwives approached for study inclusion and who satisfied the criteria were 67. Seven of these midwives were unable to assign time to undertake the task of workbook completion, making the sample size
60. Participants were assigned to three experimental groups (20 E, 20 F, 20 G midwife grades of employment), which represented a cross-section of the midwifery population as a whole (for explanation of the grading structure see p. 100)

4.3.2. Sample Sizes
Considerable effort was made to obtain the large sample size required. All 60 of the participating midwives were individually invited to take part in the study. The researcher single-handedly coordinated the entire process of data collection.

4.3.3. Dependent Variable
The SIS-M was used as the dependent variable in this study. The development and psychometric properties of the SIS-M were discussed in Chapter Two.

4.3.4. Design
The study used a longitudinal within-participants design with observations taken at two points detailed below:

**Condition One (C1) - The Pre-Workbook Questionnaire**
At the first observation point, the Pre-Workbook Questionnaire\(^ {11}\) (see Table 2.1, p. 99 & Appendix One) was used to measure participants' responses to the 10 SIS-M questions in private, in a situation in which the midwife provided her own opinions with no items of information given. The questionnaire was sent as a self-completed postal survey to 323 midwives; 209 (65%) were returned. Sixty of these 209 midwives participated in the interview condition of Study One, leaving a pool of 147 from which to recruit.

\(^{11}\) The Pre-Workbook Questionnaire is identical to the Pre-Interview Questionnaire
Condition Three (C3)\textsuperscript{12} - The Workbook

At the second observation point, after an 18-month time gap, a workbook (see Appendix Seven) was used to measure 60 participants' responses to the 10 SIS-M questions in the absence of the senior midwife but which gave the same information as in the interview condition of Study One. The workbook was identical in content and sequence to the interview (C2) (described on p. 121). What the researcher hoped to clarify was whether the informational power of the individual case studies and educational items would influence participants' SIS-M responses in a conformist direction and accordingly increase SIS-M scores.

For each SIS-M question, the participating midwife was placed in a virtual clinical situation that was designed to be "questionable" from a pregnant woman's perspective. First, the midwife read the short plausible clinical case study presented. The objective was to convey a situation as close to clinical reality as possible and by doing so improve the ecological validity of the experiment. Second, after reading the short case study, the midwife read the educational items that the senior midwife had used to backup her argument during the interview. The educational component was placed before each SIS-M question to reduce the chance that the midwife would bypass reading them. Removing the authority figure from the participants' workbook completion allowed the researcher to differentiate between Educational Influence (EI) and Social Influence (SI) as cause of the Main Effect (ME) in Study One, i.e., SI + EI = ME of Study One.

Having read the items of information, the midwife was asked to select her response to the SIS-M question on the 5-point Likert scale provided. All 10 SIS-M questions were addressed in this format. Each midwife was asked in advance to plan two hours out of her busy schedule in order to provide sufficient time to complete the workbook. On workbook completion, the midwife was debriefed and contact details provided. Sixty individual consecutive workbook administrations adhered strictly to the same process.

The Pre-Workbook Questionnaire (C1) provided a baseline against which the Workbook (C3) measure was compared. Both measures were

\textsuperscript{12}(C2) was the interview condition described in Chapter Three.
scored and compared to ascertain whether or not the midwife's SIS-M responses were influenced in a conformist direction.

A prediction was made that educational influence would be moderated by the midwives' position within the hierarchy. Dividing the participating midwives into grades of employment (20 E, 20 F, 20 G grades) allowed the experimenter to test this.

4.3.5. Format of the Workbook
The participating midwife completed the workbook in an isolated location within her clinical area of employment, often in empty delivery suites and ward side rooms. One condition of the selected environment was its suitability for sustaining privacy. On average, workbook completion took around one hour. Written consent was obtained from the participant. SIS-M question five (Q5) has been selected to illustrate the process:

Workbook Excerpt
A case study was presented to the participating midwife before each SIS-M question, e.g., in Q5:

Abigail Brown has arrived in the labour ward in early established labour. She has her two sisters and husband with her. The delivery room policy states that only one "birth partner" may be present with a woman in labour at any one time. Abigail is in pain and requires to be helped regain control.

The participating midwife read the items of information intended to influence her response in a conformist direction, e.g., in Q5 the items introduced were:

Item 1 - Research supports that one good "birth partner" is often better than an unsure crowd and that women who worry about their environment release adrenalin which is an oxytocin antagonist and can slow progress of labour. Women in nature would retreat to a warm, safe place to labour and give birth (Odent, 1999; Robertson 1999).

Item 2 - Too many people in the delivery room could be extremely
distracting for Abigail.

**Item 3** - There is a health and safety component in that delivery rooms are often small with limited space for comfort.

**Item 4** - Overcrowding may inhibit Abigail from adopting positions with associated indignities of which she may not be aware.

**Item 5** - Abigail is your average woman who is one of the 95% who accepts the guidance offered by professionals.

**Item 6** - The policy of one "birth partner" is designed to protect women from an unknown overwhelming situation.

The overall intention was to test whether the informational power of the educational items would influence the participating midwife to *Strongly Disagree* with the SIS-M question:

(5) I believe that it is acceptable for a woman to have more than one "birth partner" present during labour when the unit policy states only one person at a time.

Strongly Agree Agree Neither Agree or Disagree Disagree Strongly Disagree

Throughout the workbook process, each question was preceded with different case studies and items of information.

**4.4. Results - Study Two**

The participating midwives' global SIS-M scores are shown by study condition and according to grade. Included are the means and standard deviations for the respective conditions. Scoring was simply a cumulative operation that assigned a score of 1-5 to each of the 10 SIS-M responses. A score of 50 represents 100% agreement with what was directed in the workbook (C3). The principal data on these inventories can be viewed in *Appendix Eight*. By inspection of the total SIS-M scores, it became evident that the Workbook (C3) produced similar SIS-M scores to the Pre-Workbook Questionnaire (CI) (a outcome that differed considerably from the interview). Correspondingly, a
non-significant difference was predicted between the two conditions and an analysis of variance (ANOVA) carried out on both observation points.

A 3 (E, F & G grade midwives) × 2 (Condition) ANOVA was conducted. As anticipated, there was no significant main effect for condition, (F (1,57) = 0.31, p = 0.58), with similar scores on both measures (for means and standard deviations see Table 4.1. No significant interaction between grades and conditions was found (F (2,57) = 2.13, p = 0.13). No effect of midwife grade was observed (F (2,57) = 1.17, p = 0.32). The results of the ANOVA test confirmed the non-significant difference between the means of the private and workbook conditions. Figure 4.1. overleaf illustrates this schematically.

Table 4.1. Means and standard deviations of scores on the SIS-M as a function of condition type and midwife grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Pre-Workbook (C1) Questionnaire</th>
<th>Workbook (C3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>24.85 (3.08)</td>
<td>23.25 (3.06)</td>
</tr>
<tr>
<td>F</td>
<td>25.30 (4.44)</td>
<td>26.05 (4.29)</td>
</tr>
<tr>
<td>E</td>
<td>24.70 (4.09)</td>
<td>24.75 (3.91)</td>
</tr>
<tr>
<td>Total</td>
<td>24.95 (3.86)</td>
<td>24.68 (3.89)</td>
</tr>
</tbody>
</table>
A correlation of the Pre-Workbook Questionnaire (C1) and Workbook (C3) measures reveal that SIS-M scores increased significantly (see Table 4.2 overleaf) and in a linear fashion (see Fig 4.2 overleaf). As the SIS-M had been exposed to an assortment of validity and reliability tests during its development, a significant positive correlation between the two measures was anticipated.
Table 4.2. Correlation between Pre-Workbook Questionnaire (CI) and Workbook (C3) SIS-M scores

<table>
<thead>
<tr>
<th></th>
<th>C1 Total</th>
<th>C3 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Total Pearson Correlation</td>
<td>1.000</td>
<td>0.528*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>C2 Total Pearson Correlation</td>
<td>0.528*</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)

Fig. 4.2. Graph illustrating the positive linear correlation between the Pre-Workbook Questionnaire (CI) and Workbook (C3) SIS-M Scores

Note: Each "petal" of the sunflower represents a correlation score. Therefore a sunflower with 6 petals represents 6 identical scores. The fit line illustrates the linear correlation is positive.
This significant positive correlation demonstrates that the conformist tendencies that had already been measured using a valid and reliable scale are consistent in the majority of the individuals involved. This result also supports the reliability and validity of the scale since it unequivocally demonstrates consistent SIS-M measures between conditions.

*Table 4.3.* presents an overall picture of participants' resistance to educational influence from the information read in the Workbook (C3).

*Table 4.3.* Percentage of participants who acquiesced, resisted or neither agreed or disagreed in the Pre-Workbook Questionnaire (C1) and Workbook (C3)

<table>
<thead>
<tr>
<th>SIS-M Question</th>
<th>Condition 1 (Pre-Workbook Questionnaire)</th>
<th>Condition 3 (Workbook)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acquiesced %</td>
<td>Resisted %</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>67</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>47</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>90</td>
</tr>
<tr>
<td>6</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>78</td>
</tr>
<tr>
<td>8</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>72</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>80</td>
</tr>
</tbody>
</table>

n = 60 participants in both C1 and C3
Note: SIS-M questions can be viewed in *Table 2.1.*

On viewing *Table 4.4* overleaf, it can be seen that a mean of 12.5 (21%) (n=60) midwives provided conformist responses in the private questionnaire. A similar mean of 13.2 (22%) (n=60) participants gave conformist responses to the SIS-M questions in the workbook.
4.4. Numbers of midwives who conformed in the Pre-Workbook Questionnaire (C1) and Workbook (C3) by SIS-M question

<table>
<thead>
<tr>
<th>SIS-M Question</th>
<th>Conformed in Private CI n = 60</th>
<th>Conformed in Workbook C3 n = 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Mean 12.5 13.2

4.5. Interaction Between Interview and Workbook

From the results of Study One and Study Two, it seemed reasonable to anticipate a significant interaction between the interview and workbook measures. To substantiate this assumption, a 2 (condition type) X 2 (observation time) mixed-group analysis of variance (ANOVA) was performed on the SIS-M data and revealed there to be a statistically significant effect of condition type, \(F (1,118) = 39.68, p = 0.001\), and observation time, \(F (1,118) = 173.52, p = 0.001\). Also, there was evidence of a statistically significant interaction between condition type and observation time, \(F (1,118) = 189.26, p = 0.001\). For means and standard deviations see Table 4.5 overleaf.

This significant interaction can be explained with reference to Figure 4.3 overleaf, which shows that the workbook midwives had lower levels of SIS-M rated social influence scores compared to the interview midwives at the
second observation point, while there was little difference between scores at the first observation point.

Table 4.5. Means and standard deviations of scores on the SIS-M as a function of observation point and condition type

<table>
<thead>
<tr>
<th>Observation Point</th>
<th>1st</th>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment 1</td>
<td>22.98 (4.09)</td>
<td>35.27 (5.86)</td>
</tr>
<tr>
<td>Experiment 2</td>
<td>24.95 (3.86)</td>
<td>24.68 (3.89)</td>
</tr>
</tbody>
</table>

Figure 4.3. Schematic illustration of SIS-M scores as a function of condition type and observation point
4.6. Discussion - Study Two

Findings of the present study are of important clinical value. The data have shown that the case studies and educational items had minimal influence on participants' SIS-M decisions. The non-significant results have significant implications for our understanding of the main effect of Experiment One. The findings of the Pre-Workbook Questionnaire (C1) and Workbook (C3) provide compelling evidence that the relationship between senior and junior midwife played a significant part in socially influencing the midwives decisions during the Interview (C2), with social influence the most likely contender. Previous results have shown that the physical presence of the authority figure is clearly an important factor in changing participants' behaviour (Meeus & Raaijmakers, 1995; Milgram, 1974; Shalala, 1974).

Results show that when the authority figure was absent from the midwives' decision-making process, there was no change to mean SIS-M scores (see Table 4.4). The process of removing the senior midwife indicates what Milgram called his proximity or "experimenter absent" condition. Removing the experimenter from the laboratory dropped the number of obedient participants from 65% (Experiment 5), to 20.5% (Experiment 7) (see Table 1.7). Meeus and Raaijmakers (1995) also showed a drop from 91% of fully obedient participants' in their baseline (Experiment 1) to 36% in an experimenter absent condition (Experiment 6) (see Table 1.14). Shalala (1974) also showed a drop from 68% of fully obedient participants' in his baseline (Experiment 1) to 20% in a self-decision to continue condition when the experimenter unexpectedly had to leave the room (Experiment 7) (see Table 1.12).

This is of pressing clinical importance, for during the Interview (C2) the participating midwives were oriented primarily to the senior midwife rather than to the information cited. They came to the interview and displayed themselves as the senior midwife wanted. Many participants seemed quite concerned about the appearance that they were making and one could argue that this preoccupation made participants somewhat unresponsive to the specific information cited. The powerful presence of the senior midwife would account for the relative inattentiveness of the midwife to the information given, with results showing consequences to the decisions she made.
So what is the explanation for ignoring the information and responding to the powerful social influence that the attendant senior midwife had on participants' decisions? Previous research has shown that perceived rank has a self-confirming effect on communication patterns, because high status members talk more, have more influence and produce more conformist behaviour (Kiesler & Sproull, 1992). Why is this the case?

**Expertise**

Beginning with Hovland, Janis and Kelly (1953), social psychologists have recognised that the acceptance of a communication is often influenced by judgments made about a communicator's expertise (Hurwitz, Miron & Johnson, 1992). The junior midwife (the target) may have perceived the senior midwife (the agent) as an expert source of information, both on text and experience. In general, researchers have confirmed that a source that is perceived as highly credible will be more persuasive than a low-credibility source (see Hass, 1981, for review).

The midwife may also have viewed the senior midwife as providing unbiased information. Birnbaum and Stegner (1979) found that an unbiased source of high expertise tends to have greater weight in a participant's decision than a biased source of high expertise. In the context of this study, bias would be defined as the senior midwife having something to personally gain from providing the information, with this viewed as improbable in the given context.

**Trustworthiness**

The junior midwife might have perceived the senior midwife as a trustworthy source of information, as well as having a high level of proficiency in managing childbearing women. McGinnies and Ward (1980) reported that a greater attitude shift results from a trustworthy, non-expert source than from a trustworthy expert source, which led these researchers to conclude that trustworthiness of the source is more important than expertise.

Judgments of a communicator's expertise and trustworthiness are influenced by a great many factors, and it is fair to say that research to date leaves us rather far from a comprehensive picture of determinants of these
judgments. For the most part, researchers have focused on the effects of the message or what impact delivery characteristics have on credibility judgments (O'Keefe, 2002). The results of systematic research on this matter are consistent with these effects. What has been shown is that receiver judgments of communicator expertise and trustworthiness are significantly influenced by information concerning the communicator’s occupation, training, amount of expertise and the like (e.g., Hurwitz, Miron & Johnson, 1992; Ostermeier, 1967; Swenson et al., 1984). The interviewer, in her role as a lecturer in midwifery at the University of York was in a position of significant status, equivalent to that of a midwifery manager (Fuell, 1999). The role is also associated with extensive educational qualifications. This idea is consistent with Raven and Haley’s (1980) finding that nurses respond more to expert power than informational power from a senior person. This may be because the junior midwife attributed superior knowledge or ability to the senior midwife.

Results of this study have shown that exclusion of the interviewer from the workbook condition removed the influence of status and its associated expertise and trustworthiness from the participants' decision-making process. Findings confirm that there was no main effect from the educational items contained within the workbook. The intervention was targeted at making responses more conformist and was unsuccessful in this respect. Specifically, the information and its assessment were overridden.

For midwifery officialdom, this finding should arouse some concern, since one of the current doctrines within midwifery is that research should underpin clinical practice (Page, 2000). Evidence-based practice is the judicious use of the best evidence available so that the clinician can arrive at a safe decision, taking into account the needs and values of the individual patient (Gray, 1997). Evidence-based midwifery is a process that involves women in decisions about their care and of finding and weighing up information to help them make choices (Page, 2000).

Results of the present study show that many midwives are not using information to substantiate decisions that they make. Instead, many appeal to the judgments of the senior person, which may or may not be evidence-based and which may or may not be informed by an unbiased source. This finding
has significance for the functioning of maternity hospitals and the quality of care women receive, for the decisions that midwives and childbearing women make should be based on evidence that informs on the best outcome. When the system perpetuates senior staff preferences, midwives are unable to implement evidence-based practice, quite simply because they have low status within the dominant hierarchy. For that reason, managers should strive to organise a system that is safe and encourages use of knowledge to underpin clinical decisions that are made. When midwives are caught in a chain of command that perpetuates senior staff preferences, they may not be able to attain what a childbearing woman wants from her experience or live out what research cites as "best-practice", quite simply because they have low status within the hierarchy. In other words, hierarchy can perpetuate a culture of "commonsense" as opposed to evidence-based discourse.

The results have important consequences for midwifery practice, particularly in terms of midwives using knowledge to justify their practice. The finding is at variance with directives to deliver evidence-based practice (Dawes, 1999; Evans & Haines, 2000; Reynolds & Trinder, 2000). It also appears that many midwives perceive a duty to acquiesce with the direction of a senior person, over and above evaluating the worth of information given.

One response to this finding is that midwifery officialdom should strive to organise a system that empowers midwives to use evidence to underpin their practice. Clearly the question arises as to how this may be done. One answer would be to remove unnecessary social influence from persons higher in the hierarchy, so that midwives are free to incorporate evidence into their direction. It is clear that midwives should also be made aware of characteristics that affect their perception of an authority's direction.

4.7. Conclusion - Study Two

It was anticipated that midwives would perform high on a measure of educational influence. Informational power was measured by comparing the midwives' SIS-M scores between two conditions: (C1) a private postal condition, and (C3) a workbook condition in which the participant read items of information intended to influence her responses to the SIS-M questions in a
conformist direction. Findings showed that the educational material was unsuccessful at raising participants' SIS-M scores; consequently the first hypothesis was not supported. This result is important, since it confirms the probability that social influence was the potential confounder for causing the large main effect in *Experiment One*.

A prediction was made that educational influence would be moderated by the participating midwives' position within the hierarchy. Dividing the participants into grades of employment allowed the researcher to test this effect. Results have shown that midwives, regardless of position within the hierarchy, performed similarly in the workbook condition; consequently the second hypothesis was not supported.

The results of this study have successfully tested for the significance of education as a cause of the large main effect in *Experiment One*. The next experiment was intended to test whether changes in participants' SIS-M responses during the interview were transient or permanent. In particular, to ascertain whether temporary situational factors were responsible for the midwives' acquiescence during the public variable (C2), as found in other studies (e.g., Mantell, 1971; Meeus & Raaijamacers, 1995; Milgram 1963, 1965, 1974 etc.), or whether the intervention permanently changed participants' opinions.
4.8. The Durability Study - Study Three

The third study sought to extend observations of Study One. The Post-Interview study tested the durability of the social influence achieved during the interview. It sought to observe whether the participating midwives simply went along with what the senior midwife suggested or whether they substantively altered their opinions to fall in line with her point of view (compliance or opinion change).

Underlying a social event is the situational propriety that is part of regulating behaviour. In order for the midwife to disagree with the senior midwife, she must breach the implicit set of understandings that are part of the social event. That is, the participating midwife agreed to assist the senior midwife and with this pledge came an expectation of support. The act of disagreeing with her may have been perceived as a form of renouncing this commitment:

In ordinary social encounters precautions are frequently taken to prevent just such disruption of the social occasion, but the participant finds himself in a situation where even the discreet exercise of tact cannot save the experimenter from being discredited. Only obedience can preserve the experimenter’s status and dignity. It is a curious thing that a measure of compassion on the part of the subject, an unwillingness to “hurt” the experimenter’s feelings, are part of those binding forces inhibiting disobedience. The withdrawal of such deference may be as painful to the participant as to the authority he defies (Milgram, 1974, p. 168).

This approach is about looking at features of the immediate situation. Over the years, the findings of obedience studies have been held up as demonstrations of the controlling power of the situation (e.g., Blass, 2002; Meeus & Raaijmakers, 1995; Milgram, 1974).

Asch also investigated the situational aspect of the relationship in his conformity studies. Conformity was significantly higher: (a) the larger the size of majority, (b) the greater the proportion of female respondents, (c) when the majority did not consist of out-group members, and (d) the more ambiguous the stimulus. More recent research has been focused on the effects of in-
group and out-group minorities and majorities and their effects on influencing opinions, attitudes and actions within groups in different situations (e.g., David & Turner, 2001a, 2001b; DeDreu & DeVries, 2001; Martin, Gardikiotis & Hewstone, 2002; Moscovici & Personnaz, 1980, 1986; Perez, Mugney & Moscovici, 1986; Volpato et al., 1990; Wood et al., 1994).

It is important to note, that in emphasising situational determinants, Milgram did not question the value of personality traits as had some of the situationalists early in the trait-situation debate (Blass, 1984). Nevertheless, subsequent researchers have shown that people bring features to the study that influence obedience, i.e., locus of control (Holland, 1967; Rotter, 1966; Strickland, 1977), culture (Mantell, 1971; Meeus & Raaijmakers, 1995; Shanab & Yahya, 1977) and gender (Shanab & Yahya, 1977; Sheriden & King, 1972; An & Liu, 2003). Over the years, researchers have also used the Asch-style experiment to establish that individuals bring characteristics to the situation that influence conformity, i.e., gender (e.g., Eagly & Carli, 1981; Sistrunk & McDavid, 1971; Wren, 1999), culture (e.g., Bond & Smith, 1996; Milgram, 1961; Perrin & Spencer, 1981) and status (e.g., Berger & Zelditch, 1985; Kiesler & Sproull, 1992; Larsen et al., 1979).

It is important to note that such obedience may be further magnified when it occurs within a hierarchical institution, because sanctions may be applied when the junior member of staff fails to acquiesce. For instance, a midwife working in the “delivery suite” will have extended exposure to a particular senior midwife and with this comes a requirement for congruence between values of the subordinate and her authority. To refuse to obey the senior midwife is to reject her claim to competence and authority in this situation. Refusal may cause the senior midwife to be discredited, with acquiescence preserving her dignity and status. Withdrawal of such deference may be as difficult for the junior midwife as the senior midwife.

The message of situational determination is so often drawn from obedience studies because Milgram himself emphasised the situational perspective in his research. For example, in his final article dealing with obedience, Milgram (1984, p. 446) stated that “the crux of his inquiry is a set of experimental variations which examine the variables which increase or
diminish obedience”. One of the strongest statements in this regard comes near the end of his book:

The content of the action is not half so important as you think; the relations among the actors is twice as important. Base your prediction not on what the participants say or do, but on how they relate to each other in terms of social structure (Milgram, 1974, p. 232).

There is no question that modifications in the physical and social arrangements in the setting of the obedience experiment can have powerful effects. Milgram (1974) found that when two confederates played the role of participants who refused to continue partway into the shock series, the vast majority of participants followed suit, with only 4 out of 40 (10%) giving the highest shock (Milgram, 1974, Experiment 18, see Table 1.7). Similar results were shown by Meeus and Raaijmakers (1995) in their Experiment 7 (see Table 1.14). In every study that has compared a self-decision condition, when the participant chooses whether or not to shock and at what level to give, the self-decision condition finds a drop in the amount of punishment given (Milgram, 1974; Kilham & Mann, 1974; Mantell, 1971; Shalala, 1974; Shanab & Yahya, 1977). This confirms that individuals would prefer not to carry out the request from authority but feel obliged to do so when the situation demands.

This literature review is persuasive in supporting the proposition that situational factors affect the amount of obedience a participant will give. Therefore, it seemed reasonable to predict that removing the senior midwife from the participating midwives decision-making process would eliminate the normative pressures of the group situation. Milgram called this an “experimenter absent condition”.

During the course of the Interview (C2) the participating midwives might have been influenced by factors within the situation. The very ease by which the senior midwife successfully influenced change to the participating midwives’ decisions arouses suspicion. Did the midwives actually change their opinions in relation to the decisions asked or were the experimental victories only scored on paper? On grounds of common sense, one must question whether the midwives’ opinions were generally as watery as the results of Experiment One suggest. The investigation was guided by the underlying
assumption that people submit often uncritically to external manipulation by suggestion of prestige (e.g., Kiesler & Sproull, 1992; Larsen et al., 1979; Trieman, 1977). It is important to be sceptical of the idea that social influence necessarily implies uncritical submission, independent of the ability to rise above the senior midwife’s propositions. On psychological grounds, it is important to question whether the intervention changed the midwife’s judgements about the decisions.

The purpose of the present study was to find out if the participating midwives just went along with what the senior midwife proposed as the best action to take during the Interview (C2). That is, did the midwives merely acquiesce? Were they just responding to the immediate demands of the social situation, or did something more complex occur that effected a permanent change to their judgements? The intention was to ascertain whether the demands of the interview situation caused a transient or permanent change in the midwives’ judgements. If situational factors are important forces holding the midwife to her obedient role, there ought to be a sharp drop in acquiescence when the preconditions of the experiment are eliminated. Hence, a formal test was devised to measure the effect that the situational variables had upon the midwives’ opinions. In this third study, the questions asked during the interview were solicited again in a private condition without social influence from the senior midwife. The study addressed two research questions:

(1) Did the subordinate midwives just comply with the recommendations of the senior midwife or did something more complex occur that effected a permanent change to their judgements?

(2) Were situational factors important forces in holding the midwife to her acquiescent role?

4.9. Method - Study Three
4.9.1. Participants
The same midwives who participated in the interview condition of Study One took part in this study.
4.9.2. Dependent Variable

The SIS-M was used as the dependent variable in this study. The development and psychometric properties of the SIS-M are discussed in Chapter Two.

4.9.3. Design

The study used a longitudinal within-participants design with observations taken at three points. The three conditions were:

**Condition One (C1) - The Pre-Interview Questionnaire**

At the first observation point, the Pre-Interview Questionnaire (see Table 2.1 & Appendix One) was used to measure participants' responses to the 10 SIS-M questions in private: the midwife provided her own opinions in the absence of social influence. The questionnaire was sent as a self-completed postal survey to 323 midwives; 209 were returned.

**Condition Two (C2) - The Interview**

At the second observation point, after a 12-month time gap, the Interview Schedule (see Appendix Five) was used to measure 60 participants' responses to the 10 SIS-M questions in a situation where social influence was brought to bear by a senior midwife. The senior midwife, by making her preferred responses explicit, endeavoured to socially influence the participating midwives' SIS-M responses in a conformist direction and accordingly increase SIS-M scores. The interview process has been described in Experiment One (Chapter Three).

**Condition Four (C4)\(^{13}\) - The Post-Interview Questionnaire**

At the third observation point, the Post-Interview Questionnaire\(^{14}\) (see Table 2.1 & Appendix One) was used to measure 50 participants' responses to the 10 SIS-M questions again in private. The intention was to test whether the physical presence of the senior midwife during the interview was the key factor in promoting participants' acquiescent responses, in keeping with

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\(^{13}\) (C3) was the workbook condition described earlier in this chapter.

\(^{14}\) The Post-Interview Questionnaire is identical to the Pre-Interview Questionnaire.
Milgram’s (1974) finding of reduced obedience in his experimenter absent condition (Experiment 7, see Table 1.7). After a 6-month time gap, a second postal questionnaire was sent to the participants’ workplace. Completion of this further SIS-M, identified whether the midwife had just agreed with the senior midwife during the interview (C2) whilst harbouring unchanged personal viewpoints. It was predicted that many of the midwives’ public responses to the SIS-M questions would revert to those given in the private Pre-Interview Questionnaire (C1).

All three measures were scored and compared, with changed SIS-M responses between the postal and interview conditions informing as to whether situational aspects of the interview had simply effected a transient change to participants’ opinions.

4.9.4. Sample Sizes
Data was collected from 50, instead of 60 participants. Attempts were made to follow up the 10 missing cases from the third observation point; two of the participating midwives had retired, one had left work to become a full time mother, four had moved to alternative employment, two had left work due to chronic ill health and one neglected to complete the Post-Interview Questionnaire. The researcher was not allowed to trace these missing participants due to hospital data protection issues. A comparison of mean scores and standard deviations found minimal difference between groups represented by 60 (see Table 3.1, mean 22.98 (4.09) or 50 (see Table 4.6, mean 23.32 (3.96) participants following removal of the missing case data (see Table 3.6 & Table 4.14). As midwives are rostered to rotate around the alternative areas of midwifery practice, a great deal of effort was required to relocate the 50 remaining participants.

4.10. Results - Study Three
The participating midwives’ global SIS-M scores are shown by study condition. Included are the means and standard deviations for the respective conditions. Scoring was simply a cumulative operation that assigned a score of 1-5 to each of the 10 SIS-M responses; five represents the most conformist
response and one the least. The principal data on these inventories can be viewed in *Appendix Nine*.

Inspection of the total SIS-M scores shows that the Post-Interview Questionnaire (C4) results were similar to those of the Pre-Interview Questionnaire (C1). In stark contrast, there are large discrepancies in scores between the private (C1 & C4) and public (C2) measures. An analysis of variance (ANOVA) was carried out to determine whether there were significant differences in SIS-M scores between the grades and conditions.

A 3 (E, F & G grade midwives) x 3 (Conditions) was conducted. There was a significant main effect for conditions, \( F(2, 94) = 151.87, p = 0.001 \), with higher scores on the public measure (for means and standard deviations see *Table 4.6*). A posteriori analysis using the Bonferroni procedure, corrected for multiple comparisons, revealed the public condition to have significantly higher scores compared to the two private measures (both comparisons \( p < 0.001 \)). It was also observed that the Post-Interview Questionnaire (C4) scores were significantly higher than the Pre-Interview Questionnaire (C1) \( (p = 0.05) \). No significant interaction between grades and conditions was found, \( F(4, 94) = 1.65, p = 0.17 \). No effect of midwife grade was observed \( (F(2, 17) = 0.25, p = 0.78) \). The results of the ANOVA test showed that the means from the private and public conditions are significantly different from each other. *Figure 4.4.* overleaf illustrates this schematically.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Private (C1)</th>
<th>Public (C2)</th>
<th>Private (C4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>23.84 (3.91)</td>
<td>34.95 (6.35)</td>
<td>24.05 (4.67)</td>
</tr>
<tr>
<td>F</td>
<td>23.44 (4.59)</td>
<td>37.22 (5.39)</td>
<td>24.33 (4.31)</td>
</tr>
<tr>
<td>E</td>
<td>22.38 (3.15)</td>
<td>34.31 (6.46)</td>
<td>25.69 (4.11)</td>
</tr>
<tr>
<td>Total</td>
<td>23.32 (3.96)</td>
<td>35.60 (6.05)</td>
<td>24.58 (4.37)</td>
</tr>
</tbody>
</table>

*Table 4.6. Means and standard deviations of scores on the SIS-M as a function of condition type and midwife grade*
Visual examination of the scatter plots and correlations of the Pre-Interview Questionnaire (C1), Interview (C2) and Post-Interview Questionnaire (C4) scores revealed that SIS-M scores increase significantly (see Table 4.7 overleaf), and that they did this in a linear fashion. As the SIS-M had been exposed to validity and reliability tests during its development, it was considered a psychometrically robust instrument for assessing the natural conformist tendencies of the midwives who completed it. Since these propensities ought to be present in both the private and public measures, it would be appropriate to anticipate significant positive correlations between the three measures. Again, the mean increase in scores from the public condition can be explained by the additional social influence from the senior midwife.

Table 4.8. overleaf presents an overall picture of the participating midwives’ responses to the SIS-M questions in the three conditions of the study.
Table 4.7. Correlation between Pre-Interview Questionnaire (C1), Interview (C2) and Post-Interview Questionnaire SIS-M scores

<table>
<thead>
<tr>
<th></th>
<th>C1 Total</th>
<th>C2 Total</th>
<th>C4 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Total Pearson Correlation</td>
<td>1.000</td>
<td>0.319*</td>
<td>0.483**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>N = 60</td>
<td>60</td>
</tr>
<tr>
<td>C2 Total Pearson Correlation</td>
<td>0.319*</td>
<td>1.000</td>
<td>0.413**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.013</td>
<td>0.003</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>N = 60</td>
<td>60</td>
</tr>
<tr>
<td>C4 Total Pearson Correlation</td>
<td>0.483**</td>
<td>0.413**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.000</td>
<td>0.003</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>N = 50</td>
<td>50</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

Table 4.8. Numbers of midwives who acquiesced in the Pre-Interview Questionnaire (C1), the Interview (C2) and the Post-Interview Questionnaire (C4) by SIS-M question

<table>
<thead>
<tr>
<th>SIS-M Question</th>
<th>Acquiesced in Private CI n = 50</th>
<th>Acquiesced in Public C3 n = 50</th>
<th>Acquiesced in Private C4 n = 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14</td>
<td>47</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>39</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>39</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>14</td>
<td>36</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>39</td>
<td>8</td>
</tr>
</tbody>
</table>

Mean 7.6 33.5 10.3
Table 4.9 shows the percentage of participants who acquiesced, resisted or neither agreed or disagreed in the Pre-Interview Questionnaire (CI), Interview (C2) and Post-Interview Questionnaire (C4).

Table 4.9. Percentage of participants who acquiesced, resisted or neither agreed or disagreed in the Pre-Interview Questionnaire (CI), Interview (C2) and Post-Interview Questionnaire (C4)

<table>
<thead>
<tr>
<th>SIS-M Question</th>
<th>Condition 1 (private condition)</th>
<th>Condition 2 (public condition)</th>
<th>Condition 4 (private condition)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A %  R %  N %</td>
<td>A %  R %  N %</td>
<td>A %  R %  N %</td>
</tr>
<tr>
<td>1</td>
<td>28  52  20</td>
<td>94  4   2</td>
<td>48  38  14</td>
</tr>
<tr>
<td>2</td>
<td>18  66  16</td>
<td>62  24   14</td>
<td>16  74  10</td>
</tr>
<tr>
<td>3</td>
<td>26  50  24</td>
<td>78  20   2</td>
<td>28  34  38</td>
</tr>
<tr>
<td>4</td>
<td>20  68  12</td>
<td>78  20   2</td>
<td>28  44  28</td>
</tr>
<tr>
<td>5</td>
<td>4   90  6</td>
<td>22  70   8</td>
<td>10  84  6</td>
</tr>
<tr>
<td>6</td>
<td>18  54  28</td>
<td>96  0   4</td>
<td>24  56  20</td>
</tr>
<tr>
<td>7</td>
<td>0   98  2</td>
<td>62  36   2</td>
<td>2   90  8</td>
</tr>
<tr>
<td>8</td>
<td>28  44  28</td>
<td>72  22   6</td>
<td>32  38  30</td>
</tr>
<tr>
<td>9</td>
<td>6   82  12</td>
<td>28  62   10</td>
<td>2   80  18</td>
</tr>
<tr>
<td>10</td>
<td>4   78  18</td>
<td>78  10   12</td>
<td>16  64  20</td>
</tr>
</tbody>
</table>

n = 50 participants in CI, C2 and C4
Note: SIS-M questions can be viewed in Table 2.1
A = Acquiesced, R = Resisted, N = Neither agreed or disagreed with the senior midwife

4.11. Discussion - Study Three

Similar mean SIS-M scores are evident in the two private measures, with both differing significantly to that of the interview. This indicates that the social influence manipulation during the interview had no major lasting effect, which is consistent with Milgram's (1974) transient situational argument. Although the mean SIS-M scores in both postal measures are similar (23.32 for C1 & 24.58 for C2, see Table 4.6), the modest difference is also statistically significant. This raises debate over whether the social influence manipulation during the interview could have had some small enduring effect on
participants' decisions. Another feasible explanation for this seemingly paradoxical finding includes the issue of policy changes that have affected the clinical environment. For instance, consultant midwives have been appointed since the start of this study. These highly qualified midwives have partial role in empowering the professional identity of midwives (RCM, 2006; Osbourne, 2003). An implicit component of the role of the consultant midwife is to facilitate autonomy and independence within the midwifery profession. Also new policies have directed implementation of midwifery led care (RCM, 2006). As a result, many “birth units” have been opened to provide family-centred midwifery care for women deemed to be low risk, with these units organised and managed exclusively by midwives. The philosophy of care associated with these implementations may have made it more desirable for the participants to appear autonomous and woman-centred; with this reflected in the data collected at the third observation point. Modern midwifery takes place in a dynamic environment where many policies, professional, hierarchical and interpersonal issues may mediate and impact upon midwives' susceptibility to social influence, consistent with Milgram's (1974) situational argument.

Even with the small notable significant difference between the postal conditions (C1 & C4), the mean discrepancy is so small that its relevance to either clinical or social matters is questionable. Comparatively, the absolute magnitude of difference between the postal and interview conditions is far greater. These differences are reflected in the size of the p values (p = 0.05 and p = 0.001 respectively) and the large disparity in mean scores (23.32 (C1) / 24.58 (C4) and 35.60 (C2). Furthermore, the nature of experimentation within psychological science has been found to impart small but enduring effects on dependent variables following removal of the experimental manipulation (Kline, 2000b). This reason also presents justification for scores in the second postal condition (C4) to be marginally higher than the baseline (C1) following manipulation of the independent variable. What remains important within the

15 The role of a consultant midwife is to work with midwives and their managers to facilitate midwife-led care. One aim is to “improve the dwindling home birth and water birth figures and create more choice for women” (Osbourne, 2003, p. 26).

context of this study is the relative return to the similar mean baseline score following the very large increase in SIS-M scores from the interview condition (C2).

Accepting this, the global picture confirms that many participants just went along with the direction given by the senior midwife during the interview. The vastly reduced mean scores in the post-interview condition verified that many of these participants failed to internalise the views of the authority figure and simply acquiesced with what she proposed. The social influence effect was therefore typically fleeting and in response to factors within the immediate interview situation.

Situational factors have shown to be important forces holding the midwife to her acquiescent role, evidenced by the sharp drop in SIS-M scores when the social pressure was removed. A similar result was shown in Milgram's Experiment 7 (see Table 1.7) when the authority figure departed from the laboratory levels of obedience dropped remarkably. The number of obedient participants in the first condition (26) was almost three times as great as in the second (9), when the experimenter gave his orders over the telephone. Such obedience appeared to be rooted in the physical presence of the authority figure, with participants able to resist direction far better when they did not have to confront the experimenter face-to-face. In the same way, absence of the senior midwife in the private condition of the present experiment, removed the face-to-face element of the interview. This result is persuasive in supporting the argument that immediate situational factors affect the amount of acquiescence that a midwife will give. Yet, at the same time as acquiescing, some participants stated that their submission was reluctant and used strategies to circumvent what they saw as needless direction from the senior person (as will be shown in the participants' dialogue discussed in Chapter 5). The case of Participant Two is discussed since she circumvented any possible threat of face-to-face conflict with the researcher.

The Circumvention of Participant Two
The case of Participant Two supports the view that some midwives are able to resist a senior member of staff far better when they do not have to confront them face-to-face. Participant Two neglected to complete five Post-Interview
Questionnaires which were sent to her workplace. The researcher face-to-face with Participant Two, gained enthusiastic agreement on two separate occasions that she would in effect complete the questionnaire. In point of fact, Participant Two told a colleague of the researcher that she had no intention of doing so and provided no reason as to why. Of particular interest is this midwife's form of passive resistance. Face-to-face with the senior midwife, Participant Two pleasantly agreed to comply and then proceeded to avoid the task. At the same time as highlighting strategies that individuals use to circumvent a request and avoid losing public face, the case of Participant Two stresses the importance of examining the individual when studying group behaviour.

The avoidance strategies used by Participant Two are representative of the behaviour of some of the participants who took part in Milgram's (1974) Experiment 7 (see Table 1.7), in which obedience dropped sharply after the experimenter removed himself from the laboratory. Once the experimenter had absented himself, some participants displayed an interesting form of behaviour that had not occurred when under surveillance. In telephone conversations, these participants specifically reassured the experimenter that they were raising the shock level according to instruction, when in fact they were repeatedly using the lowest shock level on the board.

This form of behaviour is interesting, since participants acted in a way that clearly undermined the purpose of the experiment. These participants clearly found it easier to handle the conflict in a non-confrontational manner, instead of precipitating an open break with authority. This action supports the idea that the physical presence of the authority figure is an important contribution in the participants' acquiescent response. Acquiescence with the direction given is in some degree dependent upon the proximal relations between the authority figure and the participant. Consequently, any theory of midwives' acquiescence must take into account this fact. A distinction should also possibly be drawn between hierarchical factors and the midwife simply not wanting to say "no" face-to-face with the senior person, which may actually have had little to do with authority versus subordinate relationships. Levy's (1999a, 1999b, 1999c) qualitative analysis supports the argument that midwives occasionally use strategies to circumvent an intimidating
confrontation with an authority figure. Likewise, midwives in the present study discussed strategies they used to circumvent what they saw as needless direction from a senior person (see Chapter 5, Subsection 5.7.3.3).

The Effect on Delivery of Woman-Centred Care

Situational restrictions within the working environment will inevitably prevent midwives from providing the woman-centred care directed by social policy documents (DoH, 1993; DoH, 2003; DoH, 2004). It is probable that situational constraints will include close proximity of the authority figure and the face-to-face nature of such social interaction. The midwife who acts on the principle that a senior midwife directs and where this denies the childbearing woman a safe option in care, is violating her own standards of practice. Through this subordination, it would be fair to say that she abandons her principles. Instead she acquires a radically different focus. Her concern shifts to a prudential consideration of how well she is living up to the expectations that the senior person has of her.

It is of considerable interest that so many midwives devalued the childbearing woman by choosing to prioritise their own concerns. For example, in SIS-M question two, the midwife was asked if she would argue with a senior person who opposed a healthy woman’s request for a home confinement. By inspection of the results in Table 4.9, it can be seen that 33 (66%) midwives in the private pre-interview measure (C1) declared that they would confront the authority figure to act as an advocate for the childbearing woman. Yet, when exposed to social influence from the senior midwife during the interview (C2), only 12 (24%) participants sustained this point of view. In this public measure, the remaining 38 (76%) midwives did not give their support. Instead, many prioritised their own concerns and elected

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17 Olsen (1997) carried out a meta-analysis of the relative safety of homebirth compared to hospital birth. A total of 25,000 births from five different countries were studied. The results found no difference in survival rates between babies born at home and those born in hospital. However there were several significant differences between the groups. Fewer medical interventions occurred in the homebirth group. Fewer home babies were born in poor condition. The homebirth mothers were less likely to have suffered lacerations during birth. They were less likely to have had their labours induced or augmented by medications or to have had caesarian sections, forceps or vacuum extractor deliveries. As for maternal deaths, there were none in either group.
not to disrupt the social etiquette of the situation. These results are similar to Milgram’s 62.5% of obedient participants in baseline Experiment 2, and Asch’s 67% who failed to withstand pressure from the group’s confederates. Again in the private post-interview measure, when the social pressure was removed, 37 (74%) participants reverted to their initial opinion and again agreed they would confront the senior person.

These results highlight considerable differences between what midwives say they will do in private and what actually happens when they are placed within a hierarchy and exposed to social influence from a senior person. The results emphasise that temporary situational factors effect change to midwives’ opinions. When face-to-face with a senior person, the majority of junior midwives just comply with recommendations that are made.

Results of the Post-Interview Questionnaire (C4) show that many participants were in some sense opposed to the action they agreed to take during the Interview (C2). Between thoughts, words, and the critical step of arguing against the senior midwife lies another ingredient, the capacity for transforming beliefs and values into action. Some midwives were totally convinced of the wrongness of what they were doing but could not bring themselves to make an open break with authority. As Milgram (1974) so eloquently put it:

Some derived satisfaction from their thoughts and felt that - within themselves, at least - they had been on the side of the angels (Milgram, 1974, p. 28).

What these midwives failed to realise is that subjective feelings are largely irrelevant to the moral issue at hand. The abandoned principles of providing woman-centred care and evidenced-based practice has shown to be determined significantly by authority figures. There appears to be a clash between values which relate to the expected activities of a midwife and values that pertain to the maintenance of social norms within the organisation. Diffident midwives who do not have the courage to act out their beliefs perpetuate professionals’ domination over childbearing women. Time and again, during the Interview (C2), midwives devalued what they were doing but could not muster the inner resources to translate their values into action. The
problem of acquiescence therefore is not wholly psychological. The form and shape of the organisation has much to do with it.

Again, this has important consequences for the functioning of maternity hospitals and the quality of care childbearing women receive. The midwife who acts by the proposal that authority directs and where this denies a childbearing woman a safe option in care, breaches Rule 6 of the Midwives Rules and Standards (NMC, 2004, p. 17). Rule 6 states that the midwife:

- Must make sure the needs of the woman or baby are the primary focus of her practice.
- Should work in partnership with the woman and her family.
- Should enable the woman to make decisions about her care, based on individual needs, by discussing matters fully with her.

The clear fact that hospital authority reinforces the acquiescence of midwives whilst simultaneously advocating woman-centred care, causes conflict for midwives. The situation creates a contradiction between the midwife’s demands to follow Rule 6 of the Midwives Rules and Standards (NMC, 2004) or to follow the direction from a senior midwife, unless they both happen to be in agreement. In essence, the midwife is a link in the hierarchical chain of command which the organisation reinforces, with both senior and junior midwife encountering constraints presented by those in authority. That so many midwives suppress their private views and submit to the “agent of domination” is a matter that requires redress by midwifery officialdom and the Department of Health.

4.12. Conclusion - Study Three
Results have shown that many of the participating midwives just acquiesced with the proposals of the experimenter during the interview condition. This was measured by comparing the midwives SIS-M scores between three conditions: two private conditions (C1 & C4) and a public condition (C2) in which a senior midwife socially influenced the participants’ SIS-M responses in a conformist direction. Findings have shown that the majority of midwives
just complied with the recommendations of the senior person and that they made minimal revision to their private judgments; hence the first hypothesis was supported.

It was anticipated that immediate situational factors were important forces in holding the midwife to her acquiescent role; in particular, the physical presence of the senior person and the face-to-face nature of the social interaction. Results have shown that some participants found it easier to handle the conflict in a non-confrontational manner, instead of challenging the senior person. Therefore, situational factors emerge as important forces that hold the midwife to her acquiescent role; hence the second hypothesis is supported.

Results of the quantitative analysis have shown that many midwives respond in an acquiescent manner to social influence from a senior person. What was said during discussion may also be important, since discourse may explain the underlying psychological processes that were going on. Therefore, a qualitative analysis of participants’ dialogue is the focus of the next chapter (Chapter Five).
CHAPTER FIVE

A Qualitative Analysis of the Midwives' Comments

5.1. Introduction
This chapter reports an analysis of individual interviews held with the midwives who participated in Study One of this thesis. As reported in Chapter Three, the main effect of the interview condition showed that midwives performed high on a measure of social influence, with many acquiescing in the direction offered by a senior midwife. In order to discover how these midwives perceived the input of the senior midwife and to build up a picture of the psychological processes that may be involved, the content of the interviews were analysed.

5.2. Rationale for the Design and Qualitative Analysis of the Interview Data
Elliot, Fischer and Rennie (1999, p. 216) state that "qualitative research lends itself to understanding participants' perspectives." This way of thinking has led to the blending of qualitative and quantitative methods within one study and has become a lot more commonplace, particularly within social science and health research (Perone & Tucker, 2003). Richards (2002) suggests that the use of psychometric measures alone cannot generate understanding and theory construction. A study may have one goal or aim, but this may be divided into individual objectives which incorporate both causal explanation and empathetic understanding (Donovan, 2000). Quantitative research may document frequencies and suggest causal patterns, whereas qualitative research is regarded as better able to inform about interactional processes and participants' perspectives. In this context, the quantitative approach promotes a cause and effect model for explaining the midwives behaviour, whilst the qualitative component allows understanding of the midwives perspectives about why they acquiesced. The two approaches (quantitative +

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18 The main findings of this qualitative analysis are to be reported in: Hollins Martin, C. J. & Bull, P. (in press). What features of the maternity unit promote obedient behaviour from midwives? Clinical Effectiveness in Nursing.
qualitative) provide contrasting types of evidence which complement one another. The combination of methodologies allows exploration in a way that just one approach would not permit. That is to say, both "numbers" and "words" and their combination are useful in extending knowledge and understanding. The integration of qualitative data allows for representation grounded in actual experience of the research participants (Flicke, 2002).

Methodological triangulation was the approach taken in this research. This technique was used to validate the results, with focus on enriching and completing knowledge and transgressing the (always limited) epistemological potential of individual methods (Flicke, 2002). The starting point for this study took a positivist approach, with the quantitative paradigm afforded a dominant position in the hierarchy of processes of knowledge production (Bowker, 2001). A between-methods approach combined a questionnaire with a semi-structured interview (Denzin, 1989). Acquiescence of midwives was assessed and understood through specifically designed measures, i.e., questionnaires, structured interviews and workbooks, which provided independent numerical scores that represent an objective indication of material reality. This method assumes a cause and effect model of understanding the behaviour of the participating midwives.

In contrast, the qualitative component has taken a postpositivist approach. Postpositivism has argued for a set of criteria unique to qualitative research (Denzin & Lincoln, 1998). Postpositivists' contend that qualitative research should be able to generate formal theory, be scientifically credible, produce findings that can be generalised and take into account the effects of the researcher on the findings (Denzin & Lincoln, 1998). This method was primarily concerned with validating, explaining, interpreting and understanding how the participants see their working world (Cluett & Bluff, 2000). The qualitative component promoted understanding of the midwives' experience. It also provided information about the process of acquiescence depicted by the quantitative data. Interpretation of the participants' comments with regard to their selected SIS-M responses, presented both challenge and support to the dominant way of understanding the social influence processes involved.
The approach taken was an inductive thematic analysis. The reasons for selecting an inductive approach for qualitative data analysis were:

(1) To condense extensive and varied raw text data into a brief summary format.

(2) To establish clear links between the research objectives and the summary findings derived from the raw data and to ensure these links are transparent (able to be demonstrated to others) and defensible (justifiable given the objectives of the research).

(3) To develop theory about the underlying structure of experiences or processes which are evident in the text (raw data).

(4) To let the trustworthiness of findings be assessed by a range of techniques, such as; (a) independent replication of the research, (b) comparison with findings from previous research, (c) triangulation within a project, (d) feedback from participants in the research, and (e) feedback from users of the research findings.

Other traditional approaches to qualitative analysis were considered unsuitable for answering the very specific research questions asked. For example, phenomenology was rejected as an approach, since it is about trying to get at the world that exists prior to our conceptualising it; the "life-world" of experience of another. Phenomenology is an approach that begins with the "naive", pre-theoretical, pre-thematised, pre-reflected upon world of the participant (Flick, 2002). This approach is diametrically opposite to the idea that specific percentages of participants behaved in consistent and specific ways as a direct result of experimental manipulation. Since inductive thematic analysis involves percentages and validation of experimental results, it was considered the more suitable method for meeting the clearly defined aims of this study.
5.3. Aim of the Qualitative Analysis

The aims of the study reported in this chapter were: (1) to determine the participants' attitudes towards providing choice and control for childbearing women, (2) to discover characteristics of the social structure of a maternity hospital that were implicated in producing such a pronounced social influence effect, and (3) to identify the participants' psychological responses to social influence from a senior member of staff. These aims are much narrower than is usual in qualitative research, with emphasis on precise aspects, and as such fall into the postpositivist paradigm. The method for this study was qualitative, since the midwives' attitudes towards woman-centred care, aspects of the social structure promoting acquiescence, and the psychological processes identified, were derived from the interviews rather than being found in response to a predetermined coding framework.

5.4. Research Questions

The quantitative data has shown that a senior midwife was able to influence decisions that should more often be the choice of the childbearing woman at the centre of the care provision. In order to identify the midwives' willingness to provide women with choice and control during their confinement, the first research question asked was:

(1) What are midwives' attitudes towards providing woman-centred care?

From the literature review it appeared that the large main social influence effect could fall into two psychological categories: obedience and/or conformity and that aspects of a midwife's working environment could play a large part in promoting their acquiescent behaviour. In order to differentiate between the internal psychological mechanisms and external situational factors that may be involved, the following two research questions were asked:

(2) What situational aspects of a maternity hospital promote such a pronounced social influence effect?
What are midwives' psychological responses to social influence from a senior member of staff?

What follows, is the experiences of the participants as evidenced from the comments they provided on the questionnaires and made during interview discussion. Three themes, supported by sub-themes and categories, are presented in Table 5.1:

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes towards providing woman-centred care.</td>
<td>Positive attitudes</td>
<td></td>
</tr>
<tr>
<td>Situational factors that promote acquiescence</td>
<td>An obligation to follow hospital policies</td>
<td>Abnormal obstetric outcome</td>
</tr>
<tr>
<td></td>
<td>Hierarchical control</td>
<td>Litigation</td>
</tr>
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<td></td>
<td>Fear of consequences from challenging a senior person</td>
<td>Conflict and intimidation</td>
</tr>
<tr>
<td>Psychological responses to social influence from a senior person</td>
<td>Obedience</td>
<td>Dishonesty</td>
</tr>
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<td></td>
<td>Conformity</td>
<td>Evasion</td>
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<td></td>
<td>Circumvention strategies</td>
<td>Manipulation</td>
</tr>
</tbody>
</table>

5.5. Method

The study assessed a representative sample of 20 midwives from the original cohort of Study One participants. A serial sample of 20 of the midwives' tape-recorded one-to-one interviews was randomly selected for transcription (see Appendix Ten for these midwives' participant numbers, grades and SIS-M scores from the postal and interview conditions). This number was transcribed since Kuzel (1992) suggests that 12 to 20 informants are needed when attempting to achieve maximum variation from a population. Maximum variation, as the label suggests, means that there is a breadth of different
experiences within the sample. Also available were the remarks that the 20 participants wrote in the comments sections of the postal questionnaires.

5.5.1. Participants
The participants were recruited from the 7 maternity units of North Yorkshire. The serial sample included, 7 E, 7 F and 6 G grade midwives. All were female. The age range was 21-60 years. Participants were randomly selected to represent the midwifery team at large.

5.5.2. Procedure
Approval for the study was gained from the local managers in each of the maternity units of North Yorkshire. The participants were volunteers and had signed a written informed consent statement prior to involvement in the study. The interviews took place in the midwives' clinical area of employment. The interviews were semi-structured with the participant answering each of the 10 SIS-M questions in a forced choice format with five possible responses (see Appendix Five for the interview schedule and Chapter Three: Subsection 3.2 for the procedure). The order of the SIS-M items was fixed, with the participant responding on a Likert-type scale. After each question, the interviewer encouraged the participant to clarify her response. Open and closed-ended questions were asked and prompts were given. For example, after the midwife had answered the question, the interviewer would ask: “Would you argue? How would you go about this? Could you elaborate on that? Do you Strongly Agree or do you just Agree with the question asked?” The participant could make as many (or as few) comments as she liked. Each interview lasted approximately one hour.

In the postal questionnaire, a comments section was provided underneath each SIS-M question (see Appendix Two), in which the participant could, if she wanted, provide clarification for the answer she gave, e.g.,
(2) I would argue with the consultant if he refused to support a home confinement when a mother with a healthy pregnancy is keen to have one.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

Comments

The interviews were transcribed verbatim by the interviewer and imported into QSR Nud*ist version 4 (Qualitative Solutions and Research Pty. Ltd 1997) to aid data handling. (QSR Nud*ist is a computer programme that enables the analyst to allocate categorical codes directly to text and allows ease of tracking and collating data).

The scripts were analysed using inductive thematic analysis (Boyatzis, 1998). As the researcher did not know the participants' attitudes towards providing woman-centred care, what situational factors were involved in their acquiescence, or the psychological processes that led them to acquiesce, the coding was derived from the comments using an iterative process.

All of the data in the transcripts was coded. Coding has been described by Charmaz (1994, p. 97) as "the process of categorising and sorting data. Codes serve as shorthand devices to label, separate, compile and organise data". Short descriptive labels were allocated to sections of the text (each section could have more than one label attached), following which labels expressing similar concepts were grouped together to form themes. Labels and themes were compared across scripts. The allocated codes enabled the researcher to summarise and synthesise the data, and were the "bridges" between data and subsequent conceptualisations (Charmaz, 1994).

The codes were arranged according to their similar content into groups that were labeled with broad conceptual descriptions. For example, the theme labeled "situational factors that promote acquiescence" eventually had three properties (elements that comprise sub-themes):

- An obligation to follow hospital policies
- Hierarchical control
- Fear of consequences from challenging a senior person

Categories were also integrated into the sub-themes as new properties arose. For example, the sub-theme labeled "fear of consequences from challenging a senior person" eventually had three properties (elements that comprise categories), which were as follows:

- Abnormal obstetric outcome
- Litigation
- Conflict and intimidation

The themes, sub-themes and categories generated from the qualitative analysis have been outlined in Table 5.1. (see p. 176). Writing the theory consisted of organising and sorting the printed codes into a coherent and logical "whole". First, the main themes were identified, and then the sub-themes and categories that comprised these. During the writing process, literature was used to support the emergent labels and their properties. The selected quotes reflect those that helped explain acquiescent behaviour of the participating midwives. Some quotes are lengthy but these highlight the strength of feeling in the dialogue.

5.6. Reflexivity

The author has background and experience that assisted in the analysis and interpretation of the data. First, the author has been a registered practising midwife for 20 years. Over this time span she has been employed as a staff midwife (E, F grade), ward sister (G grade), clinical tutor and latterly as a lecturer in midwifery. Second, the author has both basic and masters degrees in psychology. Although the author is childfree, she has had an unsuccessful pregnancy and has received care from the maternity services. This variety of experiences afforded advantages in understandings and negotiations of the interview data.

As a reliability check (Mayring, 2000), a second rater (a research assistant) coded the first seven interviews independently for: (1) attitudes towards providing women-centred care, (2) situational factors that promote acquiescent behaviour, and (3) psychological responses to social influence
from a senior person. The themes, sub-themes and categories specified in Table 5.1 were issued and the coding framework explained. As the thesis author had both knowledge of the literature and experience of performance expectations of a midwife, the reliability check was to ensure that anticipation of particular predicted factors did not introduce bias into the analysis, either by causing text to be labeled inappropriately, or by causing certain factors to be missed. (The excerpts that were identified by the two raters are itemised in Appendix Eleven). Inter-rater agreement of the analysis was calculated using Cohen’s coefficient of agreement (Cohen, 1960).

5.7. Results
Calculation of inter-rater agreement produced a kappa coefficient of 0.83, indicating a high level of inter-rater agreement about midwives’ attitudes towards providing women-centred care, situational factors that promoted acquiescent behaviour and psychological responses to social influence from a senior person.

The majority of the participating midwives held positive attitudes towards providing woman-centred care. They were a diverse group in terms of their psychological responses to social influence, and there was variety in the reports they gave of situational factors that encouraged them to acquiesce or resist direction from senior members of staff. Reported experiences spanned the full range from senior staff being “libertarian” to “oppressive”.

5.7.1. Attitudes Towards Providing Woman-centred Care
Positive Attitudes
Many of the participants revealed positive attitudes towards providing woman-centred care, consistent with the findings of Levy (1999b). These positive attitudes were exposed through the participants’ use of phrases which prioritised giving women what they “want”, “wish” and “choice”, in relation to the care they receive. Participants’ dialogue showed that they were keenly aware of their responsibility towards facilitating informed choice and encouraging women to play an integral role in making their own decisions. This is consistent with what is directed in social policy documents (DoH, 1993; DoH, 2003; DoH, 2004) and the Midwives Rules and Standards (NMC, 2004).
The following excerpts illustrate participants' beliefs that choice and control should be provided to childbearing women.

Four participants regarded the childbearing woman's choice as an essential part of care provision. This aspiration abides with direction cited in "Changing Childbirth" (DoH, 1993), which notifies midwives that "the woman must be the focus of maternity care. She should be able to feel she is in control of what is happening to her, and able to make decisions about her care, based on her needs, having discussed matters fully with the professionals involved" (DOH, 1993, p. 9).

Participant 38: If it is what the woman wants. I think that is the most important thing.

Participant 21: We should empower women to have as much choice and control as possible.

Participant 8: Her choice and her decision.

Participant 19: Here I am considering the woman's choice.

Two participants expressed the view that childbearing women "have the right to" and "deserve" choice over their obstetric management. This approach responds to evidence which reports that a sense of control is a major factor in contributing to a woman's birth experience and her subsequent well-being (Green & Baston, 2003; Green, Coupland & Kitzinger, 1998; Waldenstrom, Borg & Olsson, 1996).

Participant 15: Women have the right to choose.

Participant 49: But that lady deserves a choice.

Three participants expressed belief that women should be given "informed choice" underpinned by "research-based information". The notion of enlightening about options is a fundamental principle of good working practice within the National Health Service (DoH. NHS Improvement Plan, 2004):

Participant 24: The woman should be in fact be making an informed choice.
Participant 16: Informed choice is about giving women unbiased research-based information.

Participant 43: Well you see, emm, the one thing I would question here is whether she has made an informed choice. Care should be individualised.

Two participants expressed belief that it was their role to provide women with informed choice. This approach is consistent with the findings of Lavender and Chapple (2004) who highlighted that many midwives take pride in this role:

Participant 60: It is up to us to give that informed choice and options.

Participant 44: I ask all women re options to give informed choice.

Six participants articulated self-belief that they would override direction from a senior person to stand in support of the childbearing woman’s personal preference. This observation is consistent with Milgram’s (1974, pp. 44-48) finding that the majority of people (psychiatrists, graduate students and faculty in the behavioural sciences, college sophomores and middle class adults) predict that both self and others would refuse to acquiesce with instructions that conflict with their belief about appropriate behaviour:

Participant 22: I would be an advocate for the mother and support her in her wish.

Participant 7: *(I would do it)* only if this is what the woman wants.

Participant 5: No, no, because the thing is, the mother’s wishes outweigh anything.

Participant 6: It would depend on what the woman wanted *(whether I would do it or not).*

Participant 41: It depends what they, the girl herself wants *(whether I would do it or not).*
Participant 35: So I think what the lady wants is more important (than what we want).

Two participants commented that if there were obstetric risks associated with the woman’s personal preference, then the option should be rescinded:

Participant 57: Women’s choice unless there was a clinical reason for it to be a problem.

Participant 39: Depending on individual circumstances (problems) and wishes of the woman.

Discussion
In total, nineteen (95%) of the twenty participants revealed positive attitudes towards providing woman-centred care. The selected excerpts show that by and large these midwives consider themselves committed to the rhetoric of choice provision. The findings have answered the first research question placed in Section 5.4 - “What are midwives’ attitudes towards providing woman-centred care?” The analysis reveals that the vast majority of midwives start with the presupposition that they would support the woman’s choice when asked to think about their own behaviour in the given situations. They focus on their own autonomous character rather than on the situation in which they find themselves. With this view, they are likely to expect themselves to behave in a resistant manner to social influence from a senior person. They also make the assumption that they have the power to prioritise the personal preference of the childbearing woman.

Although the interviewees expressed their intention to assist childbearing women make informed choices, many gave details of factors which controlled the agenda of options that were actually available.

5.7.2. Situational Factors That Promote Acquiescence
Interviewees could (and did) give multiple explanations of factors within their working environment that promoted their acquiescent behaviour. Three main categories were apparent: (1) the imposition of hospital policies,
(2) hierarchical control, and (3) fear of consequences from challenging a
senior person. The following excerpts show that when trying to facilitate
childbearing women to make an informed choice, midwives try to balance the
expressed needs of the woman, the procedures and policies of the
organisation for which they (the midwives) work, and their own personal and
professional needs. In order to achieve this balance, midwives often feel that
they have to “pick their line”. In other words, midwives have to consider
carefully how to achieve their goals without displeasing senior staff.

5.7.2.1. An Obligation to Follow Hospital Policies
The following excerpts supported the idea that participants felt duty-bound to
follow hospital policies. This finding is in keeping with Lawton and Parker
(2002) and Green (2005) who assert that rules, regulations and laws are in
place to ensure adherence to protocols and reduce uncertainty. These beliefs
were illustrated through use of phrases which substantiated that the midwife
felt that she would “have to” adhere to hospital policies.

Three participants cited that they perceived an obligation to follow
“guidelines” and “policies”:

Participant 16: For the reasons that you have said... You would just have
to go with it (guidelines) Caroline, wouldn’t you?

Participant 21: If the unit policy states one birth partner. I would have to
go along with that.

Participant 19: I’d have to if she’s under his care ‘cos you know, I’ve
got my own professional practice but I am employed and
I’m under the auspices of the hospital policies.

Two participants articulated feelings of overwhelming subordination.
This was expressed in phraseology like, “it’s like I am defeated” and “I would
feel a bit narked that I would be having to”. In these circumstances, the
hospital policy seemed to act as an “agent of domination” that permitted
piecemeal autonomy to the midwife. With this view, the midwives’
acquiescence could be perceived as a forced choice:
Interviewer: Would you administer the oxytocin according to the guidelines?

Participant 19: You’d have to, you can’t get away from it.

Interviewer: OK. In that case do you feel strongly about it or moderately? I take it you are agreeing. Would you strongly agree or agree?

Participant 19: It’s like I’m defeated, if you know what I mean. I would have to follow them (guidelines).

Interviewer: Do you feel strongly that you would have to follow them or do you just feel moderately?

Participant 19: I suppose strongly because I am bound to it.

Participant 44: I would say that I disagree. It is sort of one of those situations where I would feel a bit narked that I would be having to rupture this woman’s membranes, but it’s there and it is in black and white. That is the issue, you have to work within these guidelines.

One participant’s use of the expression “war crimes court” implies that she thought that agreement with the action directed was not in the woman’s interest. The following excerpt illustrates the conflict experienced between this midwife’s drive for obedience and her drive to defend an action she thought was more appropriate:

Participant 43: I can’t say I am having to follow orders because that doesn’t stand up in a war crimes court.

Interviewer: The point is, do you agree to administer the oxytocin or do you go against it?

Participant 43: I’m not saying that I would always follow it because. I will have to get back into the reality check. I would, I would, I agree (to administer the oxytocin).

One participant stated that policies stand in the way of providing women with choice. This finding is consistent with Magill-Cuerden (2005) who
affirms that policies frame the way a midwife works and as a consequence this inhibits the provision of care that is tailor made to the individual:

Participant 49: I would probably say, if that’s the policy, you know. Yeah you are not making that decision for that lady, you are making that decision for the senior midwife’s breathing down your neck and saying this is the policy and I am not happy with more than one partner in the room. I would in reality of the situation, I would go along with the system and I would say all right then someone is going to have to leave.

One participant articulated the view that policies repress those who are lowest in the chain of command. It would appear that dominant groups make the rules that juniors are expected to follow. This finding is consistent with Scambler’s (1987) viewpoint that the term “non-compliant” is reserved exclusively for less powerful groups who are expected to comply with directions from more powerful groups:

Participant 57: Well I think I would probably have found it difficult, but I mean I might be lying there actually. It’s difficult isn’t it? I think I might well be obliged to follow the guidelines if I was junior.

In total, seven (35%) participants supported the idea that midwives felt duty-bound to follow hospital policies.

5.7.2.2. Hierarchical Control
The following participants remarked that the influencer’s position within the hierarchy was an important factor in gaining their acquiescence. This was articulated through use of phrases which expressed that the participant perceived that the other member of staff was “senior” in the hospital hierarchy. The following excerpts show that higher-ranking staff are perceived as having a legitimate right to give direction.

Four excerpts support the idea that action flows from the higher end of the hierarchy to the lower by way of a system of ranks and grades, with
participants' responsive to signals from a level above their own and not the other way around. The axiom is that the person above has a legitimate right to give commands. This finding is consistent with the conclusions of Milgram (1974) and Shalala (1974). Milgram (1974) showed that when the high status experimenter was placed in the victim's position, obedience dropped to zero (Experiment 14, see Table 1.7). Shalala (1974) also found that when a lieutenant colonel issued instructions, obedience of those junior reached 68%. In contrast, when a private issued the orders, obedience dropped to 25% (Experiment 3, see Table 1.12). These results confirm that the response is to a designated authority rather than to just anyone:

Participant 49: I think what I would do as a fairly junior member of staff, unfortunately, I would probably...Yeah you are not making that decision for that lady, you are making that decision for the senior midwife's breathing down your neck.

Participant 60: I wouldn't refuse to do it because again I just think that someone higher up asked you to do it. (cardiotocography)

Participant 35: She (sister) definitely would not allow it (husband and two friends at delivery).

Participant 44: I would also ask, "is it OK that I rupture your membranes?" But again if he has made the decision (the obstetrician), I would question or not if it is his decision and his case. You have got to, you have got to follow.

Two participants talked about the character of the hierarchy, with difficulties resulting from defiance directly proportional to relative position within it. Social order places consultants uppermost, with obstetric registrars subordinate in standing. Midwives hold less status than obstetricians, with midwifery sisters superordinate to junior graded midwives:
Participant 15: So I suppose you are more likely, I am more likely to do what a consultant requests than I am probably a registrar.\textsuperscript{19}

The following excerpt shows that the practice of lower-ranking doctors was similarly constrained by power differentials, which is a finding consistent with Stapleton, Kirkham and Thomas (2002):

Participant 8: It's difficult in that it is the consultant obstetrician. If it is a more junior doctor or a sister you could say, "I don't think she needs it as she's making progress." When it is a consultant it is difficult.

One participant perceived some kind of contract with the hospital in which the hierarchy was accepted as one of the key terms of membership. Use of the phrase, "if I was junior", disclosed this participant's internalised hierarchy and her perception of her own place within it:

Participant 57: I think I might well be obliged to follow the guidelines if I was junior.

Three participants articulated the view that power was attributed to position. Many writers, for example Foucault (1980), have related knowledge to the distribution of power in society, maintaining that it is the dominant, powerful groups who define what can be accepted and what qualifies as knowledge:

Participant 39: It's positional power isn't it and how they use that power... There's a difference in power balance, definitely.

Participant 41: I think there is a definite power struggle that goes on... I don't just mean between professionals, but between women, midwives, the doctors themselves.

\textsuperscript{19} An SHO is a Senior House Officer or the most junior grade of doctor in the team. A registrar is a middle grade doctor who is training to be an obstetrician. A consultant is the highest grade of doctor who has appropriate obstetric qualifications and experience.
The following participant expressed a belief that the values and norms of the dominant group become accepted as the "right" ones within society, while those of the subordinate group are considered less important. This is a view also held by Levy (1999a):

Participant 49: It's power, she'll look at him and think yes, you know he knows what he is talking about as he has more experience.

The following excerpt illustrates the institutionalised reverence that junior employees show to senior staff. Such deference serves to reinforce the fundamental power structures and assists in maintaining the status quo. It will inevitably license those at the top of the hierarchy to define the norms, with an acceptance that top people can issue punishments for non-compliance. This is a finding consistent with Stapleton et al. (2002b):

Participant 41: And sister had to be there (on the ward round) and had to hand him each different set of notes and say yes Mr M, no Mr M. Things had to stop and the women had to lie on the bed. Miss T was the last one that could, ruled with a rod of iron, but she has mellowed quite a lot.

In total, nine (45%) participants remarked that the influencer's position within the hierarchy was an important factor in gaining their acquiescence.

5.7.2.3. Fear of Consequences From Challenging a Senior Person

The following excerpts show that the participants acquiesced, not because they agreed with what was suggested, but instead to avoid some form of retribution that might result from their resistance. Such acquiescence could be interpreted as necessary agreement. This was also a finding of Brehm and Cohen (1962), Festinger (1954, 1957) and Wickland and Brehm (1976), who found that public compliance without private acceptance can be forced when there is a threat of punishment for non-compliance. Three themes of feared consequences were identified. These were the participants' fear of: (1) an abnormal obstetric outcome, (2) litigation, and (3) conflict and intimidation.
5.7.2.3.1. Abnormal Obstetric Outcome

Participants remarked that they feared an abnormal obstetric outcome would result from a decision that they had defended in a conflict situation. This was consistent with the findings of Green (2005) and was articulated in participants' use of phrases which expressed their fear of complications, e.g., "thinking of...problems ahead", "rather be safe than sorry", "if anything did go wrong", "the sort of death rate" and "if anything did go pear shaped". Clearly, these midwives were afraid that they would be held responsible in the event that complications emerged. As a result, many promoted the technological interventions suggested by senior members of staff, even when they were contraindicated by the evidence-base.

One participant coped with clinical uncertainty by asking the senior person to perform the prescribed action. This is consistent with the findings of Hewson (2004) and Milgram (1974):

Participant 21: I would ask the consultant to discuss it with the woman and for him to do it (amniotomy). I would not be happy.

Interviewer: You'd abdicate responsibility.

Participant 21: I would, I would in this case because thinking ahead of the possibilities of, ummm, problems ahead and you never know if she kept doing nicely and she got to 6 centimeters, but she has still got a long way to go.

One participant managed clinical uncertainty by simply not opposing the direction given. Her strategy for coping was to relinquish responsibility to the senior person. This was also a finding of obedience researchers (e.g., Blass, 2002; Meeus & Raaijmakers, 1995; Milgram, 1974):

Participant 35: I think I would rather be safe than sorry. I am quite happy to go along with what he said. I don't think I would challenge him.

Two participants believed that use of technology (cardiotocography & amniotomy) would be viewed positively in the event of an abnormal obstetric
outcome. This opinion reinforces notions of “right” and “wrong” choices rather than “informed choices”:

Participant 36: I would be thinking if I don’t do it (cardiotocography) and as you said if anything goes wrong then I would never forgive myself. So I suppose I would and that’s awful really, but emmm, I suppose fairly strongly in that because of what I’ve said really, you know if anything went wrong, I would think I’d better do it.

Participant 38: Yeah (I would do the amniotomy). When you think about the sort of death rate.

One participant considered that she held only nominal power to influence clinical decisions. This comment is in keeping with Stapleton, Kirkham and Thomas (2002), who observed that midwives generally exercise little clinical influence compared to doctors. This midwife was clearly concerned about possible penalties from recommending options that contradicted obstetrically defined clinical norms:

Participant 44: Again if Mr Russell has written this down (that he wants cardiotocography), if anything did go pear shaped then I would have a lot of questions to answer.

In total, five (25%) participants remarked that they feared an abnormal obstetric outcome would result from a decision that they defended in a conflict situation.

5.7.2.3.2. Litigation
Some participants expressed a fear of the litigation that might result from decisions they advocated. This is a very real concern for midwives (Earle, 2005; Johanson, Newburn & Mcfarlane, 2002; Robertson, 2003; Warren, 2001), since there has been an alarming increase in lawsuits against the NHS over the last few years with 70% of all litigation involving obstetric cases (Johanson, Newburn & Mcfarlane, 2002). As a consequence, fear of litigation will inevitably shape midwifery practice (Robertson, 2003). Fear of the “fiscal
body”, “court” and “litigation” were cited as reasons for acquiescing with direction given:

Four participants commented that fear of litigation made it difficult for them to instigate independent and autonomous decision-making. This fear promoted notions of “right” choices that clinicians felt secure with and which they thought would afford them protection from litigation:

Participant 35: I just think there is so much litigation. You don’t practice just how you would like because of the fear of litigation, I think.

Participant 15: In the eyes of the court if I don’t do it and something happens, then he’s going to say “I didn’t follow his instructions” or whatever.

Participant 43: They are open to litigation, when working as an independent midwife...
I understand that he will never agree to it (a home confinement) because of litigation.

Participant 5: I think that there is one good reason here and it’s not maternal age, it’s the fiscal body.

One participant commented that she would not trust the senior person to stand by her in the event of an abnormal obstetric outcome. This lack of trust will inevitably affect decisions that midwives make. In situations of conflict, trust could be maintained only through compliance. Parsons (1967) used the term “zero power” to describe situations where power is used so that one individual is advantaged over another. He believed that this conceptualisation of power serves exclusively sectional interests. According to Lukes (1974, 2005), dominant individuals and groups have the power to make decisions against the preference of others, not least through marginalizing or reshaping the decisions of adversaries. In the words of Morriss (1987), they have “power over”:
Participant 39: I argued about something in the guidelines before. It was actually about labour and how long to leave women and she said, “I value your judgment and it’s not cast in stone. I am happy for you to use your professional judgment”, and that’s because she trusts me and she knows I would ask and how I make my decisions. But then I could cross her and that would change, so you can’t rely on that. If it came to a court case I wouldn’t trust her still. Do you know what I mean? As long as you play the game and play the game by their rules.

Two participants stated that fear of litigation caused them to devolve responsibility to the senior person. This illustrates the ability of the dominant group to control the agenda by implicitly encouraging various sets of values and beliefs that regulate and control subordinates’ actions:

Participant 41: And if there was litigation from it, then it would be the consultant that is sued and not me.

Participant 60: Like litigation and things, that someone higher up asked you to do it. Yeah, so I would agree that I would do it (cardiotocography).

Two participants commented that the best way to avoid litigation was to follow protocol. Over time, what starts out as non-routine direction may become subsumed into scheduled investigations and interventions. Eventually these are less likely to be questioned or refused. Thus the package of care, written by senior people, by virtue of its routine character may come to be regarded as the only possible or reasonable way of giving and receiving maternity care. In turn, these patterns of expected behaviour will seriously reduce opportunities for genuine informed choice to be given to childbearing women:

Participant 19: If you are looking at it as a protection mechanism (from litigation), then yes I would strongly disagree, sorry I would want them in place (guidelines).
Participant 60: Ummm, I feel quite strongly and I think that for litigation reasons.....that's in your best interests (to follow guidelines).

In total, eight (40%) participants expressed fears of litigation that might result from decisions they fought to support.

5.7.2.3.3. Conflict and Intimidation

Participants cited fear of conflict and intimidation as inhibitions to challenging authority. This is a very real concern for midwives (Davies, 2004; Dimond, 2002b; Hadikin & O'Driscoll, 2000; RCM, 1996). Nurses and health care employees account for around 12% of over 10,000 cases of bullying reported to the UK National Workplace Bullying Advice Line between 1996 and 2002. Surveys by Unison and the Royal College of Midwives show that 33% of employees in nursing and healthcare experience bullying (Bully on Line, 2005). Rappaport (1984) proposes that empowerment is often visible by its absence, characterised by powerlessness, helplessness, alienation, victimisation, subordination and oppression - terms Farmer (1993) noted have been used by some nurses to describe their position.

Participants expressed fear of conflict and intimidation through use of language that labelled the senior person as frightening. For example characterising them as a “dragon”, “intimidating”, “frightening”, “bullying”, “disagreeable”, or capable of going “bezerk”. Fear of conflict was cited as causing “misery”, “dread” and “hurt”.

Three participants articulated that challenging a senior person could result in some form of (undesirable) confrontation:

Participant 7: Discuss not argue, argue is a bit dangerous, grey area. Miss M would not take kindly to it.

Participant 15: Even the scariest ones.....because not many (midwives) do challenge them (senior staff) because they are frightening.
Participant 35: Well it depends, but on that particular personality here (sister), it probably would because I know what she would be like if I didn’t agree.

Interviewer: Would you change that (question response) if that person came into the room?

Participant 35: Probably!

One participant expressed frustration when imperatives, rather than evidence-based information or client choice determined the options available. This is a finding consistent with Stapleton, Kirkham and Thomas (2002):

Participant 10: I would challenge but it can often be quite intimidating to do so. I do though remember the feelings of helplessness, anger and frustration felt (when a senior person decided to override a decision I made regarding normal labour).

Two participants stated that they would actively seek to avoid confrontation:

Participant 41: But I don’t like the confrontation...

Yes. I am not a confrontational, not an aggressive confrontational person.

Participant 43: I would never be looking for an argument anyway.

One participant stated that she would acquiesce, not because she agreed with what was suggested, but instead to avoid the risk of losing her relationship with the dominant individual:

Participant 22: I wouldn’t argue with the consultant but I would agree, I wouldn’t have any problem with this mum wanting a home confinement. But I think you could cause more friction by arguing in front of the consultant. I think you could lose that relationship.

Four participants saddled the dominant individual with a reputation for intimidating junior members of staff:
Participant 36: It was a long time ago and it seemed to be all right (to let her two sisters and husband in with her in labour), but the dragon (sister) wasn’t on the ward.

Interviewer: Would you argue?

Participant 36: No...I think it would depend on which consultant it would be. If it is the most disagreeable one. The one you can’t talk to. No.

Participant 41: Miss T…ruled with a rod of iron.

Participant 38: I used to know this consultant who went beserk when they had more than one (birth partner present during labour).

Three participants cited that failure to comply would in all probability result in penalties. This was also a finding of Levy (1999a):

Participant 38: I’d give her a channel to go to… but I wouldn’t hurt myself personally (by arguing).

Participant 39: I used to dread nights if he was on. I used to feel physically sick ‘cause I knew if anything came in he would be so awful...and the bullying part of him didn’t like to give other people a break.

Participant 44: The costs of being direct with some of these individuals is, one that they tend to go a shade of puce and they and you know that they are going to make your life a misery for the next goodness knows how long.

One participant cited that her failure to acquiesce had resulted in attempts to block her promotion:

Participant 39: I have actually had this with Mr M, he tried to block my promotion, he didn’t succeed… Because I used my professional judgment.
Interviewer: Were you arguing in favour of what the woman wanted? Is that what you were doing?

Participant 39: He doesn't like anyone to make a decision but him.

One participant expressed that she feared a disciplinary hearing would result from her failure to cooperate:

Participant 60: Yes, but bit by bit people like this chip away at you. They do chip away at you. They make you feel that you are to follow a disciplinary and this absolutely mortified me. It staggered me.

In total, twelve (60%) participants could (and did) give multiple examples of fears that prevented them from resisting direction from a senior person.

Discussion

The analysis has shown that specific situational factors play a critical part in producing acquiescent behaviour from midwives, which is also the argument presented to explain participants' agreement in obedience literature (e.g., Blass, 2002; Meeus & Raaijmakers, 1995; Milgram, 1974). The situational factors that were themed in this study included: (1) the imposition of hospital policies, (2) hierarchical control, and (3) fear of consequences from challenging a senior person. The findings have answered the second research question placed in Section 5.4. - “What situational aspects of a maternity hospital produce such a pronounced social influence effect”? What emerged from the data is an image of organisational structures that empower senior staff to socially influence decisions of junior staff. The power to influence simultaneously disempowers subordinates and reinforces order.

The paradox is that obedience and conformity are essential for the effective functioning of maternity hospitals. When there is doubt, it is crucial

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20 A “disciplinary” is the lay term for the official process that management use to deal with alleged misconduct. When a midwife’s behaviour is deemed to have breached one of the Midwives Rules or Standards (NMC, 2004), then that midwife may be suspended from practice pending enquiry and the case reported to the Nursing and Midwifery Council in accordance with the specifications of Reporting Misconduct - Information for Employers and Managers (NMC, 2002).
that the midwife seeks out suitable advice and follows direction that is typically well informed and of sound intention. If they do not do this, patients may fail to receive appropriate management and treatment. Regrettably, there are occasions when the person in authority expresses a preference that should in fact be the choice of the childbearing woman, quite simply because there are no dangerous consequences that can result from her preferred option. Examples include, a woman who wants a natural physiological labour or more than one birth partner present at her delivery. In such situations, acquiescence with the senior person’s point of view constitutes failure to provide woman-centred care.

What is palpable, is that midwives often feel powerless to support women’s choice due to powerful external constraints. Consequently, when conflicts arise, acquiescence with the senior person and the institution is often prioritised over acting as an advocate for the childbearing woman.

The analysis indicates that order is maintained through the hierarchy, with a chain of command that implements hospital policies to produce desired behaviour. Adherence to procedures and discipline is sustained by an elaborate array of sanctions that may be exercised in the event that a subordinate does not accept direction from the senior person, consistent with the findings of earlier researchers (e.g., Arvey & Ivancevich, 1980; Manz & Sims, 1981; Trevino, 1992). In turn, obstetricians, senior midwifery staff and hospital managers are inhibited both by their seniors and by constraints that are external to their control (Hall, 1993; Weaver, 1998). As a result, those whose own control is limited will find it difficult to give others more control. If some gain more control then others will have less. Expanding control is therefore a political issue, a question of power relations. Resolution of such political problems is seldom easy. One inevitable consequence of such organisational structures, is that educated, capable, junior practitioners may have their eagerness for innovative practice obstructed and their enthusiasm for providing choice to childbearing women stifled.

Within such a regime, it is doubtful whether alternatives will be raised and it is probable that established normative practice will be presented as the only reasonable way. According to Cleland (1971), dominance is most complete when it is not even recognised. An obvious example of this is the
medicalisation of childbirth, whereby senior staff assume control purportedly in the interests of women (Turner, 1987). This control led to suppression of women’s knowledge, power and control over their own childbirth and fertility (Oakley, 1984). For example, hospital “confinements” came to be regarded by childbearing women and professionals as safer than home births, even when childbirth was normal (DoH, 1970). This policy was enforced by a government heavily influenced by the medical profession, whose personal interests happened to be served by the resultant increase in numbers of women seeking hospital confinements (Wagner, 1997). This belief has only recently been challenged, and the safety and popularity of home births is (very slowly) reasserting itself in the UK (Office of Population Censuses and Surveys, 1993).

Examples of other obstetric myths concern specific policies in childbirth, for instance, unnecessary inductions of labour, invasive methods of fetal monitoring, and high incidences of operative deliveries and episiotomies. All have been largely discredited in recent years (Enkin, Kierse & Chalmers, 1989; Tew, 1990). Some midwives and others (including some obstetricians) have long protested against such policies, believing them not to be in the best interests of childbearing women. These midwives and others have traditionally been regarded as relatively powerless against the collective forces of the dominant lobby (Levy, 1999c).

The excerpts cited illustrate how less dominant groups of people may be manoeuvred into following courses of action that do not necessarily gain their approval. There is a need to understand the issues involved in broader contextual terms and to relate them to choices that should be available to childbearing women (DoH, 1993, 2003, 2004; NMC, 2004). Research has found that control during labour is associated with greater sense of satisfaction and emotional well being at six weeks postpartum (Green, Coupland & Kitzinger, 1988; Green et al., 2003; Green & Baston, 2003; Bryant, Green & Hewison, 2003). Simkin (1991) found that women who had a sense of control during labour were more likely to express long-term satisfaction about the experience 20 years later. Kitzinger (1992) describes the experiences of some women, who 50 or 60 years after the event are still trying to deal with memories of horrific childbirth over which they had little or
no control. What is evident is that their memories of the event have neither
been obliterated by the pleasure when a healthy baby was born or by the
passage of time. Consequently, depriving women of choice and control during
childbirth is no small matter. Although power structures are inevitable and
potentially beneficial, they need to be deconstructed in order for misdirections
and abuses of power to be identified.

5.7.3. Psychological Processes Involved in Acquiescence
Several psychological processes were found to be involved in the participants'
acquiescent responses. Three main sub-themes were apparent: (1) some
participants interpreted direction from the senior person as instructions they
were expected to follow (an act of obedience), (2) some voluntarily changed
their viewpoint to fall in line with the one offered by the senior person (an act
of conformity), and (3) some stated that they used circumvention strategies to
avoid perceived negative consequences from resisting the guidance given.

5.7.3.1. Obedience
Participants could (and did) provide multiple examples which showed that they
perceived counsel from the senior person as direction they were obligated to
follow. This finding is consistent with arguments presented in obedience
literature (e.g., Blass, 2002; Meeus & Raaijmakers, 1995; Milgram, 1974).

Obedient behaviour was evidenced by participants' agreement with
what the senior person proposed, whilst simultaneously refusing to accept that
the decision was an appropriate one. The following excerpts show that
participants' decisions contravened their established views of best practice:

Participant 7: She won't benefit from that (cardiotocography\textsuperscript{21}). It's
pointless. Why does he want it?
Interviewer: He wants it to be done.

\textsuperscript{21} Current evidence supports that cardiotocography (CTG) is an unnecessary
procedure when there is normal progression of labour and the fetal heart is within
normal range. Meta-analysis of randomised controlled trials that compare
cardiotocography with a control group for fetal assessment found no significant
effect on perinatal mortality and morbidity. There was a trend to an increase in perinatal
deaths in the cardiotocography group (Patison & McCowen, 2005).
Well you would have to agree then!

Yeah I would conceal my opinion, I agree with that. I wouldn't necessarily say she's made the right decision.

Yeah, you'd do it but you wouldn't be happy about it (changing the method of pain relief). You'd say something to the contrary but you'd do it.

In that case I would have to go along with it, unfortunately (giving the epidural).

I would as well probably (agree), because this could be another conflicting situation. I wouldn't really see the reason for it, but like your saying half a minutes tracing (cardiotocography) and let the lady go back into the pool to carry on with her own birth plan.

So what you are telling me is that you would do it but you wouldn't want to do it? (give the oxytocin)

Yeah, yeah, well I would be reluctant to do it.

You know, so do you know what I mean, it's going against my beliefs a lot but at the end of the day I would do it (give the oxytocin).

You have got to, you have got to follow (carry out the amniotomy)... I would agree that I am going to have to do it. I wouldn't be happy though.

Oxytocin (Pitocin) is a drug that causes the uterus to contract more frequently. It is a means of accelerating and augmenting the first stage of labour and is contraindicated when labour is progressing normally (Fraser & Cooper, 2003). The World Health Organisation disapproves of routine use of Pitocin. The Physician's Desk Reference and the British National Formulary states that Pitocin should only be used when medically necessary. The induced mother should be continuously monitored (CTG) and have competent and consistent medical supervision. At the first signs of over dosage, such as tetanic contractions or fetal distress, Pitocin should be discontinued, oxygen administered and the patient treated with symptomatic and support therapy.
Participant 57: I would do *(the amniotomy)*. I probably would have some discomfort about it, thinking why are we doing it basically.

Interviewer: You'd do it with discomfort?

Participant 57: Yeah, I would.

Participant 60: I wouldn't refuse to do it because, again I just think that someone higher up asked you to do it *(cardiotocography)*. Yeah so I would agree that I would do it, but I don't know whether it would be immediately...Everybody says they cause more problems than they solve.

In total, ten (50%) excerpts showed that participants' decisions contravened their established views of best practice.

One participant actually used the words "instructions" and "acquiesce" to describe her behaviour, which showed that she interpreted that her agreement was requisite:

Interviewer: Do you feel strongly about that or moderately? *(undertaking amniotomy)*

Participant 38: To follow the instructions, to acquiesce... Yeah!

One participant's perceived obligation to obey noticeably caused her stress. Her behaviour was similar to Milgram's (1974) reports that some of his participants had persisted with the shock administration whilst voicing objections. This midwife recognised that her obligation to obey inhibited her

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23 Contemporary research informs that amniotomy is an unnecessary, outdated and invasive procedure in the event of normal labour. It is not recommended because it increases women's pain experience and may precipitate a cascade of obstetric intervention (Fraser & Cooper, 2003). Historically, it was a routine procedure that was carried out on all labouring women. Amniotomy is contraindicated because fetal heart abnormalities are more likely in the healthy, term fetus (Barrett et al., 1992; Fraser et al. 1993; Kariniemi, 1983; Garite, 1993) and it may cause umbilical cord prolapse (Levy, Meier & Makowski, 1984). Amniotomy has little effect on labour length (Barrett et al., 1992; Rosen & Peisner, 1987; Seitchik, Holden & Castillio, 1985) and it does not reduce the caesarian section rate (Barrett et al., 1992; Fraser et al., 1993; Garite et al., 1993).
from working as an autonomous woman-centred practitioner. Continual conflict eventually caused her to resign from post\textsuperscript{24}, which is a finding consistent with reasons given by other midwives for deserting the midwifery profession (e.g., Dimond, 2002b; Warwick, 2002; Price, 2005):

Participant 43: I would be very uncomfortable with this one (doing the amniotomy).

Interviewer: Right so what do you do? You have to answer with one of these.

Participant 43: Yeah (agreed)! This is why I shall leave midwifery in the end. It is a complexity of the system. I couldn't cope. That is why I am out on the community you know. I just couldn't do it any more......

The reason I am having difficulty with it is because it brings up all these feelings of ugh. It is very interesting for me because my feelings and the reality, the wider it gets, I feel I can't do it any more. You know what I mean? It is like when it starts to get right to your core values. It's, you are not willing to do it any more. As soon as that comes into your conscience. These situations that you are giving us here are very very hard for stress levels of midwives because they are not able to practice you know and they should be able to practice in the interests of women. Emm, and that conflict will make staff ill. It is very bad for their health. It is so disempowering. So there you go, I'd probably have to do it. Agree!

The following participant also recognised that her focus had shifted from giving preferential consideration to the choice of the childbearing woman, to instead fulfilling her perceived obligation to follow direction:

\textsuperscript{24} Shortly after this interview, Participant 43 resigned from her post as a G grade community midwife. Participant 43 informed the researcher that she had done this because she felt that she had nominal autonomy and felt disempowered to provide the woman-centred care that was requested by current doctrine.
Participant 49: Yeah, you are not making that decision for that lady. You are making that decision for the senior midwife's breathing down your neck and saying, "this is the policy and I am not happy with more than one partner in the room (during labour)". I would in reality of the situation, I would go along with the system and I would say all right then someone is going to have to leave.

The disparity that is evident between the participants' private opinions and the SIS-M responses given during the interview, tells us something profoundly revealing about the psychological processing that was going on. These midwives perceived an obligation to obey the senior person, when quite clearly their personal viewpoint differed. This is obedience as defined by Milgram (1974). Regularities within the quantitative data support this deduction (see Table 4.8). The following excerpts illustrate one particular participant's unchanged rationale between the postal and interview condition, despite her acquiescence with the consultant's demand:

The following participant wrote on the pre-interview questionnaire:

Participant 22: I would be the advocate for the mother and support her in her wish to have a home birth (agreed with SIS-M question).

This participant provided the opposite response during the interview:

Participant 22: I wouldn't argue (disagreed with SIS-M question), but I would (still) agree, I wouldn't have any problem with this mum wanting a home confinement.

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25 In the World Health Organisation (WHO) (1996) summary of research on place of birth - Subsection on Place of Birth. It is stated that it has never been scientifically proven that the hospital is a safer place than home for a woman, who has an uncomplicated pregnancy, to have her baby. Studies of planned home births in developed countries have shown sickness and death rates for mother and baby are equal to or better than hospital birth statistics for women with uncomplicated pregnancies. The evidence states that planned home birth is a safe option (Anderson & Murphy, 1995; American Public Health Association, 2002; Dower et al., 1999; Goer, 1995; The Mother-Friendly Childbirth Initiative, 1996).
This participant wrote on the post-interview questionnaire:

Participant 22: I would certainly be the advocate for the mother and support her as much as possible in her wish to have a home confinement (agreed with SIS-M question).

In total, thirteen (65%) participants could (and did) provide examples which showed that they perceived counsel from the senior person as direction they felt obligated to follow.

5.7.3.2. Conformity

The following excerpts illustrate that for the brief period of the interview there was homogenisation of viewpoints, as the influenced midwife both agreed and came to adopt the perspective of the other person. This is conformity as defined by Asch (1956). These participants not only changed their SIS-M response, they also adopted the underlying rationale that was presented by the interviewer. The following excerpts disclose participants’ readiness to reach agreement with colleagues:

Participant 5: You seek some sort of consensus of opinion with the mother and the midwife and maybe necessarily the medical practitioner or another colleague. I mean, I personally don’t practice independently above people. If I am unsure of something, I will ask a colleague to see if they concur, because it is not a job that you can really, you know. I don’t know if it’s a job that you can do just on your own. I don’t believe that. I don’t believe, I mean, I know our guidelines say we should go in, the midwife only with the woman and you have this one to one magic, and that’s all very nice. But I don’t see why as a group we can’t work as a group or have a consensus.

Participant 43: Oh yeah. My argument is that we shouldn’t be put in these situations where we have these conflicts because we all should be of the same mind.
Participant 49: I would, in the reality of the situation, I would go along with the system and I would say alright then someone is going to have to leave (the delivery room).

The disparity that is evident between the private and interview response helps identify the psychological processing that was going on. What is clear, is that these midwives perceived a need to be of the same mind as their social group. Consequently, during the interview they reneged on their postal response. Regularities within the quantitative data support this deduction (see Table 4.8). The following excerpts show that the participant's changed their underlying rationale to match the one given by the interviewer:

The following participant wrote on the pre-interview questionnaire:

Participant 19: If being considered for a home birth, with no adverse "risk factors", don't need consultant support.

NB., Majority of risk factors not evidence-based (agreed with the SIS-M question).

During the interview this participant provided the opposite response and changed her underlying rationale to match the one given by the interviewer:

Participant 19: The fact that she's been under shared or consultant care. There has obviously been some reasons and there could be some historical baggage there with the consultant. And it's not my position if it's his name on the notes and in this situation I think, unless something was really shouting at me and I would be very secure with what I was going to say, I wouldn't argue (disagreed with SIS-M question).

This participant wrote on the post-interview questionnaire:

Participant 19: Should be referring to research. Nevertheless need to view research in context. In this instance a way to
educate the consultant needs to be found (agreed with the SIS-M question).

One participant actually shifted from supporting the personal preference of the childbearing woman, to instead comply with the viewpoint of the interviewer:

On the pre-interview questionnaire, Participant 24 agreed to let the childbearing woman have more than one “birth partner” present throughout her labour. During the interview she reneged on this decision and altered her underlying rationale to match the one given by the interviewer:

Participant 24: The problem is that some of the delivery rooms are quite small and that can create a problem. Often where you’ve got a small labour room and you get everybody in there. They can see it, it's completely obvious and it's usually not physically possible for all of them to stay. (disagreed with the SIS-M question)

On the pre-interview questionnaire Participant 44 agreed that guidelines were unnecessary when obstetric progress was normal. During the interview Participant 44 reneged on this response and changed her underlying rationale to match the one given by the interviewer:

Participant 44: In which case I believe that guidelines are necessary. I feel as if they have to be there to give some structure emm, and you do have to work within them.

One participant’s concern shifted from giving preferential consideration to evidence-based practice, to instead comply with the viewpoint of the interviewer:

On the pre-interview questionnaire, Participant 57 agreed that she would argue to support a woman wanting a home confinement. During the interview she relinquished this offer and changed her underlying rationale to match the interviewer’s:
Participant 57: I would agree that, emm, I think that what I would probably do is... Well it's I agree with his reasons for being unhappy with that (disagreed with the SIS-M question).

The following participants' use of the words "valid" and "experienced" imply that they ascribed status, credibility and trustworthiness as important factors in securing their agreement. This finding is consistent with Hurwitz, Miron and Johnson (1992), Ostermeier (1967) and Swenson, Nash and Roos (1984). Self-categorisation may also have played a part, with the midwife influenced by the senior person's reputation, attitudes and judgments, dependent on the level of social identification they felt (Haslam, 2001; Oldmeadow et al., 2003):

Participant 8: I am more likely to do what a senior person says. Their decisions are more valid because of their position.

Participant 20: I would listen because after all she is more experienced than me.

In total, nine (45%) excerpts illustrated that for the brief period of the interview there was homogenisation of viewpoints, as the influenced midwife both agreed and came to adopt the perspective of the other person.

5.7.3.3. Circumvention Strategies
Participants stated that they used tactics that circumvented direction given by the senior person. This finding is similar to strategies identified in an interpretive grounded theory study by Levy (1999a). Barry (2001) also found subordinate midwives using a variety of stratagems to circumvent dominant people imposing knowledge and preference over them. In some instances, the solutions that the midwives implemented represented innovative and resourceful ways of pleasing both authority and the childbearing woman. Three main categories were apparent. The participants employed (1) dishonesty, (2) evasion, and (3) manipulation.
5.7.3.3.1. Dishonesty

One participant stated that she used dishonesty to circumvent what she saw as unnecessary interference from the senior person. This type of psychological strategy was also identified in Milgram's (1974) Experiment 7, in which some participants reassured the experimenter over the telephone that they were escalating the shock levels as prescribed, when in fact they were repeatedly reissuing the lowest dose on the board:

Interviewer: Would you do it (cardiotocography)?
Participant 6: No, well I would, eh, get round it by sort of, by sort of saying she was far too distressed and that you know, she just couldn't tolerate you know the CTG. I think it's really quite an unreasonable request. I mean it's not as if she has had a problem. I mean she's not come in with any problems or so. If it's necessary, you'd lie a bit and say I mean he doesn't need to know she's got a flexible approach. Do you know what I mean?

5.7.3.3.2. Evasion

Participants cited strategies that evaded face-to-face confrontation with the senior person. This finding is consistent with Milgram's (1974) Experiment 7, in which in the experimenter's absence, some participants administered less shocks than were prescribed and did not escalate the levels as the task required. When the experimenter was present the number of obedient participants (26) was almost three times as great as when he gave his orders over the telephone (9).

The following excerpts are illuminating since they tell us that the participants found it easier to handle dissent in a non-confrontational manner. Face-to-face with the senior person, some participants overtly agreed to follow what was advised and then proceeded to circumvent the direction given by using covert strategies. This psychological tactic permits the midwife to defend her autonomy whilst staying in favour with the senior person and with intent a respectful relationship is maintained. Morriss (1987) differentiates between “power to” affect outcomes and “power over” other individuals to persuade or
coerce the course of action. These participants utilised the “power to” circumvent interference, since they could not assume “power over” the more dominant individual.

Two participants cited an evasive tactic of blocking access of senior staff. This finding is similar to Rank and Jacobson’s (1977) non-compliant nurses who would have only given the drug had the senior person stayed to maintain surveillance over administration:

Participant 7: No wonder we barricade the doors so they can’t get in (senior staff). I say before he can get a word in, “my lady is absolutely fine, we don’t need to be seen by the consultant on the ward round. Thank you”!

Participant 21: Whoever was coordinating the labour ward has said to the consultant, if she is in the pool and she is pressing on nicely, “we are happy with her, this is quite normal, you really don’t need to see her”.

Two participants quietly circumvented confrontation. The perception that this would avoid “a big scene” serves to underline the relative powerlessness of the midwife. Such use of covert tactics to subvert the power of more influential others reinforces hierarchical structures between the senior person and the midwife. Kitzinger, Green and Coupland (1990) call this behaviour “hierarchical maintenance work”:

Participant 16: Yeah, you are constrained but there is always ways of getting around it very quietly, without making a big scene.
Interviewer: Can you tell me what they are?
Participant 16: Well, you can always say, “well, can one or two of you just wait in the coffee room or just wait quietly and come back in twenty minutes or half an hour”? So there are always ways of doing it really quietly.
Interviewer: So that it is not noticed, do you mean?
Participant 16: Yes, so it is not noticed and in still being an advocate for the woman, keeping it, not making it very obvious how
many people are actually in the (labour) room.

Interviewer: Has this ever happened to you?
Participant 16: Yeah, yeah, done quietly later on and then they come back in either when there is a shift change or just before.

Participant 38: I used to know this consultant who went bezerk when they had more than one (birth partner). You only had to have one in delivery. But I used to hide them in the toilet and there was always the toilet. He'd be doing the ward round, so you would say, "go in the toilet", 'cos they wouldn't stay long.

Four participants perceived that their power and knowledge was inadequate. Data have shown that these midwives were placed in invidious positions of relative powerlessness. It is also strikingly apparent, that their actions serve to reinforce the fundamental power structures and status quo:

Participant 38: I wouldn't do it. I'd say "if you wanted a home confinement". I'd give her a channel to go to. If the consultant wouldn't, I'd say "there are people who will give you a home confinement." I mean, so I would give her information so that she could have a home confinement but I wouldn't hurt myself personally.

Interviewer: Would you do that or would you not, get into an argument with the consultant over this home confinement?
Participant 41: I would ask the woman what she wanted to do first of all. The options are that she may wish to change consultant. She may wish not to come to hospital anymore, unless she has a problem, and therefore as a midwife I could give her that care. But if she felt she wanted to have a consultant input still, I would suggest that we referred her to another consultant.

Interviewer: Right fair enough. So you are looking for a way round it?
Participant 41: Yes.
Interviewer: OK. So you usually opt for a way round?

Participant 41: Yes, I don’t know if that is because I have been here a long time and I know the consultants. Nothing is ever black or white.

Participant 6: There is a way round this, you could sort of have a word with the woman and tell her that she could have a home confinement and be attended upon, but not necessarily by him. And that would probably be my way around it.

Participant 15: It depends on who your consultant is and there might be a consultant out there if your woman cares to choose another one. She doesn’t have to stay with that consultant does she? She might decide to see another consultant who might support her in her decision.

In total, seven (35%) participants cited creative and resourceful strategies they used to evade face-to-face confrontation with the senior person.

5.7.3.3.3. Manipulation

Participants cited that they would "get around" the problem by persuading the childbearing woman to refuse what had been suggested by the senior person. This interesting covert approach accords with Stein’s (1978) description of strategies used by nurses when interacting with doctors. It is also reflects the way women are said to use manipulation rather than confrontation to get what they want (Tannen, 1992).

Use of manipulation empowered these creative midwives to influence the agenda. Hugman (1991) warned that individuals or groups who exercise power may be unaware of doing so, and that nurses may even reject the idea that they exercise control in this way. Manipulating the childbearing woman to “agree” or “disagree” with what the senior person suggested represents a smart strategy that the powerless use to realize their preferences.
Four participants cited that they would manipulate the childbearing woman into refusing the treatment suggested by the senior person. Responsibility for rejection was deflected onto the client:

Participant 5: 'cos in law, even in law you cannot force anyone to have anything done to them that they will not consent to. So if the mother does not consent to it, all you need to write in the notes is, discussed with mother, underneath what the husband said, discussed with consultant. Consultant will then come back and say, blah, blah, blah, against my wishes, but you just write that consent has not been given. You're covered!

Participant 57: I think what I would probably do is discuss it with the parents. Tell them that Mr Russell has suggested that we rupture her membranes. There is a lot of possibility that this could, you know, make it that she wasn't able to cope with the pain. Try to sort of discuss the scenario with her, so if she said that she'd rather wait another hour to see how she got on, I could put it in the notes that having discussed it with the mother, the parents, we've decided to wait another hour to see if there's progress.

Participant 6: Well because again there is easily ways around it, by just saying. What I would do is probably say to the woman, "you don't want them to break your waters, do you? Because of this, this and this," and then she would say no and then you would turn round to the consultant and say I couldn't because she didn't want to.

Participant 39: You could say that the case reports state that there is an increased incidence of risks for women, you know risk of death etcetera and given that it is obviously making it more indigestible, like food.
In contrast, one participant declared that she would attempt to persuade the childbearing woman to revise her appeal for three visitors. In this way, the woman was manipulated to alter her birth plan to fit in with what the senior person suggested:

Participant 36: I wouldn't strongly agree because I'd maybe try and dissuade her (from having three visitors).

Interviewer: OK. You'd try and dissuade her?

Participant 36: Probably yeah.

The following participant engaged in gate-keeping activities when providing information. Consequently, the childbearing woman would be unaware of omissions from the agenda or variation in emphasis on the topic. As such, limiting information was used to manipulate the woman's choice, which would not be made in a level playing field:

Participant 60: Yeah, I agree with you there. Exactly how informed is informed. Because you can make the informed choice sound as if you are telling her everything so she can make that decision. But you can give her informed choice hoping that she's going to say, "I don't want that then".

In total, 6 (30%) participants stated that they manoeuvred childbearing woman into refusing what the senior person had suggested.

Discussion

The results illustrate some of the participants' psychological responses to social influence from a senior person. Thirteen (65%) demonstrated obedience, nine (45%) conformity, while 12 of the 20 (60%) illustrated strategies used to circumvent perceived needless interference from the senior person. Overall, the findings have addressed the third research question stated in Section 5.4 - "What are midwives' psychological responses to social influence from a senior member of staff"? The analysis showed that midwives respond to social influence using two central processes: obedience and
conformity; it also showed that inspired and resourceful circumvention strategies are sometimes used to avoid perceived needless direction from senior staff.

5.8. Midwives Who Resist and Assist Authority

It would be ill considered to simply perceive the participant as a midwife who either acquiesced or resisted social influence from the interviewer, for each individual brings to the event a complex and specific range of emotions, attitudes and individual styles. So varied in character and nature were the participants, that it appears surprising that such regularities emerged from the data at all. While one midwife was hesitant, uncertain and self-doubting, another was confident and assertive as she pointed her pen at the interviewer to underscore her assertions. While it is important to take seriously what these midwives have said, it is also valuable to realise that they themselves may not understand the causes of their own behaviour. Forces beyond their awareness may have adjusted and restricted their behaviour in the presence of the senior midwife. The data have shown that many of the participants acquiesced with the views of the interviewer. Yet, some also resisted. Participant 60 has been identified as an autonomous character who strongly resisted social influence from the interviewer:

Participant 60

Participant 60 has worked as a full time midwife for 18 years. She is a G grade labour ward sister who has been in her present post for 14 years. She presented herself to the interviewer as an autonomous, able and efficient midwife with a somewhat formidable character. Throughout the interview, she was strong and resolute about what she thought were the appropriate SIS-M responses. Out of all 60 midwives, Participant 60 was the only one who had an interview score that was lower than that obtained from the pre-interview questionnaire (Pre-Interview SIS-M score = 31: Interview SIS-M score = 29, see Appendix Seven). That is to say, Participant 60 reacted in feisty resistant ways to authority. The strong and resolute behaviour she exerted was evidenced in the response she gave to SIS-M question four:
Participant 60 was strong and assertive throughout the entire interview. She displayed a manner that differed from the other interviewees. Her personal history showed that she had been promoted to sister after only four years experience as a practising midwife. Participant 60 gave an impression that she had some form of ownership of the system, that she was a stake holder. In the specified role of advocate for women, she showed a great deal of action initiation. Participant 60 clearly used an inner reference group and considered herself to have an active role in political aspects of the system. This was evident in the response she gave to SIS-M question 7:

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26 Multip is short for multigravida. A multigravida is a woman who has been pregnant more than once. When a woman has given birth before, the process of labour is usually more spontaneous and rapid.
Interviewer: Would you challenge him over this issue? *(If a senior member of staff decided to override a decision you made regarding normal labour).*

Participant 60: Yeah, yeah, yeah, I would. I mean the only thing that I would say is that I wouldn’t do it in the room. I would come outside and do it. If I’m challenging I would probably go say, do you know that maybe he’s coerced her a bit into having this epidural that she really didn’t want and, emm, so yeah definitely.

Interviewer: Right OK, so what I have asked you is, would you challenge him and that’s fine.

Participant 60: I would say that he’s frightened her.

Interviewer: Can I ask you, see I am getting a feel of your personality here and you’re sounding quite, umm, an autonomous practitioner. Are you ever issued punishments for being so strong minded?

Participant 60: No I haven’t really and in fact one of the consultants, not just one probably all of them really, but one in particular. This day, he was talking to a woman about induction and said he would come back in the afternoon and assess her with view to prostin. And I was actually doing the round with him. And he said to me “yes unless you’ll be here will you”, and I said “yes I am on this afternoon”. And he said “will you do it then”? I said “yeah” and he said to the woman, “I am very happy for sister to do it you know. I feel”, and he added “not the SHO”, that I was to do it myself and I have had that quite a few times.

Interviewer: So you feel you’ve got quite a bit of trust there?

Participant 60: Yeah!

Participant 60 upholds her position by persistently projecting herself as a power to be reckoned with within the maternity unit in which she works. In the presence of senior members of staff she displays strong individuality. It is clear that her colleagues know her character and expect her to be more
assertive and prominent than the other midwives. Participant 60 conveys self-confidence, is very secure and consequently is unrestrained from challenging the authority or the wisdom of instructions. “Per se”, she does not exhibit the kind of acquiescent behaviour that many other midwives show to senior members of staff.

In contrast, some midwives are incorporated into the organisation and accept the organisation’s right to set behavioural standards with imposed restrictions. Such a midwife acknowledges authority within the system and therefore her personal ideals and position become immaterial within the operation of the maternity unit. Therefore and accordingly, such a midwife regards acquiescence with the directives of the system as appropriate and essential. Selected excerpts have shown that many midwives follow policies and rules and adopt a position that is acquiescent to the views of senior people. Such a midwife does not see herself as an action initiator, but rather as a representative who follows directions issued by authority. This midwife does not see herself as accountable for blocking choice and instead perceives that it is the responsibility of the senior person to accept or refuse the childbearing woman her personal preference.

Participant 19 is an example of such a midwife. Out of all 60 midwives, Participant 19 scored the highest interview SIS-M score, which was 28 points higher than the score she attained in the private measure (Pre Interview SIS-M score = 20: Interview SIS-M score = 48, see Appendix Seven). During the interview, Participant 19 clearly used an external reference group and considered herself to have no role in political aspects of the system. This was evidenced in the responses she gave to SIS-M questions two, three and nine:

**SIS-M Question Two**
Participant 19: There has obviously been some reasons and there could be some historical baggage there with the consultant and it’s not my position if it’s his name on the notes.

**SIS-M Question Three**
Participant 19: I’d have to if she’s under his care. Cos you know, I’ve got my own professional practice but I am employed and I’m under the auspices of the hospital policies and I’m sure I
would get out of him what his reasons were and they probably would be very good.

SIS-M Question 9
Participant 19: I'd go with the policy, a policy is a policy. I might not agree with it but this is how I would have to function. This is probably most of the time how I do function, even in here.

Participant 19 agreed with every answer the interviewer proposed and was definite in her views about following custom and policy. Her personal history was that she had been employed full time as an E grade for the 8 years that she had been registered as a practising midwife. Participant 19 gave an impression that she conformed within the system and that her role was to follow direction issued by authority. She presented herself as an able practitioner and considered herself as someone who functioned well within the system.

5.9. Chapter Discussion
Findings have explained the participants' acquiescent behaviour in terms of powerful situational forces. Many of the midwives acquiesced because they perceived a requirement to do so, consistent with obedience literature (e.g., Hofling et al., 1966; Meeus & Raaijmakers, 1995; Milgram, 1963, 1965, 1974; Shalala, 1974). Others acquiesced because they were influenced to identify with the "other", consistent with conformity literature (e.g., Asch, 1952, 1955, 1956; Bond & Smith, 1996; Pendry & Carrick, 2001). The selected excerpts have shown that the working environment can make it difficult for midwives to be innovative and assertive. Also, at times there is conflict between supporting the childbearing woman's choice and what authority and protocol direct.

Results of the qualitative analysis illustrate a paradox. Clearly, the participants wished to bestow childbearing women with choice, yet the midwives control of the situation did not necessarily lead to empowerment - rather the opposite. Many of the midwives experienced constraints imposed by dominant groups and thus were rendered helpless to offer real choice to childbearing women.
Solutions have been considered, which are similar to those cited by Shields (1995) and Young and Haynes (1988). First, there is the development of an internal sense of self-awareness. This concerns the fostering of an identity, involving self-value, self-acceptance and trust in the form of self-knowledge. The ability of individuals to socially influence and assume power over others is perhaps the ultimate manifestation of empowerment. In order to gain this, the individual (or organisation) requires strength of self-identity and self-concept, energy and action (Young & Haynes, 1988). Processes of mutual empowerment are visible when groups of midwives, (e.g., the Association of Radical Midwives - ARM) and groups of women concerned with childbearing (e.g., the Association for Improvements in Maternity Services - AIMS), facilitate individual empowerment through group activities. 

One of the intentions of groups such as ARM and AIMS is the furtherance of these values. They do this by developing a clear sense of purpose in women regarding the choices they wish to make during childbirth. They also build a strong sense of shared identity between midwives. It could be argued that the concept of “professional identity” is a double-edged sword, implying an allegiance to a particular worldview of what midwifery is about. Also, the term “professional identity” may imply allegiance to other professional organisations and groups demanding codes of behaviour that may not be in the interests of childbearing women. 

Second, that midwives move towards taking action, speaking out and participating in decision-making, taking risks and developing skills. These actions are also reflected within the organisations that have been cited. Midwives and women are increasingly vocal in their views about childbirth, and the fruits of this action are visible in initiatives that relate to Changing Childbirth (DoH, 1993).

Third, a sense of connectedness is developed between those who share a social identity and between midwives and other health care professionals. That by teamworking members collaborate to stimulate many initiatives to improve the experience of childbirth and to empower midwives and childbearing women, as also described in Changing Childbirth (DoH, 1993).
The work of midwives is highly complex and often difficult. Data from this study has shown that midwives are frequently placed in unenviable positions of relative powerlessness. It is markedly apparent that some actions and strategies that midwives use reinforce the fundamental power structures and status quo. A raised awareness of the processes that relate to social influence and the exercising and sharing of power may be helpful to midwives in asserting not only their own professional capacity to influence, but also the autonomy of the women they seek to empower. Further consideration is needed of the issues surrounding the giving and taking of power in relation to the clinical, educational, managerial and supervisory roles of midwives.

Further research would also be useful. In particular, there is a need for a study that explores in more detail situational aspects of the maternity hospital that exerts influence upon midwives' decisions. With greater insight, hospital managers could be helped to understand why particular demands of practice are not being met. Without such research, the work of a growing number of maternity care professionals now concentrating on improving choice and control for childbearing women may fail to yield the desired results. If hierarchical position and its associated power to influence decisions and situational constraints are shown to be durable and effective in obstructing women-centred care, then special efforts may be warranted to counteract this effect.

5.10. Conclusion
This qualitative analysis of participants' interview transcripts has shown that there is a strong face-to-face authority relationship that subverts what many midwives believe should happen and is at odds with woman-centred practice. The excerpts have shown that much of this is embedded in hospital culture. It is an example of a form of acquiescence that extends far beyond health care. At one level, the explanation can be in terms of a specific culture and hierarchy, but on the other there is something more basic. The midwife's role blends rules backed by disciplinary sanctions, with a need to act autonomously. Midwives are bound by regulations at the same time as being asked to respond to women's requests. In the present institutional culture, such conflicting directives mean that midwives run the risk of getting it wrong.
They need to think creatively and rapidly at critical moments in order to avoid discipline. They also at times have to bend the rules and face the risk of reprisal. This combination requires radical responses in order to meet practice directives (DoH, 1993; DoH, 2003; DoH, 2004; NMC, 2004).
Discussion and Conclusions

Most people will have observed the often impressive synchrony of the behavior of fish in a school or birds in a flock. The fact that the behavior of a fish is so well matched to that of the behavior of others is straightforward: perception directly affects behavior. When a fish perceives a change of direction in another fish it simply matches this change in direction. This direct link between perception and behavior can be easily witnessed in humans as well. We too match the behavior of others and we do this simply because perception directly affects action. The specific behavioral changes perception can bring about differ between humans and fish, but the underlying mechanism is essentially the same. Perhaps we share this important psychological mechanism with a haddock. (Dijksterhuis, 2001, p. 105)

6.1. Introduction

The study results have important practical consequences for evaluating the care that midwives offer to childbearing women. During the interviews, the participants were placed in a well-controlled situation that was structured to make resistance to the senior midwife’s suggested SIS-M responses difficult. The senior midwife was successful in her attempts to socially influence many of the participants’ responses to the SIS-M questions in a conformist direction. Anticipated consequences from their failure to acquiesce might have made it difficult for these midwives to resist the senior midwife’s arguments. The midwives in the present study, like many of the corresponding participants in the Milgram (e.g., Milgram, 1974; Meeus & Raaijmakers, 1995; Shalala, 1974) and Asch experiments (Asch, 1952, 1956; Bond & Smith, 1996; Pendry & Carrick, 2001), often dutifully agreed with what was suggested. Unequivocally, many of the midwives agreed with decisions they already had opposed in a private questionnaire.

The purpose of the interview condition was to examine whether a senior midwife could socially influence junior midwives to acquiesce with her proposals about decisions that by and large should be client led. The experiment took cognisance of the dilemma that many midwives face when under pressure from a senior member of staff. The majority of midwives perceive a duty to acquiesce with the senior person over and above their role.
as an accountable practitioner (NMC, 2004) and advocate for the choice of the childbearing women (DoH, 1993, 2003, 2004). Results of the interview showed that the senior midwife was significantly successful at influencing junior midwives to acquiesce with her suggested question responses \( F(1,57) = 249.62, p = 0.001 \). Those participants who achieved high scores on the measure of social influence thereby showed substantial agreement with what was recommended by the senior midwife.

Results stimulate interest in specific factors that made disagreement with the senior midwife so difficult. Milgram (1974), Asch (1952, 1956) and their more recent counterparts (e.g., Meeus & Raaijmakers, 1995; Pendry & Carrick, 2001; Shanab & Yahya, 1977) provide explanations similar to those that seem to account for the present experimental results. Explicitly, the demands of an authority figure, the acceptance of full responsibility by the experimenter, the group pressures, the stress of the situation and lack of perceived choice influenced the participants' decisions. The participants' lack of perceived choice is highly relevant, since during the interviews they could have disagreed at any time.

6.2. Legitimisation

Legitimisation may be the key to the interpretation of these results. When a senior person is viewed as having a legitimate right to give direction, such authority has the capacity to exert influence. During the interview, the senior midwife asserted herself from a position that the subordinate might have interpreted as necessitating a duty to acquiesce. This view of authority flows from the manager by way of a system of grades or ranks, as shown by Milgram (1974) in Experiments 12, 13, and 15, and Shalala (1974) Experiments 3 and 4 (see Chapter One, Subsection 1.2.1). In the present study, the interviewer primarily dominated the conversation and sought to "socially influence" the participating midwives' decisions. The definition of the two terms, domination and social influence (following Shalala, 1974) as used in this study, illustrate the context in which these concepts were employed:

**Domination** - Influencing an individual's responses by giving explicit direction as to the desired response, with reference to the goals sought. The objective is to produce mechanical compliance.
Social Influence - Manipulating the individual’s behaviour by indirect techniques and by emphasis on specific goals.

The dilemma over answering the questions honestly or giving the desired response may occur when the midwife attempts to establish the legitimacy of the direction. Milgram (1974) showed that obedience occurs as a function of conventionally constituted authority. He demonstrated that action flows from the higher end of the social hierarchy to the lower, with the participant responsive to signals from a level above his own, but indifferent to those below it (see Chapter 1, Subsection 1.2.1, Experiments 12, 13 & 15).

Similarly, the midwives who took part in the interview were polite and deferential to the senior midwife. Milgram (1974, p. 155) provides an explanation for participants' responsiveness to signals from above and not from below, in terms of perpetuating the hierarchy:

Throughout this experience with authority, there is continual confrontation with the reward structure in which compliance with authority has generally been rewarded, while failure to comply has most frequently been punished. Although many rewards are meted out for dutiful compliance, the most ingenious is this: the individual is moved up a niche in the hierarchy, thus both motivating the person and perpetuating the structure simultaneously. This form of reward, "the promotion", carries with it profound emotional gratification for the individual but its special feature is that it ensures the continuity of the hierarchical form (Milgram, 1974, p. 155).

The net result is internalisation of the social order - that is, internalising the axioms by which social life is conducted. And the chief axiom is, do what the man in charge says (Milgram, 1974).

6.3. Perceived Obligation to the Organisation
There are important differences between the perceived lack of choice for participants in the Milgram and Asch style experiments and for the midwives in the present study. Milgram (1974) was impressed by the amount of wholesale obedience that an authority figure was able to elicit in situations where
legitimacy is assumed and discipline implied. This is not the case in a hospital environment.

First, consider the notion of authority as expressed by some of the midwives’ comments (see Chapter 5, Subsection 5.7.2). It is clear that many of the participants perceived some kind of contract with the hospital in which they agreed to accept authority as one of the key conditions of membership. What the midwife accepts, at least in public, is the right of the authority figure to direct and her own duty to acquiesce. This was shown by participants who commented that they felt duty-bound to follow hospital policies (see Chapter 5, Subsection 5.7.2.1), consistent with the findings of Green (2005), Lawton and Parker (2002) and Scambler (1987), and second by those who articulated that they felt constrained by power differentials, consistent with the findings of Levy (1999a) and Stapleton, Kirkham and Thomas (2002) (see Chapter 5, Subsection 5.7.2.2).

Continuous compliance with routine directives reinforces this element of the contract, with the midwife made aware early in her tour of duty that there is an elaborate array of hospital sanctions ready and available for use to encourage her compliance. Fear of resultant conflict and intimidation was also a theme shown to inhibit midwives from challenging authority (see Chapter 5, Subsection 5.7.2.3), consistent with (e.g., Davies, 2004; Dimond, 2002b; Farmer, 1993; Hadikin & O’Driscoll, 2000; RCM, 1996).

Raven and Haley (1980) outline the power bases that senior staff may exercise in the event that a subordinate does not accept direction from legitimate authority:

(1) **Coercive power** - stems from ability of the influencing agent to mediate punishment for the target, i.e., warn the midwife of possible disciplinary action or dismissal.

(2) **Reward power** - stems from the ability to mediate rewards, i.e., to point out to the midwife that the evaluations of the authority figure carry some weight and that such a figure may be able to help the midwife in future.
(3) **Legitimate power** - grows out of the target's acceptance of a role relationship in which she is expected to comply with the request of the agent, i.e., emphasise her position and the nurse's obligation to comply with authoritative recommendations on appropriate matters.

(4) **Referent power** - occurs when the target uses others as a "frame of reference", as a standard for evaluating behaviour, i.e., emphasises that other midwives in the hospital follow proper procedures.

(5) **Expert power** - stems from the target attributing superior knowledge and ability to the agent. That the agent knows best and knows what is correct, i.e., emphasises expertise regarding policies.

(6) **Informational power** - results from persuasiveness of the information communicated by the agent to the target, i.e., indicates the basis for techniques, citing available evidence, hospital data or journal references.

In some civilian organisations, sanctions may be hidden and insignificant. In midwifery however, sanctions are generally salient, swift and harsh. Both the managerial system and the Nursing and Midwifery Council lay down rules, with a system in place to issue penalties for non-cooperation (NMC, 2002a, 2004).

### 6.4. Hospital Discipline

Endorsement of discipline in the system by the individual midwife assures the hospital that its purposes and aims will be achieved. Hospital organisations differ from civilian and many other institutions, in that the chief objective of management is to enhance health and save lives. To effectively handle hazardous procedures, the hospital services continually formulate protocols and guidelines (Green, 2005; Lawton & Parker, 2002; Magill-Cuerden, 2005). Management constantly structure programmes aimed at reducing the risk of complication, and the consequent mortality and morbidity that may ensue. Contingencies involve uncertainties with some outcomes to be scrupulously avoided during operations and treatments. The essence of hospital effectiveness lies in the ability to contend with these contingencies.
Uncertainty is reduced by restricting freedom of choice and regulating information flow (Lawton & Parker, 2002):

Health care professionals would be best advised to avoid violations and where possible comply with clinical protocols. The findings here demonstrate that by complying the health care professional makes it more likely that their behaviour will be judged appropriate. (Lawton & Parker, 2002, p. 263)

By limiting independence, systems can be rigorously structured. This structure, or order is analogous to the hospitals purpose of routinisation. Rules, regulations, laws, and a system of penalties are in place to ensure adherence and reduce uncertainty.

Discipline is one of the major ingredients in the hospitals method of managing uncertainty. The organisation has defined effective discipline as a state in which the individual possesses a mental set that results in immediate and relatively automatic acquiescence with direction given by a person in authority. During the interview, such acceptance of discipline was frequently evident in immediate agreement with the direction of the senior midwife. Repeatedly, the junior midwife held in check her own evaluation of the action required and thus any criticism of the senior midwife's direction. As a result, her freedom of choice was restricted and she did not seriously entertain alternatives.

Therefore, a major conclusion of this thesis is that hospitals can create in the minds of its members the vital importance of the accomplishment of the organisation’s mission. Outcomes have shown that members will relegate their knowledge of appropriate action and the choice of the childbearing woman, in order to acquiesce with the viewpoint of the senior person. This is so, even when their preference is a safe and evidence-based alternative. Situations that arise within hospital activity carry with them their own pressures, with the conduct of the participants dependent upon the power of these forces. During the interview condition of the present study, such pressures caused many of the participants to abandon their personal position to instead acquiesce with the perspective of the senior person. The participating midwife was faced with two options; acquiescence or resistance,
expressed as agree or disagree. What has been shown is that acquiescence was often the easier choice to make.

6.5. Priming by the Interviewer
Does the hospital organisation specifically prime midwives to follow the direction of seniors? The studies of Bargh, Chen and Burrows (1996), Epley and Gilovich (1999), Macrae and Johnson (1998) and Pendry and Carrick (2001) show that priming can influence specific responses. In particular, Epley and Gilovich (1999) showed that participants primed with a stimulus to conform expressed views more similar to those of the experimental confederates. This may be because it is typically easier to conform than rebel. This could have been particularly true during the interview condition, since deviation from the example set by the senior midwife would have required a reasoned challenge. Clarification as to whether priming responses were generated by the points of view proposed by the interviewer or by her mere presence, was substantiated through the workbook condition. When the same points of view were given and the senior midwife was removed from the participant's cognitive processing, participants were not primed to conform. Consequently, the results of the workbook condition support the conclusion that the stimulus for acquiescence lies more in the presence of the authority figure and less on what was said during discussion.

6.6. Social Identification and Categorisation
Many of the participants may have identified and conformed to the social role of the senior midwife during the interview. Zimbardo, Haney and Banks (1973) and Reicher and Haslam (2004) showed that social roles have powerful influence over behaviour, in keeping with the social identity tradition (e.g., Haslam, 2001; Reicher & Potter, 1985; Tajfel & Turner, 1979; Turner, 1982). The guards in the Zimbardo, Haney and Banks (1973) prison study had authority and “expected to be obeyed”. Likewise, senior midwives “expect to be obeyed”. Ward sisters and managers anticipate cooperation with the course of action they direct. Equally, prisoners obey guards, as junior midwives obey sisters, with uniforms in turn reinforcing these social roles (Bickman, 1974; Bushman, 1984; Joseph & Alex, 1972).
"The analysis of leaders cannot be divorced from consideration of the group of which they are part and need to represent" (Haslam, 2004, p. 45). Further enhancement of the subordinate midwives willingness to acquiesce may have been because they perceived the senior midwife to represent the interests of the collective whole rather than just her personal interests (Brown, 1954; Haslam, 2004; McGregor, 1960). It is important that the leader, by her behaviour, manifests a loyalty to the needs and aspirations of group members. These things must matter to her in ways that are publicly visible. Such evidences of good faith and sincere interest serve to elicit greater acceptance of her influence (Hollander, 1995).

It is further suggested that subordinates' behaviour can be explained in terms of the manner and levels at which particular individuals are integrated into the hospital system. In studying modern complex organisations, psychologists have theorised about the significance of identities and roles. Gouldner (1957; 1968), Kelman (1969) and Kelman and Hamilton (1989) have proposed several theoretical schemes that deal with identities and roles, and levels at which these concepts operate in organisational systems. While Gouldner theorises about organisations and Kelman deals with the "national" system, both possess explanatory power regarding the present study.

At a normative level (Kelman, 1969, 1989), a midwife is integrated into the system and accepts the system's right to set behavioural norms within prescribed limits. This may result from an affective commitment based on a person's identification and involvement with the organisation (Meyer & Allen, 1991; Meyer, Allen & Smith, 1993). The best predictor is the prevalence of interesting, satisfying work of a type found in enriched jobs (Mathieu & Zajac, 1990; Meyer & Allen, 1991). A committed midwife accepts the legitimacy of the system and personal values and roles become irrelevant within its operation. Because individuals with collectivist orientation are believed to be more likely to: (a) favour their own group over others, (b) show concern for group goals rather than personal ones, and (c) be suggestible to social influence (Haslam, 2004, p. 209), it is suggested that such individuals will be more likely to participate in collective action (Kelly & Breinlinger, 1996) than would otherwise be the case.
These midwives regard acquiescence with the directives of the organisation as proper and necessary. The only requirement for acquiescence is that the order has the blessing of "authority". In addition, a system of rewards and punishments relevant to authoritative requirements solidifies the legitimacy process (Arvey & Ivancevich, 1980; Manz & Sims, 1981; Trevino, 1992).

That most midwives within the hierarchy are rule governed defines what they should do in terms of legitimate authority. This argument can be supported by observation of these individuals at their work. Midwives are required to follow the Midwives Rules and Standards (NMC, 2004) and so long as the direction of a legitimate authority is in keeping with these requirements, the midwife may perceive an obligation to acquiesce. The normative midwife does not see herself as the initiator of the action, but rather as an agent who does the bidding of the person in authority. This midwife abandons her freedom of choice and sees herself as having no choice but to acquiesce with the preferred options of the senior midwife who directs her. In so doing she does not see herself as responsible for obstructing the choice of the childbearing women for whom she cares. Instead, it is the responsibility of the senior midwife to permit or deny the childbearing woman her personal preference.

In contrast to the normative integration mode is the ideological level (Kelman, 1969; Kelman & Hamilton, 1989). A person integrated at this level is said to feel a greater sense of ownership of the system and as a result takes responsibility for a proportionately larger share of the action initiation. This midwife plays specified roles better than the other midwives and her orientation to the system is one of loyalty and long service. She uses an inner reference group and considers herself to have more of a role in the formulation of practice directives, rather than being a midwife who just carries them out.

Using the normative/ideologist scheme allows categorisation of midwives within the hospital system. Only a select and small group of midwives fall into the ideological category. The bulk of midwives fall into the normative category. Gouldner (1968) suggests another categorisation that further explains the ideologist's role and offers a subcategory for the
normative element. Gouldner identifies as "locals" those people who are highly committed to the organisation and have internalised its policies. From the organisation’s point of view, such midwives are developed by the hospital system in that they are identified early in their career for future positions of the highest responsibility. Such midwives, perhaps leaders of their class at university, often have achieved well in the education system and are moved rapidly up the promotion ladder to top leadership positions. In return, these senior midwives not only exhibit unique loyalty and commitment but also provide the kind of totally dedicated leadership necessary to perpetuate the system.

In contrast, an ideologist maintains her position and posture by relentlessly projecting herself as a “force to be reckoned with” in her particular hospital organisation. Even in the presence of her superiors, she is expected to exhibit strong individuality and to provide her specific input into policy and program decision matters. Because members of the system know her to be an upwardly mobile midwife, they expect her to be more assertive and prominent. She exudes confidence, is highly secure, and as such is not restrained from questioning the legitimacy or wisdom of orders.

Participant 60, who was a “G” grade midwife in a busy labour ward, is an example of this kind of midwife (see Chapter Five, Subsection 5.8 for comments that support this assertion). Participant 60 continually questioned the direction of the senior midwife during the interview and put her own adherence to providing choice and control to childbearing women as a high priority. She was one of the few midwives who argued in accordance with the directives of social policy documents (DoH, 1993, 2003, 2004) and the Midwives Rules and Standards (NMC, 2004) regarding provision of woman-centred care.

While the majority of "normative" midwives do not enjoy the independence of the few “ideologists”, they are generally the doers of the organisation who complement or fill the gaps of the system created by the more “generalist” ideologists. That is, like the majority of the participants who took part in the present study, they are the midwives who provide the hands on care to the population of childbearing women. This group parallels what Gouldner (1957, 1968) classified as “cosmopolitans”. These midwives, while
loyal and committed in their own right, do not exhibit the single-minded dedication to the system, demonstrated by the ideologists. Cosmopolitans generally are horizontally mobile because they eventually settle into a specialist role of some kind. They often gain expertise in a specific area of midwifery and are valued as contributors of needed information from which ideologists make their decisions. They realise, as do other normatives, that their activities are vitally necessary for decision-making activities of the ideologists.

Cosmopolitan roles do not suggest servile or obsequious behaviour. While less committed than ideologists, and perhaps oriented to an outer reference group because of a particular special discipline, the cosmopolitan defines her role as one absolutely necessary for the efficient functioning of the system.

The senior midwife, who interviewed the participants, might have been perceived as a "local". Because these midwives know her to be a lecturer in midwifery, they expect her to lead and take responsibility. They also anticipate that she will be more knowledgeable and expert on matters that relate to midwifery. In her role as interviewer, she displayed certainty, was dependable, and as such was likely to hold more power to socially influence normative midwives. Consequently, the "normative" participants with a "collectivist orientation are more likely to be suggestible to social influence" (Haslam (2004, p. 209).

The interviewer’s success might in part have been rooted in her ability to embody participants’ expectations that were underpinned by an act of categorising her as a leader. Leadership categorization theory (Lord, Foti & De Vader, 1984; Lord, Foti & Phillips, 1982; Lord & Maher, 1990, 1991) argues that leaders’ effectiveness is determined in part by others perceptions of them, and that these are based on preformed leadership prototypes. These prototypes are hierarchically organised, with archetypes at lower levels being more specific. Like stereotypes, prototypes are believed to provide perceivers with a set of expectations regarding a person’s appropriate traits and behaviour (Haslam, 2004).
6.7. Perception of Forced Aquiescence

The participants’ acquiescence might have resulted from a perception of forced agreement. That is, the participants simply acquiesced because the direction came from an authorised agent of the authoritarian institution to which they both belong. Regularities in the quantitative data have clearly shown that many of the participants changed their SIS-M responses between the postal and interview conditions (see Table 4.8). Obedience was evidenced by participants’ citations of agreement, whilst refusing to accept that the decision was an appropriate one (see Chapter Five, Subsection 5.7.3.1, p. 199). These participants acquiesced with the senior person, not because they agreed with what was suggested, but instead to avoid some sort of "punishment potential", consistent with Arvey and Ivancevich (1980), Manz and Sims (1981) and Trevino (1992).

According to the Festinger (1954) paradigm, public compliance without private acceptance can be forced when there is a promise of reward for compliance or a threat of punishment for non-compliance. Neither of these was implied in this study. Festinger and Carlsmith (1959) propose that the threat of mild punishment produces greater dissonance than the threat of severe punishment, consistent with Brehm and Cohen (1962), Festinger (1954, 1957) and Wickland and Brehm (1976). Specific sanctions that the participants feared were identified in the qualitative analysis of the interview transcripts (see Chapter Five, Subsection 5.7.2.3). These comments were offered voluntarily as the reason for the participants' acquiescent responses.

It was also clear, that a number of subordinate midwives were unfamiliar with questioning direction. Many also maintained a social distance from senior staff. In the short period during which the participants deliberated over whether to “agree” or “not agree”, it is possible that they mentally telescoped the entire act of both acquiescence and resistance. Thus, participants displayed the activities on a mental screen and witnessed possible consequences of opposing direction from the senior person. Perceived aversive stimuli would in all probability decrease the likelihood that they would proceed to resist the guidance given (Parmerlee, Near & Jenson, 1982).
Most of the participants would be familiar with experiences of colleagues who have been suspended from practice whilst awaiting disciplinary hearings for breaking with protocol. They may also have had personal experience or know of peers who have been issued with punishments for defying direction from authority. Due process is clearly outlined in Rule 5 of the Midwives Rules and Standards (NMC, 2004). Several of the 16 rules prescribed by the Nursing and Midwifery Council pertain to compliance with directives, methods, procedures and routines. Consequently, situational forces that operate at varying degrees of intensity may block out the midwives' conscious and individual wishes.

6.8. Tension and Strain
Tension and strain might have contributed to the amount of wholesale acquiescence shown by participants during the interview. Unlike Kilham and Mann (1974), Milgram (1963, 1965, 1974), Shalala, (1974), Shanab and Yahya (1977), and Sheriden and King, 1972), the participants in the present study were not requested to issue violent attacks upon an undeserving victim. Unlike Meeus and Raaijmakers (1995), they were not asked to make offensive negative remarks to an interview applicant. In contrast, the interview was a relatively benign and comfortable process in which the participants were asked simple questions in a peaceful and non-threatening environment. Nonetheless, similar levels of acquiescence were achieved.

Frustration might have occurred when the senior midwife directed a response that differed from the midwife's own; particularly when she blocked answers with justifications for her desired response. In such circumstances, it would seem logical that the interviewer may be the target of the participants' aggressive feelings. Some of the participants' comments made this evident (see Chapter 5, Subsection 5.7.2.1). Further aggravation may have resulted from thoughts of being tangled, along with the interviewer, in yet another hospital hassle. As the establishment was the source of their irritation and since there was little they could do about it, the resultant aggressive feelings were either minimised or disguised.

Shalala (1974) reported that some of his participants became "stressed and confused". Milgram (1974) reported tales of participants'
objections followed by their paradoxical delivery of the prescribed electric shocks. Similarly, during the interview, some of the participants verbally challenged the senior midwife whilst simultaneously acquiescing with her proposed action (see Chapter 5, Subsection 5.7.3.1). The idea of dissent may have served a dual and conflicting function. As a strain-reducing mechanism, conveying the idea of opposition was perhaps a source of psychological consolation to the midwife with reference to the moral conflict at hand. The clash between the childbearing woman's expressed preference and what had been suggested was for some a source of tension. For example, the participant publicly defines herself as opposed to blocking a healthy childbearing woman's request for a home confinement and thus establishes a desirable self-image. Ironically, this strain-reducing mechanism allows the midwife to let off steam without altering the course of action. In effect, the participant maintains her submissive relationship with the senior person by ultimately acquiescing with her propositions.

Milgram (1974) and Shalala (1974) claimed that verbal objection prior to obedience relieved the tension-filled environment. Correspondingly, during the interview, participants protestations might have reduced the tension and strain that preceded their eventual acquiescence with what was suggested.

6.9. Refusal to Cooperate

Most of the participants appeared happy with the outcome of the interview and were pleasant and affable on departure. This contradicted some of the signals of stress and tension characterised by participants' questions, requests for further explanation, appeals for guidance and occasional stalling. Remarkably, not one participant refused to continue with the interview process. This was surprising, since refusal to continue is the ultimate means whereby the strain of the interview is brought to an end.

Refusal to cooperate is not an act that comes easily. It entails not just a failure to comply, but a reformulation of the relationship between the midwife and the authority figure. To break out of the assigned role is to create, on a small scale, a form of anomaly. The future of the junior midwife’s interaction with the senior person is predictable as long as she maintains the relationship according to the well-defined social order. On the contrary, when a midwife
refuses to respond to a question, the character of the relationship becomes uncertain and may be tinged with fantasies of the senior midwife's undefined retribution. Also, for most people it is painful to renege on a promise of aid that they made to a person. While the obedient participant shifts responsibility for the decision to the senior midwife, those who break their word have to accept responsibility for ruining the interview. In so doing, the participant thwarts the purpose of the researcher. She may then believe that she has proved inadequate to the task assigned to her. The price of refusal may be a sense that she has been disloyal. The midwife might then remain troubled by the disruption of social order she brought about, and have the feeling that she deserted a cause to which she had pledged support.

6.10. The Relationship to Woman-Centred Care

The social influence exerted by the senior midwife during the interview should not necessarily be viewed as a wholly negative outcome. It is important to recognise that a substantial amount of acquiescence is essential for efficient group behaviour (Stogdill, 1972), or else there may be lack of success in collective activities and failure to achieve common goals (Mudrack, 1989). However, there are occasions when an authority figure may express a preference that should in fact be the personal choice of the childbearing woman. Quite simply, there is no ethical or medical justification for refusal when there are no dangerous consequences that could result from the request, e.g., a woman who wants multiple birth partners present at her delivery, a water birth or entonox for pain relief during labour. In such situations, acquiescence with the senior person's perspective constitutes a failure to provide woman-centred care. The midwife who complies with the suggestion of a senior person, over and above the request of a childbearing woman for a particular option, is breaching Changing Childbirth (DoH, 1993), the Reference Guide to Consent for Examination or Treatment (DoH, 2003) and the new standard on maternity services within the National Service Framework for Children, Young People and Maternity Services (DoH, 2004). That midwife is also breaching Rule 6 of the Midwives Rules and Standards (NMC, 2004, p. 17), which states that a midwife:
• Must make sure the needs of the woman or baby are the primary focus of her practice.
• Should work in partnership with the woman and family.
• Should enable the woman to make decisions about her care based on her individual needs, by discussing matters fully with her.
• Should respect the woman's right to refuse any advice given.

Typically, senior midwives may not directly intend to obstruct the preferences of the childbearing women in their care. Rather, due to constraints experienced from those higher in the hierarchy, protocols and the demands of the organisation, the safe requests of childbearing women may be thwarted by the agenda of others.

As directed by the NMC (2004), midwives are meant to be independent, accountable, highly trained and autonomous practitioners. However, social influence from a senior midwife has been shown to have a profound effect upon junior midwives' clinical decision making. According to established midwifery rhetoric, the midwife should seek clarification for any direction tendered that is questionable (Page, 2000). Clearly, the relationship between the senior and junior midwife during the interview often made it difficult for the junior midwife to question the direction offered. Quite simply, midwives do not receive training on "how to question direction". To make such enquiries runs counter to the training, socialisation, and routinisation of the individual midwife. Often a midwife would disregard the direction of a senior member of staff at her peril. This of course, makes it easier to establish and maintain the direction as legitimate. To challenge a person senior in the hierarchy may be a monumental proposition for the ordinary midwife, quite simply because of the restricting forces that operate within her working environment.

This has important consequences for the functioning of maternity hospitals and the quality of care that childbearing women receive. Midwives who are relatively low in assertiveness are likely to be influenced most strongly by persons in authority, consistent with the findings of Kipnis, Schmidt and Wilkinson (1980). If the maternity hospital has established a "tradition" of criticising midwives who violate "woman-centred care", then new midwife
employees, if not assertive themselves, will be influenced to change their behaviour in a positive direction. In other words, they are likely to become less acquiescent in interference to women's birth plans. In contrast, when hospitals develop standards of low assertiveness and high levels of acquiescence, the behaviour of incoming midwives in these hospitals will be shaped accordingly.

The major problem within maternity hospitals is that midwives are expected to follow the protocol driven culture (Green, 2005; Lawton & Parker, 2002; Magill-Cuerden, 2005), which is reinforced by senior staff. In diametric contrast, midwives are also asked to follow social policy documents (DoH, 1993; DoH, 2003; DoH, 2004) and the Midwives Rules and Standards (NMC, 2004) that advocate provision of choice, continuity and control for childbearing women. Essentially midwives are being asked to follow two conflicting paths; to be allegiant to the hierarchical system driven by protocols and orders from the top down, at the same time as providing "woman-centred" care. On one hand, the hierarchical structure within the maternity hospital perpetuates acquiescent behaviour. On the other hand, social policy documents, universities, journal articles and the Nursing and Midwifery Council direct midwives to be independent, accountable and autonomous practitioners. These two roles contradict each other.

6.11. Contribution to the Body of Knowledge About Social Influence in Hospitals

It is important to identify what the present experiment adds to the body of knowledge about social influence in nursing/midwifery practice. Undoubtedly, the results challenge the Nursing Editor (1974) and the Krackow and Blass (1995) surveys, since so many of the participants held misleading perceptions of their own predicted behaviour in the postal conditions of the present study. The large disparities that are evident between the midwives' forecasted performance and what actually happened when they were placed in the company of a senior person, leads to skepticism over the validity of participant responses to postal surveys like those carried out by the Nursing Editor's (1974) and Krackow and Blass (1995).
In light of Rank and Jacobson's (1977) replication of the Hofling et al. (1966) experiment, it was considered advantageous to compare and contrast the present study with the latter in order to emphasise what has been shown. The Hofling et al. (1966) study is one of two field experiments that have attempted to show the susceptibility of nurses to social influence from senior people in clinical practice (see Chapter 1, Subsection 1.5.1). The findings of the Hofling et al. (1966) study are similar to those of the present study. Hofling et al. (1966) explained the nurses' behaviour as obedience, while the present study uses the term acquiescence to describe the midwives' responses. Acquiescence has been defined in Chapter One, Subsection 1.5.7. as a blend of both obedience and conformity. This is the case whether we consider the three distinct groups of E, F and G grade midwives or whether they are considered as one large group. In effect, the midwives in the present study, like the nurses in the Hofling et al. (1966) experiment, behaved similarly on a measure of social influence. Therefore, the main assumption underlying the present study has been met.

6.11.1. Difference in Roles Between Nurses and Midwives
Both the Hofling et al. (1966) experiment and the present study considered aspects of social behaviour within nursing practice. Hofling et al. (1966) examined the behaviour of nurses, while the present study focused on midwives. The roles of the nurse and midwife differ considerably, with spheres of practice outlined by the Nursing and Midwifery Council (NMC, 2004). The fundamental difference between these subcategories of nursing, is that midwives are trained to work as independent, accountable and autonomous practitioners, while the majority of nurses are not. The comparable results of both studies highlight that similarities and differences in training, clinical competence and legislation cause nominal variation to the amount of obedience/ acquiescence shown to an authority figure. Whilst research has shown slight discrepancies in obedience and conformity in relation to personality (e.g., Krech, Crutchfield & Ballachey 1962; Larsen et al. 1979), gender (Eagly & Carli, 1981; Javornisky, 1979) and culture (e.g., Bond & Smith, 1996), taken as a whole levels are analogous. As a result, the significant rate of obedience shown by Hofling et al. (1966) and acquiescence
measured in the present study, regardless of occupation, was rightly predicted.

6.11.2. Similar Hierarchies
Milgram (1974) and his contemporaries showed that situational factors are in part responsible for altering levels of participants' obedient behaviour. Despite the diversity in roles between nurses and midwives, their working environments are comparable since they share analogous hierarchical structures and experience equivalent institutional pressures. A key similarity of the participant groups of both the Hofling et al. (1966) and the present study, is that they collectively focus upon superordinate-subordinate relationships within a functional hospital hierarchy. One of Milgram's (1974) key conclusions was that obedient behaviour flowed from the higher end of the social hierarchy to the lower and not the other way round. Therefore, it is not surprising that both nurses and midwives performed similarly on measures of social influence exerted by a senior person.

6.11.3. The Difference Between Acquiescence and Obedience in Context
Hofling et al. (1966) studied the obedience of nurses to a specific medication order. In contrast, the present study focused on the choice of midwives to acquiesce or resist direction from a senior midwife. Hofling et al. (1966) made a clear distinction between obedient or disobedient responses, with no invitation given for participants to contribute to the decision-making process. In contrast, in the present study, participants were asked for their considered opinion over the decisions that were made. The option of whether to acquiesce or resist the direction given was tabled and participants were given time to think about their responses.

In the Hofling et al. (1966) experiment, the majority of participants viewed the instruction as one they were dutybound to follow, even though it breached standard procedures for medicine administration. Many of the participants in the present study also interpreted the event as a "must do" situation in which resistance equalled disobedience (see Chapter 5,
Subsection 5.7.3.1), whilst others voluntarily changed their rationale and viewpoint to match that of the interviewer (see Chapter 5, Subsection 5.7.3.2).

6.11.4. Relevance Today
The present study has shown that the conformity/obedience paradigm is still relevant today. Even though psychologists have known for half a century about the powerful social influence that an authority figure can have on a subordinate’s behaviour, they have as yet failed to provide adequate remedies for its antisocial effects. In this lies one opportunity for further research.

6.11.5. Similarity of Cultures
The Hofling et al. (1966) experiment is American and the present study British. The literature review has clarified that there are cultural variations in rates of conformity (Bond & Smith, 1996), with higher levels prevalent in collectivist societies like China and Japan (Fragar, 1970; Triandis, 1989). Since both America and Britain have been identified as individualist societies (Bond & Smith, 1996), the similar levels of obedience/acquiescence found in the Hofling et al. (1966) study and the present one, may in part be due to the shared aspects of culture with its similar hospital organisation.

6.11.6. Replication
It is unlikely that the situation in the Hofling et al. (1966) study could be replicated in contemporary British nursing culture. The protocol for medicine administration states that two qualified nurses must hear and record a telephone order before proceeding to administer a requested medication; this is then recorded on a prescription sheet and signed by both registered practitioners. Were a nurse to break with the rules of medication administration, this would appropriate a disciplinary hearing and incur profound consequences for the practitioner’s future practice. Moreover, a nurse or midwife is not allowed to administer a medication of which she has never heard (NMC, 2002b). The nurse/midwife is duty bound to check the British National Formulary (BMA, 2005) for information concerning purpose, dosage and side effects. It is also unlikely that the nurse/midwife would fail to distinguish the name and voice of the doctor on call, for they are part of a ward team who work along side each other on a day-to-day basis. In contrast,
the present study could be replicated readily since the SIS-M decisions are relevant within contemporary midwifery practice.

6.11.7. Choice About Participation

The Hofling et al. (1966) participants did not elect to take part in the experiment. In contrast, the midwives in the present study had a choice over whether to participate in a study about decision-making in midwifery practice. This raises the issue of chosen versus imposed situations. Whether or not individuals have elected to place themselves in particular circumstances may determine the size of the social influence effect. Once participants have made a commitment to help the researcher and the experiment is underway, psychological mechanisms may inhibit them from reneging on a promise even when they want to leave (Blass, 1991). It has been shown that the Foot-In-The-Door (FITD) procedure increases the probability that, after complying with a first request, a participant is more likely to agree to a second appeal (Beaman et al., 1983; DeJong, 1979; Dillard, Hunter & Burgoon, 1984; Fern, Monroe & Avila, 1986; Weyent, 1996; Yu & Cooper, 1983). Accordingly, it is likely that once the midwife has put her FITD she is more likely to agree to the next request.

6.11.8. Difference in Findings

In the Hofling et al. (1966) experiment, obedience was assessed using just one independent variable. The nurse either did or did not attempt to administer the drug ordered over the telephone. Comparatively, a great deal more has been learned from the present study. What has been shown is that:

(1) Many midwives readily follow direction from superiors, even when this challenges what they see as right action to take.

(2) The status of a midwife does not alter the degree of acquiescence shown to a senior person.

(3) Midwives prioritise maintenance of social relationships over and above agreement with available and appropriate educational material.
(4) Social influence from senior people is often transient and seldom shapes midwives' private viewpoints.

(5) A strong face-to-face authority relationship repeatedly subverts what many midwives believe is the best action to take. An explanation in terms of specific culture and hierarchy has been identified, with a need for midwives to think creatively and rapidly at critical moments in order to avoid sanctions.

In effect, the social influence that has been demonstrated in this thesis is sufficient justification for recommending that a critical reassessment of existing organisational structures be carried out, otherwise the work of a growing number of maternity care professionals now concentrating on improving choice and control for childbearing women will doubtfully yield the desired results. This recommendation also applies to directives that promote midwives to use sound knowledge and evidence-based practice.

6.12. Some Caveats and Reservations

This study raises some caveats and reservations. First, it provides little information on variables that "do" or "do not" affect acquiescent responses in midwives. Complexities and constraints within a hospital environment make this goal difficult to achieve. Many of the variables have already been identified in the elaborate array of laboratory experiments, which show that levels of obedience and conformity vary as a function of situational manipulations, e.g., obedience experiments (e.g., Milgram, 1974; Holland, 1967; Mantell, 1971; Sheriden & King, 1972; Kilham & Mann, 1974; Shalala, 1974; Shanab & Yahya, 1977; Meeus & Raaijmakers, 1995) and conformity experiments (e.g., Asch, 1955; Bond & Smith, 1996; Pendry & Carrick, 2001) (see Chapter 1, Subsections 1.2.2. & 1.1.2). Lack of ecological validity is the major criticism of many of these experiments, since they are performed in the laboratory, within a rigid and controlled environment. In comparison, the present study has shown the acquiescence of midwives within a natural social setting, which makes the results useful for developing clinical midwifery practice and understanding the social behaviour of people who operate in functional groups. Milgram (1974) placed great emphasis on the importance of
extrapolating his experimental results into real situations to help make sense of social life. Hofling et al. (1966) sent a published version of his experiment to Milgram and received the following reply:

Your study is precisely what I have been searching for in trying to find general carefully observed instances of compliance with authority. The convergence of findings particularly in regard to the discrepancy between a person’s predicted performance and actual performance is striking and should convince even the thorniest sceptic of the generality of this phenomenon.

Second, the results could be criticised for not representing the population from which they are drawn. That is, the results cannot be generalised to all maternity units since the sample size was small and may not represent the larger population of practising midwives. The 209 participants were drawn from only one area of the country, that is North Yorkshire. The experimenter, with more than 20 years experience of working with midwives, made efforts to select a representative spread to assure homogeneity. Various managers were queried regarding “differences” between groups of midwives, with no important discrepancies found. In other hospital trusts, differing variables within a midwife’s working environment could alter her perception of the appropriate SIS-M response. If there is an organisational component and it has been argued that there are situational determinants that promote acquiescence, it may be that different behavioural tendencies could be found were the study to be repeated in other areas. Midwives within the North Yorkshire region may be subject to distinctive influences in the way that legitimacy is implied, behaviour is reinforced and directives are prescribed.

Third, outcomes could be suspected of being invalid or unreliable since no repeated measures were taken. This problem can be resolved by simply comparing the methods and the results of the present thesis with those of other studies that have looked at social influence in similar contexts. Similarities between many of these experiments and the present study suggest reliability and validity.

Fourth, a midwifery lecturer conducting the interviews might have constituted a limitation of the study, quite simply because midwives are not
accustomed to receiving direction from a midwife in this position (unless undertaking post registration modules at the university, attending study days or mentoring student midwives in clinical practice). The role itself stands outside the midwifery hierarchy. Since the study did not provide for interviewers from various roles, such differences were not observed. Nonetheless, a lecturer in midwifery produced the large main social influence effect from the interviews, which leads to speculation about the magnitude of social influence that others could obtain.

Fifth, there are differences in methodology between the Hofling et al. (1966) experiment and the present study. In the former, obedience was analysed using one condition in which the nurse either did or did not attempt to administer the drug ordered. In the present study, there were four conditions and three grades of midwives. Acquiescence was measured by the difference in scores between the Pre Interview Questionnaire (C1) and the Interview (C2). During the 12-month time gap between the private and public measures, unidentified variables might have caused participants to change their viewpoints, e.g., attendance at study days, reading literature or experience of a particular clinical event. As there was such a large significant difference between the private and public measures, \( F (1,57) = 249.62, p = 0.001 \), time related variables could only have contributed an inconsequential amount to the large main effect.

6.13. Overall Study Conclusion
An argument has been presented that explains the participants' behaviour in terms of "powerful situational forces". It is concluded that during the interview, many participants felt obliged to acquiesce because of the presence of an authority figure. A combination of pressures was brought to bear upon the participants that might have emanated from three sources: interpersonal (authority versus subordinates), group (social comparison process), and perception (of source of knowledge). These pressures created conflict between the midwives' knowledge of their preferred answer to the SIS-M question and the concern to please authority or the social group.

The midwives' altered SIS-M responses between the postal and interview condition reveal their susceptibility to social influence. Results have
shown that a senior midwife was able to influence decisions, many of which should be woman-centred. Consequently, when a hierarchy exists the senior person is likely to lead care even when a subordinate has built a picture of a woman's birth values and preferences. In such situations, the subordinate midwife has the burden of deciding whether to fight for the preference of childbearing women or to simply acquiesce with the direction offered. When such conflicts arise, acquiescence with the senior person is often prioritised over playing advocate for the childbearing woman's choice. Thus, the hospital system seems to act as an "agent of domination" that permits the notion of collective responsibility to be entertained by its members.

Although one could question the exact parallels between the actions of the Milgram or Asch participants and those who took part in this thesis, the studies undertaken have clearly contributed to understanding why midwives find autonomy difficult. Hopefully, such "consciousness raising" can help the organisers of maternity care see clearly the obstructions that stand in the way. The potential value of this thesis in this regard is no trivial matter, especially for those who are the receivers of maternity care.

6.14. Implications for Midwifery Practice

The results of this study have important consequences for evaluating the care that midwives' offer to childbearing women. The findings indicate practices that are at variance with government directives for the maternity care system to transform into an organisation that provides women with choice and control during their birth experience (DoH, 1993, 2003, 2004), and current legislation that instructs midwives to work as autonomous, women-centred, accountable practitioners (NMC, 2004). What has been shown is that supporting women with choice and autonomous practice is difficult to achieve when a midwife is placed within a hierarchy. Clearly, "traditional" hospital authority is alive, well and flourishing, with organisational structures reinforcing subordinate midwives' acquiescence. Many subordinates believe that they resist at their peril.

One response to this finding is that midwifery officialdom look squarely and forthrightly at the midwives' dilemma. Those in charge must do for the midwife what she cannot do for herself, in terms of interpreting direction from
authority. Senior midwives must incorporate the women-centred element into their direction. They must be unequivocally responsible for their dictates. Direction given should incorporate the preference of the childbearing woman it relates to, as long as it does not present a serious threat to maternal or fetal mortality. Clearly, the question arises as to how this may be done? The challenge is straightforward. Direction that excludes the childbearing women's input is a daily occurrence. Prescriptions are written, supply requisitions are processed, procedures are prepared for; a significant number of which prohibit the input of the childbearing woman. If the senior midwife or obstetrician wants a task undertaken that excludes the input of the woman, that person must have the character to tell the subordinate during the decision-making process that this is the case.

Such a practice would have several outcomes. First, responsibility would be diffused rather than focused. Second, transfer of responsibility would become meaningless since responsibility for the direction rests with both the senior and junior midwife. If the decision exempts the childbearing woman from process, the issuing senior midwife should label it so, thus giving the subordinate the facts before requiring their acquiescence. If the junior midwife then acquiesces, she too would also clearly be responsible for her actions.

The better solution is not to exclude the childbearing woman from the decision-making process. Senior midwives should recognise their own accountability for the appropriateness of their direction, and in turn demand that subordinates embrace responsibility. Such an act would touch the individuals at the heart of the system. Clearly, when a hierarchy exists, the senior midwife is likely to lead care even when a subordinate has constructed a picture of a woman's birth values and preferences. Therefore, clearer definition of roles would reduce confusion over the limits of practitioners' responsibilities. Within such a system, the role of the senior midwife could be one of monitoring safety and dealing with serious obstetric problems, i.e., haemorrhage, cord prolapse, fetal distress and birth asphyxia. The role of the senior midwife could be clearly defined as one that does not involve interfering with safe options requested by childbearing women. An even simpler solution would be to flatten the hierarchy and free midwives to work as the autonomous practitioners they were trained to be.
Senior staff should also be made aware of the characteristics that affect a subordinate's perception of their direction. It would be helpful to inform senior midwives of how subordinates perceive and react to people of higher status. The obedience research of Milgram (1963, 1965, 1974) and his contemporaries (e.g., Meeus & Raaijmakers, 1995; Shalala, 1974; Shanab & Yahya, 1977), and the conformity studies of Asch (1952, 1955, 1956) and more recently (e.g., Bond & Smith, 1996; Macrae & Johnson, 1998; Pendry & Carrick, 2001), highlight variables that may alter a participant's perceptions and reactions in specific situations. The senior midwife could be taught to view her communication with juniors not from the standpoint of the sender or the receiver. Instead, she could be helped to step outside the communication process and examine it within its broader context. She may then notice that perception of the various elements of the communication process will differ between individuals. How the senior midwife perceives herself and how she thinks her subordinates see her, may in fact differ. There are also implications for midwife training. Universities could incorporate into their curriculum communication skills training on how to question direction from higher authority. Assertiveness training may also help practitioners act out their beliefs about particular options in given situations.

These responses flow from the most important conclusion of this study - the predictability that midwives will acquiesce with direction from a senior person. It is doubtful that a junior midwife will speak up to a senior who communicates a position that differs from her own, or even act as advocate for the childbearing woman's point of view. Put simply, within the present hierarchy with its attendant expectations, many junior midwives are unlikely to resist the social influence attempts of a senior person. The power of the social influence shown in this study is sufficient justification for a critical reassessment of existing practices.
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APPENDICES

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Appendix One

To the Midwife Concerned

This questionnaire aims to look at decisions you make within the clinical setting. Thank you very much for agreeing to take part in this study. Your contribution is greatly appreciated. The information you give will be treated with the utmost confidentiality and is not for the purpose of making any judgments about your performance at work. The information you provide will not be used in any way that could identify you personally and shall not be disclosed to your manager or any other person.

Tips for Filling in the Questionnaire

(a) Find a quiet place where you will be undisturbed.

(b) Read each question carefully and once you understand what is being asked, respond fairly quickly. Do not ponder too long over each statement.

(c) The statements are structured as follows. Please circle one of the choice answers.

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(d) Please do not miss out any of the statements placed, and try to be as honest as possible.

I would like to thank you for taking part in this study

Your Sincerely

Caroline J Hollins Martin

Lecturer in Midwifery and Researcher, Health Sciences, University of York

How long have you been registered as a midwife? ________________ years

What is your Position / Grade? ___________________________________

How long have you been employed at your present grade? ________ years

Which maternity unit do you work in? _______________________________

What are your professional qualifications? __________________________
(1) I believe that guidelines are unnecessary when labour is progressing normally.

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Comments __________________________________________________________


(2) I would argue with the consultant if he refused to support a home confinement when a mother with a healthy pregnancy is keen to have one.

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(3) I would follow a senior member of staff's request to rupture a woman's membranes if this was the decided course of action.

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(5) I believe that it is acceptable for a women to have more than one “birth partner” present during labour when the unit policy states only one person at a time.

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(6) I would automatically commence cardiotocography if it was requested by a senior member of staff.

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</thead>
</table>

Comments


297
(7) In general I would challenge a senior member of staff if they decided to override a decision I made regarding normal labour.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
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<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
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Comments ______________________________


(8) I would conceal my opinion from a consultant obstetrician when my stance about carrying out elective section for social reasons differs.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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Comments ______________________________


(9) I would allow a woman to have her two friends and husband present during labour and delivery if this is what she wanted.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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Comments ______________________________


(10) Informed choice for women is an idealised dream when the reality is that we know what is best for women in labour.

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Comments ________________________________________________________

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I would like to thank you very much for your contribution to this study

Yours Sincerely

Caroline. J. Hollins Martin
(Lecturer in Midwifery and Researcher)

Are there any general comments you would like to make? ________________

_________________________________________________________________

_________________________________________________________________

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_________________________________________________________________

299
Appendix Two

Glossary of Terms (Taken from Tiran, 2003)

Adrenalin one of several hormones secreted by the medulla of the adrenal or suprarenal gland. Its function is to aid in the regulation of the sympathetic branch of the autonomic nervous system.

Amniotomy surgical rupture of the amniotic sac for induction of labour. The mother is placed in lithotomy or dorsal position and the midwife or obstetrician performs examination per vaginum. The fore-waters are ruptured by passing an instrument through the cervix and piercing the membranes, while taking care not to damage the fetal presenting part.

Antenatal before birth. Care provided by midwives and obstetricians during pregnancy to ensure that the fetal and maternal health are satisfactory. Deviations from normal can be detected and treated early. The mother can be prepared for labour and parenthood and health education offered. A detailed history and baseline observations and investigations are obtained at the first appointment. Subsequent appointments involve monitoring the progress of pregnancy and the health of mother and fetus.

Apgar a scoring system devised by Dr Virginia Apgar to assess the condition of the baby during its first few minutes of life, so that severe asphyxia neonatorum can be diagnosed and treated at once.

Birth plan a plan prepared by the expectant mother, usually in conjunction with her partner and midwife, which records her preferences for care during and after labour.

Blood pressure the midwife should assess the mother’s blood pressure at every antenatal appointment and refer to the obstetrician if the systolic pressure rises above 130 mmHg, or the diastolic pressure rises above 90 mmHg, or where the diastolic pressure rises above 15 mmHg above first trimester baseline reading.
**Cardiotocography (CTG)** a graphical correlation between fetal heart rate patterns and uterine contractions in labour. Also a non-stress test for fetal well-being in pregnancy.

**Cephalic presentation** Fetal head lies lowest in the birth canal; the first part felt on examination per vaginam. In a normal vertex presentation this is the occiput.

**Cervix** the neck of the uterus; it is about 2.5 cms long and opens into the vagina.

**Contracting** a temporary shortening of muscle fibre, which returns to its original length during relaxation. During labour they are usually painful and are accompanied by retraction.

**CTG** see cardiotocography. Recognised abbreviation.

**Diamorphine** hydrochloride. Heroin. A powerful analgesic and drug of addiction.

**Effacement** 'taking up' of the cervix. The process by which the internal os dilates, so opening out the cervical canal and leaving only a circular orifice, the external os.

**Elective caesarian section** planned, preorganised surgical delivery.

**Entonox** nitrous oxide and oxygen, 50% of each, premixed in one cylinder and used as an analgesic. The mother controls the amount of gas received by inhaling as required, either through a facemask or a mouthpiece.

**Epidural** analgesia also known as extradural or peridural anaesthesia. A form of pain relief for both first and second stage of labour, obtained by the injection of a local analgesic e.g. bupivacaine, into the epidural space in order to block the spinal nerves.
Fetal pertaining to fetus.

**Fetal distress** the clinical manifestation of fetal hypoxia.

**First stage of labour** the period from onset of labour until complete or full dilatation of the cervix.

**General anaesthesia** a state in which the whole body is insensible to pain, feeling or sensation. It is induced to permit performance of surgery or other painful procedures.

**Gestation** pregnancy. Period in the human species approximately forty weeks from the first day of the last normal menstrual period or thirty-eight weeks from day of conception.

**Guidelines** an agreement between parties in healthcare. A multidisciplinary planned course of suggested action in relation to specific situations.

**Home confinement** women can choose to deliver their babies at home and receive care from the community midwife and general practitioner, or sometimes from an independent midwife. The midwife is legally obliged to provide care for any women within her area of practice, even if the mother’s wish for home birth is against the advice of the midwife or doctor.

**Hypoglycaemia** an abnormally low blood sugar.

**Intramuscular** within or into muscle.

**Ketoacidosis** state of electrolyte imbalance with ketosis and lowered blood pH. Ketosis occurs when there is an increase in fatty acid metabolism. Occurs in starvation or in uncontrolled diabetes mellitus.

**Lie** the relation of the long axis of the fetus to the long axis of the mother’s uterus. Normally these are parallel and the lie in said to be longitudinal.
Abnormally, the fetus lies across the mother's uterus, the lie is transverse or oblique and, unless this is corrected, labour will become obstructed.

**Membranes** chorion and amnion; the two membranes enclosing the fetus in utero.

**National Childbirth Trust (NCT)** a charitable organisation concerned with education for pregnancy, birth and parenthood, with over 3000 branches and groups in the UK. Primarily through these local groups, it runs antenatal classes, breast-feeding counseling and postnatal support.

**Oxytocin** is a hormone secreted from the posterior lobe of the pituitary gland, which causes stimulation (i.e. contraction) of the uterine myometrium. Synthetic oxytocin (Syntocinon) may be administered intravenously to induce or augment labour, or intramuscularly or intravenously to contract uterine muscle after delivery of the placenta and to control postpartum hemorrhage.

**Prenatal** occurring before birth.

**Primigravida** a woman pregnant for the first time.

**Resuscitation** restoration from a state of collapse. Necessary if the baby fails to breathe after birth.

**Risk analysis** use of a structured approach to care, to reduce identifiable risks before problems arise in order to protect the interests and increase the satisfaction of patients and clients and reduce the number of complaints and consequent costs of litigation. Agreed standards of care based upon current research findings are written into clinical guidelines; regular systematic reviews of clinical notes are taken to assess for completeness; case discussion are initiated and case conferences are held in event of any adverse outcomes to treatment; and continuous training programmes are developed. Health and safety risks are also considered.
Rupture of membranes artificial (ARM) is an aseptic procedure performed per vaginam to induce or to accelerate progress of labour. Spontaneous (SRM) is a natural inevitable rupture of membranes.

Scan an image produced using a moving detector or a sweeping beam of radiation. A means of determining fetal abnormalities, growth and development.

Second stage of labour the stage of expulsion, lasting from full dilatation of the cervix uteri to complete birth of the child.

Urinalysis analysis of the urine as an aid in the diagnosis of disease. In pregnancy the urine is regularly tested for the presence of protein, glucose and ketones. Blood and pus may also be detected in cases of infection.

Uterus the womb

Vaginal examination a means of assessing factors of pregnancy, labour and puerperium and gynaecological conditions by palpation with one or two fingers in the vagina.

Water pool used for waterbirth. A form of care in which the mother chooses to labour and may deliver in water, to achieve relaxation and a degree of pain relief.
Appendix Three

To the Midwife Concerned

This questionnaire aims to look at decisions you make within the clinical setting. Thank you very much for agreeing to take part in this study. Your contribution is greatly appreciated. The information you give will be treated with the utmost confidentiality and is not for the purpose of making any judgments about your performance at work. The information you provide will not be used in any way that could identify you personally and shall not be disclosed to your manager or any other person.

Tips for Filling in the Questionnaire

(a) Find a quiet place where you will be undisturbed.

(b) Read each question carefully and once you understand what is being asked, respond fairly quickly. Do not ponder too long over each statement.

(c) The statements are structured as follows. Please circle one of the choice answers.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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<th>Strongly Disagree</th>
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(d) Please do not miss out any of the statements placed, and try to be as honest as possible.

I would like to thank you for taking part in this study

Your Sincerely

Caroline J Hollins Martin

Lecturer in Midwifery
University of York - Health Studies Department

How long have you been registered as a midwife? _______________ years

What is your Position / Grade? ________________________________________

How long have you been employed at your present grade? __________ years

Which maternity unit do you work in? ____________________________________

What are your professional qualifications? _______________________________
(1) I believe that guidelines should be used when labour is progressing normally.

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<th>Strongly Agree</th>
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Comments ______________________________________________________

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(2) I believe that the chief care professional should always be the consultant obstetrician.

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Comments ______________________________________________________

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(3) An E grade midwife with one completed year of labour ward experience is not ready to make the decisions necessary when caring for a woman in normal labour.

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Comments ______________________________________________________

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(4) Liz is suffering from considerable amounts of pain during labour. I believe that Liz should be the one making the decision about what sort of pain relief she requires.

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(5) I believe the midwife caring for a woman in normal labour should be the one who is totally responsible for care.

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(6) I enjoy utilising my labour ward skills to their full potential.

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(7) I like having people around to advise me when caring for a woman in normal labour.

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(9) I am able to act as a woman’s advocate during her time spent in the labour ward in which I work.

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308
(10) I would follow a senior member of staff's request to rupture a woman's membranes if this was the decided course of action.

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(12) One year's labour ward experience is enough to prepare a midwife for making the necessary decisions when labour is progressing normally.

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309
(13) I believe that it is inappropriate for a woman to have more than one individual present during labour when the unit policy states only one person to be present at a time.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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Comments _______________________

(14) I prefer to have senior people around to facilitate in decision making when all is progressing normally during labour.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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Comments _______________________

(15) I support the concept of informed choice for childbearing women.

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<tr>
<th>Strongly Agree</th>
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<th>Neither Agree or Disagree</th>
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Comments _______________________

310
(16) The environment in which I work enables me to express my true opinion about some of the decisions made concerning women I have cared for in labour.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
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<th>Neither Agree or Disagree</th>
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Comments


(17) I want to work as an autonomous practitioner.

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<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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Comments


(18) I would automatically commence cardiotocography if it was requested by a senior member of staff.

<table>
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Comments


311
(19) I can stand up for myself when another questions my practice.

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<tr>
<th>Strongly Agree</th>
<th>Agree</th>
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Comments ____________________________

(20) In general I accept it when a senior member of staff override's my decisions regarding normal labour.

<table>
<thead>
<tr>
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Comments ____________________________

(21) Protocols inhibit the accommodation of individualised care.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
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<th>Neither Agree or Disagree</th>
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Comments ____________________________

312
(22) I would argue in support of a healthy elderly primigravida with a normal pregnancy desperately wanting a home confinement.

<table>
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<tr>
<th>Strongly Agree</th>
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Comments ______________________________________________________

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(23) I would argue in support of a woman not wishing to have labour accelerated when labour is progressing slowly but normally?

<table>
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<tr>
<th>Strongly Agree</th>
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Comments ______________________________________________________

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(24) I would support insertion of an epidural when it has been requested by the obstetrician.

<table>
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Comments ______________________________________________________

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313
(25) I would argue against cardiotocography when requested by a senior member of staff if all was progressing normally and the process would interfere with the woman's birth plan, i.e. she is in a waterpool which is providing a considerable amount of pain relief.

<table>
<thead>
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<th>Strongly Agree</th>
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Comments

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(26) I would allow a woman to have her two friends and husband present during labour and delivery if this is what she wanted.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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Comments

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(27) I would conceal my opinion from a consultant obstetrician when my stance about carrying out elective section for social reasons differs.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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Comments

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________________________________________________________________________________________
(28) Informed choice for women is an idealised dream when the reality is that we know what is best for women in labour.

<table>
<thead>
<tr>
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<th>Neither Agree or Disagree</th>
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Comments ________________________________________________________________

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315
Appendix Four

To the Participating Psychologist

I am currently working towards a Ph.D. in Psychology within the Department of Psychology (University of York). This questionnaire aims to look at conformity among midwives working in labour wards and I am attempting to ascertain external validity. Please could you rate out of 10 how much you believe each statement reflects conformity. Number 1 represents the lowest reflection of conformity while number 10 represents the highest.

The statements are placed on a continuum as shown underneath. Please circle the number which you feel represents how much the statement reflects conformity.

Low 1 2 3 4 5 6 7 8 9 10 High

I would like to thank you for allowing me to pull on your expertise

Your Sincerely

Caroline. J. Hollins

Lecturer in Midwifery, MPhil (Psychology), B.Sc.(Open), Cert. Ed, ADM., RM., RGN
University of York - Health Studies Department

(a) What is your name? ________________________________
(b) How can I contact you if required in the future? _______________
(c) How long has it been since you graduated with a psychology degree? ____________ years
(d) Are you currently utilizing your psychology degree? YES / NO
(e) If you have answered YES to question (d), in what capacity are you currently using your psychology degree?

______________________________

(f) What are your professional qualifications? ________________________________
Questionnaire

(1) I believe that guidelines should be used when labour is progressing normally.

(This statement is assessing desire for external decision making via issue of prescriptive guidelines)

Low 1 2 3 4 5 6 7 8 9 10 High

(2) I believe that the chief care professional should always be the consultant obstetrician.

(This statement is assessing desire for a senior member of staff to be in ultimate control when labour is normal)

Low 1 2 3 4 5 6 7 8 9 10 High

(3) An E grade midwife with one completed year of labour ward experience is not ready to make the decisions necessary when caring for a woman in normal labour.

(This statement is assessing confidence in junior staff's ability to make decisions when labour is normal)

Low 1 2 3 4 5 6 7 8 9 10 High

(4) I believe that the woman should be the one to make decisions about what sort of pain relief she would like during labour.

(This statement is assessing ability to stand as an advocate for another)

Low 1 2 3 4 5 6 7 8 9 10 High

(5) I believe the midwife caring for a woman in normal labour should be the one who is totally responsible for care.

(This statement is assessing desire for a senior member of staff to be in ultimate control when labour is normal)

Low 1 2 3 4 5 6 7 8 9 10 High
(6) I enjoy utilising my labour ward skills to their full potential.

(This statement is assessing desired autonomy for self)

Low 1 2 3 4 5 6 7 8 9 10 High

(7) I like having people around to advise me when caring for a woman in normal labour.

(This statement is assessing desired autonomy for self)

Low 1 2 3 4 5 6 7 8 9 10 High

(8) I would back up the consultant in his refusal to support a home confinement when a mother with a healthy pregnancy is keen to have one.

(This statement is assessing willingness to comply with senior staff)

Low 1 2 3 4 5 6 7 8 9 10 High

(9) I would follow a senior member of staff's request to rupture a woman's membranes if this was the decided course of action.

(This statement is assessing willingness to carry out orders)

Low 1 2 3 4 5 6 7 8 9 10 High

(10) I would administer oxytocin to a woman desiring a normal labour if it was a requisite of the guidelines for routine labour.

(This statement is assessing willingness to comply with external regimes)

Low 1 2 3 4 5 6 7 8 9 10 High
(11) One year's labour ward experience is enough to prepare a midwife for making the necessary decisions when labour is progressing normally.

(This statement is assessing confidence in junior staffs ability to make decisions when labour is normal)

Low 1 2 3 4 5 6 7 8 9 10 High

(12) I believe that it is inappropriate for a woman to have more than one individual present during labour when the unit policy states only one person to be present at a time.

(This statement is assessing allegiance to 'in house rules')

Low 1 2 3 4 5 6 7 8 9 10 High

(13) I prefer to have senior people around to participate in decision making when all is progressing normally during labour.

(This statement is assessing desire for support in decision making)

Low 1 2 3 4 5 6 7 8 9 10 High

(14) I support the concept of informed choice for childbearing women.

(This statement is assessing desire to facilitate women's needs over power base of staff)

Low 1 2 3 4 5 6 7 8 9 10 High

(15) I want to work as an autonomous practitioner.

(This statement is assessing desire for support in decision making)

Low 1 2 3 4 5 6 7 8 9 10 High
(16) I would automatically commence cardiotocography if it was requested by a senior member of staff.

(This statement is assessing willingness to argue a point)

Low 1 2 3 4 5 6 7 8 9 10 High

(17) I can stand up for myself when another questions my practice.

(This statement is assessing willingness to stand up for self when another questions practice)

Low 1 2 3 4 5 6 7 8 9 10 High

(18) In general I accept it when a senior member of staff overrides my decisions regarding normal labour.

(This statement is assessing willingness to stand up for self when another questions practice)

Low 1 2 3 4 5 6 7 8 9 10 High

(19) Protocols inhibit the accommodation of individualized care.

(This statement is assessing desire for external decision making via issue of prescriptive guidelines)

Low 1 2 3 4 5 6 7 8 9 10 High

(20) I would argue in support of a healthy elderly primigravida with a normal pregnancy desperately wanting a home confinement.

(This statement is assessing willingness to comply with senior staff)

Low 1 2 3 4 5 6 7 8 9 10 High
(21) I would argue in support of a woman not wishing to have labour accelerated when labour is progressing slowly but normally.

(This statement is assessing willingness to comply with external regimes)
Low 1 2 3 4 5 6 7 8 9 10 High

(22) I would support insertion of an epidural when it has been requested by the obstetrician.

(This statement is assessing ability to stand as an advocate for another)
Low 1 2 3 4 5 6 7 8 9 10 High

(23) I would argue against cardiotocography when requested by a senior member of staff if all was progressing normally and the process would interfere with the woman’s birth plan i.e. she is in a waterpool which is providing a considerable amount of pain relief.

(This statement is assessing willingness to argue a point)
Low 1 2 3 4 5 6 7 8 9 10 High

(24) I would allow a women to have her two friends and husband present during labour and delivery if this is what she wanted.

(This statement is assessing allegiance to “in house rules”)
Low 1 2 3 4 5 6 7 8 9 10 High

(25) I would conceal my opinion from a consultant obstetrician when my stance about carrying out elective section for social reasons differs.

(This statement is assessing ability to express own opinion when in a group)
Low 1 2 3 4 5 6 7 8 9 10 High
(26) Informed choice for women is an idealized dream when the reality is that we know what is best for women in labour.

(This statement is assessing desire to facilitate women’s needs over power base of staff)

Low 1 2 3 4 5 6 7 8 9 10 High

I would like to thank you very much for your contribution to this study

Yours Sincerely

Caroline. J. Hollins Martin
THE SIS-M INTERVIEW SCHEDULE
To the Midwife Concerned

The aim of this interview is to investigate midwives’ decisions regarding clinical incidents. During this exercise you will be asked to read 10 very short clinical scenarios in sequence and provide a decision regarding each one. Thank you very much for agreeing to participate in this study. Your contribution is greatly appreciated.

Instructions

(1) Read the clinical scenario.

(2) You will be asked to present your decision verbally. Can you present your answer in one of the following format:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

(3) As soon as you have presented your decision to the researcher, can you please circle on the recording sheet the answer you provided. The opportunity to do this will be provided at the end of each scenario in the above stated format.

Please provide your name ________________________________

Within which maternity unit are you employed? __________________

At which grade are you employed? ___________________________

I would like to thank you for taking part in this study.

Your Sincerely

Caroline Hollins Martin
(Researcher)
Case Study 1

Karen Smith is a 23 year old primigravida at 40 weeks gestation and an uncomplicated pregnancy. During the prenatal period all assessments were found to be within normal limits. Karen arrived in the labour ward at 9 a.m. contracting strongly 3 in 10 minutes and vaginal examination found her cervix 3 centimetres dilated and fully effaced. The time is now 2 p.m. and on repeat vaginal examination Karen’s cervix is found to be 5 centimetres dilated with bulging membranes and her uterus is contracting strongly 3 in 10 minutes. The guidelines for management of labour indicate that the midwife should rupture membranes when less than 1 centimetre dilation has occurred per hour in a primigravida. Karen is coping very well with pain and has no set ideas about what she wants from labour. Observations are within normal limits and on cardiotocography the fetus appears in good condition.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Guidelines act as guidance to the new or returning to practice midwife, bearing in mind that they should be evidenced based and reasonably flexible.

(2) Guidelines protect midwives from litigation, in that if you work within them you are conducting yourself according to routine management at that time.

The participant is asked to circle a response:

Decision to be made - I believe that guidelines are unnecessary when labour is progressing normally.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</table>
Case Study 2

Ann Priestly is a 39 year old primigravida attending the antenatal clinic at 24 weeks gestation. Having discussed the idea of a home confinement, Ann and her husband decide they would like to investigate this an option. Blood pressure, urinalysis, scan, medical and surgical history all appear at the moment uncomplicated. The consultant obstetrician expresses disapproval when the idea of a home confinement is raised, stating that although Ann is healthy her age may bring problems.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

1. The organisation we work within imposes a system called Risk Analysis, which is designed to provide optimum care to childbearing women. According to this system Ann would be safer having her baby in hospital.

2. Ann is a reasonable woman, one of the 95% who accepts the advice of professionals, even when the option of having her baby in hospital is second best.

3. Midwives often struggle to maintain good relationships with consultants, which could be damaged through challenge, particularly if things go wrong.

4. The organisation places consultants in the position of highest authority, therefore it is unfair and unsupportive to attempt to control what he considers is best management.

The participant is asked to circle a response:

Decision to be made - I would argue with the consultant if he refused to support a home confinement when a mother with a healthy pregnancy is keen to have one.

Strongly Agree  Agree  Neither Agree or Disagree  Disagree  Strongly Disagree
SIS-M Question 3

Case Study 3

Helen Martin is a 38 year old primigravida at 40 weeks gestation, with a pregnancy which has progressed normally during the antenatal period. Mr Russell is her consultant obstetrician. Helen arrived in the labour ward 4 hours ago with a cervix 2 centimetres dilated, partially effaced and uterine contractions 3 moderate in 10 minutes. The consultant obstetrician has requested a routine repeat vaginal examination, which finds Helen's cervix 6 centimetres dilated, appropriate fetal decent, full effacement, bulging membranes and uterine contractions 3 strong in 10 minutes. Karen is coping very well with pain, has no set ideas about what she wants from labour and both mother and fetus are generally in good condition. Mr Russell requests that you artificially rupture Karen's membranes.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Helen is a reasonable woman, and one of the 95% who accept the advice of professionals.

(2) The consultant writes in the case notes instructions asking you to conduct the amniotomy.

(3) The organisation places consultants in the position of highest authority therefore it is unfair and unsupportive to attempt to control what he considers is best management.

(4) Amniotomy may hasten labour and there may be a very positive outcome.

The participant is asked to circle a response:

Decision to be made - I would follow a senior member of staff's request to rupture a woman's membranes if this was the decided course of action.
Karen McDonald is a 26 year old para 1+0 at 39 weeks gestation, with a straightforward pregnancy and normal labour. Karen arrived in the delivery room 5 hours ago with a cervix 3 centimetres dilated, partially effaced and a uterus contracting 3 moderate in 10 minutes. On routine repeat vaginal examination Karen’s cervix is found to be 6 centimetres dilated, fully effaced and uterine contractions 2 strong in 10 minutes; progress is slow. Membranes spontaneously ruptured half an hour ago and at present there are no signs of fetal distress. The guidelines for management of labour state an expectation that the cervix of a parous woman usually dilates 2 centimetres an hour and that 3-4 good contractions are expected every 10 minutes, with slow progress indicating commencement of syntocinon to increase uterine activity and accelerate proceedings.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Administration of oxytocin does not mean labour becomes abnormal.

(2) Administration of oxytocin will accelerate labour and reduce the likelihood of hypoglycaemia and ketosis that can result from not feeding women in labour.

(3) Guidelines protect midwives from litigation, in that if you work within them you are conducting yourself according to routine management at that time.

The participant is asked to circle a response:

**Decision to be made** – I would administer oxytocin to a woman desiring a normal labour if it was a requisite of the guidelines for routine labour.
Case Study 5

Abigail Brown has arrived in the labour ward in early established labour. She has her two sisters and husband with her. The delivery room policy states that only one ‘birth partner’ may be present with a woman in labour at any one time. Abigail is in pain and requires to be helped regain control.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Research supports that one good “birth partner” is often better than an unsure crowd and that women who worry about their environment release adrenalin which is an oxytocin antagonist and can slow progress of labour. Women in nature would retreat to a warm, safe place to labour and give birth. (Odent, 1999; Robertson, 1999)

(2) Too many people in the delivery room could be extremely distracting for Abigail.

(3) There is a health and safety component in that delivery rooms are often small, with limited space for comfort.

(4) Overcrowding may inhibit Abigail from adopting positions with associated indignities, of which she may not be aware.

(5) Abigail is your average woman and one of the 95% who accept the guidance offered by professionals

(6) The policy of one “birth partner” is designed to protect women from an unknown overwhelming situation.

The participant is asked to circle a response:

Decision to be made - I believe that it is acceptable for a women to have more than one “birth partner” present during labour when the unit policy states only one person at a time.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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329
Ann Wilson is a 33 year old primigravida at 39 weeks gestation, with an extremely straightforward pregnancy and flexible approach to labour. Mr Russell is her consultant. Ann commenced spontaneous labour 3 hours ago with routine observations during this time within normal limits. Ann has been in the water pool for half an hour, which has proven a successful method of pain relief. All observations are within normal limits and labour appears to be progressing satisfactorily. Mr Russell pays a visit and requests a 30 minute cardiotocograph trace.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Ann is a reasonable woman, and one of the 95% who accepts the advice of professionals, therefore she agrees.

(2) The consultant has prescribed a CTG.

(3) The organisation places consultants in the position of highest authority therefore it is unfair and unsupportive to attempt to control what he considers is best management.

The participant is asked to circle a response:

**Decision to be made** – I would automatically commence cardiotocography if it was requested by a senior member of staff.

<table>
<thead>
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<th>Strongly Agree</th>
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</table>
Case Study 7

Laura Brown is a para 1+0 who has had a previous normal pregnancy with successful outcome. She is pregnant again and carrying twins at 38 weeks gestation, both of which are cephalic presentations. The twins are appropriate weights for their gestational age and labour is progressing well. Laura’s uterus is contracting strongly 4 in 10 minutes and she is coping well with pain for which she has had an intramuscular injection of diamorphine and is using entonox. Laura’s cervix is 7 centimetres dilated and fully effaced, with membranes having spontaneously ruptured prior to delivery room admission. Cardiotocograph tracings on both twins are within normal limits. You decided epidural was not required because Laura was coping with her pain. The consultant overrides this decision, stating that he wants Karen to have an epidural just in case there are problems during the second stage of labour. Karen is generally agreeing with what is going on.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Essentially the labour is normal and Laura, with help from yourself, has made informed decisions about pain relief.

(2) The consultant explains that he wishes the epidural in case the second twin were to rotate into a transverse lie post delivery of twin one, thus allowing avoidance of pain during manipulation of second twin.

(3) Laura is a reasonable woman, and one of the 95% who accept the advice of professionals.

(4) The organisation imposes a system called Risk Analysis which is designed to provide optimum care to childbearing women. According to this system Laura would routinely be placed in consultant led care even though all is normal in the above situation.

(5) The organisation places consultants in the position of highest authority, therefore it is unfair and unsupportive to attempt to control what he considers is best management.

The participant is asked to circle a response:

Decision to be made - In general I would challenge a senior member of staff if they decided to override a decision I made regarding normal labour.
Case Study 8

Mary Smith is a primigravida at 37 weeks gestation. During a clinic appointment Mary asks the consultant for an elective caesarean section under a general anaesthetic because she wants to absent herself from the occasion. Mr Russell agrees with her choice and books a date for an elective section in a fortnight's time. You are the midwife present during this clinic visit and feel this was the wrong decision to make.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Mary is an American who comes from a society where section is often considered the 'best way' to deliver a baby. This is her value and part of her birth philosophy.

(2) Mr Russell has explained the risks and his preferences with no effect.

(3) Mr Russell's decision to meet Mary's wishes is in keeping with the Changing Childbirth Document (DoH, 1993) which requests that women should have choice and control over their birth experience.

The participant is asked to circle a response:

Decision to be made - I would conceal my opinion from a consultant obstetrician when my stance about carrying out elective section for social reasons differs.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</table>
Case Study 9

Karen Bell is a 21 year old primigravida at 40 weeks gestation and has arrived at the delivery suite accompanied by her husband and 2 friends. Karen's husband and 2 friends ask if they can stay in the room with her throughout her labour and delivery; Karen agrees. The unit policy states one ‘birth partner’ at a time. You are the midwife in charge of Karen’s care.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) Research supports that one good “birth partner” is often better than an unsure crowd and that women who worry about their environment release adrenalin, which is an oxytocin antagonist and can slow progress of labour. Women in nature would retreat to a warm, safe place to labour and give birth (Odent, 1999; Robertson, 1999).

(2) Too many people in the delivery room could be extremely distracting for Karen.

(3) There is a health and safety component in that delivery rooms are often small with limited space for comfort.

(4) Overcrowding may inhibit Karen from adopting positions with associated indignities, of which she may not be aware.

(5) Karen is your average woman, and one of the 95% who accept the guidance offered by professionals.

(6) The policy of one “birth partner” is designed to protect women from an unknown overwhelming situation.

The participant is asked to circle a response:

**Decision to be made** - I would allow a women to have her two friends and husband present during labour and delivery if this is what she wanted.

| Strongly Agree | Agree | Neither Agree or Disagree | Disagree | Strongly Disagree |
SIS-M Question 10

Case Study 10

Susan Stewart is a 29 year old primigravida who has attended National Childbirth Trust classes during the antenatal period. Susan has written an extremely elaborate birth plan involving utilisation of the water pool during first and second stages of labour. The guidelines for the delivery suite request that a short CTG be conducted on admission to establish fetal condition and both consultant and midwife are keen for this reassurance.

The interviewer makes clear her preferred response and asks the participant to consider the following points:

(1) When a woman is asked by a midwife if he/she can undertake a CTG, common statements made are: -

"I just want to check baby is coping, happy".

Most midwives don't disclose related issues such as fetal distress, low apgars and resuscitation, because it would be unethical to frighten Susan

(2) Labour is the wrong time to present a third level debate over decisions made, because attention is limited due to pain and stress.

(3) Midwives who are informed often have difficulty making choices regarding certain issues.

(4) Some women do not want the "locus of control" in relation to decisions. They would rather defer decisions to the experts. Some prefer to leave everything in the hands of the professionals (Bennet & Brown, 1999).

The participant is asked to circle a response:

**Decision to be made** - Informed choice for women is an idealised dream when the reality is that we know what is best for women in labour.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>
I would like to thank you very much for participating in this study.

Yours Sincerely

Caroline Hollins Martin

Are there any general comments you would like to make?

Name of Participant __________________________

Date____________________

Place____________________

335
Appendix Six

Total SIS-M scores out of 50 for E grade midwives for the Pre-Interview Questionnaire (C1) and the Interview (C2)

<table>
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<th>C2 Interview n = 20</th>
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<tr>
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n = number of participants
* = Participant 19 scored the highest SIS-M score in the public condition
Total SIS-M scores out of 50 for F grade midwives for the Pre-Interview Questionnaire (C1) and the Interview (C2)

<table>
<thead>
<tr>
<th>Participant F Grade</th>
<th>C1 Pre-Interview Questionnaire n = 20</th>
<th>C2 Interview n = 20</th>
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</table>

M 23.55 36.95
SD 4.59 5.46

n = number of participants
* = Participant 26 had static scores between the private and public condition
Total SIS-M scores out of 50 for G grade midwives for the Pre-Interview Questionnaire (C1) and the Interview (C2)

<table>
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<tr>
<th>Participant G Grade</th>
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<th>C2 Interview n = 20</th>
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<td>60*</td>
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<td>29</td>
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</table>

| M       | 23.75 | 35.10 |
| SD      | 3.82  | 6.21  |

n = number of participants
* = Participant 60 had a score that dropped in the public condition
Appendix Seven

THE SIS-M WORKBOOK SCHEDULE
Research Study on Decision Making in Midwifery Clinical Practice

This workbook has been designed for the purpose of investigating general stances midwives hold regarding aspects of midwifery practice. You will be asked to read 10 very short clinical scenarios and to make a decision regarding each one. Your contribution is greatly appreciated and thank you very much for agreeing to take part in this study. Your responses will be treated with the utmost of confidentiality and you are given assurance of anonymity.

Instructions

(1) Find a quiet place where you will be undisturbed.

(2) Please read the clinical scenario.

(3) Think about the points for consideration.

(4) Please circle your decision, which will be presented in the following format.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
</table>

I would like to thank you for taking part in this study.

Your Sincerely

Caroline J. Hollins Martin
(Lecturer in Midwifery and Researcher)
Case Study 1

Karen Smith is a 23 year old primigravida at 40 weeks gestation and an uncomplicated pregnancy. During the prenatal period all assessments were found to be within normal limits. Karen arrived in the labour ward at 9 a.m. contracting strongly 3 in 10 minutes and vaginal examination found her cervix 3 centimetres dilated and fully effaced. The time is now 2 p.m. and on repeat vaginal examination Karen’s cervix is found to be 5 centimetres dilated with bulging membranes and her uterus is contracting strongly 3 in 10 minutes. The guidelines for management of labour indicate that the midwife should rupture membranes when less than 1 centimetre dilation has occurred per hour in a primigravida. Karen is coping very well with pain and has no set ideas about what she wants from labour. Observations are within normal limits and on cardiotocography the fetus appears in good condition.

Please consider the following points:-

(1) Guidelines act as guidance to the new or returning to practice midwife, bearing in mind that they should be evidenced based and reasonably flexible.

(2) Guidelines protect midwives from litigation, in that if you work within them you are conducting yourself according to routine management at that time.

Please circle your response:

**Decision to be made** - I believe that guidelines are unnecessary when labour is progressing normally.

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<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
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Comments ____________________________________________

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____________________________________________________
Ann Priestly is a 39 year old primigravida attending the antenatal clinic at 24 weeks gestation. Having discussed the idea of a home confinement, Ann and her husband decide they would like to investigate this as an option. Blood pressure, urinalysis, scan, medical and surgical history all appear at the moment uncomplicated. The consultant obstetrician expresses disapproval when the idea of a home confinement is raised, stating that although Ann is healthy her age may bring problems.

Please consider the following points:-

(1) The organisation we work within imposes a system called Risk Analysis, which is designed to provide optimum care to childbearing women. According to this system Ann would be safer having her baby in hospital.

(2) Ann is a reasonable woman, one of the 95% who accepts the advice of professionals, even when the option of having her baby in hospital is second best.

(3) Midwives often struggle to maintain good relationships with consultants, which could be damaged through challenge, particularly if things go wrong.

(4) The organisation places consultants in the position of highest authority therefore it is unfair and unsupportive to attempt to control what he considers is best management.

Please circle your response:

Decision to be made - I would argue with the consultant if he refused to support a home confinement when a mother with a healthy pregnancy is keen to have one.

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<th>Strongly Agree</th>
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Comments _______________________________________________
Case Study 3

Helen Martin is a 38 year old primigravida at 40 weeks gestation, with a pregnancy which has progressed normally during the antenatal period. Mr Russell is her consultant obstetrician. Helen arrived in the labour ward 4 hours ago with a cervix 2 centimetres dilated, partially effaced and uterine contractions 3 moderate in 10 minutes. The consultant obstetrician has requested a routine repeat vaginal examination, which finds Helen's cervix 6 centimetres dilated, appropriate fetal decent, full effacement, bulging membranes and uterine contractions 3 strong in 10 minutes. Helen is coping very well with pain, has no set ideas about what she wants from labour and both mother and fetus are generally in good condition. Mr Russell requests that you artificially rupture Helen's membranes.

Please consider the following points:-

(1) Helen is a reasonable woman, and one of the 95% who accept the advice of professionals.

(2) The consultant writes in the case notes instructions asking you to conduct the amniotomy.

(3) The organisation places consultants in the position of highest authority therefore it is unfair and unsupportive to attempt to control what he considers is best management.

(4) Amniotomy may hasten labour and there may be a very positive outcome.

Please circle your response:

Decision to be made - I would follow a senior member of staff's request to rupture a woman's membranes if this was the decided course of action.

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Comments ______________________________________________
Case Study 4

Karen McDonald is a 26 year old para 1+0 at 39 weeks gestation, with a straightforward pregnancy and normal labour. Karen arrived in the delivery room 5 hours ago with a cervix 3 centimetres dilated, partially effaced and a uterus contracting 3 moderate in 10 minutes. On routine repeat vaginal examination, Karen's cervix is found to be 6 centimetres dilated, fully effaced and uterine contractions 2 strong in 10 minutes; progress is slow. Membranes spontaneously ruptured half an hour ago and at present there are no signs of fetal distress. The guidelines for management of labour state an expectation that the cervix of a parous woman usually dilates 2 centimetres an hour and that 3-4 good contractions are expected every 10 minutes, with slow progress indicating commencement of syntocinon to increase uterine activity and accelerate proceedings.

Please consider the following points:-

(1) Administration of oxytocin does not mean labour becomes abnormal.

(2) Administration of oxytocin will accelerate labour and reduce the likelihood of hypoglycaemia and ketosis that can result from not feeding women in labour.

(3) Guidelines protect midwives from litigation, in that if you work within them you are conducting yourself according to routine management at that time.

Please circle your response:

Decision to be made – I would administer oxytocin to a woman desiring a normal labour if it was a requisite of the guidelines for routine labour.

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<tr>
<th>Strongly Agree</th>
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Case Study 5

Abigail Brown has arrived in the labour ward in early established labour. She has her two sisters and husband with her. The delivery room policy states that only one ‘birth partner’ may be present with a woman in labour at any one time. Abigail is in pain and requires to be helped regain control.

Please consider the following points:-

(1) Research supports that one good “birth partner” is often better than an unsure crowd and that women who worry about their environment release adrenalin which is an oxytocin antagonist and can slow progress of labour. Women in nature would retreat to a warm, safe place to labour and give birth (Odent, 1999; Robertson, 1999).

(2) Too many people in the delivery room could be extremely distracting for Abigail.

(3) There is a health and safety component in that delivery rooms are often small, with limited space for comfort.

(4) Overcrowding may inhibit Abigail from adopting positions with associated indignities, of which she may not be aware.

(5) Abigail is your average woman and one of the 95% who accept the guidance offered by professionals

(6) The policy of one “birth partner” is designed to protect women from an unknown and overwhelming situation.

Please circle your response:

Decision to be made - I believe that it is acceptable for a women to have more than one “birth partner” present during labour when the unit policy states only one person at a time.

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Comments _______________________________________________
Ann Wilson is a 33 year old primigravida at 39 weeks gestation, with an extremely straightforward pregnancy and flexible approach to labour. Mr Russell is her consultant. Ann commenced spontaneous labour 3 hours ago with routine observations during this time within normal limits. Ann has been in the water pool for half an hour, which has proven a successful method of pain relief. All observations are within normal limits and labour appears to be progressing satisfactorily. Mr Russell pays a visit and requests a 30 minute cardiotocograph trace.

Please consider the following points:-

(1) Ann is a reasonable woman, and one of the 95% who accepts the advice of professionals, therefore she agrees.

(2) The consultant has prescribed a CTG.

(3) The organisation places consultants in the position of highest authority therefore it is unfair and unsupportive to attempt to control what he considers is best management.

Please circle your response:

**Decision to be made** – I would automatically commence cardiotocography if it was requested by a senior member of staff.

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Comments ____________________________________________________________

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Case Study 7

Laura Brown is a para 1+0 who has had a previous normal pregnancy with successful outcome. She is pregnant again and carrying twins at 38 weeks gestation, both of which are cephalic presentations. The twins are appropriate weights for their gestational age and labour is progressing well. Laura's uterus is contracting strongly 4 in 10 minutes and she is coping well with pain for which she has had an intramuscular injection of diamorphine and is using entonox. Laura's cervix is 7 centimetres dilated and fully effaced, with membranes having spontaneously ruptured prior to delivery room admission. Cardiotocograph tracings on both twins are within normal limits. You decided epidural was not required because Laura was coping with her pain. The consultant overrides this decision, stating that he wants Laura to have an epidural just in case there are problems during the second stage of labour. Laura is generally agreeing with what is going on.

Please consider the following points:-

(1) Essentially the labour is normal and Laura, with help from yourself, has made informed decisions about pain relief.

(2) The consultant explains that he wishes the epidural in case the second twin were to rotate into a transverse lie post delivery of twin one, thus allowing avoidance of pain during manipulation of second twin.

(3) Laura is a reasonable woman and one of the 95% who accept the advice of professionals.

(4) The organisation imposes a system called Risk Analysis, which is designed to provide optimum care to childbearing women. According to this system Laura would routinely be placed in consultant led care even though all is normal in the above situation.

(5) The organisation places consultants in the position of highest authority, therefore it is unfair and unsupportive to attempt to control what he considers is best management.

Please circle your response:

Decision to be made - In general I would challenge a senior member of staff if they decided to override a decision I made regarding normal labour.

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Comments ____________________________________________________________

347
Case Study 8

Mary Smith is a primigravida at 37 weeks gestation. During a clinic appointment Mary asks the consultant for an elective caesarean section under a general anaesthetic because she wants to absent herself from the occasion. Mr Russell agrees with her choice and books a date for an elective section in a fortnight’s time. You are the midwife present during this clinic visit and feel this was the wrong decision to make.

Please consider the following points:-

(1) Mary is an American who comes from a society where section is often considered the “best way” to deliver a baby. This is her value and part of her birth philosophy.

(2) Mr Russell has explained the risks and his preferences with no effect.

(3) Mr Russell’s decision to meet Mary’s wishes is in keeping with the Changing Childbirth Document (DoH, 1993) which requests that women should have choice and control over their birth experience.

Please circle your response:

**Decision to be made** - I would conceal my opinion from a consultant obstetrician when my stance about carrying out elective section for social reasons differs.

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<th>Strongly Agree</th>
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Case Study 9

Karen Bell is a 21 year old primigravida at 40 weeks gestation and has arrived at the delivery suite accompanied by her husband and 2 friends. Karen's husband and 2 friends ask if they can stay in the room with her throughout her labour and delivery; Karen agrees. The unit policy states one “birth partner” at a time. You are the midwife in charge of Karen’s care.

Please consider the following points:-

(1) Research supports that one good “birth partner” is often better than an unsure crowd and that women who worry about their environment release adrenalin, which is an oxytocin antagonist and can slow progress of labour. Women in nature would retreat to a warm, safe place to labour and give birth (Odent, 1999; Robertson, 1999).

(2) Too many people in the delivery room could be extremely distracting for Karen.

(3) There is a health and safety component in that delivery rooms are often small with limited space for comfort.

(4) Overcrowding may inhibit Karen from adopting positions with associated indignities, of which she may not be aware.

(5) Karen is your average woman and one of the 95% who accept the guidance offered by professionals.

(6) The policy of one “birth partner” is designed to protect women from an unknown overwhelming situation.

Please circle your response:

Decision to be made - I would allow a women to have her two friends and husband present during labour and delivery if this is what she wanted.

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<tr>
<th>Strongly Agree</th>
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Comments _____________________________________________________________

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Case Study 10

Susan Stewart is a 29 year old primigravida who has attended National Childbirth Trust classes during the antenatal period. Susan has written an extremely elaborate birth plan involving utilisation of the water pool during first and second stages of labour. The guidelines for the delivery suite request that a short CTG be conducted on admission to establish fetal condition and both consultant and midwife are keen for this reassurance.

Please consider the following points:-

(1) When a woman is asked by a midwife if he/she can undertake a CTG, common statements made are: -

"I just want to check baby is coping, happy".

Most midwives don't disclose related issues such as fetal distress, low apgars and resuscitation, because it would be unethical to frighten Susan.

(2) Labour is the wrong time to present a third level debate over decisions made, because attention is limited due to pain and stress.

(3) Midwives who are informed often have difficulty making choices regarding certain issues.

(4) Some women do not want the "locus of control" in relation to decisions. They would rather defer decisions to the experts. Some prefer to leave everything in the hands of the professionals (Bennet & Brown, 1999).

Please circle your response:

**Decision to be made** - Informed choice for women is an idealised dream when the reality is that we know what is best for women in labour.

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<th>Strongly Agree</th>
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<th>Neither Agree or Disagree</th>
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<td>Comments</td>
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350
I would like to thank you very much for giving me your time. What information you have provided is given in confidence. You enter the study as a number and in an anonymous state.

Yours Sincerely

Caroline J. Hollins Martin
(Lecturer in Midwifery and Researcher)

Are there any general comments you would like to make?
Appendix Eight

Total SIS-M scores out of 50 for E grade midwives for the Pre-Workbook Questionnaire (C1) and the Workbook (C3)

<table>
<thead>
<tr>
<th>Participant E Grade</th>
<th>C1 Pre-Workbook Questionnaire n = 20</th>
<th>C2 Workbook n = 20</th>
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| M       | 24.70     | 24.75    |
| SD      | 4.09       | 3.91     |

n = number of participants
Total SIS-M scores out of 50 for F grade midwives for the Pre-Workbook Questionnaire (C1) and the Workbook (C3)

<table>
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<tr>
<th>Participant F Grade</th>
<th>C1 Pre-Workbook Questionnaire n = 20</th>
<th>C2 Workbook n = 20</th>
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<td>28</td>
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<tr>
<td>40</td>
<td>28</td>
<td>27</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>C1 Pre-Workbook Questionnaire n = 20</th>
<th>C2 Workbook n = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>25.30</td>
<td>26.05</td>
</tr>
<tr>
<td>SD</td>
<td>4.44</td>
<td>4.29</td>
</tr>
</tbody>
</table>

n = number of participants
Total SIS-M scores out of 50 for G grade midwives for the Pre-Workbook Questionnaire (C1) and the Workbook (C3)

<table>
<thead>
<tr>
<th>Participant G Grade</th>
<th>C1 Pre-Workbook Questionnaire n = 20</th>
<th>C2 Workbook n = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>24</td>
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<td>19</td>
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<td>23</td>
<td>26</td>
</tr>
<tr>
<td>60</td>
<td>26</td>
<td>24</td>
</tr>
</tbody>
</table>

M 24.85  23.25
SD 3.08  3.06

n = number of participants
Appendix Nine

Total SIS-M scores out of 50 for E grade midwives for the Pre-Interview Questionnaire (C1), Interview (C2) and Post-Interview Questionnaire (C4)

<table>
<thead>
<tr>
<th>Participant</th>
<th>C1 Pre-Interview Questionnaire</th>
<th>C2 Interview</th>
<th>C4 Post-Interview Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>E Grade</td>
<td>n = 13</td>
<td>n = 13</td>
<td>n = 13</td>
</tr>
<tr>
<td>1</td>
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</tr>
<tr>
<td>3</td>
<td>19</td>
<td>33</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>28</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>27</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>8</td>
<td>24</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>9</td>
<td>18</td>
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<tr>
<td>11</td>
<td>18</td>
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</tr>
<tr>
<td>12</td>
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<td>32</td>
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<tr>
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<td>42</td>
<td>28</td>
</tr>
<tr>
<td>14</td>
<td>23</td>
<td>42</td>
<td>33</td>
</tr>
<tr>
<td>15</td>
<td>22</td>
<td>35</td>
<td>23</td>
</tr>
<tr>
<td>17</td>
<td>24</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>48</td>
<td>27</td>
</tr>
</tbody>
</table>

M = 22.38  34.31  25.69  
SD = 3.15  6.46  4.11

n = number of participants
Missing case data: Participant 2, 5, 6, 10, 16, 18, 20
Total SIS-M scores out of 50 for F grade midwives for the Pre-Interview Questionnaire (C1), Interview (C2) and Post-Interview Questionnaire

<table>
<thead>
<tr>
<th>Participant E Grade</th>
<th>C1 Pre-Interview Questionnaire, n = 18</th>
<th>C2 Interview, n = 18</th>
<th>C4 Post-Interview Questionnaire, n = 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>22</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>22</td>
<td>21</td>
<td>32</td>
<td>22</td>
</tr>
<tr>
<td>23</td>
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</tr>
<tr>
<td>24</td>
<td>34</td>
<td>47</td>
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</tr>
<tr>
<td>25</td>
<td>26</td>
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</tr>
<tr>
<td>27</td>
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<tr>
<td>28</td>
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<td>20</td>
</tr>
<tr>
<td>40</td>
<td>21</td>
<td>42</td>
<td>33</td>
</tr>
<tr>
<td>M</td>
<td>23.44</td>
<td>37.22</td>
<td>24.33</td>
</tr>
<tr>
<td>SD</td>
<td>4.59</td>
<td>5.39</td>
<td>4.31</td>
</tr>
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</table>

n = number of participants
Missing case data: Participant 26, 32
Total SIS-M scores out of 50 for G grade midwives for the Pre-Interview Questionnaire (C1), Interview (C2) and Post-Interview Questionnaire

<table>
<thead>
<tr>
<th>Participant E Grade</th>
<th>C1 Pre-Interview Questionnaire n = 19</th>
<th>C2 Interview n = 19</th>
<th>C4 Post-Interview Questionnaire n = 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>17</td>
<td>33</td>
<td>19</td>
</tr>
<tr>
<td>42</td>
<td>22</td>
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<td>22</td>
</tr>
<tr>
<td>60</td>
<td>31</td>
<td>29</td>
<td>24</td>
</tr>
</tbody>
</table>

| M                  | 23.84                  | 34.95                | 24.05                  |
| SD                 | 3.91                   | 6.35                 | 4.67                   |

n = number of participants
Missing case data: Participant 44
Appendix Ten

Numbers, grade and SIS-M scores of the midwives who had their interview tapes selected for transcription

<table>
<thead>
<tr>
<th>Participant</th>
<th>Grade</th>
<th>Pre-Interview Questionnaire SIS-M Score</th>
<th>C2 Interview SIS-M Score</th>
<th>C4 Post-Interview Questionnaire SIS-M Score</th>
</tr>
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<tbody>
<tr>
<td>5</td>
<td>E</td>
<td>22</td>
<td>38</td>
<td>+</td>
</tr>
<tr>
<td>6</td>
<td>E</td>
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<td>32</td>
<td>+</td>
</tr>
<tr>
<td>7</td>
<td>E</td>
<td>27</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>8</td>
<td>E</td>
<td>24</td>
<td>33</td>
<td>31</td>
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<td>E</td>
<td>22</td>
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<td>23</td>
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<tr>
<td>16</td>
<td>E</td>
<td>20</td>
<td>33</td>
<td>+</td>
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<tr>
<td>19*</td>
<td>E</td>
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<td>F</td>
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<td>F</td>
<td>26</td>
<td>41</td>
<td>22</td>
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<td>20</td>
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<td>F</td>
<td>18</td>
<td>41</td>
<td>20</td>
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<td>17</td>
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<td>19</td>
</tr>
<tr>
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<tr>
<td>60*</td>
<td>G</td>
<td>31</td>
<td>29</td>
<td>24</td>
</tr>
</tbody>
</table>

Note: Scores are out of 50: maximum score 50, minimum score 10.

* = Participant 19 had the largest difference in score between the private and public measure
* = Participant 60 had the smallest difference in score between the private and public measure

+ = Missing data
Appendix Eleven

Qualitative Excerpts Categorised By Interview Rater

There were seven interviews assessed by each rater for presence of positive attitudes towards providing woman-centred care, situational factors that promoted acquiescence, psychological responses to social influence and none. Below are a list of positive attitudes towards providing woman-centred care (1), situational factors that promoted acquiescence (2) and psychological responses to social influence (3) categorised by each rater.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Rater</th>
<th>Positive Attitudes Towards Providing Woman-Centred Care</th>
<th>Situational Factors That Promoted Acquiescence</th>
<th>Psychological Responses to Social Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>A</td>
<td>The mother’s wishes outweigh anything</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It’s fiscal body</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>You seek some sort of consensus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Just write that consent has not been given</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>A</td>
<td>It would depend on what the woman wanted</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Argue is ..dangerous…Miss M would not take kindly to it</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>She won’t benefit from that…well you have to agree then</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No wonder we barricade the doors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>A</td>
<td>Here I am considering the woman’s choice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m under the auspices of the auspices of policies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you are looking at it as a protection mechanism</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>And it’s not my position if it’s his name on the notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>A</td>
<td>We should empower women to have choice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If the unit policy states…I would have to go along</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thinking of problems ahead</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In that case I would have to go along with it</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>We are happy with her, this is quite normal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A = Rater A | B = Rater B
If anything goes wrong
The dragon wasn’t on the ward
If it is the most disagreeable one
Yeah, yeah, well I would be reluctant to do it
I’d maybe try and dissuade her

Depending on wishes of the woman
It’s positional power isn’t it
If it came to a court case I wouldn’t trust her still
And the bullying part of him
He tried to block my promotion
It’s going against my beliefs a lot but...I would do it
Given that it is obviously making it indigestible

I ask all women re options to give informed choice
You have to work within these guidelines
You have got to, you have got to follow
If anything did go pear shaped
You know that he is going to make life a misery
I am going to have to do it. I wouldn’t be happy though
Guidelines are necessary...to give some structure
### Appendix Twelve

**Assessment of Agreement Between Interview Raters Using Cohen’s Coefficient**

<table>
<thead>
<tr>
<th>Rater B</th>
<th>(+ve attitude toward providing woman-centred care)</th>
<th>situational factors that promoted acquiescence</th>
<th>psychological responses to social influence</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rater A</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(0)</td>
<td></td>
</tr>
<tr>
<td>(+ve attitude toward providing woman-centred care)</td>
<td>6 (1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>situational factors that promoted acquiescence</td>
<td>0</td>
<td>15 (7.1)</td>
<td>0</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>psychological responses to social influence</td>
<td>0</td>
<td>0</td>
<td>11 (4)</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>16</td>
<td>11</td>
<td>3</td>
<td>36</td>
</tr>
</tbody>
</table>

(figures in brackets are those expected by chance)

The formula for the kappa (k) coefficient is as follows:

\[ k = \frac{f(o) - f(e)}{N - f(e)} \]

Where \( f(o) \) is the observed frequency of agreement, \( f(e) \) is the frequency of agreement expected by chance and \( N \) is the total number of observations.

\[ f(o) = 6 + 15 + 11 = 32 \]
\[ f(e) = 1 + 7.1 + 4 = 12.1 \]
\[ k = \frac{32 - 12.1}{36 - 12.1} \]
\[ k = \frac{19.9}{23.9} \]
\[ \text{kappa} = 0.83 \]