Optimizing Autonomy-Supportive consultation

an investigation in the context of prenatal consultations in maternity care

Joyce Kors

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Provided by thesis specialist Ridderprint, ridderprint.nl
Printing: Ridderprint
Layout and design: Heike Renée de Wit, persoonlijkproefschrift.nl
Cover design: Iris van Sen www.irisvansen.nl

ISBN 978-94-6506-430-7
DOI: http://doi.org/10.5463/thesis.880

Printed with financial support from the Netherlands Association for Medical Education (NVMO).

VRIJE UNIVERSITEIT

OPTIMIZING AUTONOMY-SUPPORTIVE CONSULTATION

An investigation in the context of prenatal consultations in maternity care

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor of Philosophy aan

de Vrije Universiteit Amsterdam,

op gezag van de rector magnificus

prof.dr. J.J.G. Geurts,

in het openbaar te verdedigen

ten overstaan van de promotiecommissie

van de Faculteit der Geneeskunde

op donderdag 12 december 2024 om 9.45 uur

in een bijeenkomst van de universiteit,

De Boelelaan 1105

door

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geboren te Soest

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CHAPTER 1

Introduction

BACKGROUND

Becoming a parent is a special life event for most people[1]. It affects not only the lives of the parents but also the lives of their parents and loved ones. In the Netherlands, in 2023, 164.918 babies were born alive[2]. This means that more than 1 million people, parents, grandparents, and friends, have experienced maternity care in their inner circle. As a result, there are many stories about experiences with maternity care. Most stories emphasise the life-changing effect of becoming a parent, as well as the happiness and hard work. However, there are also a remarkable number of stories of people who are disappointed with maternity care, their maternity care professional (midwife or obstetrician) or themselves[3].

In these stories, ineffective communication, loss of autonomy and lack of consent are the most frequently mentioned reasons for the disappointing experiences[3,4]. Feijen et al. (2020)[5] found that in the Netherlands, in prenatal consultations, 17% of the patients* perceived low to moderate respect, and 38% very low to moderate autonomy regarding decision-making during prenatal consultations. Patients perceived lower autonomy regarding decisions later (>32 weeks) in their pregnancy than regarding decisions earlier in their pregnancy[6]. When the perceived respect and autonomy were measured postpartum, they were even slightly worse[7]. In Canada, Vedam et al.(2017) found that 6% of women were dissatisfied during pregnancy with their ability to participate in decision-making, 15% during labour and birth, 16% after birth, and 3% were not satisfied at any point during pregnancy with their ability to participate[8]. In a national survey in the Netherlands, 50% of all respondents reported at least one form of disrespect during labour and birth, and 33% perceived the disrespect as upsetting. The perceived disrespect was predominantly related to a lack of communication or a lack of choice[9]. The interaction during prenatal consultations could also affect the experiences during labour and birth[10]. To summarise, there is room to improve the interaction and decision-making during prenatal consultations and to optimize patients' experiences during pregnancy, labour and birth.

Optimizing prenatal consultations has a relevant impact on maternity care because prenatal consultations are an essential part of maternity care. In the United States, there are 50 million prenatal consultations annually; while in the Netherlands, there are approximately 2 million prenatal consultations per year[2,11]. In order to facilitate healthcare professionals and healthcare students to optimize their interaction with their patients during consultations and, more specifically, in maternity care, it is important to know what happens during prenatal consultations. Therefore, this thesis aims to unravel the interaction and decision-making process during prenatal consultations in daily practice.

In this introductory chapter, we first briefly introduce the context of maternity care in the Netherlands. Next, we introduce the major concepts related to prenatal consultation, describe what is known about professional-patient interaction and decision-making during prenatal consultations and address knowledge gaps. After that, we introduce

the theoretical framework we use in the different studies. Finally, we present the aim and outline of this thesis.

Context of maternity care in the Netherlands

In the Netherlands, maternity care professionals provide primary, secondary, and tertiary care. Most midwives work in independent primary care midwifery practices. They provide maternity care to 'low-risk' patients (88.9% of all patients receive primary care at the beginning of their pregnancy). Hospital-based midwives and obstetricians provide secondary and tertiary maternity care (11.1% of all patients receive secondary care at the beginning of their pregnancy).

If complications occur during pregnancy or childbirth, or the risk of complications rises, the independent midwife refers the patient to secondary maternity care.

At the beginning of childbirth, 46.6% of all patients receive primary care, and 53.4% receive secondary care.

At the end of the birth, 26.2% of all patients receive primary care, and 73.8% receive secondary care[12].

During a normal pregnancy, there are about 13 prenatal consultations, the first consultation preferably before the 9th week of the pregnancy. When necessary, extra consultations are planned[13].

In the Netherlands, at the moment there are 3940 practicing midwives (Nivel, 2021)[14] and 1001 gynaecologists[15].

In 2023, there were 164.918 babies born alive in the Netherlands[2].

PRENATAL CONSULTATIONS

Prenatal consultations have been part of maternity care for over 100 years. William's Obstetrics, first edition, from 1907, states, "pregnancy should be considered a normal process but (the professional should) keep strict supervision and be constantly on alert for the appearance of untoward symptoms"[16]. Nowadays, the aim of prenatal consultations is broadening to include health promotion and education[17,18]. In this paragraph, the major concepts related to prenatal consultations are introduced in order of content, professional-patient interaction, and context (Figure 1.1), respectively in blue, green, and red).

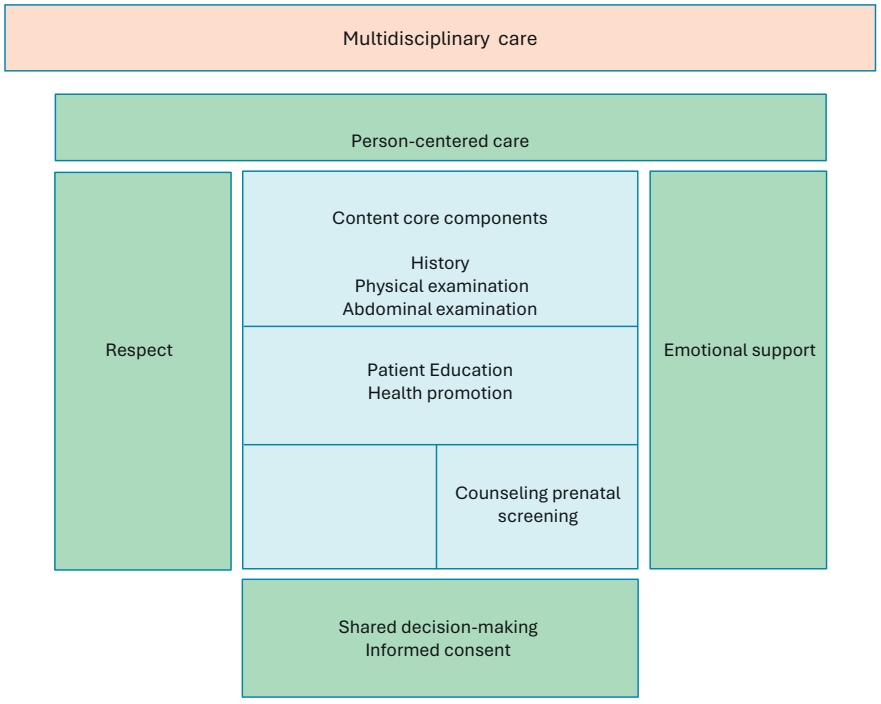

Figure 1.1. Increased complexity of prenatal consultations

Content of prenatal consultations

In high-income countries, prenatal care comprises 7 to 16 consultations[11,19]. Regular prenatal consultations consist of history and physical examination, including measurement of blood pressure and weight, abdominal examination to assess fetal growth and position and document the fetal heart rate, patient education, laboratory testing and ultrasounds[11,19]. In the Netherlands, weight measurement is optional, and ultrasound, e.g. to confirm position or growth, is mostly part of the prenatal consultation; patients are referred for ultrasound regarding prenatal screening for anomalies[20]. In most models of prenatal care, there is a scheme that describes when laboratory tests and ultrasounds are performed, and issues regarding patient education are discussed[19]. In the Netherlands, for instance, the conversation and, if indicated, counseling for prenatal anomaly screening takes place before the ninth week of pregnancy. Lifestyle issues such as smoking cessation are also discussed early in the pregnancy. In the period between 22 to 28 weeks of pregnancy, patient education includes issues such as symptoms of hypertensive disorders and the preparation for childbirth. After 28 weeks of pregnancy, decision-making regarding preferred care during birth occurs, and issues regarding the post-partum period, such as infant feeding, are discussed[20] (Figure 1.2).

Intake (1ste consultation) Education & Decision-making prenatal screening General education & advice e.g. working conditions, lifestyle, contact information Education & Decision-making regarding behavioural change: smoking, alcohol & drugs
9-14th week Decision-making prenatal screening Education on the organisation of Maternity care in the Netherlands & Freedom of choice
14-22th week Decision-making screenings ultrasound (FAS) Education & Decision-making on prenatal immunisation for whooping cough
22-28th week Education symptoms of hypertensive disorders Education on pregnancy classes, infant feeding and preparation for labour & birth e.g. place of birth, positions during labour & birth, pain and pain relief
28-36th week Education on the importance of foetal movements Education & Decision-making labour & birth, e.g. place of birth, positions during labour & birth, pain, (medicine) pain relief and infant feeding. Education on postnatal care, transition to parenthood and practical information e.g. maternity leave
36-42th week Education & Decision-making on labour &birth e.g. pain relief, Instructions on how and when to contact their maternity care professionals Education on the postnatal period & transition to parenthood, including vitamin K & neonatal screening Education and Decision-making on serotinity Education and Decision-making on breech (if indicated)

Figure 1.2. Patient education and decision-making during regular prenatal care in the Netherlands based on the National Dutch guideline, 'Integrated Maternity Care'[20]

The number of issues that need to be discussed and decisions parents need to make during their pregnancy has increased in recent years due to the increased number of options for preferred care during childbirth, such as pain management and the increased number of options for health promotion through expanded immunisation programs or lifestyle interventions. In the Netherlands, counseling for prenatal anomaly screening is done by maternity care professionals and is usually integrated into prenatal consultations. Also, in prenatal anomaly screening, the options that need to be discussed have increased in recent years (as shown in Figure 2 in blue). Some issues involve more than a single decision; a birth plan, for instance, includes many decisions about labour, birth and parenthood. For parents to be able to make such decisions, it is essential to support their self-management[21]. Self-management implies "the individual's ability to manage the symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition."[22]. Although pregnancy is not a chronic condition, the life event of pregnancy and the transition to parenthood require self-management skills from the patient and the partner[21]. Self-regulation is the foundation of a patient's self-management[23].

Professional-patient interaction in prenatal consultations

The interaction between professionals and patients has also changed over time. As already advocated by the WHO in 1997, patients need to actively participate in consultations to improve the quality of care[24]. Later on, the term person-centred care was introduced to describe the collaboration between patients and healthcare professionals. The core elements of person-centred care are relatedness, communication, shared decision-making and individual focus[25]. Besides person-centred care, the term patient-centred care is also used. Both terms have many similarities, with person-centred care focusing more on a meaningful life and less on illness[25]. In midwifery specifically, the term woman-centred care is also used. This term has a lot in common with person-centred care, whereby, specific to the concept, woman-centred care is the view that pregnancy and birth are physiological processes, and from that point of view, the woman is not a patient[26,27]. In the National Dutch guideline, 'Integrated Maternity Care' shared decision-making, emotional support, respect and informed consent are explicitly named as core elements of person-centred maternity care[20].

As mentioned before, decision-making is an important part of the interaction between maternity care professionals and patients during prenatal consultations. Three related terms are often used to describe decision-making during healthcare consultations: shared decision-making, informed consent, and informed decision-making.

In shared decision-making, healthcare professionals and patients work collaboratively. They share not only information and intuition but also decision-making power. Healthcare professionals and patients discuss their views and come to an agreed decision for which they share the responsibility. This process takes into account patients' emotions, needs and personal values, as well as the respect for the patient's autonomy. There is no reason why professionals should not contribute their views if there is good evidence that this will add to the patients' direct medical benefit[28]. Shared decision-making is appropriate when there are two or more medically seen reasonable options and thus decisions in which patients' preferences are decisive[28,29]. Shared decision-making seems less appropriate for decisions with high risks and only one choice[29]. Informed consent is relevant in all situations, whether there are multiple options or only one choice.

According to Faden and Beauchamp (1986)[30], informed consent is given "When a patient or a subject with (1) substantial understanding and (2) in the substantial absence of control by others (3) intentionally (4) authorises a professional".

Informed consent also involves a conversation between healthcare professionals and patients about the treatment, alternatives, risks, and benefits of all the options. This discussion may take place in one or several consultations[29]. From this perspective, informed consent can be considered part of the decision-making process. A distinction is sometimes made between informed consent and simple consent, in which simple consent is for low-risk interventions, e.g., using a plaster for a broken leg. Informed consent is for high-risk interventions or procedures, e.g. cesarean section. In the case of simple consent, the professional could explain what is wrong and how to rehabilitate

after a broken leg. If there are any questions, there is minimal discussion on risks or alternatives[29]. In the context of prenatal anomaly screening, the term informed choice is sometimes used. However, the literature justifies that there is no ethical need to use this term[31].

Informed decision-making is the last term discussed. Informed decision-making includes mainly the same components as shared decision-making. However, in informed decision-making, healthcare professionals could be involved in some or all the steps of the decision-making process depending on patients' preferences [32]. In the context of prenatal anomaly screening informed decision-making mainly refers to the process rather than the decision[31]. In practice in the Netherlands, the term shared decision-making is used for all conversations between patients and their healthcare professionals about choices regardless of the number of options or the involvement of the professional in all steps.

Decision-making in the context of prenatal care relates to medical interventions, preferred care or lifestyle changes. This warrants professionals to be aware that aspects of decision-making are present in almost every consultation[29]. Although decision-making is always a continuous process in which patients may change their minds, in maternity care, the medical and organisational circumstances, especially during childbirth, can make it necessary for patients to reconsider their decisions. This highlights the importance of careful decision-making processes in prenatal consultations.

Finally, the context of prenatal consultations has changed over time. In 2022, 89% of all patients received primary maternity care from a midwife at the beginning of the pregnancy. At the start of labour, about 47% of the patients still receive primary maternity care, and 53% receive secondary maternity care. This implies that half of the patients are referred during the pregnancy. At the end of birth, 26% of the patients receive primary maternity care, and 74% receive secondary maternity care[12]. This underlines the importance of primary and secondary maternity care professionals working together for a seamless referral for their patients. However, collaboration with other professionals, such as social workers, pediatric nurses and physicians, has also intensified due to the complexity of patients in maternity care. Also, the shortage of staff impacts the context of prenatal consultations.

Prenatal consultations have become more complex due to changed content, changes in the maternity care professional-patient interaction, and a more complex context. This increasing complexity requires a different way of thinking of professionals, one that incorporates variable degrees of agreement and certainness[33].

WHAT IS KNOWN ABOUT INTERACTION AND DECISION-MAKING DURING PRENATAL CONSULTATIONS

The broader scope, the active involvement of the patient, and the more complex context require different competencies from maternity care professionals. Professionals have had to move away from paternalistic care, in which the healthcare professional knows best, to person-centred care, where professionals and patients work together to achieve optimal care. Professionals have to reflect on and modify their professional roles; patients appreciate when professionals view health comprehensively, share experiential knowledge, and allow less formal and more personal relationships. Incorporating these changes may, in turn, enable patients to make informed choices and participate more actively in care[11]. To enable patients' active participation, truthful, tailormade information from professionals is needed to supplement patients' knowledge[11,34,35]. However, patients also need to be known, and their preferences must be considered to support active involvement in conversations and decision-making during prenatal consultations[11,34,36]. A meaningful patient-professional relationship enhances patients' feelings of control and autonomy in decision-making[11,37].

Professional training is important to prepare future maternity care professionals and support current maternity care professionals. Nowadays, in midwifery education in the Netherlands, students are trained to become strong players in maternity care and able to offer woman-centred care. For this, two components have been recognised as essential in midwifery education: (1) role models as powerful learning strategies and (2) scientific skills[38]. Role models are persons looked up to by others as examples to be imitated. In healthcare education, mentors and others can help and inspire students to show certain behaviours that often have a lifelong effect[39]. In continuing professional education for maternity care professionals over the past few years, attention has been paid to person-centred interaction and decision-making support. This is especially true regarding prenatal anomaly screening. There has been mandatory communication skills training.

Nevertheless, person-centred interaction and decision-making support are still challenging for most maternity care professionals. Baas et al. (2015)[35] found that, according to patients, midwives could improve their competence by listening more carefully and showing more respect and empathy. The interactions sometimes felt as routine. Regarding patient education, maternity care professionals pay the most attention to providing information and building patients' knowledge to support patients' self-management[21]. Healthcare professionals, in general, still tend to focus on providing information to guide their patients' decision-making[40-43]. Although providing information is essential in consultations, patients need more support to actively participate in consultations and make their own decisions. Only half of the healthcare professionals named decision-making support as part of the counseling for prenatal anomaly screening[44]. In another study, Martin et al. (2018)[45] found that maternity care professionals overestimate their competence concerning decision-making support; 93% of the professionals assessed themselves as competent. These professionals needed only 12 minutes to provide information and decision-making support regarding

prenatal anomaly screening, while the recommended time is 35 minutes[46]. This finding aligns with other studies, which have also found that professionals underestimate the time needed to provide tailormade information and decision-making support[47]. Van Hooft (2017)[48] found a significant difference between self-assessment and behaviour in practices in a study on self-management support by nurses. A third of the nurses indicated they did not need additional training. A study of 41 healthcare professionals from 18 different disciplines reported that professionals could not assess their decision-making support style in medical consultations[49].

To conclude, we know that healthcare professionals guide patients' decision-making processes mainly by providing information. Less is known about how they stimulate active patient participation and support decision-making. Most of the research, especially regarding decision-making in the domain of maternity care, was conducted concerning prenatal anomaly screening. We know little about the decision-making processes in prenatal consultations regarding other topics. As mentioned before, we know from patients' experiences that there is room for improvement.

THEORETICAL FRAMEWORK AUTONOMY SUPPORTIVE CONSULTATION (ASC)

Patients who receive autonomy support participate more actively in consultations[50]. They experience better physical and psychological well-being, more psychological energy and less anxiety[51]. Patients who perceive a decision as more autonomous show higher compliance for treatment or behavioural change and higher decision satisfaction even when the outcome is suboptimal [51-53]. Autonomy Supportive Consultation (ASC) is an evidence-based intervention grounded in Self-Determination Theory (SDT)[54]. Autonomy-supportive consultation stimulates patients' self-regulated behaviour, which enables them to make their own choices regarding their health[51]. According to this macro theory of human motivation, the quality of motivation is arranged along a continuum, with autonomous motivation at one end and controlled motivation at the other. Autonomous motivation means engaging in behaviour out of one's own choice with no perception of internal or external pressure, the regulation underlying this being internal or autonomous. Autonomous self-regulation happens when a person finds a certain behaviour (e.g. active participation during consultations or healthcare decisions) important or engages in it out of interest. Controlled motivation, conversely, means making choices and showing behaviour for external reasons, such as receiving praise. The regulation underlying this type of motivation is external (Figure 1.3).

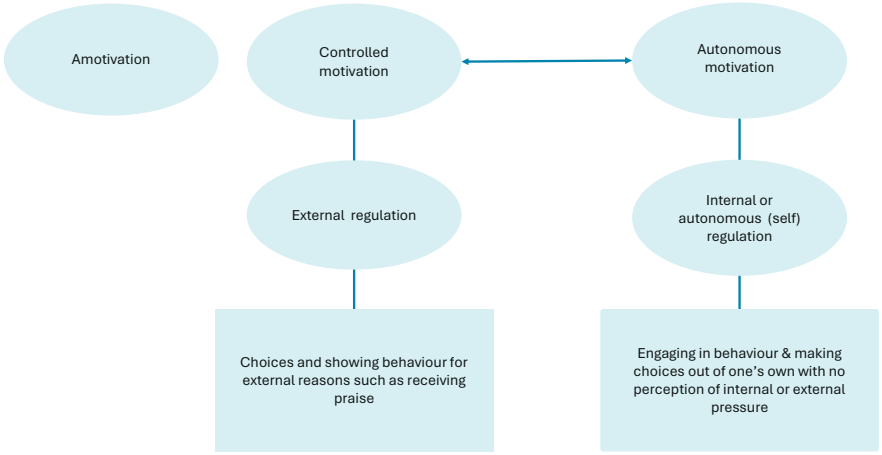

Figure 1.3. Self Determination Theory continuum adapted from Ryan & Deci (2000)[55]

People's autonomous motivation can be stimulated by the fulfilment of their three basic psychological needs: autonomy (feeling of ownership, endorsement, and choice), competence (feeling of capability and growth), and relatedness (feeling of belonging and connection)[55].

During ASC, healthcare professionals fulfil patients' basic psychological needs by creating a warm healthcare climate, using a need-supportive interaction style and avoiding a need-threatening interaction style (Figure 1.4). In this need-supportive interaction, a good balance between autonomy-support and competence-support is important. Patients' perceptions of autonomy may change over time when new information is presented or when a patient's health status changes. For instance, when a complication such as hypertension occurs, a patient can feel no longer competent to make satisfying decisions without direct input from their healthcare professional[56, p842]. According to the SDT perspective on autonomy, a patient can be autonomously dependent or autonomously independent concerning the recommendations made by their healthcare professional[56, p840]. In an autonomy-supportive healthcare climate, the healthcare professional respects the patient's choice even when this choice is not in line with guidelines or regulations[57]. This requires respectful disclosure of information and other actions that foster autonomous decision-making. It requires professionals to support their patients in achieving their objectives/goals and foster their capacity[58, p105]. Sometimes, a patient may choose to delegate their choice to someone else; a patient has the right to choose, not the duty. Therefore, a patient delegating their choice can be autonomous[58, p106]. In healthcare consultations, fostering autonomy could support shared decision-making. However, SDT, as well as ethicists, pointed out that there can be control from inside the patient as well as outside. Therefore, it is important to actively seek to understand the more autonomous motivation of the patient[56, p840]. ASC is useful in every consultation. Because almost every consultation contains aspects of decision-making. Finally, ASC is an inclusive intervention that is useful for all types of patients.

For these reasons, we use the lens of SDT to look at interactions and decision-making in maternity care consultations in daily practice.

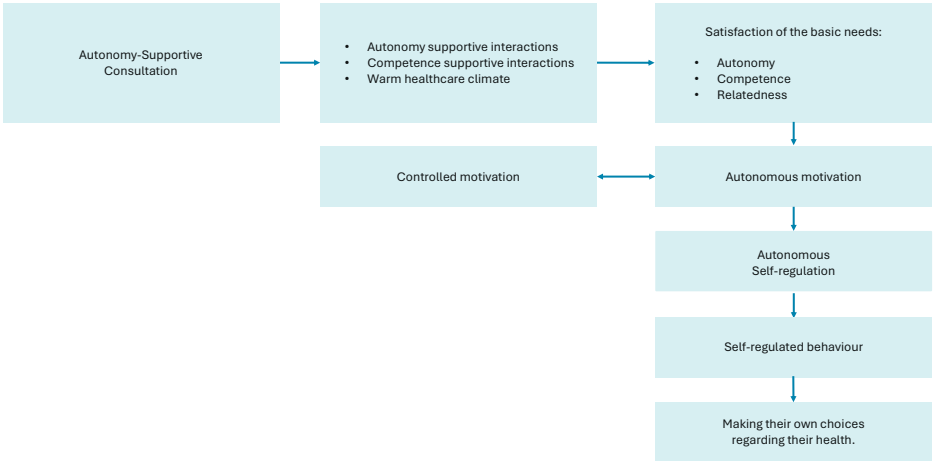

Figure 1.4. Model of Autonomy Supportive Consultation

Given the importance of healthy behaviour in increasing the risk of preventable diseases or complications, interest in studies on SDT in the domain of health has increased over the last decade. In 2019, there were 184 publications on SDT and health[59]. The most widely researched health behaviour was physical activity; other researched behaviours included diet, medication adherence, smoking cessation, alcohol consumption and dental hygiene. The studies were conducted in a variety of healthcare contexts [60,61,62].

STUDY CONTEXT OF THIS THESIS

Instead of developing a 'new model for interaction", we aimed to perpetuate the strong elements of the interaction professionals already use and to improve or add some other elements. By taking daily practice as a starting point, we also address the perception of midwifery students, who say they perceive a difference between their communication training in the academy and their internships in maternity care. The gap between what a professional can do and what a professional does in a real-life situation is a well-known phenomenon in literature [63,64]. This is a relevant issue respecting the importance of role models in internships as a powerful learning strategy in healthcare education. Although group consultations are an increasing part of prenatal care in high-income countries, this thesis focuses on individual prenatal consultations[34].

THE AIM OF THIS THESIS

In order to help healthcare professionals and healthcare students optimize their interaction and decision-making support during consultations and, more specifically, in maternity care, we need to know what happens during prenatal consultations.

Therefore, this thesis aims to unravel the interaction and decision-making during prenatal consultations in daily practice and offer professionals' and teachers recommendations on optimizing the interaction and decision-making support during prenatal consultations.

In addition, this thesis contributes to the research on SDT in healthcare. To our knowledge, it is the first study to examine maternity care consultations through the lens of SDT. This thesis can also contribute to the knowledge of SDT interventions, such as ASC, on health behaviours and self-management.

The broad central research question is: "How can maternity care professionals optimize their interaction so that patients are more autonomously motivated, self-regulated, and able to make their own choices regarding their health?"

OUTLINE OF THIS THESIS

To answer the broad central research question, the following five studies were performed.

Study	Aim	Study question
Chapter 2 Realist Review	A theoretical foundation of autonomy-supportive consultation (ASC).	a) How do contextual factors influence the provision of autonomy-supportive consultations b) What are the mechanisms that support or hinder patients' autonomy in consultations c) What are the outcomes of autonomy-supportive consultations?
Chapter 3 Validation study	To facilitate structured observations in maternity care in daily practice, we adapted and validated the encoding of observations using the Coding and Observing Need-Supportive Consultation in Maternity Care consultations (CONSUL-MCC): A self-determination theory-based tool to observe consultations in maternity care.	a) Is it possible to adapt the Coding and Observing Need-Supportive Counseling in Chronic Care Encounters (COUNSEL-CCE), a self-determination theory-based observation tool used in the context of chronic care to the context of maternity care, and to validate the encoding of observations? b) To what extent are indicators of need-supportive or need-thwarting interactions generic over different healthcare contexts? c) How can we develop a universal tool for observation and encoding autonomy-supportive consultation in practice?

Study	Aim	Study question
Chapter 4 Qualitative interaction analysis	A detailed description of interactions between maternity care professionals and their patients in daily practice to identify what is needed to optimize ASC in daily practice. This knowledge could enrich existing concepts and models and enable maternity care professionals to improve decision-making processes in their daily consultations.	Which mechanisms of ASC do maternity care professionals use during decision-making in prenatal consultations?
Chapter 5 Quantitative structural observation study	This study aims to quantify the frequency with which maternity care professionals use autonomy-supportive and autonomy-thwarting interactions during prenatal consultations and the association between these interactions and patients' perceptions of the healthcare climate during consultation.	a) Which autonomy-supportive and autonomy-thwarting interactions do maternity care professionals use in prenatal consultation in daily practice? b) What is the frequency of use of these interactions? c) Which characteristics of patients or professionals are associated with the use of autonomy-supportive or autonomy-thwarting interactions? d) Is there a relation between the frequency of use of autonomy-supportive or autonomy-thwarting interactions and the characteristics of maternity care professionals? e) Is there a relation between the autonomy-supportive or autonomy-thwarting interactions and the patient-perceived healthcare climate during consultations?
Chapter 6 Qualitative analyses of the open-ended question part of the data collected as part of a big study called the TRIDENT-2 study.	To generate insights into maternity care professionals' views on 'good' counseling for prenatal anomaly screening. These insights, in turn, can be instrumental in tailoring education.	What are aspects of 'good' counseling for prenatal anomaly screening' according to maternity care professionals?

REFLEXIVITY

As a parent, it is important to make a choice with your heart that is closely related to your values and norms. To do this, it was important to be seen and heard by my maternity care professional. I needed the support of my maternity care professionals to know not only my options but also the consequences of each option. Before I could feel what was the right decision for us, I needed to know all the possible consequences of the options. It was only when I knew all the consequences that I was able to accept the consequences of my choice.

Although we were perfectly well guided in our decision-making process, I realise that guiding parents through this kind of decision-making process sometimes requires different competencies from professionals.

X

Box 1: personal experience of X

As a midwife, I found prenatal consultations the most difficult and, at the same time, the most important and satisfactory part of my work. Later, as an educationalist at the midwifery academy, I found prenatal consultations to be a topic of interest, especially when prenatal anomaly screening was introduced as part of regular prenatal care. Unique stories of people like X (see box 1), reflecting the importance of interaction and decision-making for the acceptance of the outcome of maternity care, inspired me. The pregnancy of X was complicated by unexpected findings during prenatal screening. In 2021, she told me her story because she wanted to share what she had learned from her journey. She also wanted to help maternity care professionals optimize their care and healthcare educators improve their training.

In 2016, I had the opportunity to become part of the research team 'Research in Medical Education'. In this team, I was introduced to the Self Determination Theory, and I realised the potential of this theory for maternity care and, more specifically, prenatal consultations. During the SDT conference in Egmond in 2019, I had the opportunity to speak with SDT experts as well as its co-founders, Profs. Edward Deci and Richard Ryan, so the outline of our studies was further concretised. Also, our cooperation with Gent University on the adaptation of the COUNSEL-CCE was a spinoff of this conference.

Especially in qualitative research, it is important to know your motivation, perceptions and background. Therefore, I was privileged to perform my research within a multidisciplinary context with researchers with diverse backgrounds. My direct research team consisted of a professor in Health Professions Education with a medical background, a practising neurosurgeon, a professor and dean of an academic medical centre, a psychologist and lecturer in communication and counseling, a professor in midwifery and an experienced midwife in a teaching hospital and midwifery practice. In the diverse studies, I collaborated with co-authors with a background as an

obstetrician, a nurse educator and a professor of public health and primary care, a linguist and educationalist, experienced in communication skills training in medical education, a perinatologist, responsible for the obstetric education of bachelor and master students, an experienced midwife in midwifery practice, an epidemiologist and developmental psychologist, a professor of patient perspectives on genetic testing and two bachelor students in midwifery. Additionally, I discussed my work and research findings with patients and patient representatives of the Board of Mothers.

This facilitated me to reflect on choices and interpretations of maternity care practice and education.

In this thesis, the term patient is used for someone pregnant. However, pregnancy is not a disease, so the term client is frequently chosen. Still, it can be a challenging period for people due to changes in their physical and mental condition. When seeking health care, a person becomes a patient[36].

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CHAPTER 2

Factors Influencing Autonomy Supportive Consultation: A Realist Review

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This chapter was published as an article in
Patient Education and Counseling (PEC) 2020
Available online at https://doi.org/10.1016/j.pec.2020.04.019

ABSTRACT

Objective
Gaining insight into contextual factors and mechanisms supporting or hindering autonomy-supportive consultation and into outcomes of such consultations.

Methods
We conducted a systematic review using the realist synthesis procedure according to RAMESES guideline. A search was performed in PubMed, Embase, PsycINFO and Cinahl from inception to March 2019 using the search terms: 'autonomy' AND 'support' AND 'consultation' OR 'communication' AND 'intervention'. The review process, including paper selection, quality assessment, and full-text reading for data extraction, was conducted by two researchers independently.

Results
Of 2792 articles, 18 met our inclusion criteria. Contextual factors influencing an autonomy-supportive consultation were: work organisation and the attitude of professionals. An overarching supporting mechanism for AS was relationship building. In addition, each phase of the decision-making process seems to need supporting mechanisms fulfilling patients 'specific psychological needs in that phase. The outcome of AS is higher levels of patient well-being.

Conclusion
Autonomy-supportive consultation works in various contexts coupled with mechanisms that give rise to favourable outcomes, of which relationship building, taking time, and exploring patients' needs seem the most important.

Practice Implications
The results of our review facilitate professionals to reflect on their autonomy-supportive consultation skills, which could improve their autonomy-supportive behaviour.

INTRODUCTION

In the past forty years, healthcare professionals have made a shift towards more patient-centred care, in which patients are better informed, empowered and encouraged to make their own choices regarding their health[1-3]. However, in healthcare consultations, healthcare professionals still tend to focus on providing information instead of empowering patients and facilitating their autonomous decision-making during consultations[4].

According to the self-determination theory (SDT)[5], a macro-theory of human motivation, the quality of motivation is arranged along a continuum with autonomous motivation at one end and controlled motivation at the other end. Autonomous motivation means engaging in a behaviour out of one's own choice with no perception of internal or external pressure, the regulation underlying this being internal or autonomous. Autonomous self-regulation happens when a person finds a certain behaviour (e.g. active participation during consultations or healthcare decisions) important or engages in it out of interest. Controlled motivation, on the other hand, means making choices and showing behaviour for external reasons, such as receiving praise. The regulation underlying this type of motivation is external[6]. For a person to autonomously engage in a behaviour, three basic psychological needs – autonomy, competence and relatedness – need to be fulfilled. The frustration of these needs is related to controlled motivation[6].

Based on the SDT and the literature, we hypothesised that when professionals provide autonomy-supportive consultation, this can facilitate the fulfilment of the three basic psychological needs in patients, which could, through more autonomous motivation, stimulate more autonomous forms of self-regulated behaviour, enabling patients to make their own choices regarding their health as seen in Figure 2.1[7-9].

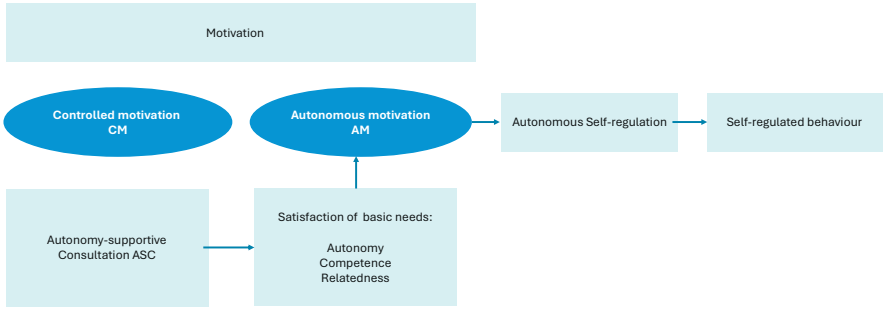


Figure 2.1. Autonomy-supportive consultation

When professionals provide autonomy-supportive consultation, this can potentially facilitate autonomously engaged patient behaviour. However, autonomy-supportive consultations do not necessarily result in autonomously engaged behaviour because

providing autonomy-supportive consultation is a complex intervention in which the setting, the professional and the patient interact.

It is known that autonomy-supportive consultation has a positive effect on patient well-being, but the underlying mechanisms, why what works under what circumstances, are not known[7,10].

The aim of this realist review is to a) determine how contextual factors influence the provision of autonomy-supportive consultations, b) identify the mechanisms that support or hinder patients' autonomy in consultations, and c) determine the outcomes of autonomy-supportive consultations.

METHODS

We conducted a systematic literature review using the realist synthesis procedure according to the RAMESES guideline. A realist review method is used to study how and why an intervention works using relevant, heterogeneous evidence. Reviewers seek out which contextual factors influence the relevant mechanisms to generate the outcomes of interest. Mechanisms are defined as processes that generate these outcomes[11].

A search was performed from the inception of the databases to 20 March 2018 in PubMed, Embase.com, PsycINFO and Cinahl and was updated to 18 March 2019, in collaboration with a medical librarian (LS). Search terms used (including synonyms and closely related words) as index terms or free-text words: "autonomy" AND "support" AND "consultation" OR "communication" AND "intervention." No language restrictions were applied. The full-search strategies for all databases can be found in the supplementary information.

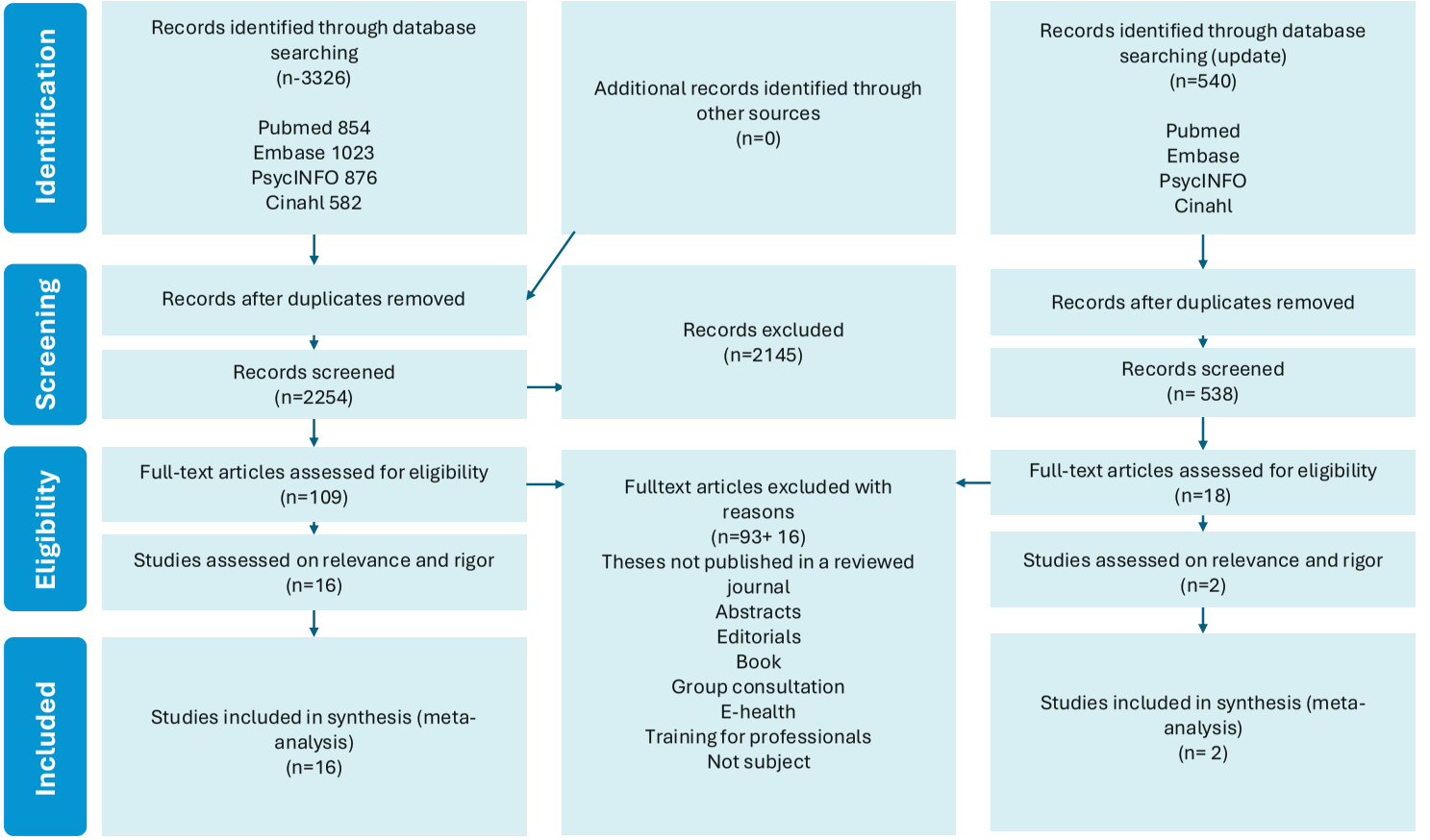
For inclusion, the articles needed to relate to an intervention within a healthcare professional-patient or client interaction and needed to report on autonomy support or self-regulation or the fulfilment of psychological needs. Articles that relate to shared decision-making were only included when they reported on autonomy support or self-regulation or the fulfilment of psychological needs. Both decision-making and behavioural change were included as outcomes.

Articles that related to training for health professionals, e-health interventions and group consultations were excluded. In addition, books, editorials, case reports, posters, theses, conference abstracts, perspectives, letters to the editor and comments were excluded.

Titles and abstracts were screened for inclusion by two authors independently (JK and RK or EP). The first author (JK) and two co-authors (RK and EP) assessed the full texts of the remaining articles for inclusion and performed the final full-text reading of all included papers to extract the relevant text fragments from the articles. Quality

assessment of the included papers on rigor and relevance was conducted by two authors independently. Rigor was defined as the method used to generate that particular piece of data being credible and trustworthy. Relevance was defined as how far the article can contribute to the theory-building of our intervention, autonomy-supportive consultation. Relevance is related to providing relevant information for answering the research question. Thus, both rigour and relevance depend on the purpose of this specific realist review[11]. In case of disagreement, the papers were discussed until consensus was reached.

Table 2.1: PRISMA-Flow-Diagram-Realist Review Factors influencing autonomy-supportive consultation.



RESULTS

A total of 2792 articles were screened; 127 full-text articles were assessed for eligibility of which 18 were included: three reviews, seven qualitative and eight quantitative studies. All included articles were written in English. A table was constructed containing the characteristics of the 18 included articles and their contribution in the form of text fragments for answering the research question. (Appendix 1. Table with characteristics of the included articles, described by context (setting, participants), mechanism and outcome (results)).

A broad range of patients or relatives of patients were included in the articles: patients after undergoing surgery, terminal patients, diabetics, patients from districts with overall low socioeconomic status, people at risk for cardiovascular disease, women with breast cancer, elderly (60 years or older), low-risk pregnant women and adult smokers. In addition, a wide range of healthcare professionals was included: registered nurses, family medicine clinicians, physicians, surgeons and oncologists. Most of the included studies were performed in a primary care setting/general practice setting, but studies conducted in hospices and hospitals were also included.

A realist review considers the interaction between the context, mechanism and outcome. Therefore, first text fragments in our dataset were sought that described the influence of the contextual factors on autonomy-supportive consultation. Second, text fragments were sought that could uncover the mechanisms for autonomy-supportive consultation. Finally, text fragments were sought that described the outcome of the perceived autonomy support. All resulting text fragments comprised descriptions of a process or entity, e.g., what the healthcare professional did to facilitate more autonomous forms of self-regulated behaviour.

The first data extraction resulted in 335 text fragments out of the 16 included articles. After sharing and discussing the results of this first data extraction with the full research team, we decided to split the text fragments that included more than one description. In this step, 23 extra text fragments were extracted, which resulted in a total of 358 text fragments.

After the additional literature search, 13 extra text fragments were extracted out of the two newly included articles. This resulted in a total of 371 text fragments on which the final analysis by the full research team was conducted. During the analysis, the text fragments were summarised and categorised in a context–mechanism–outcome table (Figure 2.2). In the left column the contextual factors: patient, professional and organisational perspective are presented. In the middle, the mechanisms that support or impede patients' autonomy are presented. In the top row are the overarching mechanisms, and below this, the mechanism per phase. In the right column are the outcomes of autonomy-supportive consultation.

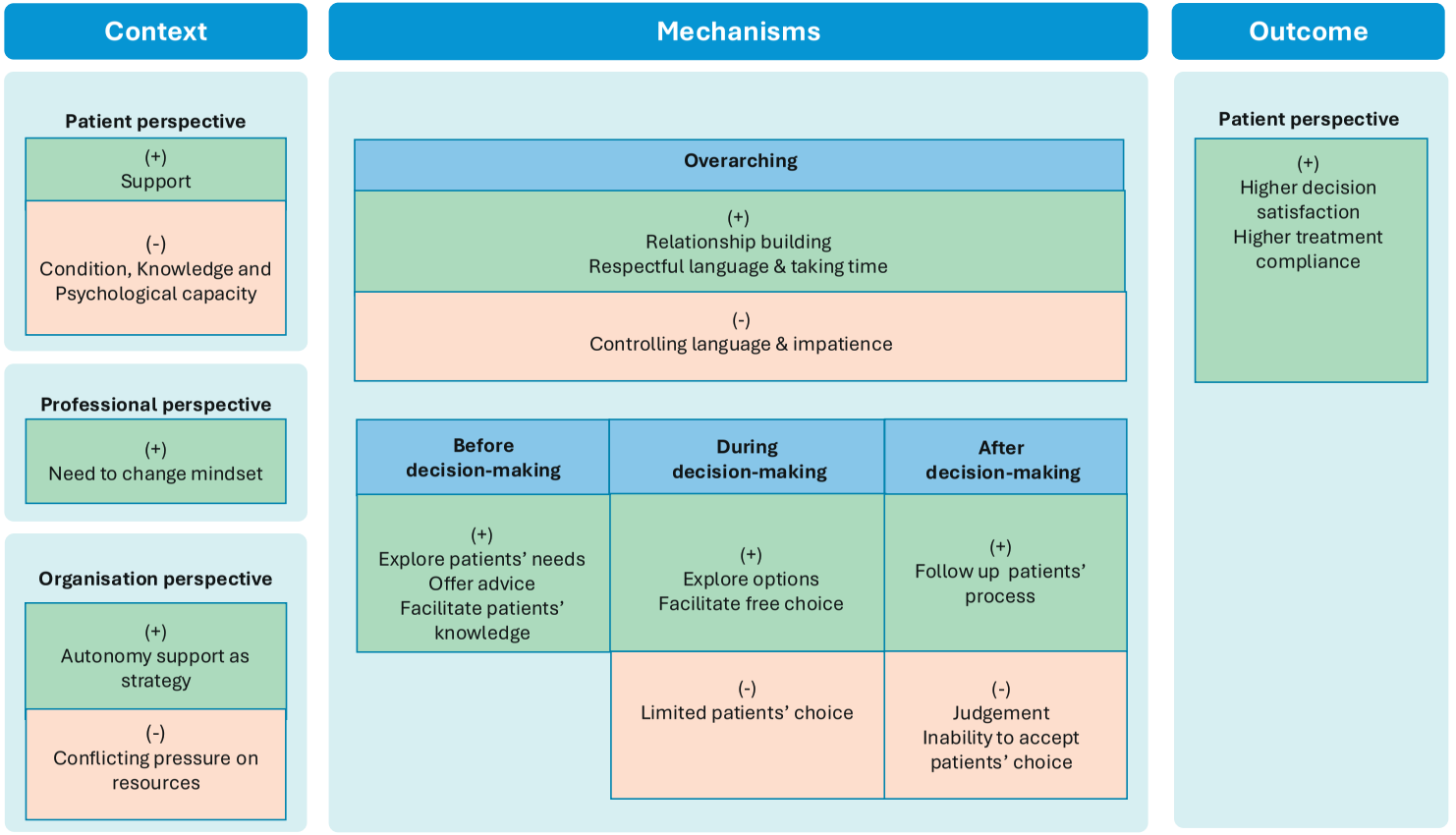


Figure 2.2. Table results

Context of autonomy-supportive consultation

The contextual factors found in our review were classified at the patient, healthcare professional, and organisational levels. These factors are not part of the working mechanism but may interact with the intervention, e.g., autonomy support during consultation.

Patient perspective—The patient can be limited by his/her physical condition, knowledge or psychological capacity[12-15]. If a patient is too ill to be actively involved, this limits the possibilities for autonomy support[13,15]. The support of important others, such as family or companions, could foster a patient's autonomy[15-19].

Professional perspective—The overarching contextual healthcare professional factor we found was competence, which comprises knowledge, skills, and attitude, whereby attitude appeared to be the most important aspect. Autonomy support requires a specific positive attitude to focus on the needs of patients and to work in a way that differs from regular clinical care[8,18,20-22].

Another aspect of the professionals' attitude is taking sufficient time, the amount of time varies among patients and within the same patient over time[20]. It is important professionals tailor made their time to the specific patient for building a relationship and allow patients to take time they need to make their own decisions[17,20,22].

Organisational perspective—The daily routine with a rigid planning of regular care (e.g. the timing of tests and treatments) can be a contextual barrier for autonomy support as well as the traditional physical environment with a patient and a professional sitting opposite each other with a computer in between[13,15,20]. By way of contrast, a management team that adopts autonomy support as an overall strategy for good care can be stimulating for professionals to provide autonomy-supportive care. This also applies to colleagues who endorse the concept of autonomy support. It makes it possible to respect patients' choice and to realise their wishes as a team[20]. The extent to which professionals are motivated for autonomy support determines the way in which they deal with barriers, such as time constraints or competing demands. Motivated professionals are better able to overcome obstacles in collaboration with colleagues e.g. respecting patients' choice and providing patient-centred care[13,20]. On the other hand, are there professionals with a different approach set rigid limits and restricting patients' choices unnecessarily. These professionals tend to be more concerned about meeting their own agenda, sticking to rigid routines or experiencing heavy workload[13].

Mechanisms that support patients' autonomy in consultation

We looked for mechanisms that support or impede patients' autonomy in relation to decision-making in a consultation. Mechanisms were either overarching mechanisms or mechanisms relevant to a specific phase of the decision-making process.

Overarching mechanism

The overarching mechanism to create an autonomy-supportive climate during the consultation was relationship building to create a necessary environment of trust[13,20,21]. This requires healthcare professionals who are really interested in their patients, not only in the information found in their files but also in information from patients' families, other professionals and most importantly, the patients themself to meet patients' needs to be known and understood. Professionals need to become familiar with patients' concerns, expectations, beliefs, life aspirations and motivations and not only with the physical condition of the patient[13,17,20]. To acquire this information, activities, such as sitting next to the patient, asking open-ended questions and observing the behaviour of the patient, have been described[13,14,22].

In regard to overarching hindering aspects, the use of controlling language and impatience undermines the creation of an autonomy-supportive climate for decision-making[21,25].

We found that communication or decision-making tools, e.g. 5x A-model, 5x R-model or Motivational Interviewing (MI), could sometimes facilitate autonomy-supportive consultation[8,16,18,23].

Mechanisms relevant to a specific phase

Before decision-making

Starting the consultation by exploring patient needs is essential for supporting autonomy, e.g., by asking the patient what he/she wants to achieve[8,16-18,21,22,24]. In addition, it is important to facilitate patients' need to know and understand their own situation, e.g., by offering personalised, non-threatening information or discussing learning goals with them[7,13,17,21,22,24-26].

During decision-making

To optimize patients' choice during decision-making, it is important to explore options by offering information about alternatives of which patients are not aware and discussing the pros and cons by sharing professional knowledge, suggestions and information about potential barriers[13,18,21,27]. Giving advice or recommendations is also important during the decision phase, although we found that some professionals think it is not appropriate to give advice within an autonomy-supportive healthcare climate[14,15,17,23,26]. However, professionals can give advice in an autonomy-supportive context when they give it without exerting pressure or expect patients to act accordingly and explicitly ask their patients how they feel and think about the advice[8,26]. Furthermore, most patients appreciate advice; in particular, patients with a lack of confidence to make their own decisions need advice or recommendations[28]. However, text fragments show that autonomy support is undermined by mechanisms that limit choice, e.g. offering restricted choice or pseudo-choice. A healthcare professional may appear to be giving a choice, but it is deliberately limited in such a way that there is little true reasonable choice[13,16,23]. Last, it is important to recognise the complexity of patients' decision-

making, which can be complicated by conflicting motivations or fears[14,20,21]. When patients hesitate, professionals tend to focus on providing more information. From an autonomy-supportive perspective, it is more effective to recognise and address emotional issues that could account for patients' hesitation[13,17,18].

After decision-making

The communication between patients and healthcare professionals after decision-making is of great significance for patients' feelings of empowerment. Respect for the patient's choice without positive or negative judgment strengthens the feeling of autonomy, while being judgmental weakens patients' autonomous self-regulation because it strengthens only their external motivation[8,13,17,21,22,25]. However, sometimes, healthcare professionals are unable to accept patients' choices; they weaken the feeling of autonomy support, for instance, by negotiating or persuading patients to change their minds[13]. Nevertheless, professionals' own preferences should remain separate, as for achieving true autonomy support it is important to make the maximum effort in realising the patients' choices[8,13,17,22,25,26]. Furthermore, it is relevant for professionals to realise that autonomy support needs to be continued after patients' decision-making. Professionals have to keep checking whether the provided care still fits patients' preferences. Patients preferences could change depending on their personal circumstances[13,19,27].

Outcome of autonomy-supportive consultation

Patients who perceived autonomy support were more actively involved in consultation and perceived higher levels of physical health and psychological well-being[12,25]. Patients in an autonomy-supportive consultation experienced higher decision satisfaction, and there was higher compliance for treatment or behaviour change[17-19,24,25,27,28]. While controlling behaviour of healthcare professionals may prompt quicker short-term changes, autonomy- supportive change may take longer to become effective but is maintained better[26].

DISCUSSION AND CONCLUSION

To test our hypothesis that autonomy-supportive consultation can facilitate the fulfilment of the three basic psychological needs in patients, more autonomous motivation could stimulate more autonomous forms of self-regulated behaviour, enabling patients to make their own choices regarding their health.

The aim of this realist review was to a) determine how contextual factors influence the provision of autonomy-supportive consultations, b) identify the mechanisms that support or hinder patients' autonomy in consultations, and c) determine the outcomes of autonomy-supportive consultations.

Context of autonomy-supportive consultation

Contextual factors, such as work organization and the attitude of healthcare professionals, can stimulate or hinder the creation of an autonomy-supportive climate during consultation. Contextual factors, such as competing demands on healthcare professionals during their shift, specifically could have a negative impact on the mechanism "relationship building," the most important overarching mechanism to provide autonomy-supportive consultation.

Mechanisms that support patients' autonomy in consultation

Both overarching and phase-specific mechanisms found in this realist review can be explained in relation to the theoretical concept of autonomy support based on the Self Determination Theory (SDT) as described by Ryan et al.29. This theory describes that when healthcare professionals fulfil the three basic psychological needs of their patients (autonomy, competence and relatedness), they offer autonomy support. This realist review found that not every need was equally important in every phase of the decision-making process. This is shown in Figure 2.3, in which the original table results (Figure 2.2) are combined with the basic psychological needs.

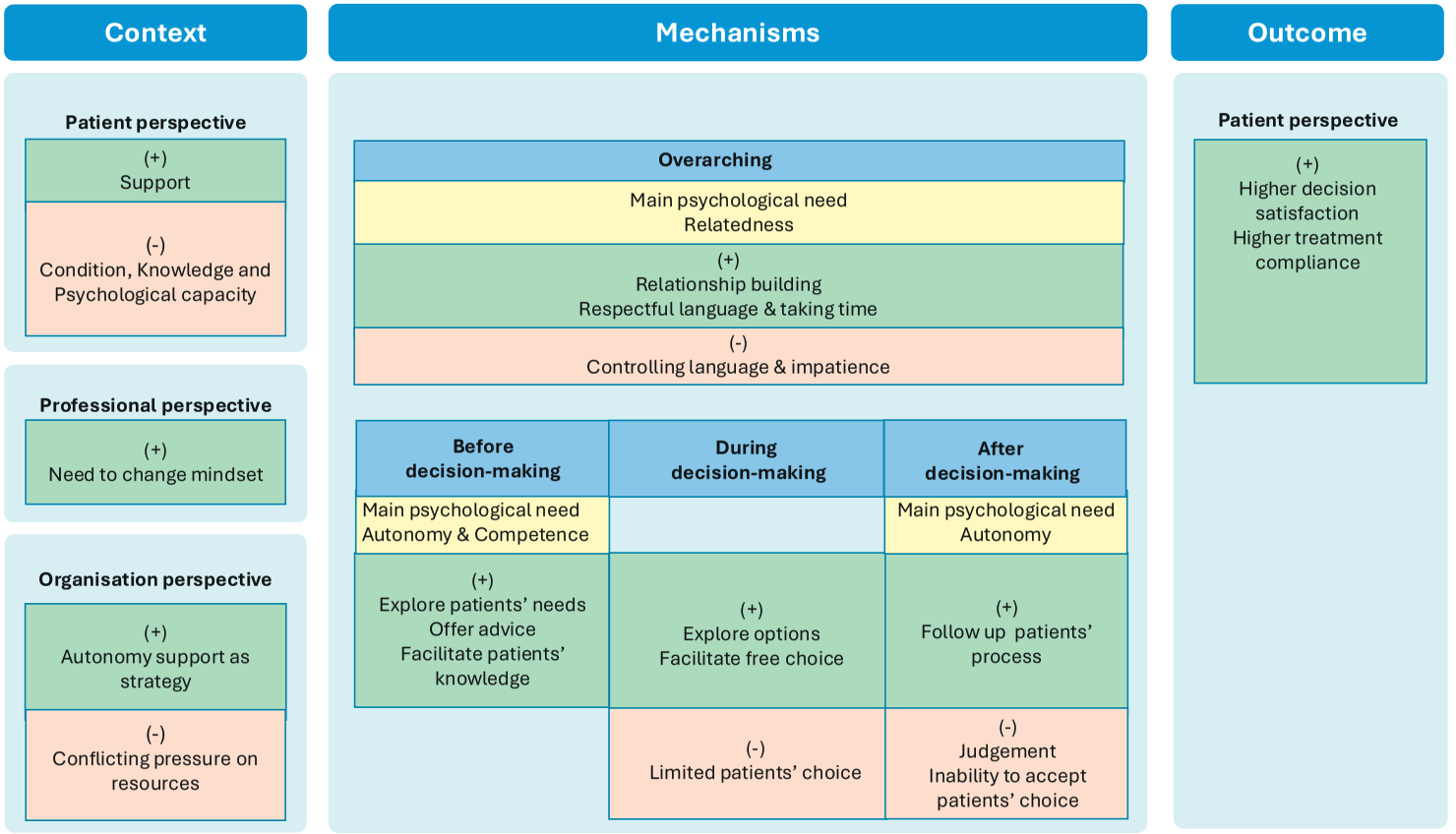


Figure 2.3. Result review combined with the basic psychological needs

Autonomy is an important need to fulfil especially in the phases before and after the decision-making. Autonomy, from the SDT perspective, means providing patients with as much choice as possible and desirable for the client, which is in line with the text fragments found in this review. This is important not only before decision-making but also after decision-making, e.g. by realising patients' choices. When, after the decision-making, healthcare professionals persuade patients to make a different choice, this can be perceived as negative feedback (e.g. your choice is not good enough; you cannot make a good choice). This can undermine patients' feeling of competence and thereby decrease their more autonomous forms of self-efficacy[29].

Facilitating patients' competence seems especially important in the phase before the decision-making. Within an autonomy-supportive climate, patient education is based on the principles of SDT whereby patients are actively involved in the knowledge-building process[32]. The professional actions found in this review, which were used to meet patients' need for competence and autonomy, show similarities with scaffolding. Scaffolding finds its origin in Vygotsky's developmental method and can be used to bridge gaps between what patients know and what they need to know to make their own decisions regarding their health. In an interaction between the patient (the 'learner') and the healthcare professional (the 'expert'), the patient learns what he cannot understand without the assistance of the expert. To do so, it is essential that the healthcare professional is aware of the actual knowledge and learning competence of the patient and then works further to receive the next level[33].

According to this review, relatedness is the most important overarching need that must be fulfilled to provide autonomy support. This is in line with both the literature about Shared Decision Making (SDM) and SDT. Relationship building is the foundation to acknowledge the perspective and worldview of the patient, which is essential for supporting self-regulated behaviour and decision-making[29]. To be able to facilitate patients' self-regulated decision-making, it is essential professionals know what is most important to their patients. They need to know and understand them in their physical, psychological, social and spiritual dimensions to provide support tailor-made to their patient's values and norms. This is specific essential for patients during the decision-making process[29-31]. The text fragments found in the realist review show which concrete techniques professionals can use to facilitate relatedness, e.g. talking about worries and taking time to listen, but also which behaviour impedes relatedness, e.g. interrupting patients.

Outcome of autonomy-supportive consultation

As an outcome, we found that autonomy-supportive consultation seems suitable for all patients who were included in this realist review, e.g., cancer patients, pregnant women, and diabetics, to help them make more autonomous choices regarding their health.

Integration autonomy support and SDM

As described above, the actions, behaviours and experiences of professionals and patients found in our review are linked to the SDT framework. This link probably makes it clearer for professionals for which purpose certain techniques should be used

to facilitate more autonomous forms of decision-making by autonomy support. For this reason, it can be useful to integrate autonomy support and SDM. This is in line with Vansteenkiste and Sheldon[10], who describe how the techniques of motivational interviewing (MI) and SDT can be integrated. They propose that MI works because the techniques used in MI could contribute to the satisfaction of the three basic psychological needs in SDT. To use these techniques effectively, it is essential that professionals understand the purpose of using this technique. In line with this reasoning, Figure 2.4 shows in the central column the results of this review combined with the basic psychological needs and the steps of a model for SDM.

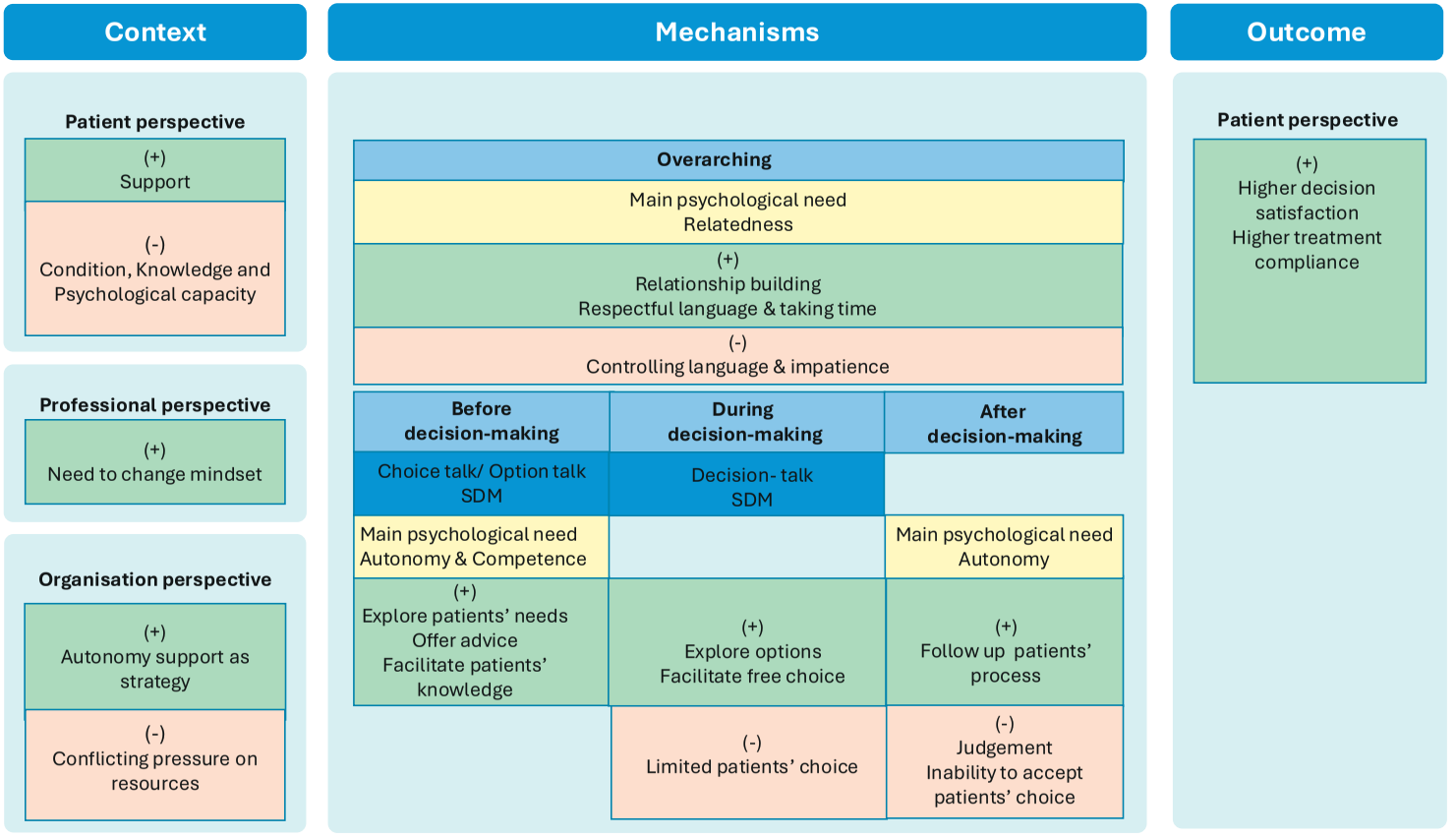


Figure 2.4. Results review combined with the basic psychological needs and a model for SDM

Figure 2.4 helps professionals to understand which basic psychological needs should be fulfilled in each step of SDM. When healthcare professionals use techniques as described for SDM and MI instrumentally without understanding the underlying concept, they risk not achieving the higher purpose behind the use of these techniques[10]. This can be an explanation for our finding that communication or decision-making tools (such as 5x A-model, 5x R-model or MI) developed to aid professionals in patient-centred care sometimes facilitate autonomy-supportive consultation but not always[23]. The intention with which professionals talk, listen, and act is important for patients to perceive autonomy, support and empowerment. This includes not simply talk with patients about their plans but also about their personal values and own responsibility[34].

Another aspect that can explain why the techniques used in MI do not always facilitate autonomy support is that MI focuses more on the motivational quantity instead of quality. MI focuses on altering patient behaviour without taking into account the force that can drive this behaviour, i.e. the type of motivation[35]. Taking the motivational quality or type into account is important because only the more autonomous forms of motivation contribute to more autonomous forms of self-regulation[6,34]. When professionals facilitate controlled motivation by giving rewards or praise, as found in our review, they thereby undermine autonomous motivation[6]. Such controlled motivation results in less active involvement and less effective outcomes, e.g. a temporary behavioural change[34].

Strengths and limitations

The composition of our research team with healthcare professionals of different disciplines and various research departments is a strength of this study. It facilitates discussions about the interpretation of our data and has contributed to the applicability of our results to consultations within several medical fields. Another strength is that we based our review on a sound methodology that allowed us to explore the context, mechanisms and outcomes to answer the research question.

In our review, there was a lack of studies with well-defined outcomes in relation to the context and mechanisms. The outcomes were reported in an abstract overarching way e.g. physical well-being or as concrete outcome measures e.g. increased physical activities. This impeded the understanding of the outcomes in relation to the mechanisms.

As described in our method section we excluded e-health autonomy-supportive interventions although there are some recent interesting publications. We expect that especially the influence of spoken languages difference from online communication.

CONCLUSION

This realist review shows that fulfilment of the three basic psychological needs by autonomy-supportive consultation facilitates more autonomous motivation, which supports more autonomous forms of self-regulation, enabling patients to make their own choices regarding their health. Within the mechanisms, relatedness is the most important basic psychological need that should be fulfilled to facilitate patients in making their own health-related choices. Before the patients' decision-making process, the basic psychological needs of competence and autonomy should also be fulfilled. Patients' psychological need of autonomy must be supported even after they have made their decision. Because of the importance of our findings for facilitating patients in making their own choices, we propose an integrated model of SDM with the underlying mechanisms as found in our review and the theoretical foundation of SDT.

Practice Implications

Insight into the deeper layers of the decision-making process could facilitate healthcare professionals to reflect on the way they empower patients and facilitate their autonomous decision-making during consultation. It could help them to understand how to reach the higher purpose behind the phases in de the decision-making process and utilize suitable mechanisms .

The figures constructed in this review could also be used in the education of healthcare students to provide insight into the self-determination theory in relation to more autonomous forms of self-regulation of patients.

Finally, based on our results, healthcare professionals and healthcare organisations could adjust the process and content of their consultations and choose autonomy support as an overall strategy for their patient-centred care.

Suggestion for further research

We found in our included studies that controlling and authoritarian language can pose a threat to patient autonomy, but we found little specific information on the autonomy-supportive role of language in face-to-face communication. We suggest further research to explore the role of autonomy-supportive communication in consultation and also with respect to the patients' perceived autonomy support.

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CHAPTER 2

Appendix

Appendix 1: Table with article characteristics of the included articles, described by context (setting, participants),mechanism and outcome (results)

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution[1]
Biley, 1992	An inductive approach using modified grounded theory in order to discover how patients feel about participating in decision-making about nursing care. To explore further the subject of patient participation in decision-making about nurse care	Patients after discharge from hospital after undergoing surgical intervention. Four male and four female patients age between 21-75, 7-10 days after discharge from hospital after undergoing surgical intervention	If I am well enough: being too ill to be involved in decision-making or being well. Being too ill: nurse act as a patient's advocate and make all decisions on behalf of the patients. Being well: nurse's role becomes educative/ supportive with more responsibility being taken by the patients. If I know enough: 1) situations require technical knowledge, nurse know best, patients prefer a passive role in decision-making. Patients not have enough information to make a choice about a decision. (medical-surgical/ technical issues) 2) less technical matters about which patients require information but still prefer to be passive. (nurse know best). Patients did not have enough information to make a choice but requested more information before a decision was made or the action was acceptable. Less technical but still outside a normal range of knowledge for non-nursing person. 3) I know best, patients prefer to be actively involved. (non -technical, activities of daily living: choosing food, hygiene and normal exercise) f I can: organizational constraints or freedom that can either restrict of encourage choice and participation. Individual needs or desires were unable to be met by the nurse. Environment full of situational constraints – more relaxed rules.	Patients	Medium: Rel + Rigor -

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Residents who exercised an element of control scored higher on indicators of alertness, physical health and psychological well-being than others who had not had the same opportunity		
Bottorff et al., 2000	This study is part of a larger grounded theory study. A secondary analysis of data was conducted to investigate the ways nurses support or restrict patients participation in their care.	Two palliative units, to provide symptom management and terminal care for patients for whom active treatment is no longer the focus. The smaller unit was organized based on total patient care, the other used a primary nursing care model. 43 -3 hour observation nurse-patient interaction of 16 terminal patients who were cognitive alert (age 31-89) and 32 registered nurses working full or part-time. Interviews: 10 patients 12 nurses	1) Getting to know the patients: recognizing capacity for choice Not depend on data or what they learned from report but they need direct interaction with patient to "check out" . Sitting down to chat, using open ended questions, observing the patients behavior, taking advantage of the time required to complete nursing tasks to talk with patients about their needs, desires, checking to determine patients preferences and obtaining relevant information from family members and others staff. Nurses realize that patients need to feel comfortable before they could discuss the hesitations, concerns, and practical issues. Because of the patients changing condition nurses could not take things for granted. 2) Enhancing opportunities for choice: empowering patients to choose Letting patients set the pace, sharing professional knowledge and suggestions with patients and informing patients about contextual boundaries. Nurses recognized the difficulties patients could encounter. Who were sensitive to the time it could take for patients to build sufficient trust to feel comfortable to expressing their choices (act like you don't have anything else to do).	Nurses	High: Rel ++ Rigor++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Explain alternatives not known to the patients, offer suggestions and information based on their observations and clinical judgement. Maximize patients opportunities for choices. Sometimes when patients hesitated nurses focus on providing more information, they fail to address of sometimes even recognize emotional issues (fear) that could account for the patients hesitation. Limits for patients choices: context and boundaries: scheduling, the timing of tests and treatments, routines in the unit. Rigid limit setting by nurses (heavy workloads) increased patients susceptibility to restricting their choices unnecessarily. 4 patterns: 1) Opening up possibilities for choice: a high level of knowledge and respect for patients agendas and capabilities while assuming a low level of control over patients choice. Found ways to fit patients choices into ward routines or heavy workloads. 2)Making patients-centered choices: higher degree of nursing control. Nurses did not assume control of patients choice without carefully considering patients conditions and respecting patients autonomy. 3) Offering Pseudo choices (leading Choices). Nurses assumed a high level of control and demonstrated a low level of knowledge and respect for patients.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			4) Offering Restricted choices. Nurse assumed lower levels of control then when they offer pseudo choices. However nurses offered restricted choices, they demonstrated lower levels of knowledge and respect for patients agendas and capabilities. 3) Being open to patients choice: working within constraints (present in the situation) Nurses use negotiation strategies: they negotiate because of constraints imposed by lack of time, work with other patients, scheduled breaks, available resources availability of other staff and their workload as well as concerns about patients safety and comfort. Sometimes nurses seemed more concerned with meeting their own agendas than with supporting patients agendas. They negotiate because from their perspective the choices were inappropriate or not in a patients best interest. Nurses were most resolute when patients choices had safety implications other times nurses persuade patients to change their minds by: providing information, simply repeating suggestions, questioning patients decisions or resorting to authority.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			4) Respecting choice: making it happen and doing so In many situations nurses were able immediately to follow through with supportive actions. In other situations they needed to decrease barriers so patients were able to enact their choice. Decreasing barriers required flexibility, innovation, and planning on the part of the nurse that sometimes involved seeking help of other staff. Knowing patients limits and capabilities provided nurses with a foundation for designing ways that patients could realize their choices. Some nurses recognize that patients fears often prevented them from following through with their preferred choices. They encourage patients to express their fears and used coaching and teaching strategies to help them deal with their fears. Nurses demonstrate respect by verbally supporting patients choices or by checking with patients to ensure that patients preferences were respected. Encouragement and reassurance to be especially important when patients seemed hesitant or when they communicated choices might have been perceived as deviating from routines or common patterns. Checking was an ongoing process, patients could change their mind at any time. The physical environment can be a barrier to enacting patients choices.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			The model described in the current study support the need for nurses to share their professional knowledge and expertise with patients. Nurses who critically reflect on their practice and the degree to which they demonstrate respect and share control are likely enhance their ability to facilitate patients choice in ways that preserve and enhance each patients unique individuality and identity. This process does not necessarily require additional time.		
Carroll et al., 2013	To assess the effect of a pilot intervention (5A's) to promote clinician-patient communication about physical activity on patients ratings of their perceived competence for physical activity and their clinician's autonomy supportiveness. Two group pragmatic pilot RCT design.	Two urban community health centers. The setting consisted of two large practices serving a predominantly low-income, ethnically diverse population of 14.000 patients in Rochester New York 13 family medicine clinicians at two urban community health centers. 326 Patients mostly female (70%) and low income. Patients were eligible if they were scheduled for routine chronic care or health maintenance follow-up visits for which physical activity counseling would likely be appropriate.	Session 1 Eliciting motivation using autonomy support skills such as acknowledging a person's feelings or perspectives about physical activity. Introduction to basic problem-solving techniques for common barriers to physical activity. Session 2 Emphasizing strategies to provide support and encourage patients to set goals, if willing. Techniques to ascertain patients' perceived competence to change. Session 3 Explore patients willingness to participants in a community exercise program. Reinforce eliciting patients perceived competence to change and exploring potential barriers to change. Promote active decision-making and goal-setting for health with their patients for physical activity. The most frequent sources of support were family, friends and/or social groups. And having determination or will within oneself.	Clinicians	High: Rel + Rigor++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
	The purpose of the intervention was to increase use of the 5As and enhance patients' autonomy support and perceived competence for physical activity. Autonomy supportiveness encompasses communication skills such as acknowledging a patient's feelings or perspective, providing options, minimizing control or pressure and encouraging active decision-making and goal-setting for health.		Mentioned barriers to counseling: time constraints, competing demands/ heavy workload, and lack of knowledge about how to bill or code for counseling. Autonomy support increased significantly at post-intervention compared to baseline. Clinicians reported that they significantly increased their frequency of counseling of assessing a patients' exercise history, knowledge of local resources that could meet their patients' needs and counseling in a cost effective way. In the post study interviews the clinicians reported that the availability and familiarity with the option to refer to the community exercise program was a major asset and motivator for their counseling about physical activity Perceived competence is potentially more distal to the intervention than autonomy supportiveness since autonomy support reflects patients perceptions of clinician behavior rather than their ability to be physical active. Clinicians may have felt less competent adapting the counseling to challenging clinical situations. A theoretically-based, clinician-directed intervention increased underserved patients reports of clinicians autonomy supportiveness but not patients perceived competence for physical activity.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Champassak et al., 2014	This study examined the extent to which physicians in usual practice and without specific training administered the 5 R's including the use of an MI-style. Audio recordings were coded on the implementation of the 5A's, 5R's and MI counseling style	Primary care outpatients clinic in a non-profit hospital in a large Midwestern city. 38 physicians	The 5A's Ask, Advise, Assess, Assist, Arrange. (USPHS Clinical Practice Guideline). Almost all physicians ask about patients smoking status, a high proportion advise their patients to quit and assed their patients interest in quitting. Physician were less likely to offer their patients assistance to quit and only a small proportion arranged a follow-up appointment. Principles MI interviewing (5R's): 1) encourage the patients to indicate the personal *Relevance* for Quitting tobacco use. 2)Ask the patients to identify potential *Risks* of tobacco use. 3)Ask the patients to identify potential *Rewards* of stopping tobacco use. 4) Ask the patients to identify barriers of *Roadblocks* to quitting and 5) the motivational intervention should be Repeated every time an unmotivated patients visits the clinic setting. High proportion of physicians discussed the personal relevance of quitting and the great majority discussed the risk of smoking. Fewer than half of the physicians discussed the roadblocks to quitting and the rewards of quitting. Physicians were most likely to give information.	Physicians	Medium: Rel - Rigor ++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Physicians use more MI inconsistent strategies than consistent: Closed questions, advising without permission, raised concern without permission, providing warnings and use confronting. Physicians were most likely to provide reflective and affirming statements and unlikely to ask permission before offering advice, reframe patients statements, make supportive statements or emphasize patients control. Improved physician training is needed to provide patients the treatment they deserve.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Fisher et al., 2017	A review providing a practical framework that organizes and structures patient-centered strategies and programs to enhance their more systematic use	Diabetes care People with diabetes	Step I Clinician prepares for a different kind of interaction. Clinicians change mindset to address three fundamental patient motivational needs: competence, autonomy and relatedness. Clinicians prepare to shift from an hierarchical to an egalitarian, collaborative interaction. Prepare to structure interaction in ways to optimize satisfaction of person's motivational needs. A focus on personal autonomy and self-direction to satisfy needs and enhance effective behavioral change. Emphasizes that the individual, not the clinician, is the autonomous agent of change. Person is to make informed decisions about what they want to do and how they want do it over time. Relationship building utilizing a different kind of interactional style that employs the principles of motivational change. Shape the interaction by utilizing a fuller understanding of the values. Needs and perspectives of the person (with diabetes) Step II Relationship building Strategies to help a person self-identify areas for change through clarifying values and exploring feelings and motivation. Clinicians drive change by fostering ambivalence: identify factors that foster change vs. factors that foster maintaining the status quo. Roll with resistance and initiate change talk to tilt the ambivalence toward change.	Clinicians	Medium: Rel + Rigor–

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
	Directing clinician attention away from gathering and dispensing information to addressing the motivational needs and conflicts of the patient Shift their mindset from traditional hierarchical mode of interaction to a more empathic, shared collaborative interaction style. Broader vision or conversational style that deeply sincere, collaborative and affirming. Self-determination theory as a template for addressing motivational needs.		Clinicians identify and label affect to help people understand how their feelings and emotions drive their management behavior. Collaborate with the person A focus on basic beliefs and cognitive perceptions about disease and its management. How people think about disease impacts how they manage it. Motivational Interviewing exploring and resolving ambivalence for or against taking action. Roll with resistance and initiate "change talk" to tilt the ambivalence toward change. Clinicians identify and driving the overt recognition of conflicting motivations: anticipate feelings, acknowledge feelings, standardize/normalize feelings, accept feelings plan focuses on identifying labeling and normalizing the feelings and expectations that drive behavioral change. Address underlying beliefs and cognitions associated with the disease held by the person with diabetes. MI trough open-ended questioning, making reflective statements and exploring motivation about change. MI spirit through engaging, affirming, reflecting and advising. Employing specific behavioral and educational tools and resources to guide and support positive behavior change e.g. action plans and structured follow-up visits		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Step III Behavior change tools Emphasis on actions regarding specific types of defined behavior change using highly structured cognitive/behavioral methods. Empowerment-based communication: "active listening" open ended questioning, making reflective summarizing statements. "Building motivation" by clarifying values and identifying and addressing emotions. Goal setting, Action planning. Training to be aware and accepting of internal emotional states to facilitate decisions around action. Providing information delivery. Electronic prompting, monitoring and data storage of specific behaviors. Context: Brief period of transition to help clinicians achieve a shift in mindset. Slow the pace of the encounter and prepare to do more listening and reflecting and possibly to rearrange the examination room chairs and turn off the computer screen to support equality and respect for the person. Separate themselves from the fast pace of regular clinical care to the slower, more reflective pace required by this different kind of clinical conversation. Creates a mutually safe, trusting and encouraging environment A person (with diabetes) dialogue that can inform of underlying beliefs, expectations, worries and concerns, which can then set the stage for a more effective therapeutic relationship.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Directed at building a collaborative relationship in which people receive support for making their own primary decisions about their diabetes and how to implement them. The pace of change might be slower than desired. The amount of time needed for relationship building can vary between people and within people over time as motivation ebbs and flows based on host of disease and non-diseased related factors. Ideally all members of the care team should be sensitive to these issues and adopt relationship-building strategies as an overall strategy of good care. At least one team member has the requisite skills and abilities to fulfil this function. Conflicting pressures urge clinicians to be time and resource efficient while at the same time addressing the unique, personal needs, and preferences of individuals. Adoption of these kind of relationship-building programs requires the overt support of clinic managers and practice champions. Clinical support for self-direction, personal decision-making and a secure and trusting relationship enhance autonomous motivation. Self-determination theory as a template for addressing motivational needs . They suggest a conceptual rationale and a three-step framework for an alternative approach, one that fully recognizes personal needs for autonomy, competence and relatedness, and that channels these needs into the clinical encounter through the effective use of specific clinician relationship-building skills and behavioral tools		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			To respectfully encourage and support engagement and motivation for behavior change in people with diabetes People-focused The preference and needs of the person with diabetes must be respected and addressed in the clinical setting and must form the basis of treatment. Fully recognized personal needs for autonomy, competence and relatedness and that channels these needs into the clinical encounter through the effective use of specific clinician relationship-building skills and behavioral tools. Outcome: patients who display better self-regulation competence, diabetes management and quality of life.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Freytag et al., 2018	Secondary data analysis from the values and options in cancer care study, a cluster RCT of a patient-centered communication intervention. To identify predictors of participation of patients with advanced cancer in clinical encounters and to assess the impact of patient and caregiver participation on perceptions of physician support.	Patients, physicians and caregivers were recruited from academic and private oncology practices in New York and California 38 Physicians. 119 patients and their caregivers.	Partnership-building predicted the degree to which patients were assertive and expressed concerns. When caregivers' active participation behavior was combined with patients the results were similar to patients alone with 2 exceptions: Physician partnership building predicted combined patient and caregiver question asking. Patients and caregivers at California asked more questions than those at New York. Expressions of concern and assertive responses did not predict patients or caregivers perception of physician support for their autonomy (HCCQ) Questions did, more patient and caregiver combined question-asking, predicted patients perception of more autonomy support. There was a negative relationship between patient perception of autonomy support and the presence of a caregiver Outcome: Physicians can support patient participation through facilitative communication such as partnership-building and supportive talk	Patients and caregivers	High: Rel ++ Rigor ++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Hardcastle et al., 2012	Prospective, quantitative study to explore the effectiveness of motivational interviewing on physical activity change within a deprived community and the social-psychological and motivational predictors of change in physical activity including stage of change, self-efficacy, social support, and variables from SDT and theory of planned behavior	Primary care setting (Lifestyle Change Facilitators) 207 patients from districts with overall low socio-economic status that were either sedentary, insufficiently of moderately active and whose physical and mental health could benefit from increased PA.	MI effective to promote PA. Although any exposure to the intervention promoted increased PA, multiple sessions with an optimal number appearing to 4 or 5 session leads to significantly greater PA participation. The MI structure provided by the practitioner, such as helping the client develop appropriate goals and providing positive feedback, targets the psychological need for competence. The provision of autonomy support by using client-centered strategies like rolling with resistance, exploring options and letting the clients make decisions, all support for autonomy. The involvement of the client by the practitioner in terms of expressing empathy, demonstrating an understandings of the clients 'position and avoiding judgmental talk, support the need for relatedness. In higher socio-economic status group had significantly higher levels of perceived behavior control and lower stage of change and relative autonomy index for PA	Patients	High: Rel + Rigor++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Johnson, 2007	A review to describe alternative and more efficacious strategies for holistic nurses to promote long-term healthy behavior choices in their clients.		1. Autonomy-supportive behaviors can be learned and routinely practiced by nurses. 2.Clients decide whether or not to change. A nurse's job is to understand, support and guide the client in making a decision to adopt and sustain a healthier lifestyle. 3. Avoid trying to coerce, persuade or reward the client. Rewards and punishments can produce amotivation or active resistance. 4. Expect conflicting motivations while the client works through the process of resolving the discrepancy between present situation and goals. 5. Display a sincere interest in her as a unique human being who deserves your respect. Partnership in which power is shared equally. Nonjudgement and empathic partnership in which clients feel safe to explore and express feelings, goals, ambivalence. Use verbal technics such as: active listening, silence, reflection, seeking clarification, suggesting and focusing. 6. Clients statements indicating a need for change, an intention to change, a concern with their situation, ability to change. Clients who feel competent and autonomous are more likely to be successful. 7. Offer information (no threating information), offer variety of strategies and allow clients to determine her learning environment and method. Invite clients to discuss their choices, learning and therapeutic progress and letting them know that you are available for such discussions.	Nurses	Medium: Rel ++ Rigor–

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			8. Offer alternatives that clients are not aware of and facilitate free choice among those alternatives. Allow clients to set agenda, decide what behavior to change and how and when. 9. Be patient. Individuals learn, develop and change at different rates. The client controls the timeline. 10. Provide wise feedback. Giving explicit detail in response to client's performance. Belief that the client is capable of changing. Minimize the use of controlling language because that undermines IM.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Kayser et al., 2014	Report of an analysis of the concept of an autonomy-supportive intervention. Identify and analyses the antecedents, attributes and consequences across disciplines of an ASI using Rodgers' evolutionary method in concept analysis. Concept analysis: 6 activities: 1) Identify the concept with its surrogate and related terms. 2) Identify the concept in time and describe its history across disciplines.	Nursing, psychology and medicine	Choice *Is defined as one direction of action of an intervention provider offering more than one option to the individual without coercion or control* Provides choices in treatment or interventions. Avoids reducing choice options using pressure, punishment, demands or coercion. Conveys choice in status quo vs. change. Allows time for patients to make own choices and decisions Provides choice in opportunities for autonomous actions, or initiatives. Respects and supports choices and decisions. Provides access to choice in systems, resources or information. Provides limits in choice. Provides choice in opportunities for social interactions or support from environment. Rationale *Is defined as having one direction and involved the provision of information or explanation from the intervention provider to the patient.* Provides a meaningful rationale. Provides relevant and factual information, or explains the meaning of technical terms Provides feedback on performance (e.g. factual information contrasting current and past behavior) Communicates clear expectations and values. Communicates value in uninteresting activities. Presents clear contingencies between behavior and outcome. Offers recommendations or advice. Communicates persuasive information.	Health-care pro-fessionals	High: Rel + Rigor++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
	3) Identify the concept's attributes across disciplines. 4) Identify the antecedents and consequences of the concept across disciplines. 5) If possible, present an exemplar case identified from the literature and 6) propose a conceptual model of the concept and suggest implications		Empathy *Is defined as a two-way interpersonal communication between the intervention provider and the patient* Understands and acknowledges the other's perspective, feelings, and opinions. Takes time to listen with attentiveness and warmth. Allows time for the other to talk. Accepts negative emotions and provides emotional support. Collaboration *Is defined as sharing power in an interpersonal interaction between the intervention provider and the patient where the provider's aim is to engage patients in collaborative action planning using exploration and respectful communication* Supports and encourages self-initiatives and increased self-responsibility. Engages in shared collaborative decision-making and action planning. Encourages questions and responds to them. Uses respectful, fair and constructive communication. Minimizes interpersonal power differential. Defines treatment goals and goal follow-up in collaboration with the patient. Engages in agenda setting in collaboration with the patient. Asks about what the other wants, wants to do, achieve or will do.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Participate in collaborative problem-solving. Encourage a leadership role in the other. Explore problem and allows own problem definition. Avoids evaluating performance or surveillance. Discusses learning strategies and offers hints. Shares responsibility. Strengths *Is defined as involves the action of identifying, exploring and providing feedback on clients' strengths, which include positive attitudes, capabilities, personal characteristics, aspirations and motivations* Communicates praise, providing positive feedback on strength. Explores life aspirations and motivations. Explores values and goals, in relation to lifestyles Environment An AS environment adds the notion of social structure, network or resources in the ASI Outcomes Lifestyle risk reduction, Medication adherence, physical activity, self-care behaviors in chronic illness, smoking cessation and substance abstinence		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Lavoie et al., 2013	A study was conducted at a palliative care facility to document changes that occurred after the integration of a person-centered approach focusing on human freedom (which is linked to autonomy). The approach chosen was that of the human becoming school of thought developed by Parse Pre-project and post-project phases were analyzed following the Parse method	Palliative care hospice that can accommodate up to 15 patients and their relatives Nurses, other caregivers and relatives of patients.	*Changes Related to Nurses* Not only listen to patients needs but also make sure they respected patients choices, desires, differences and dignity. Respect patients notably by allowing them to choose between the possibilities offered. Nurses must first get to know their patients. Instead of straightaway suggesting measures to favor patients well-being and risk sometimes imposing measures, the nurses were more inclined to listen to the priority needs of patients. Ensure availability. Present in order to show true ability to listen. Listen to patients values without judging. Take time to take care of their patients. Make sure they respected patients choices to improve their quality of life. Adapting themselves to the patients desires. They achieved this by focusing their attention on continuity in care, by better respecting peoples choices and by being less "rigid" in their care. *Changes Related to other healthcare providers.* Listening to their entire team. Also findings as described above *Changes Related to Respect of autonomy* In the post-project phase they abandoned the idea that this autonomy need be expressed in a framework that imposed limits such as presenting their arguments and their own choices or that it might disturb the rhythm of the health setting.	Health-care pro-fessionals	High: Rel ++ Rigor+

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Listen to patients desires and being with them by accepting guidance from them and offering help. Follow the rhythm of the person. Taking the time to exchange with patients, listen to them, obtain information on their needs and respect their choices. *Changes Related to the delivery of Care from the families Perspectives* Asking them what they wished to do, by respecting choices made and by suggesting help for safety reasons. Nurses respected the refusal expressed. *Changes in the documentation of Wishes* The cessation of notes concerning interventions aimed at persuading the patients, now notes concerning discussions with patients on treatment proposals. Sift from focus on the task to the person. They valued the patients perspective and chose to let themselves be guided by the patients values and unique character rather than their own values. Nurses dared to reappraise certain conventions, protocols or care "contracts" and mentioned that their professional autonomy was at the service of their patients autonomy. Increase care in documenting demands, agreements and refusals for care.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Be truly centered on patients, to understand who the patients were and who they becoming, without judgement and by respecting their choices, desires and needs. Even be more attentive to members of the healthcare team. Be attentive to what they were experiencing at the moment. Terms used by nurses and other healthcare providers: true listening, adapt, adjust or effect to describe their beliefs, values and care practice.		
Loon, van et al., 2014	In-depth interview analyzed using directed content analysis to evaluate the nurse-led supportive intervention for primary prevention of CVDs from ethical perspective, by exploring in detail the experiences of patients with the intervention, and their views on the role of both the nurse and patient	13 General practices 16 participants were eligible for a cardiovascular risk assessment but had no existing CVD. (age 46-76)	In ethical literature, two approaches to autonomy can be distinguished: 1e autonomy in the ability to make ones' own decisions, based on relevant information. 2e autonomy in the ability to shape one's own life, and develop patterns of behavior which are meaningful in the context of a life-plan. E.g. Relational autonomy which emphasizes that a person develops an identity trough relationships with others The concept of relational autonomy implies that nurses focus on supporting patients in finding out what health behavior is appropriate and feasible and fostering their ability to shape their lives in a meaningful way. Key themes: 1. Clear answers and realistic advice received from the nurse. *Advices about actions that are good and bad for their health was also appreciated by the patients.*	Patients	High: Rel + Rigor++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Patients reported that the nurses were able to explain well what they should do in various situations. 2. Being encouraged without being criticized *Compliment them.* *Someone to help them when they needed assistance.* 3. Being understood and helped to understand *Nurses had understood them by being genuinely interested in them. Nurses took time to talk to patients about themes that were important to them, and patients felt at ease talking about these important issues.* *Nurses knew about their personal situation.* *Nurses were helpful in improving patients understanding of their own situation.* *Nurses helped them to get a better grip on life and their preferred lifestyle.* 4. Working together *Patients used words like: together, we or not alone when reporting on the role of the nurses and the things they did to achieve lifestyle change.* *The choice of which risk factor to work on was also perceived as a joint effort.* 5. Being motivated by the need to prove oneself to the nurse *Visiting the nurse was a motivation in itself to maintain healthy behavior.*		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Martinez et al., 2016	Data from the iCanCare Study, a large diverse population based study of women newly diagnosed with localized breast cancer. A multivariable linear regression analyzes was conducted to Explore the association between patients perceptions of autonomy-supportive communication by surgeons and medical oncologists and patients appraised quality of their breast cancer surgery and chemotherapy decisions.	Georgia and Los Angeles County 2578 women newly diagnosed with localized breast cancer.	AS communication is associated with better subjective decision quality. Providers encouraged to utilize a AS communication style with their patients. Eliciting women's preferences for non-directive versus directive may improve physicians ability to support women's communication needs. Patients- centered care techniques: listening, addressing patients' needs and concerns, seeking their input, supporting their autonomy in treatment decision making. Assessing the patients emotional status Patients who preferred non-directive style of communication and received it from their surgeon reported significantly higher levels of decision quality than those who preferred an more directive style and received autonomy-supportive communication. Those who preferred more directive communication from their surgeon, decision quality was higher among those who received AS communication compared to those who received non-autonomy supportive communication. AS communication facilitates shared decision making by helping the patients feel that they have the volition as well as the support to make medical decisions consistent with their values and preferences. Women who want more direction lack confidence to make the decision themselves and as a result feel anxious or distressed at the time of decision making	Patients	High: Rel ++ Rigor+

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			They seek advice or recommendation. It is important to note that: Patients who preferred directive communication and received it from physicians reported worse decision quality than those who preferred directive communication and received AS communication. AS communication may result in better patients outcomes for all patients. Race/ ethnicity Latina patients reported lower subjective decision quality than white respondents in line with literature. Similarly black patients reported worse decision quality than whites. Decision satisfaction is positively associated with age. Association between AS communication and subjective decision quality in different age groups may elucidate important differences in the role of provider communication in decisional outcomes between older and younger patients. Older tending to focus more on positive aspects of decision making thereby feeling more satisfied with their decisions.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Hoecke van et al., 2014	This study compared the long-term effectiveness of three Need supportive physical activity counseling strategies among sedentary older adults: REFER, WALK and COACH by a linear mixed models analysis The secondary purpose was to test if AM mediates the short and long-term intervention-effects	In three regions across Flanders (Vlaanderen) Sedentary adults aged 60 years or older	Need-supportive counseling procedures yielded larger PA increases. Facilitating the need for competence by providing a structured program and explicitly fostering needs during coaching can be equally effective in increasing PA. By providing concrete and realistic weekly walking schemes with progressively increasing volume and intensity participants were likely to experience success. Feelings of control might have been facilitated by participation as well as program autonomy. Interpersonal relatedness might have been facilitated by completing walks with meaningful others. Coach (tailored need-supportive program: regular contact between coach and client, individual PA goals according client's preferences and abilities. Goals were specified by PA type, location, timeframe, company, possible barriers and solutions were written down in a personal weekly schedule) explicitly fostered the need for autonomy (providing PA options), competence (providing positive feedback) and relatedness (express empathy) . Higher levels of need support yielded higher PA through AM even 1 year after intervention.	Patients	Medium: Rel – Rigor ++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Vanroy et al., 2017	A randomized controlled field trial to evaluate the short and long-term effects of a 6-week need-supportive physical activity (PA) intervention among type 2 diabetes mellitus patients, on health-related and behavioral outcomes. Intervention on satisfaction of basic psychological needs (SDT) of participants. Dialogue between participant and PA coach, in line with psychological principles from SDT and related practices from Motivational Interviewing	General practices patients with type 2 diabetes mellitus	Autonomy MI to consider choice. Discuss past experience & expected difficulties. Relatedness Support through planning, agreeing & reviewing PA. Support from PA coach to identify with PA Competence Understand PA. Consider PA types. Pros/ cons PA. Success/ failure reflection. Value/ competence beliefs. Duration, frequency and intensity ranges were adapted to the individual fitness level. The type of activity was free to choose for participants	Patients	High: Rel + Rigor++

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Warren et al., 2017	Prospective qualitative study to assess the feasibility and acceptability of the "eat well keep active" intervention. Based upon the SDT framework and utilized MI and individualized goal setting	A large maternity unit in South Wales 20 Low risk pregnant women suitable for midwife led care	Counselling session gave them the opportunity to seek advice and reassurance but also to address the areas that they felt needed improvement in a non-judgmental collaborative environment. Not being told what they should do, but were being asked what they wanted to do (ownership of the goals). Social support from significant others has been identified as key to women's perception of their weight management behaviors during pregnancy. Non-judgmental empathetic approach Outcome: enabled participants to change their perceptions of exercise from being viewed as a negative health behavior during pregnancy to being a desirable behavior	Patients	High: Rel + Rigor+

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Williams et al., 2000	A review of studies done within the University of Rochester's Program for Biopsychosocial studies, founded by Engel, and shows the direct relation emphasized by Inui and Carter. The studies have established a clear association between the quality of patient-physician interactions and healthcare outcomes such as: satisfaction, health-relevant behavior change, medication adherence, health status and healthcare utilization.	Healthcare Physicians, surgeons and patients	Autonomy support in the realm of healthcare refers to providers' interacting with patients by taking full account of their perspectives, affording choice, offering information, encouraging self-initiation, providing a rationale for recommended actions, and accepting the patients' decisions. The concept also encompasses a way for physicians to relate to relevant family members, and for family members to relate to patients. Thus, we suggest that practitioners 'being autonomy-supportive with patients and relevant family members, and encouraging family members to be autonomy-supportive with the patients, is the central element in providing relationship-centered care. Autonomy-supportive physicians would respect the patients right to make the choice When patients are autonomous the feel volitional and willing to engage in a health-relevant behavior because they have fully accepted its importance. Early interruption (after 18-22 seconds) → withholding important information, important concerns. Behaviors that impede successful discussion were well timed and controlling statements by the physician. More autonomy-supportive in the sense that they facilitated discussion about psychosocial factors and elicited more participation from patients. Primary care physicians may need to pay more attention to and be more prepared to intervene in family dynamics if they are to promote patients health.	Health-care professionals	High: Rel + Rigor+

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
	The article also reviews studies that link the quality of patient-family interactions to healthcare outcomes thus emphasizing that it is sometimes important for physicians to involve patients' family members more fully in providing the patients with optimal care.		Outcome: Individuals being autonomously –motivated: more persistent, more creative, better able to think conceptually, more trusting and satisfied and more psychologically healthy. Patients more autonomously motivated: Attended the sessions more regularly, stayed in the program longer and were more actively involved. Patients seemed to place greater value on the treatment. Activated patients were more involved during visits. Patients who perceived their physician more autonomy- supportive reported more autonomous reasons for adhering to their prescriptions and displayed better adherence. Patients perceptions of the staff's autonomy support predicted their autonomous motivation for following the treatment regimen. If physicians take the lead and are autonomy-supportive with all their patients the patients are likely to respond by becoming more actively involved and autonomous motivated. Their patients will be more autonomously motivated which in turn leads to program attendance, smoking cessation, glucose control, long-term exercise, maintained weight loss and adherence to medication prescriptions. Further supporting patients autonomy was also found to make the interview more time efficient.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Williams et al., 2001	Randomized trial of 27 community based physicians using two interview styles with observer ratings of patients active involvement and assessment of patients smoking states at ,6, 12 and 30 months. Tested using Structural Equation Modeling (SEM). To test whether physicians counseling patients for smoking cessation with an AS rather than controlling style would increase patients active involvement in the counseling session and increase maintained abstinence	27 community based physicians. patients saw their own physician if their physician was participating. if not patients were assigned to a participating physician. 336 adult smokers (≥5 cigarettes/day) and were willing to "discuss your smoking with a doctor, so we might learn more about how best to counsel patients who smoke. Primary care physicians.	Support patients autonomy involves: Listening carefully to the patients perspectives, encouraging questions, providing relevant information, offering choice about treatment regimens, supporting patients initiatives and minimizing control. 11 minutes interview Ask About smoking (how much, how long). What they likes about smoking. What health concerns they had about smoking. Whether they tried to quit and if so what had happened Advise Advise to quit smoking. The advice is clearly but not in an pressuring way. Doctors acknowledged that stopping is patients own decision. Doctors asked patients how they felt about what had been said. Assist Physicians asked if patients are ready to quit. If not what have to happen. For patients ready to quit physicians ask them to set a date (within 4 weeks) to quit. Offered a NCI booklet saying you might find it helpful. Physicians informed patients that nicotine replacement was available and recommended for patients without contraindications but pointing out that it was their choice. Patients not ready to quit, doctors acknowledged patients lacks of readiness and encourages then to give it further consideration and offered a NCI Booklet designed for people not ready to quit.	Physicians	High: Rel + Rigor+

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
			Arrange Suggested two follow-up contacts. Making explicit advise statement felt controlling to some doctors so they stay away from it in an AS condition. Control may prompt short-term change whereas AS change may better maintained but take longer 4A's with AS style means: Eliciting patients perspective, identifying their concerns (about smoking), supporting initiatives to change, providing clear though non pressuring advice regarding health improvement and minimizing control during the interview, encourage patients to become more active the discussion and in return will yield improved continuous abstinence.		

Author and Year	Aim, Design & Method	Setting and Participants	Mechanism and Outcome (Results)	Frame of reference	Level of contribution
Williams et al., 2002 Same study as Williams et al., 2001	Informed by SDT, examined whether the style used by physicians in administering the 4 –As intervention would affect smokers motivation to quit.	27 community based physicians. patients saw their own physician if their physician was participating. if not patients were assigned to a participating physician. 336 adult smokers (≥ 5 cigarettes/day) and were willing to "discuss your smoking with a doctor, so we might learn more about how best to counsel patients who smoke. Primary care physicians.	Behaviors are autonomous to the extent that people experience a true sense of volition and choice and act because of the personal importance of the behavior. Behavioral regulation becomes more autonomous when the regulation is fully internalized. Support individuals autonomy by: offering choice, minimizing controls acknowledging feelings. Model 4 As Added a fifth A: *Assess* Physicians should assess patients intentions with respect to quitting, thereby taking the patients perspective and supporting their autonomy with respect to their smoking. AS style: See the situation from patients perspective and encourage the patients to make their own choices. Providing information that relevant to the patients' health but not attempt to impose their own perspectives on the patients or make the patients change. Including respecting that the patients do not want to stop, if that is what they say. It is the patients decision. Advice is more information. Ask patients how they feel about the advice. Do not pressure to set a date to quit if patients say not ready to quit	Physicians	Rel + Rigor+

[1] This was not to judge the methodological quality of the articles, but to give insight into their degree of importance for answering our specific research question. The rigor was indicated by assessing whether 'the method used to generate that particular piece of data was credible and trustworthy' (high or low). The relevance was indicated by assessing whether 'the article contributed to answering our research question' (high or low). The two assessments were combined in one score for the level of contribution: high (high/high), medium (high/low or low/high) or low (low/low).

A

CHAPTER 3

Adaptation and Validation of the Encoding of Observations Using the Consul-MCC: A Self-Determination Theory-based Tool to Observe Consultations in Maternity Care

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This chapter was published as an article in *PEC Innovation* 2023
Available online at https://doi.org/10.1016/j.pecinn.2023.100219

ABSTRACT

Objective
During autonomy-supportive consultations, professionals use a need-supportive interaction style to facilitate patients' self-regulated behaviour. To improve maternity care professionals' need-supportive interactions, it is important to provide insights into their interaction style. No tool is currently available for measuring need-supportive interactions in maternity care. Therefore, the aim of this study was to adapt the COUNSEL-CCE to evaluate need-supportive interactions in maternity care and to validate their measurements.

Methods
A five-step adaptation and validation process was performed based on the guideline of Sousa and Rojjanasrirat: 1) adaptation of COUNSEL-CCE by two authors independently; 2) development of a consensus-based tool: CONSUL-MCC; 3) qualitative assessment of CONSUL-MCC; 4) pilot testing of CONSUL-MCC in the target population (N=10) and 5) psychometric testing in the target population (N=453).

Results
All indicators of the original tool remained relevant. Four items were rephrased, one indicator was added, and all examples were adapted to maternity care. The results of psychometric testing indicated good construct validity. However, the data characteristics made it impossible to prove the presumed factor structure and perform an accurate intraclass correlation.

Conclusions and Innovation
COUNSEL-CCE proved to be a new instrument to gain insights into professionals' interactions and be applied to maternity care.

INTRODUCTION

In the past decades, there has been a shift in focus towards patient-centred care in maternity care. A key element of patient-centred care is providing the patients with choice and control[1]. This is specifically important in maternity care because of an increasing number of options available for the various decisions that patients' need to make, such as participation in prenatal screenings, vaccination programmes or preferences regarding their care (e.g. birth plan). To help patients' make these decisions, healthcare professionals can use autonomy-supportive consultation, where they create an autonomy-supportive healthcare climate for the patients using a need-supportive interaction style. According to self-determination theory (SDT) autonomy-supportive consultation can facilitate more autonomous forms of self-regulated behaviour in patients regarding their health[2]. According to SDT, patients have three basic psychological needs: autonomy (feeling of choice in one's own behaviours), competence (feeling effective) and relatedness (feeling understood and cared for by others). The satisfaction of these psychological needs predicts autonomous motivation, adaptive self-regulated behaviour and health[3]. Self-regulated behaviour regarding health is important because if patients experience more autonomy, they will have better decision satisfaction and show higher compliance with treatment or behaviour change[4]. In contrast, frustration of these needs can result in controlled motivation, amotivation, and ill-being[3]. Autonomy-supportive consultation is based on empirically supported recommendations for healthcare professionals on how to meet patients' basic psychological needs. A need-supportive interaction style is autonomy-supportive, structuring and warm and facilitates patients' autonomy. In contrast, a need-thwarting interaction style is controlling, chaotic and cold and hinders patients' autonomy[2,3,5,6].

As mentioned before, the number of decisions patients need to make in maternity care has increased over the past few years. Maternity care professionals find it challenging to guide their patients through these decision-making processes in an autonomy-supportive way[7]. In the past decade, communication training in relation to decision-making for prenatal anomaly tests has been offered to maternity care professionals. Despite such training, professionals tend to focus on providing information and find it difficult to offer decision-making support[8,9].

To support maternity care professionals and students improve their need-supportive interaction style, it is important to provide insights into their own interaction style so that they can eventually adopt a more need-supportive style. Receiving personal, specific, meaningful and trustworthy feedback facilitates gaining insights into one's own interaction style[10,11]. In the specific case of health care professionals, it is helpful to provide feedback afterwards instead of interrupting professionals during a task. Feedback is perceived as more trustworthy if it is based on direct observation of performance[10,12]. A key component for facilitating assessors is an observation tool that defines the different aspects of the performance and instructs the assessors on what to look for and how to judge to build their feedback[13]. At present, however, to the best of

our knowledge, there is no tool available for observing and coding both need-supportive and need-thwarting interactions in maternity care in daily practice.

Interaction is an important component of supporting autonomous motivation. For this reason, studies on need-supportive interactions in other domains (e.g. education) are also meaningful for healthcare. In 2013, a study on teacher-student interactions by Haerens et al.[14] found four factors related to need-supportive dimensions in SDT: autonomy support, structure before the activity, structure during the activity, and relatedness support. To achieve more integrative and fine-grained insights into both need-supportive and need-thwarting interactions, a multiscaling analysis was performed by Aelterman et al.[5]. They found a circumplex model with an autonomy support-control axis and a structure-chaos axis, in which more autonomy-supportive and structuring interactions meet students' basic psychological needs. Based on their results, they divided each factor into two subfactors, as represented in Figure 3.1.

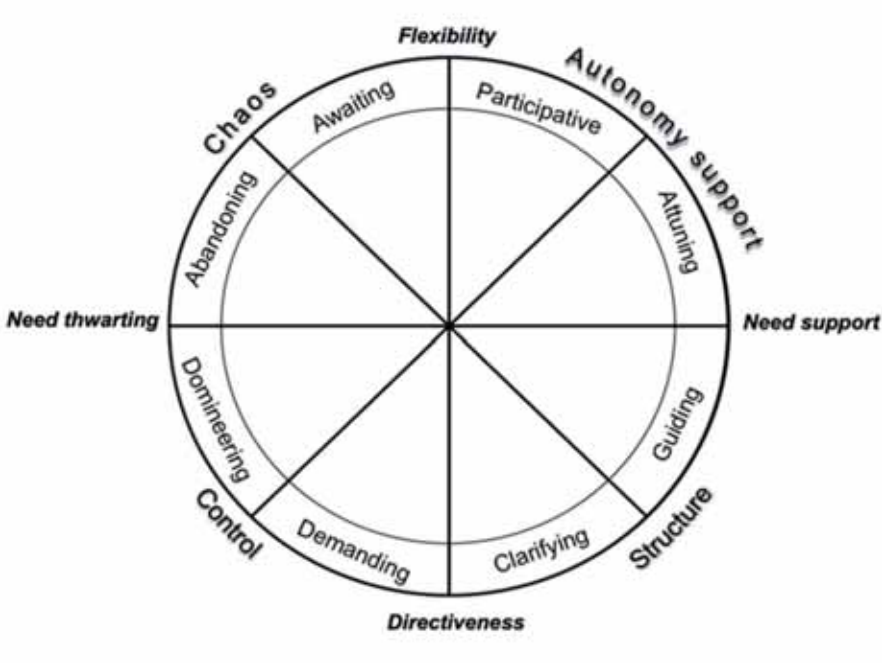

Figure 3.1. Graphical representation of the circumplex model in an educational context[5]

Grounded in this SDT circumplex model[5] and the empirically founded recommendations for healthcare professionals[6], Duprez et al.[15] developed and validated the Coding and Observing Need-Supportive Counseling in Chronic Care Encounters (COUNSEL-CCE). The COUNSEL-CCE is a tool which is used for encoding healthcare professionals' engagement in need-supportive and need-thwarting counseling in chronic care encounters. COUNSEL-CCE encodes healthcare professionals' interaction styles on two axes: autonomy supportive versus control and structure versus chaos. Each factor is divided into two subfactors based on Aelterman et al.'s model[5]. Each subfactor is

operationalised using three to six observable indicators[16] (Appendix A), which means that the empirical evidence is translated into observable indicators. In addition, there are two overall indicators for the healthcare climate: the extent to which the climate is observed as warm and the extent to which the climate is observed as cold. COUNSEL-CCE comprises a manual in which each indicator is described and illustrated using an example. The manual also includes instructions on how to assess the video fragments and how to encode the indicators using the included score form.

COUNSEL-CCE appears promising: the authors reported supporting internal construct validity, and the correlations between the global impression and associated items revealed the highest correlation values (r between 0.35 and 0.85; $p < .01$). The inter-rater reliability was high for two subscales (>0.75), moderate for four subscales (between 0.50 and 0.75) and poor for three subscales (<0.50). The consistency of the coding was high (>0.75) for all subscales except the awaiting approach, for which the intra-rater reliability was moderate (ICC = 0.66; 95% CI = 0.13–0.82)[15].

In view of these promising results, we chose to adapt COUNSEL-CCE for use in the context of maternity care instead of developing a completely new tool. Adapting COUNSEL-CCE allowed us to investigate the applicability of this tool to another healthcare context, which potentially contributes to the development of a universal tool for encoding autonomy-supportive consultations in healthcare. The use of a universal tool would provide the opportunity to compare results among different healthcare contexts and learn from each other in the future. Moreover, the circumplex model offers a gradual appraisal of need-supporting and need-thwarting interactions, which enables professionals to gain precise insights into their own interaction style. Finally, the tool has been proved useful in the context of chronic care. Nevertheless, evidence is required for using the adapted tool in another context under different circumstances[17].

The aim of this study was to adapt COUNSEL-CCE to the context of maternity care and to validate the encoding of observations in maternity care. This process contributes to enhancing the knowledge of the extent to which indicators of need-supportive or need-thwarting interactions are generic over different healthcare contexts and to the development of a universal tool for encoding autonomy-supportive consultation in practice.

METHODS

Design

The adaptation and validation process of this study was based on the guideline for cross-cultural translation, adaptation and validation of instruments by Sousa and Rojjanasrirat[18](Figure 2). The psychometric testing of the tool was grounded in the standard for education and psychological testing[17].

The process involved the following steps:

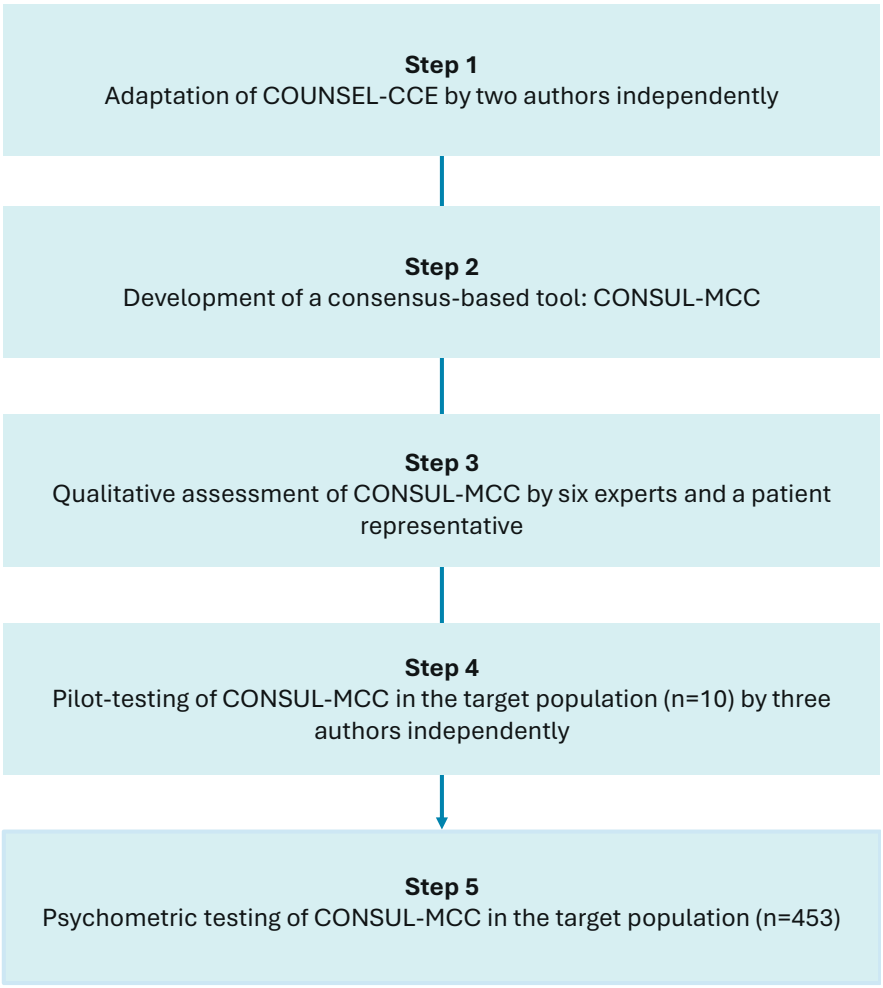

Figure 3. 2. Adaptation and validation of CONSUL-MCC.

Tool

The adapted tool was termed Coding and Observing Need-Supportive Consultation in Maternity Care Consultations (CONSUL-MCC), which encode need-supportive or need-thwarting interactions between maternity care professionals and their patients based on audio-taped consultations. The tool comprises a manual in which each indicator is described and illustrated using an example. The manual also includes instructions on how to assess the audio fragments and encode the indicators using a scoring form. The audiotapes were divided into units of 5 minutes to facilitate the assessor to focus on the accurate coding of the interactions. The assessors were allowed to recode a certain

fragment when they had doubts about the coding. Each indicator was scored on a Likert scale (0-4). The coding ranged from 0 (not observed at all), through 1 (rarely observed), 2 (sometimes observed) and 3 (observed regularly) to 4 (observed continuously).

To assess the construct validity during the validation process, the tool was extended with 12 indicators to encode the overall impression of each factor and subfactor.

Setting

The consultations took place in primary maternity care, as well as in maternity care in hospitals. The tool was used in all types of maternity care consultations because, in each consultation, there are choices to discuss and decisions to be made. Considering the applicability of the tool in this study, consultations with an interpreter, emergency consultations and encounters during birth were excluded

Adaptation

First, the original tool was adapted to the context of maternity care in the Netherlands by checking the applicability of the indicators' descriptions and rewriting the examples in the context of maternity care. This adaptation was independently performed by two researchers: VD, a nurse and developer of the original tool, and JK, an educationalist and midwife (non-practicing). Second, both adapted versions were compared, and discrepancies were discussed until consensus was reached. This step generated the preliminary version of CONSUL-MCC. In the next step, an expert group was asked to look at the relevance and ecological validity of all indicators for maternity care, the clarity of the indicators' descriptions and the recognisability of the examples. The group comprised six experts: midwives (hospital-based and primary care), communication experts and SDT experts. They were also asked to compare CONSUL-MCC with the original tool and assess the consistency between the tools. To do so, each expert received a document with the original tool and the preliminary version of CONSUL-MCC next to each other. Subsequently, each expert was interviewed individually by JK, during which every indicator and example, as well as the overall impression, was discussed. To finalise the adaptation, a patient representative recruited by the Board of Mothers (patient organisation) based on recent experience with both primary and hospital-based maternity care was asked to judge the relevance of the indicators for maternity care consultations, the clarity of the descriptions and the recognisability of the examples. The patient representative also received a document with the original tool and the preliminary version of CONSUL-MCC next to each other and was subsequently interviewed by JK, during which every indicator and example as well as the overall impression, was discussed.

Pilot-testing

The pre-final version of CONSUL-MCC was tested in a small sample population (N=10), after which further adaptations were made. Pilot testing was intended to test the comprehensibility, relevance and usability of the tool. The pilot testing was performed by three researchers (JK, VD and LM), who independently coded the same 10 units of maternity care consultations each[16].

Psychometric testing
The final version of CONSUL-MCC was tested psychometrically in a sample of the target population. The sample comprised 104 consultations with 21 maternity care professionals, divided into 453 units of five minutes of audiotaped interactions.

Factor structure
The theoretical grounded factor structure of the tool was confirmed using a confirmatory factor analysis (CFA)[19,20]. The internal consistency of the indicators within a factor was explored by calculating Cronbach's alpha[19]. For a complex construct such as interaction style, a Cronbach's alpha value of >0.60 was considered acceptable[17].

Construct validity
Construct validity was tested by calculating the correlation between the total sum score of the indicators on the factors and subfactors and the global impression of these factors and subfactors. Because the data were measured at the ordinal level, they were compared using Spearman's correlation coefficients. A positive correlation was assumed; therefore, significance was tested in a one-tailed fashion[19].

Inter- and intra-rater reliability
Since the validity of the measurements depends on their reliability[17], their consistency, regardless of the rater or the moment, was analysed. To establish the inter-rater reliability, a sample of 51 units was independently rated by three assessors [VD, JK and LM (communication expert)[16]. All assessors were familiar with the tool and trained by VD before starting coding. After coding the first 10 units, the codes were compared, and the differences were discussed. A sample of 50 is usually suitable for balancing out rater variance while having an acceptable workload for the assessors[16]. To establish intra-rater reliability, 30 units were rated twice by JK with an interval of two weeks. Since the level of the measurements was continuous, the intraclass correlation (ICC) coefficients were calculated with 95% confidence intervals[16].

RESULTS

Adaptation
The experts and the patient representative indicated that all indicators used in the original tool were also relevant for use in maternity care. They expected most indicators of controlling and chaotic interactions to be rarely observed, especially in non-acute consultations. However, they found it highly relevant that these interactions were explicitly observed whenever they occurred. To improve clarity, the descriptions of three indicators '… aligns with the patient's perspective', '… allows emotions and actively names them' and '… explores the patient's goals', were made more specific based on the Maastricht History-taking and Advice Scoring list (MAAS-global)[21]. One indicator, ' … let the patient find out for himself', was rephrased as '…do not disturb the patient, let the patient think for themselves' to improve interpretability. Furthermore, the experts stressed the need to include a new indicator about stimulating patients to organise

the support of next of kin. All original examples needed to be adapted to make them recognisable for professionals in the context of maternity care. The examples in the pre-final version of CONSUL-MCC were formulated by VD and JK and were supplemented and clarified by the experts and the patient representative.

Pilot-testing

Some adjustments were made during the pilot testing based on the difficulties the researchers experienced while coding the indicators. To clarify the differences between some indicators, a comparison was added to the description. For example, a comparison was added to clarify the difference between indicators 15 and 17, with 17 indicating that the healthcare professional ignored the value of the patient's contribution, while 15 indicating that the healthcare professional did not provide room for the patient to participate and dominated the conversation. For some indicators, the description was clarified by adding specific examples; for instance, for indicator 10: 'How would you like to achieve your goal?' In some cases, parts of the description were highlighted; for instance, indicator 11: was about explaining and interpreting, not informing.

Psychometric testing

Although our sample comprised 453 units, some of the indicators were observed only a few times or never. These indicators were specifically related to the controlling and chaotic subfactors: Demanding, Dominating, Abandoning, and Awaiting. Other indicators were mostly observed at the same frequency, such as '...the professional uses suitable language' (item 32), which resulted in only a small variance (Table 1). These characteristics of our data induced some statistical difficulties, which are described below.

Table 3.1: Frequencies of observed indicators

Indicator	0	1	2	3	4	Missing value
Autonomy support						
Attuned						
1	35	35	115	268	0	
2	243	50	70	90	0	
3	74	48	151	180	0	
4	121	68	122	142	0	
5	380	36	25	12	0	
6	48	41	131	233	0	

0: Not observed at all, 1: Rarely observed, 2: Observed occasionally, 3: Observed regularly, 4: Observed Continuously.

Table 3.1: Frequencies of observed indicators (continued)

Indicator	0	1	2	3	4	Missing value
Participatory						
7	316	44	65	28	0	
8	220	101	89	43	0	
9	249	68	91	45	0	
10	280	51	63	59	0	
10a	429	18	5	1	0	
11	219	31	79	121	3	
12	451	1	0	1	0	
Control						
Dominating						
13	446	5	2	0	0	
14	393	48	11	1	0	
15	385	47	16	5	0	
16	155	135	52	111	0	
17	409	36	7	1	0	
Demanding						
18	444	7	1	0	0	1
19	447	6	0	0	0	
20	453	0	0	0	0	
21	444	8	0	0	0	1
Structure						
Guiding						
22	315	81	37	20	0	
23	191	65	91	103	2	1
24	411	18	20	3	0	1
25	430	19	2	1	0	1
26	322	105	8	17	0	1

Table 3.1: Frequencies of observed indicators (continued)

Indicator	0	1	2	3	4	Missing value
Clarifying						
27	385	34	21	13	0	
28	444	7	1	1	0	
29	54	22	56	316	5	
30	385	56	9	2	0	1
31	233	87	89	44	0	
32	1	0	3	447	2	
Chaos						
Abandon						
33	425	20	8	0	0	
34	437	15	1	0	0	
35	451	1	1	0	0	
36	436	14	3	0	0	
Awaiting						
37	452	1	0	0	0	
38	442	11	0	0	0	
39	436	15	2	0	0	

0: Not observed at all, 1: Rarely observed, 2: Observed occasionally, 3: Observed regularly, 4: Observed Continuously.

Factor structure

To perform CFA, a minimum sample size is required. Although there is no exact rule for the number of measurements required, the general consensus appears to be 10 per estimated parameter[20]. Because some of the indicators were not observed, we did not have enough measurements to perform CFA.

Cronbach's alpha was acceptable for the subfactors Attuned (0.75) and Participatory (0.56). For the subfactor Guiding, after deleting one indicator,(i.e. indicator 22, '...Sets realistic goals in collaboration'), Cronbach's alpha was moderate (0.43). Based on the statistical outcome, the consistency between the indicators within this subfactor was qualitatively reassessed. Because 'Sets realistic goals in collaboration' differs from the other indicators described within the subfactor Guiding, indicator 22 was

deleted. For the other subfactors, the number of test indicators was too small; hence, the assumption of tau-equivalence was violated. In that case, it was not meaningful to calculate Cronbach's alpha because the reliability would be underestimated[22].

Construct validity

The strongest correlation was found between the sum score and the overall impression on the same factor. This was also the case for the subfactors excluding, Demanding and Clarifying. For these subfactors, the strongest correlation was found between the sum of their indicators and the factor to which they belonged. Spearman's correlation was good (>0.7) for all factors and subfactors except Structure and Clarifying, for which the correlation was moderate (Table 2).

Table 3.2: Construct validity of Spearman's correlation between factors/subfactors and internal measure (global impression)

Global impression

Sum of indicators	Autonomy support	Attuning	Participating	Control	Dominating	Demanding	Structure	Guiding	Clarifying	Chaos	Abandoning	Awaiting
Autonomy support	**0.794****	0.792**	0.511**	-0.263**	-0.002	-0.264**	0.232**	0.352**	0.007	-0. 091*	-0.093*	-0.044
Attuned	0.763**	**0.811****	0.448**	-0.299**	-0.003	-0.300**	0.215**	0.345**	-0.012	-0.105*	-0,115**	-0.033
Participatory	0.744**	0.416**	**0.884****	-0.171**	-0.014	-0.169**	0.439**	0.496**	0.194**	-0.037	-0.037	-0.017
Control	-0.118**	-0.110**	-0.095*	**0.778****	0.227**	0.761**	-0.019	0.014	-0.078*	0.112**	0.140**	0.017
Dominating	-0.011	0.019	-0.037	0.145**	**0.731****	0.054	-0.025	0.025	-0.036	0.041	-0.069	0.160**
Demanding	0.119**	-0.119**	-0.086*	**0.773****	0.145**	**0.772****	-0.015	0.015	-0.075	0.091*	0.150**	-0.048
Structure	0.330**	0.179**	0.401**	-0.213**	-0.003	-0.213**	**0.633****	0.506**	0.436**	0.051	-0.078*	-0.026
Guiding	0.442**	0.275**	0.507**	-0.200**	0.048	-0.208**	0.635**	**0.808****	0.134**	0.027	0.019	0.016
Clarifying	0.312**	0.128**	0.422**	-0.161**	-0.006	-0.159**	**0.639****	0.434**	**0.517****	0.053	0.091*	-0.044
Chaos	-0.084*	-0.108*	-0.010	0.062	0.047	0.052	-0,042	0.018	-0.061	**0.746****	0.663**	0.358**
Abandon	-0.109*	-0.146**	-0.010	0.091*	0.033	0.084*	-0.006	-0.006	-0.003	0.672**	**0.781****	0.104*
Awaiting	-0.0007	0.004	-0.008	-0.005	-0.001	-0.007	-0.076	0.018	-0.116**	0.437**	0.035	**0.802****

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

Inter- and intra-rater reliability

When calculating the inter- and intra-rater reliability, difficulties were experienced because some indicators were not observed by one of the three assessors; it was not always the same assessor who did not observe an indicator. In addition, the number of scores for some of the indicators was too small to produce sufficiently accurate ICC for assessment[23]. For this reason, only the inter-rater reliability was calculated for the subfactor Attuned. The ICC for Attuned was 0.65 (CI 0.44-0.79), which is considered moderate.

DISCUSSION AND CONCLUSION

The aim of this study was to adapt COUNSEL-CCE to the context of maternity care and to validate the encoding of this tool in maternity care. All indicators underlying the four factors of COUNSEL-CCE were also deemed important in the context of maternity care. Although based on the factor analyses, we doubt if '…sets realistic goals in collaboration' is an indicator belonging to the subfactor Guiding; it is a relevant indicator based on the qualitative assessment. We could replace the examples in the context of chronic care with those in the context of maternity care. A new indicator was added about stimulating patients to organise the support of next of kin. The results of psychometric testing showed good construct validity based on the correlation between the sum score and the overall impression on the four factors and their subfactors. The data characteristics made it challenging to prove the proposed factor structure and to produce a sufficiently accurate ICC.

The results of testing the renamed CONSUL-MCC in the target population showed many zero scores because some indicators were not observed. In particular, the need-thwarting indicators were hardly observed. This phenomenon was attributable to several explanations, such as the origin of the tool, the context of maternity care in daily practice and the data collection.

The tool is based on SDT, which states that need-supportive interactions can facilitate people's autonomous motivation and self-regulated behaviour. This theory is applied in many domains, including education and healthcare. Grounded in Aelterman et al.'s circumplex model[5], CONSUL-MCC facilitates the observation of need-supportive and need-thwarting interactions. However, this model[5] was constructed based on vignettes in which students and teachers had to choose between interactions which contribute to autonomy support or control and to structure or chaos. For developing COUNSEL-CCE, the factors were adapted to observable indicators based on empirical evidence[15]. In the present study, the audiotaped interactions were observed and scored on the indicators that contribute to the diverse factors. According to previous studies, need-thwarting interactions, which are found in the study context, are difficult to observe in daily practice. This might be due to the complexity of daily practice[24]. In addition, the literature shows much more empirical evidence for need-supportive interactions than that for need-thwarting interactions for healthcare professionals[2,3,6]. Particular chaos

interactions have only scarcely been investigated [24]. Our results are in line with those of Duprez et al.[15], whose observational study in the context of chronic care encounters also found the lowest number of scores on the need-thwarting subfactors Dominating, Abandoning and Awaiting.

Perhaps the descriptions of need-thwarting indicators are too explicit, as they may be more subtle in daily practice. It is also possible that need-thwarting occur in interactions in which the professional uses too much of the need-supportive interactions. For example, too much structure or too much information giving can hinder someone's autonomy and competence needs[5]. Although measuring need-thwarting interactions is complicated, their specific measurement is a strong aspect of CONSUL-MCC because, according to the literature, people are not demotivated by the absence of autonomy-supportive interactions but through the use of need-thwarting interactions[24]. The overall good construct validity, as well as the qualitative assessment by experts, confirmed that the indicators tally with the assessors' holistic impression of the factors and subfactors.

Although autonomy support and competence building are important in all contexts, their appearances can differ between different contexts. In the context of chronic care encounters and maternity care consultations, the content, focus and relationship are different. The focus in chronic care encounters is more on decision-making regarding behaviour change and on supporting motivation and confidence regarding healthy behaviour not only for the short term but also for the long term. In chronic care, professionals and patients build long-lasting relationships. In maternity care consultations, the focus in decision-making is mostly on relatively short-term health issues of patients or their babies and on the patients' wishes regarding care. During the limited period of care, maternity professionals support their patients to build confidence regarding their pregnancy, delivery and parenthood. In the literature, maternity care consultations have been described as comfortable and unconstrained[25]. Compared to Duprez et al.'s study[15], we observed fewer need-thwarting indicators. In addition, the indicators were assessed differently. For instance, for the indicator '… provides task-oriented or progress-oriented feedback' in maternity care, the focus of this feedback is more on the patient's health and the normal progress in pregnancy instead of their behaviour. This focus may have made it more difficult for assessors to score an interaction as providing feedback or as providing information. We assume that context influences if and how indicators are observed.

Our findings may also have been influenced by our data collection method. We used audiotaped consultations because audiotapes are a proven concept in prenatal maternity care consultations[26]. This approach differs from the original approach, which encodes observations based on video fragments. Although the data were divided into five-minute fragments to give assessors a relatively short focused time during coding, assessors could have missed some aspects of the interaction because of the large number of indicators in the tool. In qualitative research, the use of seven indicators with a standard deviation of two is recommended, whereas CONSUL-MCC comprises 39 indicators distributed over four factors and eight subfactors. To optimize the coding,

it might be better if assessors first listen to the whole consultation before dividing it into units of five minutes.

Finally, some indicators might not have been present in the data, despite the large number of collected units. Some experts have suggested that need-thwarting interactions occur more often during birth or during more unpredictable and acute situations.

Limitations

We observed relatively few need-thwarting indicators which hinder autonomy-supportive consultation. Therefore, we could not perform full psychometric validation of the tool. However, the results of the construct validation and the qualitative assessment provide sufficient confirmation that CONSUL-MCC can be used to collect feedback on autonomy-supportive consultation in maternity care. We suggest further research to be conducted on the need-thwarting factors and their underlying indicators to provide detailed insights into these interactions and their effects on patients' self-regulated behaviour.

The professionals and patients knew that their consultations were being audiotaped for research purposes. This could have meant that they sometimes used more need-supportive and fewer need-thwarting interactions because they were in their best behaviour.

Innovation

Looking from a more general framing for innovation, the application of COUNSEL-CCE to the new context of maternity care is a novelty. COUNSEL-CCE seems to be the first tool which enables assessors to observe need-supportive and need-thwarting interactions in chronic care encounters. In our study, for the first time, COUNSEL-CCE was adapted and validated for use in another healthcare context, specifically maternity care. Our results show that COUNSEL-CCE can be adapted for use in the context of maternity care. This makes CONSUL-MCC the first tool to facilitate feedback to maternity care professionals specifically on their need-supportive and probably to a lesser extent, their need-thwarting interactions in daily practice. This is important for patients because when they experience more autonomy, they will have more decision satisfaction and show higher compliance with treatment or behaviour change[4]. Based on our study results , we assume that COUNSEL-CCE can also be applied to other healthcare contexts. To achieve this, it is necessary to adapt the indicators' descriptions and examples for each context. Based on our research and the literature, the four factors, as well as the eight subfactors and their underlying indicators, appear to be universally applicable to all healthcare contexts. However, how these indicators are observable in practice can differ among different contexts.

The resulting tool can help assessors observe and thereby facilitate specific and trustworthy feedback. This feedback can offer professionals and students insights into their autonomy-supportive consultation behaviour. The large number of indicators allows assessors to provide, detailed feedback on specific interaction aspects. If the

score on the indicators is amplified with observed examples, the feedback becomes even stronger, especially if the feedback receiver can listen to a recording of these specific moments in the interaction[10]. This can help professionals achieve a deeper understanding of the effects of their interactions[24].

CONCLUSION

It proved possible to adapt COUNSEL-CCE to the context of maternity care. The resulting CONSUL-MCC is a useful tool to gain insights into professionals' autonomy-supportive consultation although the tool is somewhat less suitable for observing need-thwarting interactions. For teachers and trainers, the tool might be helpful to collect detailed feedback on the difficulties that interns or professionals experience in autonomy-supportive consultation in daily practice. These insights could help teachers improve their training. For researchers, need-thwarting interactions are especially important to improve their knowledge of the way interactions could hinder patients' self-regulated behaviour during consultation.

Ethical considerations

The Medical Ethics Review Committee (METc) of Amsterdam UMC stated that this research is not subject to the Medical Scientific Research with Humans Act (WMO) (case number 2019.415). All participants received an information letter and a verbal explanation of the research and the audio recording. The participating maternity care professionals and patients gave their written consent.

Acknowledgements

We thank the expert group and the patient representative for their input and feedback.

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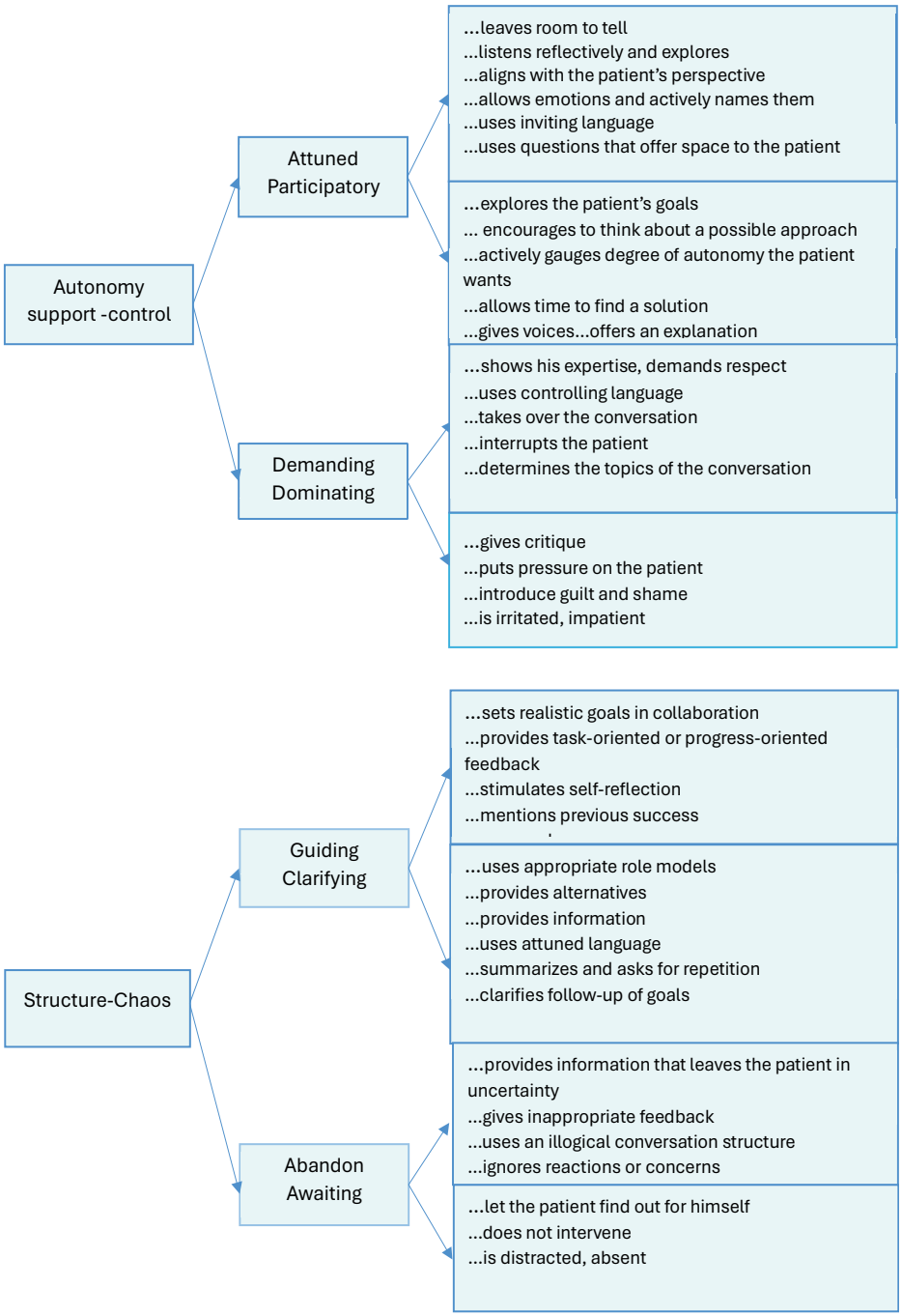
CHAPTER 3

Appendix

Appendix A: Descriptives of the COUNSEL-CCE axes, subfactors and indicators



CHAPTER 4

Autonomy-supportive Decision-making in Maternity Care During Prenatal Consultations: A Qualitative Interaction Analysis

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This chapter was published as an article in *BMJOpen* 2022
Available online at https://doi.org/10.1136/bmjopen-2022-063463

ABSTRACT

Objectives
The aim of this study was to identify mechanisms of autonomy-supportive consultation (ASC) that maternity care professionals use during decision-making in prenatal consultations.

Design
This study was a descriptive, qualitative analysis of professional-patient interactions in maternity care, using concepts and analytic procedures of Conversation Analysis (CA).

Setting
The prenatal consultations took place in hospitals and midwifery practices in the Netherlands. This study was part of a larger project. For the current study, we selected prenatal consultations concerning three topics in which patients make their own choices.

Participants
The first author invited the patient who was waiting in the waiting room. Participants were not selected a priori.

Main outcome measures
The main outcome measures were mechanisms of ASC.

Results
We selected 20 consultations which were conducted by 20 different professionals. We found eight mechanisms in the professional-patient interaction which were categorized into three overarching themes. The first theme, 'Lightheartedness', comprises the interactional mechanisms 'minimizing language' and 'humor'. The theme 'Orientation to agreement' describes how professional and patients seem to be oriented towards demonstrating agreement and mutual understanding. The last theme, 'Offering information and options', describes the professional formally giving factual information almost completely without verbal interaction between the professional and the patient.

Conclusion
The results of this study show that the model of ASC can be enriched by adding minimizing language and humor to the mechanisms that can be used to fulfil the psychological need 'relatedness'. Secondly, our results show that professionals use only few mechanisms to meet the patients' psychological needs 'competence' and 'autonomy'. They mainly use information giving to meet patients' need competence. To meet patients' need for autonomy, the professionals keep all options open. This suggests that professionals could pay more attention to other mechanisms to meet patients' needs for 'competence' and 'autonomy'.

INTRODUCTION

In the past few decades, researchers and healthcare professionals have become increasingly aware of the importance for healthcare professionals to form a partnership with their patients because through this partnership, patients feel actively involved in defining their problems and in devising feasible solutions[1,2]. To stimulate this partnership, in line with the Self-determination theory (SDT), healthcare professionals are expected to build a good relationship with their patients and facilitate them to actively participate in a consultation through competence building and autonomy support. However, this is a complex process, and its outcome depends on a delicately balanced interaction between the patient and the professional. Autonomous decision-making is particularly relevant in obstetric care, because the person who experiences the potential risk or harm (i.e. the mother) is not always the same as the person who experiences the benefits of an intervention or treatment (i.e. the baby)[3].

Theoretically, healthcare professionals can boost their patients' motivation to participate actively in consultations and make their own choices regarding their health by fulfilling of their patients' basic psychological needs: autonomy, competence, and relatedness[4-6]. According to the SDT, the fulfilment of these three basic psychological needs supports patients' autonomous forms of motivation and stimulates their self-regulated choices and behaviour[7]. Autonomous motivation means that patients engage in actions of their own choice, without any perception of internal or external pressure.

A SDT-based intervention which helps professionals to facilitate patients in participating more actively in consultations and in making their own choices is autonomy-supportive consultation (ASC)[4,8]. Previous research has established that the success of ASC strongly depends on relationship building[9]. Research has shown that healthcare professionals can advance 'relatedness' by using respectful language and taking time. To meet the patients' need for 'competence' (feeling effective), professionals can facilitate patients' knowledge by offering guidance and structure based on their professional knowledge. 'Autonomy' (the feeling of being the source of one's own behaviours) can be enabled by exploring a patient's needs and facilitating a patient's free choice. Thus, healthcare professionals can apply different methods or 'mechanisms' to foster their patients' self-regulated choices and behaviours[4,10].

While ASC in general has been theoretically well described, it is unknown to what extent mechanisms of ASC are used by maternity care professionals in prenatal decision-making.

The present study aimed to gain insight into the way professionals use mechanisms of ASC in prenatal consultation. Our research question was: which mechanisms of ASC do maternity care professionals use during decision-making in prenatal consultations? A detailed description of interactions between maternity care professionals and their patients in daily practice could help identify what is needed to optimize ASC in daily practice. This knowledge could enrich existing concepts and models and enable maternity care professionals to improve decision-making processes in their daily consultations[11].

METHODS

Study design

This study was a descriptive, qualitative analysis of interactions in maternity care. To answer the research question, first, the data was analysed inductively to identify the interactional mechanisms used by professionals during decision-making in prenatal consultations. Then, these mechanisms are related to the existing models of ASC. The descriptions aimed to describe in detail the daily practice of decision-making but were by no means intended as normative judgements on what is good or bad practice[12]. We observed the interactions of maternity care professionals, specifically midwives and obstetricians, via non-participant observations.

Setting and sampling

The study was conducted in the Netherlands from March to October 2020. This study was part of a larger project, for which data were collected during 101 consultations conducted by 21 maternity care professionals. The consultations were observed in real time and audiotaped. The prenatal consultations took place in an academic hospital and a teaching hospital in Amsterdam and in 16 midwifery practices in both urban and rural areas, and in both small and large practices. We sampled purposefully to include a wide variety of settings in which the prenatal consultations took place[13]. At the time the first author (JK) had finished her observation, the patient who was next in the waiting room was invited. Patients were not a priori selected.

The larger project as well as the current study was granted exemption from further review by the Medical Ethics Review Committee (METc) of Amsterdam UMC (Reference number 2019.415). Informed consent was given by both patient and professional and participation was voluntary.

Data collection and selection

For the current study, we selected prenatal consultations concerning three topics in which patients make their own choices: decision-making about participation in prenatal screening, participation in whooping cough vaccination, and decision-making about the birth, e.g. regarding pain management or place of birth. Data collection was performed by JK. The consultations were anonymised, transcribed verbatim by two transcribers and checked for accuracy by two researchers.

The fragments from the consultations, as presented in this paper, were translated into English with the help of a native English speaker with Dutch fluency. To check the translation, these fragments were translated back by a native Dutch speaker with English fluency. The fragments were described in detail, while we looked for a balance to do justice to the analysis and keep the fragments legible. In line with CA, each line is numbered. In all the fragments, a full stop in brackets represented a gap in the conversation of less than 0.3 seconds and a full stop at the end of a turn represented a falling intonation; a comma indicated a slight rise in intonation, and a question mark

was used when intonation strongly rose[14]. See the table 'Simplified Jeffersonian transcription notation' in the appendix.

Analysis

The interactional analysis was performed making use of the ideas, concepts, and analytic procedures of Conversation Analysis (CA). CA has its origins in sociology and, specifically, in ethnomethodology. Its primary focus is on the language as a social phenomenon. It is used to study how social acts are organised in interaction and, as part of this research, how social acts are packaged and delivered in linguistic terms (e.g., choice of words, phrasing)[15]. CA is a method that is suitable for viewing medical consultations as an interactive process organised in a way in which the professional and the patient alternately take turns and jointly construct their interaction[16]. An interaction needs to be effective and efficient. For an interaction to be effective, the recipient must be able to recognise what the speaker wants to accomplish with a specific action or sentence. For an interaction to be efficient, the interactional partners show and check understanding of a sentence is sufficient. The patients' understanding was examined using the so-called "next turn proof procedure" (NTPP); the effectiveness and efficiency of each turn are revealed in the response in the next turn[17].

The interactions in the selected consultations were analysed using the five-step analytic tool of Pomerantz and Fehr[18] (table 4.1).

Table 4.1: The five-step analytic tool of Pomerantz and Fehr[18]

Step 1	Selection of fragments for analysis
Step 2	Characterize actions in sequence
Step 3	Packaging of actions
Step 4	Turn-taking
Step 5	How does it accomplish roles and relationships?

In the first step, two researchers (JK, AdlC) independently selected fragments of consultations with the focus on decision-making, while they constantly discussed the selection process.

In the second step, the researchers examined the verbal actions that took place in the selected fragments. What kind of actions did the professional verbalise? The fragments contained sequences in which the following actions could be found: introduction of the topic, discussion of the provided information or decision and closure of the conversation about this topic.

In the third step, they analysed the packaging of these verbal actions. Packaging refers to the way professionals construct and deliver verbal actions in practice. It concerns the details of choice of words, and phrasing of options by the professional.

In the fourth step, the researchers analysed the timing and turn-taking in the interactions, including silences, interruptions, and other interactional features in the turn-taking process.

In the fifth step, they examined the relationship between the professional and the patient to determine how the ways in which professionals package their actions and take turns imply or create a specific role or relationship.

This analysis resulted in a description of typical interaction practices during decision-making in prenatal consultations, which were grouped into themes.

All analyses were done by JK and AdlC. JK is an educationalist, well-versed in the practice and theory of prenatal consultations because of her work as a lecturer in midwifery and her training as a midwife. AdlC is a linguist and an educationalist and is an experienced communication skills teacher in medical education, as well as being experienced in research on interaction.

To ensure the reliability of the results, we copied a standard practice for researchers making use of CA, meaning we took our data and analyses to data sessions and discussed our work with interaction researchers[15]. For this study, we organised three data sessions with 4 to 6 colleagues per session. The colleagues were linguists from different universities who work in the field of healthcare. We also checked our analytical procedure by asking a Conversation Analyst for feedback.

Reflexivity

Especially when analysing data from spoken interaction, which is complex, it is important to consider multiple possible interpretations and to have reflective and open discussions about the analysis. A micro-analysis of interactions can lead to discussions about what should or could have been said. We explicitly wanted to avoid an analytical culture of criticising healthcare professionals. Therefore, we considered interdisciplinarity in the team as key. Besides JK and AdlC, our interdisciplinary team consisted of the following members: LM, a psychologist and lecturer in communication and counseling; CV, a professor in midwifery and experienced midwife in a teaching hospital as well as in a midwifery practice; PB, a perinatologist who is also responsible for the obstetric education of bachelor and master students of VU university; SP, a neurosurgeon and professor in Continuing Professional Education and well versed in medical practice as well as in education; and RK, a doctor, an associate professor and a researcher in medical education. The authors discussed the results and the process of the data analysis on a regular basis. During these discussions, the authors' backgrounds were explained and used for the interpretation. Through these discussions, the primary researchers (JK, AdlC) maintained a critical and open view of the data and results.

Patient and Public Involvement

The results were also discussed with two members of a patient association, "The Motherboard". During this discussion, we focused on the recognizability of our results from the patient's perspective. In addition, we asked the patients for their own examples within the described themes. The members of the Motherboard had no patient-maternity care professional relationship with any of the professionals who participated in our study.

RESULTS

Table 4.2 shows the characteristics of the professionals included in this study.

Table 4.2: Characteristics of the professionals

Professionals	Age	Work experience	Profession
21	from 25 to 64 years	from 5 to 43 years	17 primary care midwives 2 hospital-based midwives 2 obstetricians

In the first analytic step, we selected 20 of the 101 prenatal consultations included in the larger project because they contained fragments that focused on decision-making. Given the richness of the data being enough to answer our research questions, we ended data collection after 20 consultations. The 20 consultations were conducted by 20 of the 21 professionals and contained a total of 28 fragments about decision-making.

Eight interactional mechanisms were identified, which were categorised into three overarching themes: (a) 'Lightheartedness', (b) 'Orientation to agreement', and (c) 'Offering information and options'. 'Lightheartedness' describes two interactional mechanisms: the use of mitigating language (I) and of humour (II). 'Orientation to agreement' describes how the professional and also the patient seem to be oriented towards demonstrating agreement and understanding by frequently using the word 'yes' (III), vague words (IV) and interruptions(V). The last theme, 'Offering information and options', describes how professionals give information and options. They reduced interaction with the patient (VI) and gave detailed and standardised information(VII) while they kept offering options (VIII). Table 4.3 shows an overview of the results.

Table 4.3: Interactional mechanisms and overarching themes

Themes	Mechanisms	Examples
a) Lightheartedness	I. Minimizing or mitigating language	*e.g. Little idea, Just Example: 1,2,3*
	II. Humor	*e.g. Laughing Example 4*
b) Orientation to agreement	III. Frequent use of 'yes'	*Example 5*
	IV. Use of vague words	*e.g. Something, Things Example 7*
	V. Interruptions	*Example 8*
c) Offering information and options	VI. Lack of interaction	*Figure 2*
	VII. Detailed and standardized information	*e.g. it is about 25% and with the other 75% Example 9, 10*
	VIII. Offering options	*Example 11*

Lightheartedness

Within this theme, two interactional mechanisms were distinguished: minimizing language (analytical step 3 of the analytic tool by Pomerantz and Fehr) and the use of humor (steps 3 & 4), both of which make the conversation seem lighthearted and friendly (step 5).

When introducing the topic, almost all the maternity care professionals tended to use so-called 'mitigating' or 'minimising language': in Dutch, this means the use of diminutives, for example: 'for a bit' and actions are presented as quick or easy, for example: using the word 'just'. In example 1 (table 4.4) and 2 (table 4.5), the maternity care professional introduced the topic about which a decision needed to be made:

Table 4.4: Example 1: Minimizing language

01 Professional (P)	*And we were also going to talk about the birth <u>for a bit.</u>*

Table 4.5: Example 2: Minimizing language

01 P	*Hey and what about the birth itself, did you give it <u>a little</u> thought at all?*

The minimising elements 'for a bit', 'just' and 'a little' seem to add lightness to the conversation and to minimise the impact, in these cases, of discussing the birth[19]. This did not only happen when the topic was introduced, but also further along in the interaction (example 3) (table 4.6).

Table 4.6: Example 3: Mitigating language

01P	*We know it's safe and that's why it's our job to give you information about it. Again, it is*
02P	*always your choice so you can decide for yourself what you would like to do with this just*
03P	*know that I have to provide that information. It's in here so think about it you can just do*
04P	*it from now on.*

We assume that the professionals used minimising or mitigating language to protect the relationship with their patient by making decisions more palatable for their patients and to reduce discomfort[19].

To keep the conversation comfortable and friendly for their patients, professionals also used humour and laughter, as illustrated in example 4 (table 4.7), in which the birth was discussed.

Table 4.7: Example 4: Humor

01 P	*Also not feeling the baby moving (.) the contractions themselves (.) and here is the number*
02 P	*for day and night. And then you bring a case that you will lay out ready.*
03 Women (W)	*Yes.*
04 P	*And then you leave your 2 other kids (.) somewhere?*
05 W	*Yes (.) no I have an emergency number, or in the basement with the door locked hee hee.*
06 P	*Yes, thats right hee hee then you can bring them here. We have a fishbowl.*

Continues after physical assessment (2nd part of example 4)

07 P	*To come back to your question or not your question but comment pain relief, we have*
08 P	*everything, so epidural. Remifentanil.*
09 W	*That's the thing eh? Yes that is fantastic hee hee you grab it sometimes that in your daily*

10 W	*life hee hee also sometimes, and then you think where is the button?*
11 P	*Hee hee (Loud Laughing) we can install it.*
12 W	*It's just so unkind that it that it is turned off when pushing (.) you need to be present for*
13 W	*that (.) I get that.*
14 P	*And mostly the baby.*
15 W	*Oh yes.*
16 P	*They get it as well and then they are born sleepy and they won't breathe.*
17 W	*Oh. No.*
18 P	*So remember that that is not to bully you.*
19 W	*No I know. I know it is also not hee hee I did it myself hee hee.*
20 P	*Hee hee (Loud laughing)*
21 P	*But they are so nice eh.*

Line 4 functions as an informal way to point out that the patient must make arrangements for her other children. The professional seems to use humour to discuss a potentially uncomfortable topic and to protect her relationship with the patient (step 5). The patient reacts in the same informal, even humorous way in line 5. The same pattern is observed in the discussion on pain relief. The unpleasant consequence of stopping pain relief before the second stage of the birth is put into perspective in line 18. The professional uses an informal, even humorous, way to bring this uncomfortable message across. She probably does this to protect her relationship with the patient (step 5). The final humorous remark in line 21 seems to be used by the professional to reduce the social distance (step 5). This supports relationship building[20].

Overall, humour has two functions in medical consultations: relationship building and relationship protection. Healthcare professionals mostly use the relationship-building function. To do so, they use humour to reduce social distance, to manage power asymmetry or to create a relaxed atmosphere. The relationship protection function can be used to convey a serious or emotional message or to deal with a patient's discomfort. Also, the patient can use humour to deal with emotional issues. If the professional is sensitive to the underlying emotions, humour could pave the way for more serious talk[20]. The theme shows the use of mitigation and humour to keep the interaction between the professional and the patient lighthearted and informal.

Orientation to agreement

This theme describes an orientation to agreement and understanding and contains three different interactional mechanisms. A mechanism found in almost all the interactions within this theme was that all conversational partners say 'yes' frequently as their response to a prior turn (step 4). Based on the NTPP, this 'yes' did not just

function as listening token or a minimal encourager to keep the conversation going, but rather as a sign of mutual understanding or as a conformation marker[17]. However, many times, a positive 'yes' answer is given without the previous sentence (turn) being completed or made explicit.

In example 5 (table 4.8), participation in whooping cough vaccination is discussed.

Table 4.8: Example 5: Frequently yes

01 P	*We know it's safe and that's why it's our job to give you information about it. Again, it is always your*
02 P	*choice so you can decide for yourself what you would like to do with this just know that I have to*
03 P	*provide that information. It's in here so think about it you can just do it from now on.*
04 W	*Okay.*
05 P	*And then make an appointment with the GGD and then they can(.) place it for you.*
06 W	*Yes.*
07 P	*Yes.*

It is unclear what is meant by the patient in line 6. Did she understand the information or is she accepting the offer? A stand-alone 'yes' to an offer in a medical consultation should not be taken as a confirmation[14].

In example 6 (table 4.9), the maternity care professional wants to discuss the patient's preferences and wishes regarding the birth.

Table 4.9: Example 6: Frequently yes & vague words

01 P	*Hey and the birth itself, did you guys think a bit about that?*
02 W	*ahh… Well(.) I still find it difficult but hmm then with the Corona hmmm I got a hmm from*
03 W	**** like that hmm mail with all kinds of online things.*
04 P	*Yes,*
05 W	*So then I did the online academy?*
06 P	*Yes?*

Table 4.9: Example 6: Frequently yes & vague words (continued)

07 W	*So yes, she also told us something and coincidentally, we were playing around a bit*
08 W	*yesterday with the hmm birth plan heehee.*
09 P	*Yes, very good.*
10 W	*hmm And yes(.) for the rest yes(.) I have heard some stories of course. Hmmm (Interruption)*
11P	*Yes exactly(.) yes.*
12 W	*Yes, for the rest…*
13 P	*Do you have any specific wishes? Things that you say during childbirth we would really like or*
14 P	*would like very much. If we're in charge, would we love to have it like this or whatever?*
15 W	*hmm*
16 Next of kin (N)	*Anyway, you'd like to be in the hospital.*
17 P	*Look, that's already an important thing*
18 W	*Yes(.) yes*
19 P	*Okay (.) yes.*
20 W	*Yes that…hmm*
21 N	*For the rest it's yes (.) partly to see how it goes it's the first time so…*
22P	*Yes(.) it's all new.*
23 W	*Yes(.) yes and we are- I think we're pretty level-headed that I'm kind of like hmm what*
24 W	*should happen(.) should happen Heehee.*

In the example above the frequent use of the word 'yes' (underlined) is highlighted. In lines 5, 7 and 10, the patient demonstrates that she has thought about her birth. The professional repeatedly responds by saying 'yes' (line 6, 9, & 11) (step 4). Line 12 demonstrates that it is not clear for the patient what information the professional wants. In lines 3, 7, 10 and 13 of the same fragment, the use of vague words is illustrated (step 3). Even when the meaning of the prior turn seems insufficiently clear, e.g. because of the use of vague words, the recipient responds with a 'yes'.

In line 18 and 23, the use of a double 'yes' is illustrated. The literature states that a double 'yes' is not an intense version of a single 'yes'. Depending on de peak pitch, a double 'yes' can mean that the previous speaker provides too much information that already is known or that the previous speaker is misaligned with an earlier utterance of the speaker[21]. The double 'yes' in lines 18 and 23 seems to be a response to the previous speaker that the provided information was already known (step 4).

The use of vague words, as mentioned in the example above, is a second mechanism discussed within this theme. Actions are packaged (step 3) in vague words such as 'some stories' or 'things'. This is also illustrated in example 7 (table 4.10), in which participation in Non-Invasive Prenatal Testing (NIPT) is discussed.

Table 4.10: Example 7: Vague words

01 P	*Let's check hee hee indeed (.) hey and suppose something would show up at the NIPT,*
02 P	*that there would be a syndrome or something in your child, what would that mean for you?*

The last mechanism that is discussed in the context of this heading is finishing each other's sentences to indicate 'being on the same page'. The professional seemed to understand the patient even before she finished her sentence (step 4). In example 8 (table 4.11), the birth is discussed.

Table 4.11: Example 8: Interruptions

01 P	*So the whole birth she had -*
02 W	*Yes(.) yes.*
03 P	*And your husband?*
04 W	*Also.*
05 P	*Also.*
06 W	*He also the umbilical cord – ()*
07 P	*Cut.*
08 W	*Yes(.) yes. That was nice.*
09 P	*(interruption partial overlap) Okay(.) And do you have any further wishes because it says you*
10 P	*might want that pump, that Remifentanil huh?*

In the example above, in lines 7 and 9 the professional interrupted the patient. In line 7, she finished the patients sentences, in line 9 she closed the topic and raised the next topic on the agenda. Interruptions are normal in informal interactions, and women are interrupted more often than men (95% of the professionals was female). Interruptions also fit into interactions with the focus on agreement. Agreeing answers come earlier, even with partial overlap. These utterances have an affiliative character, orientated on comfort, support and reinforcement[22]. The double 'yes' (line 2 and 8) spoken by the patient seemed like a response to the professional, signaling that the provided information was already known (step 4)[21].

This theme is characterized by a focus on agreement even when the meaning of the prior turn seems unclear, e.g. due to the use of vague words or incomplete sentences. The focus on agreement was also found in patients' responses on lighthearted interactions. The frequent use of the word 'yes' could be understood as a form of confirmation or as a listen token, and the effect on the conversation is that issues are handled rather quickly and are discussed somewhat superficially (step 5). The speaker, mostly the patient, is not encouraged to provide extra information.

Offering information and options

The interactional mechanisms described within this theme differ from the interactional mechanisms described above. When professionals were explaining options by providing information or clarifying a procedure by giving instruction, most of them start to speak faster, they sometimes even speak in a higher tone of voice, and they leave almost no pauses. Sometimes, it sounded as if they were reading a standardised written script aloud. During the information provision, there was little interaction, and the offered information was very detailed and standardised (step 3 & 4). After giving the information, professionals tended to keep all options open and persisted in giving information and offering options.

The lack of interaction during information provision is illustrated by comparing the frequency of taking turns during information-giving (Figure 4.1) to the turn-taking during other parts of the consultation (Figure 4.2). The coloured bars represent the amount of spoken text (step 4).

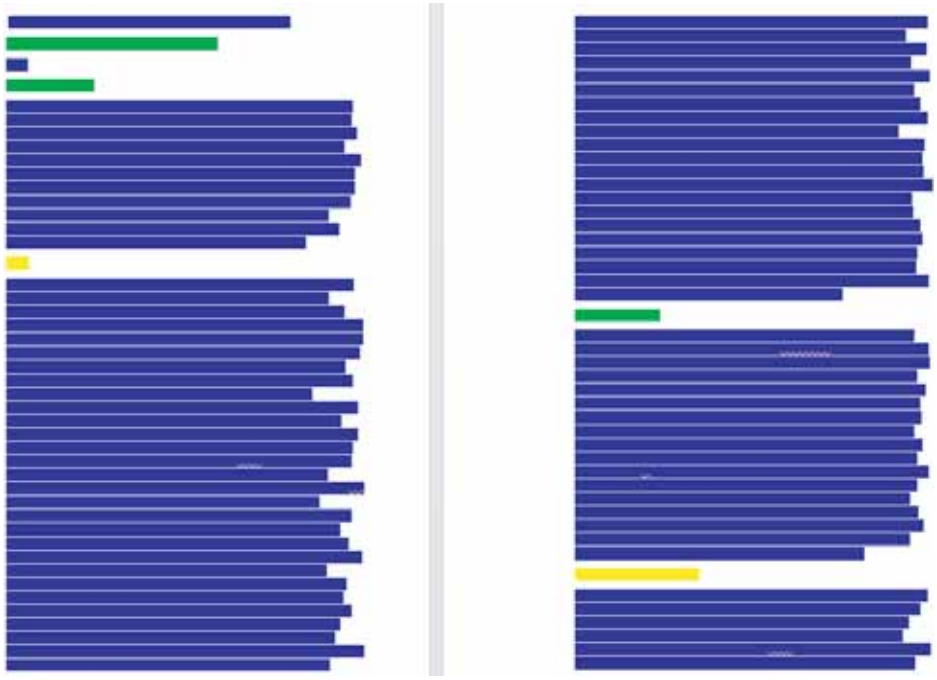

Figure 4.1 : Turn-taking during information-giving

Obstetric professional

Patients

Next of kin

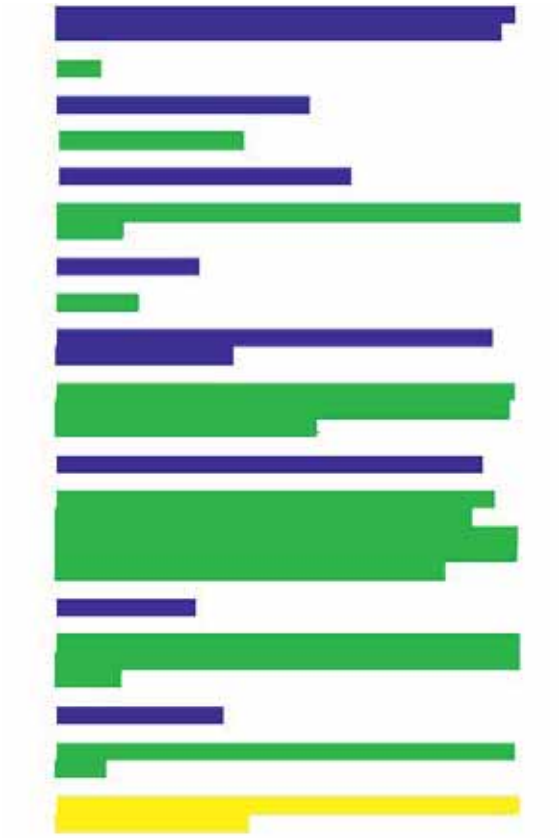

Figure 4.2: Turn-taking during other parts of the consultation

Obstetric professional
Patients
Next of kin

In the fragment represented in Figure 1, in which the choice of prenatal anomaly screening is discussed, the professional (blue) provides information for more than 7 minutes. Once, the patient responds with 'this is fine' (green) and her next of kin responds a few times by humming (yellow). The information given during these 7 minutes is very detailed, and the professional makes use of numbers and statistics, see example 9 (table 4.12):

Table 4.12: Example 9: Detailed information

01P	*You have a 90% chance that the baby actually has it. If we find Edwards or Patau*
02P	*syndrome, then it is somewhat lower. Then with one it is about 25% and with the*
03P	*other 75% chance that your child really has that condition.*

This way of providing information can be described as an objectivity-oriented strategy of information giving. When professionals use this strategy, they intended to give solid, objective, accurate standardised information. Within this strategy, the information giving is sometimes read verbatim from a standardized written script with scenarios[23].

Another mechanism discussed within this theme is the way standardised information is provided by professionals. The discussion often starts with a question to assess the patient's prior knowledge, however the professionals are giving information without any referral to the patient's prior knowledge. An example of this mechanism is shown below (example 10) (table 4.13).

Table 4.13: Example 10: Giving standardised information

01 P	*What do you know about it? Before I explain everything, that doesn't seem very useful to me either.*
02 P	*But it is important that you always know what you are getting into when you start this type of*
03 P	*testing.*
04 W	*I think the blood is taken and then I think it is actually the conclusion that there is a chance and then*
05 W	*you should be examined more closely or you can have yourself examined more closely. That's a bit*
06 W	*what I don't know very clear heehee.*
07 P	*Something like that,*
08 N	*Yes the same(.) we just really discussed it just the two of us but I've always said *** yes it's your body*
09 N	*and at the moment you are responsible, is so strong but hmm it's all your choice and*
10 N	*erm.(interruption P)*

Table 4.13: Example 10: Giving standardised information (continued)

11 P	*From a legal-technical point of view, it certainly is. (Yes(.) no(.) no but I mean interruption N) But you*
12 P	*are the father of the child of course so you can feel free to think something about it*
13 N	*(interruption talking) I have to feel comfortable with it and I certainly do. (Yes interruption P)*
14 N	*(Yes interruption V) I feel right now, I feel (Yes interruption V)*
15 N	*I'm totally comfortable with it. Hmm (Yes interruption V) That *** feels and determines*
16 N	*things (Yes interruption P) as she reasonably wants.*
17 P	*(.) What she thinks is important.*
18 N	*Yes(.) yes if it's all reasonable then I think so, then I'll definitely go with it yes, otherwise I'll hit the*
19 N	*brakes.*
20 P	*Yes I think it is important that you agree because it is quite important this topic and indeed it is*
21 P	*important that you know well what you are getting into for that when you talk about the NIPT it is*
22 P	*about an investigation that will count the child's chromosomes ,_ _ _*

The last mechanism discussed within this theme is keeping options open. In example 11 (table 4.14), in which the induction of labor is discussed, the professional keeps offering the patient options.

Table 4.14: Example 11: Offering options

01 W	*So since I thought that this conversation was also a bit of a look as well what steps can be taken now*
02 W	*and when (Yes, yes interruption P) should I be here with my bag if it all doesn't work.*
03 P	*Yes, but that's (.)hmm in that sense. .. hmm You do have a lot of choice yourself how we continue*
04 P	*these last week's hmm (.) it's really a little (.) I'm trying now. I'm going to tell you: what is there what*

Table 4.14: Example 11: Offering options (continued)

05 P	*can we do and then you can decide what we want and (.) so one possibility is membrane sweeping*
06 P	*and we can also do that several times (.) That is possible today but we can make an appointment*
07P	*hmm.*
08 W	*Okay.*

Continued after physical examination (2nd part of example 11)

09 W	*I mean more (.) suppose we membrane sweeping on Thursday (Yes interruption P), we'll wait it out(.)*
10 W	*we'll be on Friday.*
11 P	*Yes.*
12 W	*hmm when is a logical time to go*
13 P	*four, five six, Induce?*
14 W	*Induce (.) that Monday.*
15 P	*That is also possible on Saturday, Sunday or Monday. Yes.*
16 W	*You do work every (Yes interruption P) I thought maybe it's not allowed on the weekend.*
17 P	*Yes, weekends are also allowed.*
18 W	*After (.) yes … Yes. Pfft*

In the first sentence, the patient asks for information. In the next turn (line 3), the professional does not answer the question but presents some options (step 4). In line 9 the patient rephrases her question, but the professional continues to provide information on the options (lines 13, 15). The patient's responses in line 18 seem to indicate that she is looking for something other than information on her options in line with her question in lines 1 and 2 (step 4). Professionals seem to intend to offer the patient a lot of space and options. However, sometimes the patient seems to be looking for guidance. Professionals find it difficult to give advice and guidance in an autonomy-supportive way. They tend to use a consumerist model by giving more options and information instead of a conversational model, in which both parties are actively involved and in which professionals recognize a patient's need for help and address issues that could account for the patient's hesitation[24,10].

This theme shows a specific interactional pattern during offering information and options that is characterized by less interaction between professional and patient, which differs from the previously discussed interactional patterns.

DISCUSSION

To the best of our knowledge, this is the first study that aimed to identify mechanisms of ASC that maternity care professionals use during decision-making in prenatal consultations. We found eight mechanisms of ASC in prenatal decision-making, which were classified into three overarching themes: a) 'Lightheartedness', b) 'Orientation to agreement' and c) 'Offering information and options'. Professionals keep the interaction lighthearted by using (I)minimizing language and (II)humor. They aim for joint agreement and understanding by frequently using the word (III)'yes', (IV)vague words and (V) interruptions. During offering information and options, the interaction style changed. In this theme, the maternity care professionals (VI)reduced their interaction with the patient and (VII)gave detailed and standardized information while they (VIII)kept offering options.

Comparing our results with concepts and models on ASC in general health care revealed some remarkable aspects[4,8,10]. In line with the literature, professionals gave priority to relationship building to fulfil the patient's psychological need of relatedness[9,25,26]. However, they used other mechanisms to build and protect their relationship with the patient than those that were presented in concepts and models on ASC[10]. The results show that the professionals included in our study protected their relationships by using minimizing language, which reduces the seriousness of the conversation about decisions regarding pregnancy or delivery[19]. The professionals in our study also frequently used humour to convey a serious or emotional message, thus protecting the relationship while dealing with the patient's discomfort[20]. Besides these mechanisms, professionals also built and protected their relationship with the patient by creating an atmosphere of understanding and agreement, which can contribute to a climate in which decisions seems quick and easy. Mckenzie et al.[27] also found that midwife-patient consultations appeared comfortable and unconstrained and that laughter was common. Although such an informal health climate was described before, to the best of our knowledge, this study is the first that unravels the interaction mechanisms and their effects on decision-making. These mechanisms, which comprise the frequent use of 'yes', vague words and interruptions, make discussions somewhat superficial because professionals and patients seem to understand each other rather quickly. It is worth giving priority to relationship building, as relatedness is the overarching mechanism to support patients' autonomy in consultations. However, in professional-patient relationships, it is also important to take time to really become acquainted with the patients and to elicit their concerns and expectations[26].

A relatively superficial relationship can potentially undermine perceiving the patient's deeper feelings, e.g. fear of labour pain or of loss of control, which could complicate

competence building and autonomous decision-making. The professional-patient relationship can be at risk if competence building is insufficient, issues are discussed too perfunctorily, and, consequently, decisions are made too soon. In most instances, if everything goes well, this will be without consequences (e.g. negative screening results, healthy born babies). However, it could become a problem if something unexpected happens (e.g. the preferred place of birth is not available).

Our results indicate that maternity care professionals facilitate their patients' psychological need 'competence' almost exclusively by providing detailed information and the need 'autonomy' by offering options. We know from the literature that to meet patients' need for competence, it is also important to offer the patient structure and guidance[8,10]. In some consultations, it seemed that patients expected other responses, e.g. guidance, such as in example 11 concerning offering options. The informal character of the consultations possibly made it less appropriate for professionals to use more competence-building interaction mechanisms, such as offering guidance using their professional knowledge or asking patients to summarize their options. We know from the literature that although it is important to provide professional guidance, professionals find it difficult to do so in an autonomy-supportive way because they are afraid to limit the patient's autonomy[10]. Thus, compared to concepts and models on ASC, professionals seem to use other mechanisms to fulfil patients' need for relatedness and only a few mechanisms to meet patients' need for competence and autonomy.

Implication of these results

The results of this study made it possible to enrich existing concepts and models and to enable maternity care professionals to improve decision-making processes in daily practice. The results showed that it is possible to add minimising language and humour as mechanisms to fulfil the psychological need relatedness to existing concepts and models on ASC. Humour and minimizing language are valuable interaction mechanisms that enable professionals to minimize a patient's discomfort or fear and to build or protect the relationship. Also, the mechanisms described in the theme 'Orientation to agreement' could have a positive effect on the relationship between professional and patient. However, these mechanisms also have the potential to threaten this relationship, because decisions could be made too easily without discussing the patient's concerns and expectations. It might, therefore, be important that professionals reflect upon the way in which they build and protect relationships in relation to decision-making. The results show that professionals have a small repertoire to meet their patients' psychological needs, 'competence' and 'autonomy'. This reflection can help professionals to possibly pay more attention to other mechanisms described in concepts and models on ASC to meet patients' needs for 'competence' and 'autonomy', especially in relation to decision-making. Our findings can help professionals reflect on their own autonomy-supportive consultations because our results are directly gleaned from daily practice.

Strengths and limitations

A strength of this study is the large and rich data set, which enabled us to investigate 20 consultations of 20 different professionals in different contexts. The audio-taped

interactions provided the opportunity to meticulously analyse the daily practice of interactions between professionals and patients during decision-making. We realize that we might have influenced the interactional practices by observing and audio-taping them, which is inherent to observing any interactions. We reduced this limitation by taking feedback from all parties afterwards. We especially gained confidence that our results are recognisable by requesting feedback of two patient representatives, who were able to provide several personal examples of the mechanisms we described in this study.

Our analysis was limited to the spoken interaction due to the use of audiotapes instead of video recording. From other studies we knew that audiotapes are a proven concept in prenatal obstetric consultations[28]. Also, the use of audiotapes is common within research using concepts and analytic procedures of CA. This deliberate choice offered us the opportunity to include a relatively diverse and large population of professionals and patients.

Another limitation is that we only know what professionals said and that we do not know for sure why they said something in a certain way. We tried to optimize our interpretations by means of data sessions and discussions in our interdisciplinary research team. In a future study, we aim to explore why professionals keep their consultations comfortable and unconstrained most of the time and, by doing so, neglect relevant information and perspectives which diminish the patients' competence and autonomy.

Although we used the NTPP, we do not know to what extent the patients felt part of the decision-making process. In a future study, it can be useful to add a patient survey to measure patients' perceptions of the decision-making process.

CONCLUSIONS

This was a study into autonomy-supportive decision-making in prenatal consultations, focusing on the ways in which the interaction was steered towards fulfilling the three psychological needs (relatedness, autonomy, competence).

This study shows that in moments of decision-making, professionals use minimising language and humour as mechanisms to fulfil the psychological need 'relatedness'. Secondly, our results show that professionals use only a few mechanisms to meet the patients' psychological needs 'competence' and 'autonomy'. Professionals mainly use information giving to meet patients' need for competence. To meet patients', need for autonomy, the professionals keep many options open. This suggests that professionals could pay more attention to other mechanisms to meet patients' needs for 'competence' and 'autonomy'. More research is necessary to unravel why there seems to be an orientation to agreement, as well as the light-hearted and almost informal nature of the consultations.

Acknowledgements

We would like to thank all professionals and their patients for participating in this study. A special thanks goes to the colleagues who participated in the data sessions giving input and feedback, especially Marije van Braak, Universiteit Utrecht, Departement Talen, Literatuur en Communicatie. Also a special thanks for members of the Motherboard, Katie Jonker and Chamali Heijblom, and to David Brophy for translating the consultation fragments.

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CHAPTER 4

Appendix

Appendix A Table: Simplified Jeffersonian transcription notation

W	*patient**	Hmhm	*uh-huh-ing*
N	*next of kin*	Hmm	*ponder*
P	*professional (midwife or obstetrician)*	-	*unfinished sentence*
Heehee	*laugh*	—	*speaker is interrupted*
....	*silence*	_ _ _	*speaker continues*
(.)	*gap in talk of ‹0.3 seconds*	,	*a slight rise in intonation*
.	*falling intonation*	?	*strongly rise in intonation*

*In line with the usual jargon in the medical domain, the term patient has been chosen

CHAPTER 5

Autonomy Support in Prenatal Consultation: A Quantitative Observation Study in Maternity Care

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Submitted

ABSTRACT

Problem
Maternity care professionals need to guide their patients through an increasing number of decision-making processes. During these processes, professionals focus on providing information but less on decision support.

Background
Professionals could help their patients during decision-making by creating an autonomy-supportive healthcare climate. Through autonomy-supportive interactions, professionals can meet patients' three basic psychological needs, autonomy, competence, and relatedness, while stimulating patients' self-regulated behavior, therefore, supporting them in making their own choices.

Aim
The study aimed to quantify the frequency in which maternity care professionals use autonomy-supportive and autonomy-thwarting interactions during prenatal consultations and the association between these interactions and patients' perceptions of the healthcare climate during consultation.

Methods
A quantitative structural observation study was conducted in 2 hospitals and 16 midwifery practices in the Netherlands. Professional interactions were analyzed with the Coding and Observing Need-Supportive Consultation in Maternity Care Consultations (CONSUL-MCC). The Healthcare Climate Questionnaire (HCCQ) survey assessed the patient-perceived healthcare climate during the consultation.

Results
We observed that professionals derive their autonomy-supportive interactions from a small repertoire. They tend to use more autonomy-supportive interactions in which they give room to the patient rather than supportive interactions that stimulate active patient engagement. During structuring interactions, they tend to use more informing than supportive interactions for decision-making.

Discussion
Patients were rarely stimulated to be actively engaged in the consultations, while patient engagement is important to offer decision-making support.

Conclusion
Professionals could improve their autonomy-supportive consultation by paying explicit attention to interactions which actively involve patients and by offering structure.

INTRODUCTION

Maternity care professionals need to guide their patients through an increasing number of decision-making processes. The number of topics that need to be discussed and the number of decisions that need to be made in prenatal consultations have increased due to the broader scope of screening for genetic disorders, the increasing number of options for care during pregnancy and birth, and the trend to start supporting the transition into parenthood during pregnancy[1].

Maternity care professionals find it challenging to guide their patients through these decision-making processes. Research has shown that despite the attention for decision-making in professional training, professionals still tend to offer decision support mainly by giving information [2-6]. Although providing information is part of the decision-making process, patients need more support to be able to make their decisions, such as encouragement to think about a possible decision[2,7]. Research in maternity care shows that professionals dedicate much effort to building and protecting their relationship with their patients[8]. However, in these conversations, there is little room to discuss patients' fears, values and expectations, which is necessary for decision support,[3,7] especially if decisions need to be reconsidered in light of changing circumstances during birth.

The Self-determination Theory (SDT), a macro theory of human motivation, postulates that more autonomous forms of motivation are facilitated by satisfaction of the three basic psychological needs, autonomy (feeling of ownership, endorsement, and choice), competence (feeling of capability and growth), and relatedness (feeling of belonging and connection). Satisfaction of these needs stimulates patients' self-regulated behavior and therefore supports them in making their own choices regarding their health[9]. In autonomy-supportive consultation (ASC), professionals create an autonomy-supportive healthcare climate for their patients, which can help them to make decisions[10].

Healthcare professionals can use two types of interactions with patients: those which satisfy patients' basic psychological needs and those which thwart these needs. Regarding the 'need-satisfying' interactions, professionals can meet patients' need for autonomy by using autonomy-supportive interactions, such as listening reflectively and exploring patients' thoughts, while they can meet patients' need for competence by using structuring interactions, such as providing information and asking patients to summarize the provided information. Need-thwarting interactions include controlling interactions, which thwart patients' need for autonomy, and chaotic interactions, which thwart their need for competence. Patients' need for relatedness can be satisfied if professionals create a warm healthcare climate, for example by using emphatic listening, whereas a cold healthcare climate thwarts patients' need for relatedness (Figure 5.1).

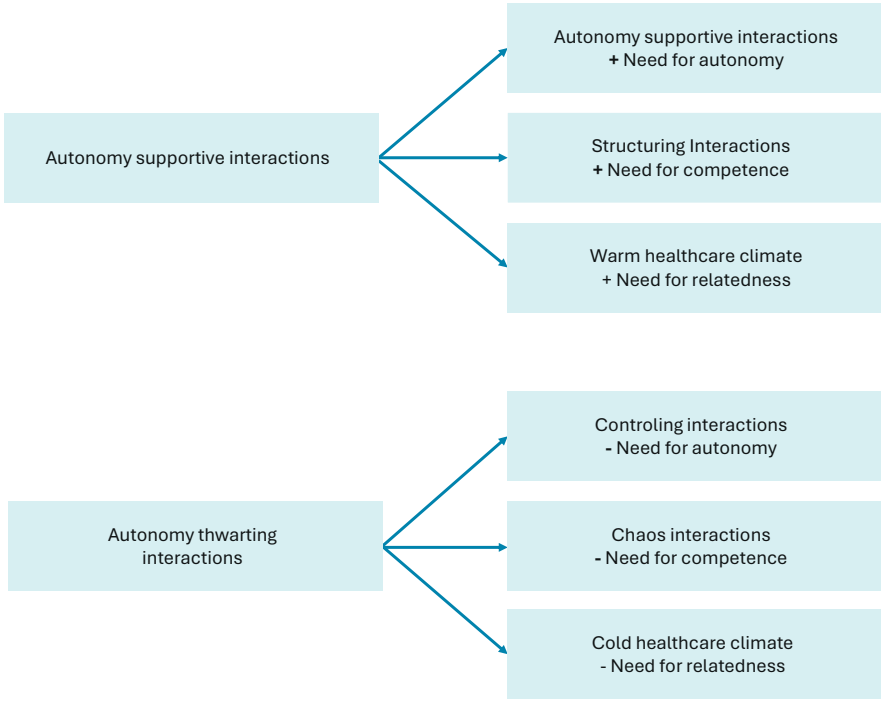

Figure 5.1: Autonomy-supportive and autonomy-thwarting interactions

The aim of this study was to quantify the frequency in which maternity care professionals use autonomy-supportive and autonomy-thwarting interactions in daily practice. In addition, we aimed to establish whether there is an association between autonomy-supportive and autonomy-thwarting interactions and the characteristics of patients and professionals, and whether there is an association between these interactions and the patient-perceived healthcare climate. The results of this study can help professionals to evaluate their repertoire of autonomy-supportive and autonomy-thwarting interactions and to eventually improve the autonomy-supportiveness of their consultations and thereby improve the decision-making support they offer to their patients. Furthermore, our results could facilitate teachers and trainers to adapt their training programs to help professionals to improve their autonomy-supportive interactions during consultation.

To reach our aim, we formulated the following research questions:

- Which autonomy-supportive and autonomy-thwarting interactions do maternity care professionals use in prenatal consultation in daily practice? What is the frequency of use of these interactions?
- Which characteristics of patients or professionals are associated with the use of autonomy-supportive or autonomy-thwarting interactions?

- Is there a relation between the frequency of use of autonomy-supportive or autonomy-thwarting interactions and the maternity care professional characteristics?
- Is there a relation between the autonomy-supportive or autonomy-thwarting interactions and the patient-perceived healthcare climate during consultations?

METHODS

Study design

To answer the research questions, quantitative data were analyzed that were collected via a structured observation approach to explore the professional-patient interaction[11]. Also, data were analyzed that were collected through a questionnaire measuring patients' perceptions of the healthcare climate during consultations.

Setting and sampling

The study was conducted in the Netherlands from March to October 2020 with two interruptions due to a Covid-19 lockdown. We sampled purposefully to include professionals and patients from a wide variety of settings in which the prenatal consultations took place[12]. The prenatal consultations took place in an academic hospital and a teaching hospital in Amsterdam and in 16 midwifery practices, both small and large ones, in urban and rural areas across the country. Patients were not selected a priori.

At the start of each consultation, the patient was invited to participate in the study. If the patient consented, the first author (JK) attended the consultation and audiotaped the interaction. During each consultation, a wide variety of issues were discussed, and decisions were made on topics such as participation in prenatal screening or a vaccination program, preferred care during birth, participation in an exercise program or patients' diet. As soon as the first author (JK) had finished her observation of a consultation, the next patient in the waiting room was invited to participate in the study.

Data collection

The interactions during a consultation were observed and coded using the Coding and Observing Need-Supportive Consultation in Maternity Care Consultations (CONSUL-MCC). This adapted SDT-based observation tool has been validated for use in maternity care[13]. The observation tool facilitates the observation and coding by defining the various aspects of the care professional's performance and by instructing the assessors what to focus on and how to judge their observations[14].

The CONSUL-MCC comprises a manual in which each item is described and illustrated by an example. The manual also includes an instruction on how to assess the audio fragments and to encode the items using a score form. The audiotaped consultations were divided into units of 5 minutes each to facilitate the assessors' focus on encoding

each fragment on all 41 items. Each item was scored on a 5-point Likert scale. The coding ranged from 0 (not observed at all) to 4 (observed continuously).

The CONSUL-MCC encodes the interactions of maternity care professionals on two axes: autonomy-supportive versus control, and structure versus chaos. Each factor is divided into two subfactors, and each subfactor is operationalized using three to six observable items (see appendix A). The healthcare climate has two overall items: the extent to which the climate is observed as warm and the extent to which the climate is observed as cold. A warm climate means that the health care professional is attentive to the patient's responses and uses emphatic listening, acknowledges patient's expressed feelings and emotions, engages in warm and friendly communication and shows unconditional respect, regardless of the patient's behavior. The climate is considered cold if the healthcare professional fails to establish connectivity and reciprocity[15].

The consultations were observed and encoded by JK for the first time in daily practice to gain a first general impression. Afterwards, the 5-minute units were encoded. To improve the reliability, the coding of the 5-minute fragments was compared to the coding in daily practice. In case of discrepancies, the audiotaped consultation was reassessed.

Directly after each consultation, the patient was asked to complete the Dutch version of the Healthcare Climate Questionnaire (HCCQ). This questionnaire was translated to Dutch and validated for use in Dutch mental healthcare by Jochems[16,17].For use in maternity care, we replaced 'the practitioner' by 'the midwife/obstetrician' and substituted the examples from the context of mental health with examples from the context of maternity care. The Dutch HCCQ comprises 15 statements, and patients score their level of agreement on a 7-point Likert scale (1 strongly disagree – 7 strongly agree) (appendix B).

The following patient characteristics were collected: age, parity and level of education. Characteristics collected from the professionals were age and work experience.

Analyses

All quantitative analyses were conducted using IBM SPSS 28. First, we analyzed the characteristics of the participants and the consultations. To assess the frequencies of the specific interactions used by professionals during their prenatal consultations, we used descriptive statistics (Mean, Median, Mode, SD and range) at the consultation level, i.e. for the entire consultation. The frequencies of the specific interaction items are reported under the axis and the subfactors they belong to as presented in Appendix A. Also, the observed healthcare climate was reported for the entire consultation.

We computed Spearman's correlations for all continuous variables included in the study. Finally, we assessed the differences in levels of autonomy support interactions and structuring interactions across the various professionals using the independent-samples Kruskal-Wallis Test.

To assess the patient-perceived healthcare climate, we analyzed the frequencies and percentages of level of agreement for each statement. To find correlations between professionals' interactions and the healthcare climate as perceived by patients, we computed Spearman's correlations. We investigated if autonomy-supportive or structuring interactions were correlated with the patient-perceived healthcare climate. We then assessed the differences between the levels of the healthcare climate as perceived by the patients across the various professionals using the independent-samples Kruskal-Wallis Test.

RESULTS

Data characteristics

Maternity care professionals

Of the 23 maternity care professionals who participated in this study, 17 were primary care midwives, 2 were hospital-based midwives, and 2 were obstetricians. The mean age of these participants was 38 years (25 – 64 years), and their mean work experience was 14 years (3 – 43 years).

Patients

In total, 104 patients participated in this study. Their average age was 32.5 years (21-44 years). Of these patients, 34 (32.7%) were pregnant for the first time, 41 (39.4%) for the second time and 29 (27.9%) for the third time or more (3-6). The level of education was low in 4.8%, medium in 30.8% and high in 64.4%.

Consultations

In total, 104 consultations were observed. The mean duration of a consultation was 21 minutes (range 7 – 73 minutes), resulting in 453 five-minute fragments. Most of the longer consultations included an ultrasound scan.

Autonomy-supportive and autonomy-thwarting interactions of maternity care professionals

Table 5.1 shows the frequencies of the interaction items on the two axes: autonomy support versus control and structure versus chaos. In general, the professionals used interactions based on a small repertoire. We found that professionals regularly use autonomy-supportive interactions, such as 'leaves room to the patient to tell' (2.34, SD=0.57), and they sometimes use structuring interactions, such as 'clarifies follow-up of patients' goals' (1.77, SD=0.55). They rarely used controlling interactions (0.73, SD=0.46), and they hardly ever used chaotic interactions (0.09, SD=0.11). The most frequently used controlling interaction was 'determines the topics of the conversation' (1.19, SD=0.96). In the further description of the results, we focus on the autonomy-supportive and structuring interactions.

The contributions of the sub-factors to each factor differ. Within the factor 'autonomy support', professionals more frequently used an attuning approach (2.31, SD=0.58) than a participatory approach (1.41, SD=0,80). Furthermore, within the factor 'structure', professionals more frequently used a clarifying approach (1.81, SD=0.59) than a guiding approach (0.94, SD=0.55).

There was a wide variation between the interaction items belonging to the sub-factors (attuning, participative, guiding and clarifying). The following interaction items were observed frequently: 'leaves room to the patient to tell' (2.43, SD=0.57), 'uses inviting language' (2.31, SD=0.68), 'provides information' (2.41, SD=0.66) and 'uses attuned language' (3.00, SD= 0.07). Other items were rarely observed: 'allows emotions and actively names them' (0.28, SD=0.41), 'encourages to think about a possible approach with important kin' (0.06, SD=0.17), 'actively gauges what degree of autonomy the patient wants' (0.04, SD=0.03), 'stimulates self-reflection' (0.13, SD=0.25), 'mentions previous successes' (0.07, SD=0.18), 'provides alternatives' (0.25, SD= 0.43), 'uses appropriate role models' (0.03, SD=0.12) and 'summarizes and requests repetition' (0.18, SD=0.24) (see table 5.1).

Table 5.1: Observed autonomy-supportive and autonomy-thwarting interactions

		Mean	SD	Min	Max	Median	Mode
Autonomy support		2.34	0.57	0.50	3.00		
Attuning approach		2,31	0.58	0.50	3.00		
1	...leaves room to the patient to tell	2.43	0.57	1.00	3.00	2.60	3.00
2	...listens reflectively and explores	1.03	0.75	0.00	3.00	0.83	.00
3	... aligns with the patient's perspective	1.93	0.92	0.00	3.00	2.00	3.00
4	...uses questions that offer space to the patient	1.75	0.74	0.25	3.00	1.67	2.00
5	...allows emotions and actively names them	0.28	0.41	0.00	2.00	0.00	0.00
6	...uses inviting language	2.31	0.69	0.40	3.00	2.33	3.00
Participative approach		1.41	0.80	0.00	3.00		
7	...allows time	0.65	0.70	0.00	2.67	0.27	0.00

Table 5.1: Observed autonomy-supportive and autonomy-thwarting interactions (continued)

		Mean	SD	Min	Max	Median	Mode
8	…gives voice	0.95	0.69	0.00	3.00	0.75	0.50
9	…explores the patient's goals	0.85	0.64	0.00	2.33	0.75	0.00
10	…encourages to think about a possible approach	0.78	0.72	0.00	3.00	0.67	0.00
10a	…encourages to think about a possible approach with important kin	0.06	0.17	0.00	1.00	0.00	0.00
11	… offers an explanation	1.25	0.99	0.00	3.67	1.00	0.00
12	… actively gauges what degree of autonomy the patient wants	0.04	0.029	0.00	0.21	0.00	0.00
Control		0.73	0.46	0.00	1.75		
Demanding approach		0.72	0.46	0.00	1.75		
13	…shows expertise, demands respect	0.019	0.09	0.00	0.67	0.00	0.00
14	…uses controlling language	0.16	0.33	0.00	2.00	0.00	0.00
15	…takes over the conversation	0.18	0.31	0.00	1.50	0.00	0.00
16	…determines the topics of the conversation	1.19	0.96	0.00	3.00	1.00	1.00
17	…. interrupts the patient	0.13	0.30	0.00	2.25	0.00	0.00
Domineering approach		0.03	0.11	0.00	0.80		
18	…puts pressure on the patient	0.02	0.06	0.00	0.40	0.00	0.00
19	… expresses criticism	0.02	0.07	0.00	0.50	0.00	0.00
20	…introduces guilt and shame	0.00	0.00	0.00	0.00	0.00	0.00

Table 5.1: Observed autonomy-supportive and autonomy-thwarting interactions (continued)

		Mean	SD	Min	Max	Median	Mode
21	...is irritated, impatient	0.02	0.10	0.00	0.82	0.00	0.00
Structure		1.77	0.55	0.64	3.00		
Guiding approach		0.94	0.71	0.00	3.00		
22	...sets realistic goals in collaboration	0.49	0.56	0.00	3.00	0.33	0.00
23	...provides task-oriented or progress-oriented feedback	1.36	0.88/ 0.89	0.00	3.00	1.21	1.00
24	...stimulates self-reflection	0.13	0.25	0.00	1.00	0.00	0.00
25	...mentions previous successes	0.07	0.18	0.00	1.00	0.00	0.00
26	.... uses tools	0.39	0.40	0.00	2.50	0.33	0.00
Clarifying approach		1.81	0.59	0.64	3.00		
27	...provides alternatives	0.25	0.43	0.00	2.40	0.00	0.00
28	...uses appropriate role models	0.03	0.12	0.00	0.67	0.00	0.00
29	...provides information	2.41	0.66	0.33	3.50	2.50	3.00
30	...summarizes and requests repetition	0.18	0.24	0.00	1.00	0.00	0.00
31	...clarifies follow-up of patients' goals	0.92	0.58	0.00	3.00	1.00	1.00
32	...uses attuned language	3.00	0.07	2.50	3.33	3.00	3.00
Chaos		0.09	0.19	0.00	0.80		
Abandoning approach		0.08	0.21	0.00	1.29		
33	...provides information that leaves patient in uncertainty	0.07	0.17	0.00	1.00	0.00	0.00
34	...gives inappropriate feedback	0.02	0.09	0.00	0.71	0.00	0.00

Table 5.1: Observed autonomy-supportive and autonomy-thwarting interactions (continued)

		Mean	SD	Min	Max	Median	Mode
35	…uses an illogical conversation structure	0.004	0.03	0.00	0.25	0.00	0.00
36	…ignores reactions or concerns	0.05	0.18	0.00	1.00	0.00	0.00
Awaiting approach		0.05	0.14	0.00	0.67		
37	…does not intervene	0.008	0.008	0.00	0.08	0.00	0.00
38	…lets the patient find out for	0.02	0.09	0.00	0.67	0.00	0.00
39	…is distracted, absent	0.05	0.16	0.00	1.00	0.00	0.00
Healthcare climate							
40	Warm climate	2.76	0.39	1.80	3.33	3.00	3.00
41	Cold climate	0.004	0.03	0.00	0.25	0.00	0.00

Correlations between professionals' and patients' characteristics and autonomy-supportive interactions

There were no significant correlations between the patient characteristics age, parity or level of education and the level of autonomy support (r= 0.041; r= 0.072 r= 0,032, respectively) or structure (r= -0.119 r= - 0.131; r= -0.061, respectively).

There were no significant correlations between the professionals' age or work experience and the level of autonomy support (r=0.018; r= 0.032, respectively) or structure (r= 0.081; r= 0.109, respectively).

The distribution of autonomy-supportive or structuring interactions was significantly different between the professionals (p< 0.001).

Patient-perceived healthcare climate

In general, patients perceived the healthcare climate during prenatal consultations as positive, as is shown in table 5.2. Their mean score on the 7-point Likert scale was above 6.29 for 14 of the 15 statements (6.29 - 6.95). Only statement 11, about the way maternity care professionals deal with the patient's emotions, scored lower (3.78). According to 44.2% of the patients, dealing with emotions was inapplicable during their consultation. Looking more closely, despite the small numbers, there was a little more spread on the statements which refer to active patient participation. This was also the case for the three statements which refer to the extent to which the professionals take the uniqueness of their patient into account.

Table 5.2: Descriptive statistics of the healthcare climate as perceived by patients (N= 104)

		Not applicable n (%)	(Strongly) disagree n (%)	Somewhat disagree n (%)	Neutral n (%)	Somewhat agree n (%)	(Strongly) agree n (%)
1	I feel that my maternity care professional offers me choices.				1 (1.0%)	5 (4.8%)	98 (94.2%)
2	I feel understood by my maternity care professional.				2 (1.9%)		102 (98.1%)
3	I can be open with my maternity care professional during our appointments.					2 (1.9%)	102 (98.1%)
4	My maternity care professional indicates that she has confidence in my ability to make choices regarding my pregnancy and childbirth.	1 (1.0%)			1 (1.0%)	1 (1.0%)	101 (97.0%)
5	I feel that my maternity care professional accepts me.						1-4 (100%)
6	My maternity care professional has made sure that I really understand my options and the choices I have.	4 (3.8%)			3 (2.9%)	5 (4.8%)	92 (88.5%)
7	My maternity care professional encourages me to ask questions.	1 (1.0%)		1 (1.0%)	1 (1.0%)	5 (4.8%)	95 (92.2%)
8	I have great confidence in my maternity care professional.					1 (1.0%)	103 (99.0%)
9	My maternity care professional answers my questions completely and carefully.	1 (1.0%)		1 (1.0%)		1 (1.0%)	101 (97.0%)
10	My maternity care professional listens to how I like to do things (regarding my pregnancy).	7 (6.7%)			2 (1.9%)	3 (2.9%)	92 (88.5%)

Table 5.2: Descriptive statistics of the healthcare climate as perceived by patients (N= 104) (continued)

		Not applicable n (%)	(Strongly) disagree n (%)	Somewhat disagree n (%)	Neutral n (%)	Somewhat agree n (%)	(Strongly) agree n (%)
11	My maternity care professional is very good at dealing with people's emotions.	46 (44.2%)		1 (1.0%)	1 (1.0%)		56 (53,8%)
12	I feel that my maternity care professional cares about me as a person	2 (1.9%)		1 (1.0%)	1 (1.0%)	8 (7.7%)	92 (88.4%)
13	I feel comfortable with the way my maternity care professional talks to me				1 (1.0%)		103 (99.0%)
14	My maternity care professional tries to understand how I see things before making a new proposal.	5 (4.8%)	1 (1.0%)	2 (1.9%)	2 (1.9%)	4 (3.8%)	90 (86.6%)
15	I feel able to share my feelings with my maternity care professional	2 (1.9%)			2 (1.9%)	2 (1.9%)	98 (94.3%)

Correlation between professionals' interactions and the patient-perceived healthcare climate

We found a weak but significant correlation between autonomy-supportive interactions and a positive patient-perceived healthcare climate (r=0.27 (p= 0.02)). We found no correlation between structuring interactions and the patient-perceived healthcare climate (r= 0.099 (p=0.32)).

The level of the patient-perceived healthcare climate was the same across the various professionals (p=0.370).

DISCUSSION

The aim of this study was to quantify the frequency in which maternity care professionals use autonomy-supportive and autonomy-thwarting interactions during prenatal consultations in daily practice and to assess whether these interactions are associated with the patient-perceived healthcare climate during the consultation.

The overarching finding of this observation study was that professionals base their autonomy-supportive interactions on a small repertoire. Moreover, they tend to use more autonomy-supportive interactions, in which they give room to the patient to participate, and fewer supportive interactions that stimulate active patient involvement. Regarding the structuring interactions, they tend to use more clarifying and informing interactions. Autonomy-thwarting interactions were hardly observed during regular prenatal consultations.

Although we found that different professionals exhibited different autonomy-supportive and structuring interactions, we found no differences between their consultations in terms of the patient-perceived healthcare climate. There was only a weak significant correlation between the used autonomy-supportive interactions and the patient-perceived healthcare climate.

The findings that professionals use informing interactions to meet patients' need for competence and mainly fulfil patients' need for autonomy by offering room to the patient are in line with the literature and as expected[2-6] .However, the more interesting finding of this study is that certain interactions were hardly observed, such as summarizing and asking the patient to repeat information. The lack of some interactions has important consequences for the consultation, as is further discussed in the next paragraphs. In line with our expectations, autonomy-thwarting interactions were hardly observed[13].

The used observation tool categorizes interactions into need-supportive or need-thwarting interactions. Research in other domains, such as sports, suggested that there is a third group of interactions in between the spectrum of need-supportive and need-thwarting interactions, the so-called need-unfulfillment interactions[18]. Based on this three-stages model, the patient could perceive need satisfaction, thwarting or

unfulfillment. Need unfulfillment is defined as the feeling that one's need is neglected[18]. Professionals may not actively thwart patients' needs, but they may instead overlook them. Need unfulfillment has been proposed to be related to more passive forms of functioning, such as disengagement of patients[19]. Looking at our results from the perspective of the proposed three-stages model, professionals seem to ignore some aspects of meeting patients' need for autonomy and competence rather than really thwarting them.

Focusing on some specific rarely observed interactions, we noticed that professionals rarely summarized their conversation or asked patients to state in their own words what they understood of the discussed information. This is remarkable because this so-called teach-back method is an evidence-based way of improving patients' understanding of the provided information and thereby fulfilling their need for competence. Therefore, teaching back is part of a professional's communication training[20]. Secondly, professionals rarely encourage patients to think about possible approaches with their important kin. The importance of peer support for autonomy-supportive decision-making as well as for decision-making in prenatal screening has been described in literature[2,21], not only from the perspective of meeting patients' need for autonomy but also from the perspective of meeting the needs of the other parent[22]. Studies have reported that the other parent could experience stress due to receiving insufficient information about pregnancy and childbirth[23].

Other interactions that were hardly observed were those that intend to offer the patients decision-support by meeting their need for autonomy, such as 'asking for the preferred degree of autonomy'. Also, there were few observations of more structuring interactions to meet patients' need for competence, such as 'stimulating self-reflection' or 'providing alternatives'. It seems that professionals struggle with the extent to which they can or are allowed to offer decision support. However, literature showed that professionals could offer decision support on the condition that patients understand the importance of their contribution to the decision process, that patients understand their options and the pros and cons, and that patients' views, concerns and preferences are included[24]. It is also important to consider the degree of autonomy the patient desires[20].

In general, patients were satisfied with the perceived autonomy-supportive healthcare climate, which is in line with the findings of previous studies[25]. Interestingly, however, 44.2% of the patients in our study indicated that dealing with emotions was not applicable during the prenatal consultation. To be able to offer decision-support, professionals need to become familiar with patients' emotions such as fears, expectations, beliefs and motivations. Professionals become informed about these issues because patients spontaneously share this information or because the professionals encourage the patients to share this information[4,21]. However, when we compare the finding that dealing with emotions was not applicable during prenatal consultation with our observations of professionals' interactions, we see that, in line with patients' perceptions, 'allowing emotions and actively naming them' was rarely

observed. Apparently, discussing patients' emotions is not a common part of the offered decision support.

The findings of our study provide insight not only into the interactions that professionals use but also into the effects the interactions could have on the conversations during prenatal consultations. Patients were rarely stimulated to be actively engaged in the consultations. In fact, the effect of rarely used interactions which stimulate active patient engagement could become even stronger because need unfulfillment can cause more passive patient behavior and disengagement[19], while patient engagement is important to be able to offer tailored decision-making support[21,26,27]. In maternity care, this patient engagement is specifically important because knowing the patient is helpful for making a decisions about preferred care during birth[28]. Whether it is possible to realize the preferred care during birth depends on medical and organizational circumstances; it is important that the professionals are able to help their patients to adjust their decisions during this process. While the patient is in the birthing process, it is more complicated to discuss what really matters to them. Therefore, it seems important to have these conversations during prenatal consultations. Some patients mentioned that the professionals did not really know the patient's situation, while knowing patients' fears, norms and expectations is essential to meet patients' need for autonomy. We could not provide an explanation for this finding based on our data. However, based on the observed warm climate during the consultations, we suggest that professionals sometimes unintentionally ignore patients' basic psychological needs. We suppose that they are not sufficiently aware of patients' basic psychological needs and of the importance of meeting these needs.

Further research is needed to establish why professionals only partially meet patients' basic psychological needs. In de meantime, it could be useful if professional training or continued professional training paid attention to the positive effects of meeting patients' psychological needs on patients' self-regulated behavior and thereby on their decision-making capabilities.

Limitations

Since this research was not a longitudinal study, we do not know if some of the participating professionals and patients were already so familiar with each other that they did not need to discuss certain issues anymore. We suppose that this possibility may have had a small effect on our results, since professionals who already knew a patient very well could align with this patient's perspective without further questioning. This degree of familiarity was not observed frequently.

In the consultations, a wide variety of issues were discussed and various decisions were made. In the literature some authors suggest that professionals vary their autonomy support based on the complexity of the decisions that need to be made. Braddock et.al. (1999) categorized decisions into basic, intermediate and complex and indicated that professionals used more autonomy-supportive behavior for making complex decisions. Based on these categories, most of the included consultations involved both basic decisions (e.g. the timing of the next appointment) and complex decisions (e.g.

about vaccination)[29]. Therefore, we assume that our results provide a representative reflection of autonomy-support during prenatal consultations.

The HCCQ assesses the perceived social context (i.e., the need-supportive climate) rather than assessing if patients feel that their needs are supported (need satisfaction)[18]. Perceiving a healthcare climate as need-supportive does not automatically mean that the patient feels autonomous and competent. Also, the results may have been affected by the fact that patients completed the questionnaire immediately after the consultation. It is possible that patients perceive the healthcare climate as less autonomy-supportive later on, when they had time to reflect on the consultation. Although the consultations were not specifically chosen and almost all the invited clients agreed to participate, there was an overrepresentation of patients with a high educational level. This could affect the generalizability of our results

Patients' experiences during the process of giving birth can influence their perceptions of the prenatal care they received. For further research, it would be interesting to assess how patients perceive the prenatal healthcare climate and the prenatal decision-making process after giving birth.

CONCLUSION

Maternity care professionals use interactions which support their patients' need for autonomy by offering room and choice. To meet patients' need for competence, they use interactions which provide information. Because professionals are less inclined to use interactions that stimulate active patient participation, it is harder for them to really become acquainted with their patients, which hinders them in offering tailor-made decision-making support and decreases patients' autonomy. Also, patients' need for competence is only partly met, because professionals do not stimulate patients to discuss their deliberation process.

Professionals could improve their autonomy-supportive consultation practice by paying explicit attention to interactions which actively involve patients and by offering structure. Furthermore, professionals can challenge themselves to actively meeting patients' psychological needs and thereby facilitate their decision-making processes.

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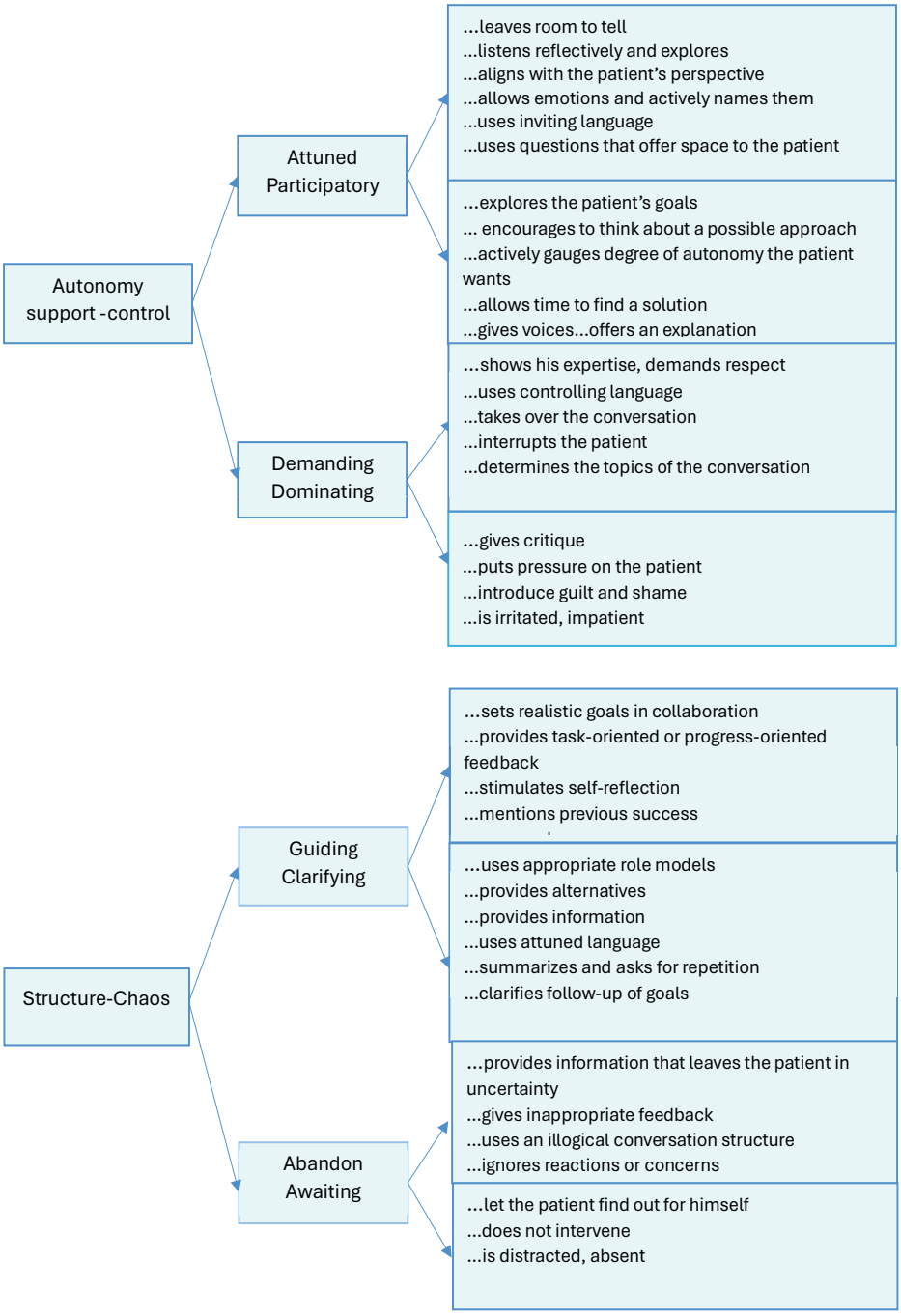
CHAPTER 5

Appendix

Appendix A: Descriptives of the COUNSEL-CCE axes, subfactors and indicators



Appendix B: Nederlandse Zorgklimaat vragenlijst (HCCQ)

Deze vragenlijst bestaat uit stellingen die gaan over uw verloskundig zorgverlener in het voorafgaande consult. Verschillende zorgverleners hebben verschillende stijlen in hoe ze omgaan met patiënten/ cliënten, en we willen graag weten hoe uw ervaringen zijn met uw verloskundig zorgverlener. Uw antwoorden zijn vertrouwelijk en zullen niet besproken worden met uw zorgverlener. Antwoordt u alstublieft eerlijk.

Omcirkel een cijfer van **1 (helemaal niet mee eens)** tot **7 (helemaal mee eens)** achter elke stelling.

Code audio-opname:	Beoordelaar:
Tijdslot:	Code pate:

1	2	3	4	5	6	7

1. Ik heb het gevoel dat mijn verloskundige/ gynaecoloog mij keuzes biedt.	1	2	3	4	5	6	7
2. Ik voel mij begrepen door mijn verloskundige/ gynaecoloog.	1	2	3	4	5	6	7
3. Ik kan open zijn naar mijn verloskundige/ gynaecoloog tijdens onze afspraken.	1	2	3	4	5	6	7
4. Mijn verloskundige/ gynaecoloog geeft aan dat zij vertrouwen heeft in mijn vermogen om keuzes te maken met betrekking tot mijn zwangerschap en bevalling.	1	2	3	4	5	6	7
5. Ik heb het gevoel dat mijn verloskundige/ gynaecoloog mij accepteert	1	2	3	4	5	6	7
6. Mijn verloskundige/ gynaecoloog heeft ervoor gezorgd dat ik mijn mogelijkheden echt begrijp en welke keuzes ik heb	1	2	3	4	5	6	7
7. Mijn verloskundige/ gynaecoloog moedigt mij aan om vragen te stellen	1	2	3	4	5	6	7
8. Ik heb veel vertrouwen in mijn verloskundige/ gynaecoloog	1	2	3	4	5	6	7
9. Mijn verloskundige/ gynaecoloog beantwoordt mijn vragen volledig en zorgvuldig.	1	2	3	4	5	6	7
10. Mijn verloskundige/ gynaecoloog luistert naar hoe ik graag dingen doe. (met betrekking tot mijn zwangerschap)	1	2	3	4	5	6	7
11. Mijn verloskundige/ gynaecoloog kan erg goed omgaan met emoties van mensen.	1	2	3	4	5	6	7
12. Ik heb het gevoel dat mijn verloskundige/ gynaecoloog om mij geeft als persoon	1	2	3	4	5	6	7
13. Ik voel mij niet goed bij de manier waarop mijn verloskundige/ gynaecoloog tegen me praat	1	2	3	4	5	6	7
14. Mijn verloskundige/ gynaecoloog probeert te begrijpen hoe ik dingen zie voordat zij een nieuw voorstel doet.	1	2	3	4	5	6	7
15. Ik voel mij in staat om mijn gevoelens te delen met mijn verloskundige/ gynaecoloog	1	2	3	4	5	6	7

CHAPTER 6

Maternity Care Professionals' Views on Good Counseling for Prenatal Aneuploidy and Anomaly Screening: A Qualitative Inquiry

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Submitted

ABSTRACT

Introduction

Maternity care professionals find the art of counseling for prenatal screening challenging. Autonomy-supportive counseling could help professionals support clients' self-regulated behaviour, enabling them to make their own choices. This study aimed to gain insight into professionals' views on good counseling. Understanding their perspectives can shed light on the underlying mechanisms that drive professionals to focus on providing information and offering options rather than decision-making support. These insights, in turn, can be instrumental in tailoring Education.

Methods

This qualitative study was conducted in the Netherlands among all 2813 Dutch maternity care professionals involved in counseling for prenatal screening. The answers to the open-ended question: 'In your opinion, what constitutes 'good' counseling for prenatal anomaly screening?' were coded according to the abbreviated grounded theory. Next, the research team elaborated on emerging overarching themes through the lens of autonomy-supportive counseling. Lastly, the researchers conducted a quantitative analysis of the qualitative data

Results

Exploring the parents' values was found to be an overarching theme. Providing information and free choice were important themes in the interaction before and during the decision-making. Regarding the outcome, parents making their own choices was the most named aspect.

Conclusions

Professionals' views about free choice and making their own choices are reflected in their non-directive attitudes, which complicate clients' more autonomous decision-making. Professionals need to offer structure to support clients in making their own choices. We suggest explicit attention in education to the aspect of non-directiveness regarding providing information and parents' choices and directiveness in helping parents during decision-making.

INTRODUCTION

Prenatal screening programs generally comprise first-trimester screening for aneuploidies and first and second-trimester screening for structural fetal anomalies[1,2]. In the past few years, the scope and timing of prenatal screening have been broadened through improved techniques and broader availability of the tests[2,3,4]. Since the introduction of non-invasive prenatal testing (NIPT) in 2011, the use has increased to 11 million tests yearly in more than 60 countries[5]. This trend means a rise in the number of people who need pre-test counseling. Pre-test counseling enables clients to make a well-informed decision about whether or not to pursue testing. The counseling should be personalised and provide sufficient information to promote autonomous decision-making[6]. However, counseling is an art that includes much more than providing information; counselors help counselees to choose between various options considering their experiences, values, and norms[7]. This art is challenging for professionals involved in counseling for prenatal screening. Prenatal screening is offered internationally in diverse healthcare systems. Many systems have opted for a program where initial counseling is provided by midwives, genetic counselors, or specialised nurses, usually with specific training and certification. Obstetricians and family doctors may also be involved[8].

The basic principles of contemporary counseling for prenatal screening are based on 'person-centred counseling', developed by psychologist Carl Rogers. He stated that people can make choices that are appropriate to their lives at a given moment in time[9]. In other words, clients can make their own choices about whether or not to carry out prenatal screening. During the decision-making process, the professional helps by adopting a non-directive attitude; the client is not directed toward a certain choice but is directed to come up with their own ideas, leading to an autonomous, informed choice[10,11]. So, counselors ideally have a non-directive attitude towards the content of the decision but provide directive guidance during the decision-making process. Kater-Kuipers (2020)[12] describes three possible phases of prenatal counseling. The first phase involves exploring the client's personal values and attitude towards prenatal screening. This phase promotes awareness of the freedom of choice; the client may accept or reject the information about prenatal screening and the screening offer itself. The second phase involves providing clients with written and oral information about prenatal screening. In addition to medical-technical information, professionals must also support clients' decision-making process. The final phase, post-test counseling, occurs after the screening and concerns follow-up and support when receiving an abnormal test result[12].

Given maternity care professionals' strong views about non-directiveness in prenatal counseling to support clients' autonomy regarding whether or not to opt for prenatal screening, professionals search for ways to support their clients in their decision-making process[13]. According to Self-Determination Theory (SDT), a macro-theory of human motivation, the quality of motivation is arranged along a continuum, with autonomous motivation at one end and controlled motivation at the other. Autonomous motivation means engaging in behaviour and decision-making out of one's choice with

no perception of internal or external pressure. Autonomous self-regulation happens when a person finds a certain behaviour important or engages in it out of interest. Conversely, controlled motivation means showing certain behaviour for external reasons, such as receiving praise or avoiding feelings of guilt or shame[14] (Figure 6.1.).

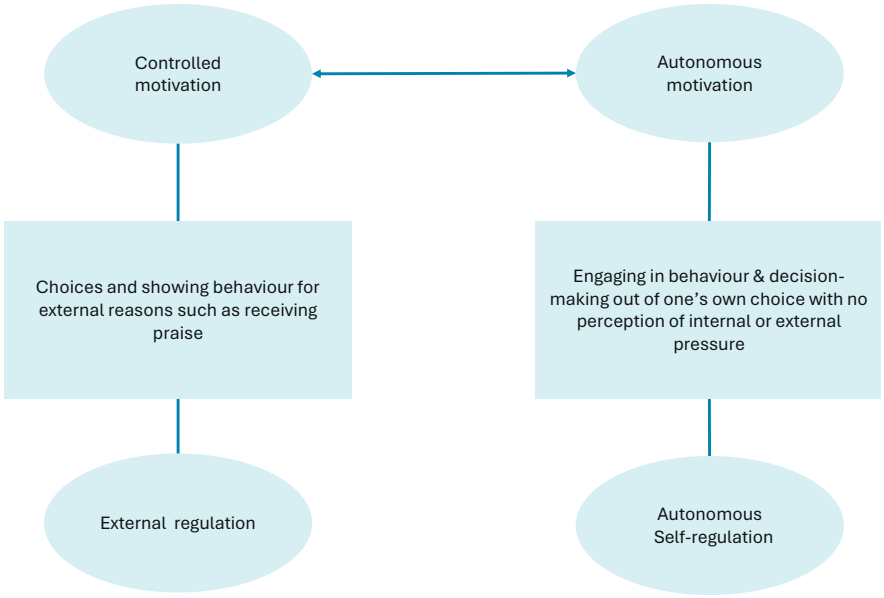

Figure 6.1 The Self-determination theory continuum based on Deci and Ryan (1985)

Healthcare professionals can facilitate clients' autonomous self-regulated behaviour by fulfilling the three basic psychological needs: autonomy, competence and relatedness[15]. Professionals can meet clients' needs using a need-supportive interaction style, contributing to an autonomy-supportive healthcare climate[16]. More autonomous forms of self-regulated behaviour help clients make their own choices regarding their health15.

Despite the positive effects of communication training concerning decision-making for prenatal screening tests, professionals can still improve by offering more decision-making support[17]. Professionals tend to focus on providing information during decision-making instead of offering decision-making support[17,18].

This study aimed to gain insight into maternity care professionals' views on 'good' counseling. Knowing their views might provide more insight into the mechanisms explaining professionals' focus on providing information and offering screening options rather than decision-making support. Furthermore, these findings might help tailor education towards a more helpful approach in training professionals to provide decision-making support, given the expanded scope and increasing complexity of prenatal screening.

METHODS

Study design

This qualitative study of maternity care professionals' views on good counseling, was conducted in the Netherlands among all 2813 maternity care professionals involved in counseling for prenatal screening. The survey study was part of the TRIDENT-2 study, which evaluated the introduction of NIPT[19]. The survey study included, among other questions, background characteristics of the participating maternity care professionals and the open-ended question: 'In your opinion, what constitutes 'good' counseling for prenatal screening?

Study setting

In the Netherlands, counseling for prenatal screening tests is mainly done by midwives, sonographers, and obstetricians with a contract with one of the seven Regional Centers for Prenatal Screening. Most clients, approximately 85% of them, are counselled by a primary care midwife or sonographer[20]. To ensure the quality of the counseling, the Regional Centers have formulated requirements, such as participating in training, to gain medical knowledge and improve their counseling skills[21]. They also prescribe counseling should take at least 35 minutes[22]. In the Netherlands, there is a strong awareness of the social and ethical ramifications of counseling for prenatal screening[13,23,24]. The aim of prenatal counseling is that parents can make their own choice whether or not to participate in prenatal screening in accordance with their own values and personal circumstances[23,25].

Ethical approval

The study protocol was approved by the Medical Ethical Committee of the VU University Medical Center, Amsterdam, the Netherlands (no. 2017.165). Online informed consent was collected from all participating maternity care professionals

Participants and procedure

All 2813 Maternity care professionals were invited to participate in the TRIDENT-2 survey study. A questionnaire was distributed (February 2017) among professionals before NIPT was implemented (April 2017). In this study, professionals were included who met the inclusion criteria:

Written informed consent; answered the question: 'In your opinion, what constitutes 'good' counseling for prenatal anomaly screening?' and as a maternity care professional, actively involved in counseling for prenatal screening including a contract with a Regional Center for Prenatal Screening.

Data analysis

Descriptive statistics were used to analyse the background characteristics of participating professionals. With respect to the available variables, the study sample was compared with the national population of professionals involved in counseling for prenatal screening.

The answers to the open-ended question: 'In your opinion, what constitutes 'good' counseling for prenatal anomaly screening?' were coded according to the abbreviated grounded theory methodology described by Strauss and Corbin (1998)[26] using the MAXQDA software program. First, three researchers (EO, SdG and JK) performed initial, independent open coding of the written answers. The unit of analysis was defined as an individual word or phrase found within a single text response. Complex answers were discussed with the research team until a consensus was reached about what code should be used. Secondly, the first author clustered the resulting codes into a cohesive cluster of codes. Thirdly, the research team elaborated on emerging overarching themes through the lens of autonomy-supportive counseling. In autonomy supportive counseling professionals use autonomy-supportive interactions to meet parents' basic psychological needs to facilitate autonomous self-regulation, including decision-making. For that purpose, they used the figure proposed by Kors et al. (2020)[27] based on their realist review on autonomy supportive consultation, whereby they explicitly used the healthcare professionals' perspective. (Figure 6.2). The quotes presented in this paper were translated into English with the help of a native English speaker with Dutch fluency. To check the translation, these fragments were translated back by a native Dutch speaker with English fluency.

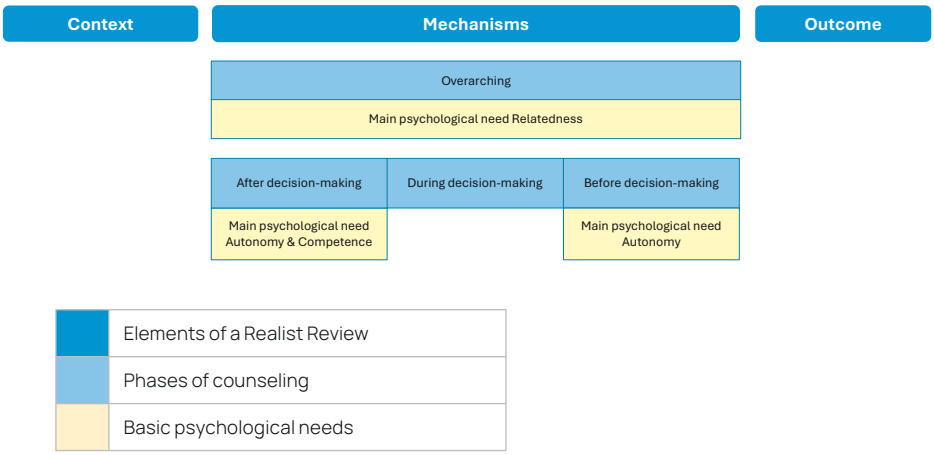

Figure 6.2. Concept of autonomy-supportive counseling based on Kors et al. (2020)

Lastly, the researchers (EO, SdG, JK) conducted a quantitative analysis of the qualitative data following the method used by Kusurkar et.al, (2022)[28]. The researchers established the number of comments for each cluster of code group. This quantification is meant to draw attention to certain patterns in the data, not to convey generalizability behind the sample. Quantification of qualitative data can be justified when all participants have the opportunity to answer the same question and the sample size is large enough, at least 50, according to some researchers[29]. The results will be reported according to the recommendations for reporting the results from the quantification of qualitative data[29].

Reflexivity

In qualitative research, more than one investigator must be involved in analysing the data to consider diverse viewpoints[30]. For that reason, our research team consist of ten persons with different backgrounds: JK, an educationalist and midwife non-practising, RAK, a professor in Health Professions Education with a medical background, LH, a professor of patient perspectives on genetic testing and involved in the TRIDENT-2 study, CV, a professor in midwifery and experienced midwife in a teaching hospital as well as a midwifery practice, PB, a perinatologist, responsible for the obstetric education of bachelor and master students, JG, an experienced midwife in midwifery practice, EO and SdG-vdL, two bachelor students in midwifery, SP, a practising neurosurgeon, professor and dean of an academic medical centre and LM, a psychologist and lecturer in communication and counseling.

RESULTS

The online survey was sent to 2813 maternity care professionals registered as prenatal counselors. A total of 1426 professionals were included, representing 50.7% of all registered Dutch prenatal screening counselors (1426/2813) (Figure 6.3).

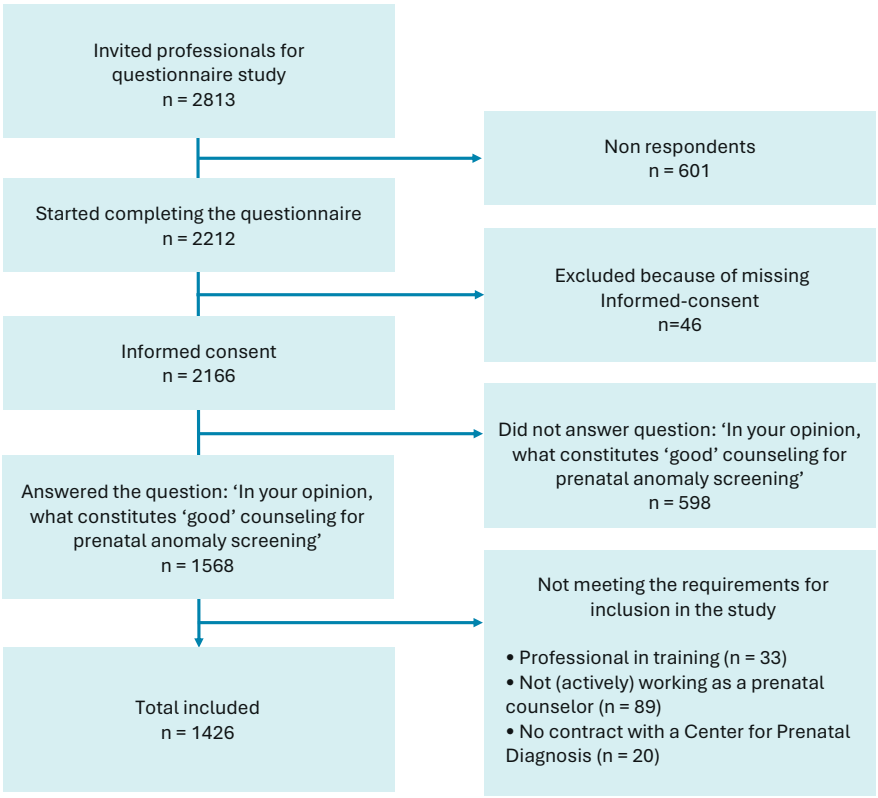

Figure 6.3. The number of included respondents

Characteristics of included professionals

Table 6.1 shows the characteristics of the included professionals and characteristics of the total number of registered Dutch counselors. The majority of the included professionals were female (97.2%) and worked as midwives in primary care (84.4%). Professionals' mean age was 39.5 years (SD = 10.9), and the mean years of work experience were 10.1 years (SD = 5.96). The professionals were relatively evenly distributed across the Regional Centers for Prenatal Screening. The study sample was comparable with the registered Dutch counselors with respect to the available variables: age, profession and work experience[17,19].

Table 6.1: Characteristics of the respondents and total registered counselors in the Netherlands

Characteristics	Sample N (%)	Total registered counselors in the Netherlands in 2017[4] (%)
	N = 1426	N= 2813
Gender[1]		
Male	40 (2.8)	
Female	1386 (97.2)	
Profession[2]		
Midwife, primary care	1204 (84.4)	2125 (75.5)
Midwife, hospital-based	99 (6.9)	79 (2.8)
Obstetrician	79 (5.5)	40 (1.4)
Sonographer	213 (14.9)	441 (15.7)
General practitioner	7 (0.5)	
Other[3]	43 (3.0)	128 (4.6)
Distribution to Regional Centers for Prenatal Screening[5]		
Region 1	279 (19.6)	
Region 2	231 (16.2)	
Region 3	166 (11.6)	
Region 4	123 (8.6)	
Region 5	269 (18.9)	
Region 6	204 (14.3)	
Region 7	187 (13.1)	
	M (SD)	M (SD)[6]
Work experience in years	10.1 (5.96)	8 (4)
Age in years	39.5 (10.9).	39 (11)

1. Only male or female options were provided. (Martin et al., 2022). All professionals completed this question.
2. Professionals could provide multiple professions; therefore, the numbers add up to more than n=1426.
3. Nurse, fertility doctor, consultant, epidemiologist, etc.
4. Martin et al., 2022[19]
5. Some respondents had contracts with multiple Regional Centers for Prenatal Screening, so the numbers add up to more than N=1426.
6. Martin et al., 2020[17]

Most of the professionals answered the question concisely, and some elaborated more broadly on the question. The professionals emphasised their answers by using capital letters or exclamation marks. The answers contained 4152 individual words or phrases, which were coded, which resulted in 11 themes and 14 subthemes. The themes are presented according to context, mechanisms and outcome of counseling for prenatal screening, as shown in Figure 6.2. The number of coded individual words or phrases for each theme is reported to demonstrate its frequency of occurrence and its relative relevance.

Context of prenatal counseling

The themes mentioned under this heading are not part of the mechanisms governing the counselor and counselee interaction but could affect the counseling (Figure 6.4).

Time

Time is a contextual theme for good counseling (71 individual words or phrases). Professionals mentioned time to inform people and discuss the possibilities of screening (Quote 1, Table 6.2) and time for the parents to think about their options and come to a well-considered choice (Quote 2). Some professionals mentioned that it is hard to schedule enough time for counseling and to schedule counseling so that there is enough time for the parents to consider and make their decisions. However, professionals also find it hard to make time for counseling (Quote 3).

Counsellors' competence

Another contextual theme is the counselors' competence (80); professionals found it essential that counselors have up-to-date knowledge to inform parents and good communication skills, such as listening and asking open questions (Quote 4).

Ethical sensitivity

As mentioned before, a group of professionals answered the question more broadly. They wrote more about the ethical aspects of prenatal screening, not only regarding the counseling of individual parents but also regarding the maternity care system (14) (Quote 5). Their answers sometimes seem to reflect their difficulties with counseling for prenatal screening (Quote 6).

Mechanisms of prenatal counseling

We looked for themes regarding the mechanisms, in this case, the interactions between professionals and parents during prenatal screening counseling, which were mentioned as core elements of good counseling. Within the mechanisms, themes were found to be related to the different phases of the decision-making process. At the top are the overarching themes placed; the themes before the decision-making are placed in the left column, during the decision-making, in the central column, and after the decision-making in the right column (Figure 6.4).

Exploring the values of the parents

Looking more closely at the professionals' answers who explored their view on good counseling more broadly, stimulating people to explore their values was mentioned as an element of prenatal counseling (237). Professionals reported that they do this by stimulating people to explore their considerations for participating in prenatal screening (Quote 15) or to explore their views on disabled children (Quote 16).

Providing information

Almost all maternity care professionals mentioned 'providing information' as a core element of good counseling (1858) (Quote 7). They emphasised that the information needs to be objective and correct and include the pros and cons of prenatal screening tests. Especially professionals who explained more about the content of the information pointed out that information needs to be nuanced with explicit attention to the limitations of the tests (Quote 8). These professionals also explicitly mentioned the right not to know before professionals provide information about the tests (Quote 9). Furthermore, the professionals mentioned the need to tailor the information to the individual couple. They consider people's health literacy, previously acquired knowledge, and personal values (Quote 10). Also, information materials that can be used before, during, and after the counseling were mentioned (Quote 11).

Free choice

According to professionals, parents' free choice is another core element of good counseling (889). They underlined the importance of this element by naming it more than once in different formulations (Quote 12). Professionals were not explicit in the way they facilitated free choice; they mainly used terms such as being non-directive, offering room to the parents or having no opinion of their own on accepting or declining screening (Quote 13 & 14)

Exploring the impact of the test results on the parents

A few professionals mentioned the importance of discussing the possible implications of the test result as an element of good counseling (57). They pointed out that before participating, parents need to think about the consequences and the decisions they must make when the test indicates an abnormality (Quotes 17 & 18).

Guiding

Finally, professionals used words such as asking questions, summarising, and listening to describe their guidance as an element of good counseling (480)(Quotes 19 & 20).

Outcome of good counseling

The themes mentioned under this heading represent the core elements of the outcome of good counseling (Figure 6.4).

Parents making their own choice

Many professionals emphasised that the outcome of good counseling must be that parents feel free to make their own well-considered, informed choices (424) (Quote 21). They emphasised their answers by using capital letters or exclamation marks. (Quote 22).

Right choice

The answers showed that professionals feel a responsibility to ensure that people can make the right choice. According to professionals, a choice is 'right' when parents decide together and will not regret it in the future (14) (Quotes 23, 24 & 25).

No assurance

Especially the professionals who answered the question more broadly pointed out that parents need to understand that a good test result does not mean a healthy child and thus does not provide assurance (28) (Quote 26).

Quantitative analysis

Based on our quantitative analysis, Providing information and Free choice are the most important themes regarding the mechanisms. Parents making their own choices is the most important theme within the outcome of good prenatal counseling (table 6.2).

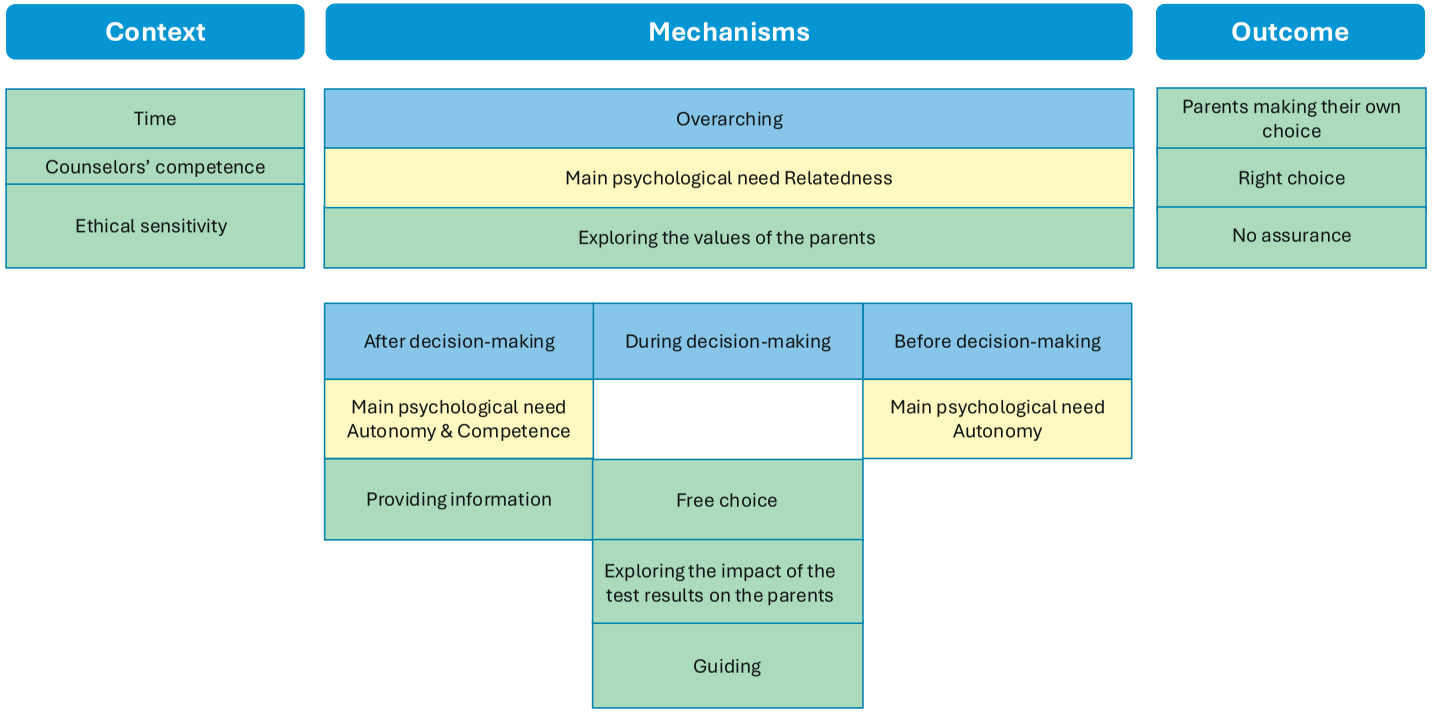

Figure 6.4. Themes of good counseling according to the professionals ordered according to Context, Mechanisms and Outcome

Table 6.2. The themes, codes including the number of codes within every theme and the percentages of total codes and Illustrative quotes describing maternity care professionals' views on good counseling

Themes	Number of codes Total n=4152	Percentage of total codes	Subthemes	Number quote	Illustrative quote
Context					
Time	71	1.7%	to inform	1	TO TAKE TIME (Document (1), Pos. 438)
			to consider	2	Give the client, together with a partner, the time to make a choice themselves (Document (1), Pos. 625)
			to schedule	3	I think that very often, not enough time is taken in practice (Document (1), Pos. 139)
Counselors' competence	80	1.9%		4	That the counsellor knows the ins and outs exactly! (Document (1), Pos. 1222)
Ethical sensitivity	14	0.3%		5	That care must be taken to ensure that it is not seen as a 'just add it test'. That it should not come across that, it is now possible to really 'choose' a 'perfect child' (Document (1), Pos. 1311)
				6	Being pregnant happily and carefree has become more difficult (Document (1), Pos. 1066)
Mechanisms					
Exploring the values of the parents	237	5.7%	to participation	15	Hearing why a pregnant woman would (not) opt for prenatal screening and assessing whether or not these are realistic and correct considerations and then adjusting this (Document (1), Pos. 1416)

Table 6.2. The themes, codes including the number of codes within every theme and the percentages of total codes and Illustrative quotes describing maternity care professionals' views on good counseling (continued)

Themes	Number of codes Total n=4152	Percentage of total codes	Subthemes	Number quote	Illustrative quote
			to disabled children	16	Starting a conversation with parents about "what if we don't have a perfect child." (Document (1), Pos. 1342)
Providing information	1858	44.7%	objective information	7	Objective information in understandable language at the level of the pregnant person and her partner (Document (1), Pos. 1377)
			pros and cons	8	Start at the beginning with the question of whether parents even want to investigate their child's health. Outlining the context of what information can and cannot be extracted from the tests (Document (1), Pos. 909)
			right not to know	9	Information based on facts, not opinions. The right to not wanting to know must also be respected! (Document (1), Pos. 244)
			tailored	10	Good information to patient and partner and evaluation of whether information is understood. Apply to personal situation of patient and partner (Document (1), Pos. 1220)
			material	11	Discuss correct information in a clear manner that the patient can understand, supported by written information (Document (1), Pos. 1171)
Free choice	889	21.4%		12	Freedom of choice. No obligation. Own choice. (Document (1), Pos. 1205)

Table 6.2. The themes, codes including the number of codes within every theme and the percentages of total codes and Illustrative quotes describing maternity care professionals' views on good counseling (continued)

Themes	Number of codes Total n=4152	Percentage of total codes	Subthemes	Number quote	Illustrative quote
			non-directive	13	Not providing directive information and accepting the client's choice without judgment (Document (1), Pos. 1237)
			non-directive	14	No direction in choice and no own opinion (Document (1), Pos. 1385)
Exploring the impact of the test results on the parents	35	0.8%		17	Freedom for the pregnant person and partner, discussing what someone wants to do with any abnormal results and therefore whether someone also wants to possibly terminate the pregnancy (Document (1), Pos. 1368)
				18	Taking people into the 'what if' story. Make them think about what they would do if they received unpleasant news (Document (1), Pos. 1341)
Guiding	480	11.6%		19	Providing correct information, listening, asking questions, summarizing, not directing, freedom of choice. (Document (1), Pos. 27)
				20	Providing information and asking good questions to pregnant persons and their partners so they can start thinking and make a well-considered choice. (Document (1), Pos. 58)

Table 6.2. The themes, codes including the number of codes within every theme and the percentages of total codes and Illustrative quotes describing maternity care professionals' views on good counseling (continued)

Themes	Number of codes Total n=4152	Percentage of total codes	Subthemes	Number quote	Illustrative quote
Outcome					
Parents making their own choice	424	10.2%	well-considered, informed choices	21	That people can make a well-considered, informed choice (Document (1), Pos. 1119)
				22	That you lead a conversation in a neutral way so that the pregnant person and her partner can make their OWN choice as to whether they want to have a test done and which test they want to have done (Document (1), Pos. 1236)
					Provide information as objectively as possible and point out that it is THEIR choice (Document (1), Pos. 1359)
Right choice	14	0.3%	no regret	23	That people don't regret their choice (Document (1), Pos. 384)
			together	24	A choice that they can support together now and in the future (Document (1), Pos. 411)
			together	25	So that a future father and mother can make a well-informed decision TOGETHER (Document (1), Pos. 1103)
No assurance	28	0.7%		26	No 100% good "guarantee". (Document (1), Pos. 1307)

DISCUSSION

The aim of this study was to gain insight into maternity care professionals' views on good counseling for prenatal screening and to understand better the mechanisms explaining professionals' focus on providing information and offering screening options rather than decision-making support.

Providing information, free choice and parents making their own choice are important themes within professionals' views on good counseling. The non-directive character of counseling for prenatal screening is dominant in the discourse of professionals on this topic. Even though data was collected using a questionnaire, our data shows that counseling for prenatal screening gives rise to emotional responses. Professionals used capital letters and exclamation marks to emphasise their answers.

Looking at the themes regarding the context of counseling for prenatal screening, time is a more often mentioned element, specifically scheduling enough time for counseling and decision-making after counseling. Prenatal screening in the Netherlands is surrounded by awareness of the social and ethical ramifications of counseling[13,23,24]. From this perspective, it is explicable that ethical sensitivity is a theme, especially when we consider that research shows some clients perceive social pressure to decide in a certain way[31]. Some professionals seem to feel responsible for guarding social and ethical consciousness. These professionals acted according to their own values. They incorporate the ethical principle of 'do no harm' into their counseling for prenatal screening by, for example, explicitly watching for the right not to know[3]. This group of professionals seems more aware of the importance of actively interacting with parents during decision-making.

When looking at themes within mechanisms through the lens of autonomy-supportive counseling, not all interactions to meet clients' basic psychological needs are mentioned as elements of good counseling (Figure 4). Clients' need for relatedness is fulfilled within the theme, exploring the client's values. The interactions within this theme could facilitate clients' feeling known and understood by their professional[32]. Clients' need for competence is fulfilled within the theme, providing information. In phrases regarding information, professionals focus on providing information and hardly on discussing the information as a core element of counseling. This is in line with other studies[18]. To fully meet clients' need for competence, clients should know and understand the information and the meaning of this information for their personal situation[31] To be effective, clients must be informed and actively discuss information about prenatal screening with their professionals. To do so, professionals can use interactions such as asking the clients to repeat the information provided to them[33]. Clients' need for autonomy is met within the themes, free choice, exploring the impact of the test results for the parents and guiding. Professionals seem to focus on free choice to fulfil clients' need for autonomy. However, to be able to make a choice, clients also need structure[34]. Some phrases mentioned within the theme guiding could offer structure and help parents make a choice. Especially the elements within the theme exploring the impact of the test results on the parents could facilitate parents to make

an autonomous choice. In general, the non-directive attitude of the professionals on the content and process of the counseling for prenatal screening complicates the fulfilment of clients' psychological needs and, thereby, clients' autonomous decision-making[15].

The themes regarding the outcomes of counseling for prenatal screening showed professionals feel responsible for creating a climate wherein parents can make their own choices.

Our findings show some indications that could explain professionals' non-directive attitudes. Professionals seem to believe a non-directive attitude on content and process is required. Although professionals need to be non-directive regarding the outcome of the decision, they need to be directive in leading the decision-making process[34,35]. Professionals' non-directive attitude is in line with earlier research[18]. Martin et al. (2015)[36] showed that less than a quarter of midwives find actively exploring parents' values part of counseling for prenatal screening.

Strengths and limitations

This study's strengths include a large research team with broad expertise and the use of a theoretical framework.

A limitation of this study is the data collection through an open-ended survey question. Although this enables us to include a large group of professionals involved in counseling for prenatal screening, it limits the depth of the answers. For further research, we suggest an in-depth look at the aspects contributing to the non-directive attitude and discourse on counseling for prenatal screening.

This study examined the core elements of prenatal counseling reported by professionals. Healthcare professionals tend to overestimate the extent to which they provide decision-making support[37]. This could mean that the mentioned core elements in real practice are a less explicit part of counseling for prenatal screening

CONCLUSION

Maternity care professionals consider providing information and parents' making their own free choice as important themes within good counseling for prenatal screening. Their view about parents' making their own free choice of whether to opt for prenatal screening or not is reflected in their non-directive attitude before and during the decision-making process, which complicates clients 'more autonomous decision-making. We suggest explicitly paying attention to the aspect of directiveness in helping parents during their decision-making process.

Acknowledgements

We would like to thank all professionals for participating in this study. A special thanks to David Brophy for translating the quotes.

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CHAPTER 7

General Discussion

INTRODUCTION

Maternity care has transitioned to person-centred maternity care, in which shared decision-making, emotional support, respect, and informed consent are core elements. Maternity care professionals and patients work together to achieve optimal care, and to do so, patients need to be actively engaged in consultations and supported to make their own choices. This places additional demands on the competencies of maternity care professionals. They often provide information to guide their patients' decision-making rather than actively stimulating patient participation and decision-support. In addition, a group of patients perceive a lack of autonomy and respect, predominantly through a lack of communication and choice[1].

This thesis aims to unravel the interaction and decision-making during prenatal consultations in daily practice and offer recommendations for professionals and teachers on optimizing autonomy-supportive interaction and decision-making during prenatal consultations.

This thesis also contributes to the research on Self-determination Theory (SDT) in healthcare. To our knowledge, this is the first research project to examine maternity care consultations through the lens of SDT.

We started our research with a realist review to provide a theoretical framework for the concept of autonomy-supportive consultation. Next, we adapted and validated an observation tool. Thereafter, we performed an observational study in daily practice to unravel the interactions and decision-making in prenatal consultations quantitatively as well as qualitatively. Finally, we performed a qualitative study on maternity care professionals' views on good counseling to get an impression of the core elements of decision-making support from the perspective of maternity care professionals.

This chapter includes:

- An overview of the main findings of our respective studies
- Integration and critical analysis of our findings
- The practical implications of our findings for autonomy-supportive consultation, specifically in the context of maternity care.
- Strengths and limitations of this thesis and
- Recommendations for future research
- Conclusions

Table 7.1: Overview of the main findings of this thesis

Objective	Main finding	Chapter
A theory-based model for autonomy-supportive consultation (ASC)	Fulfilling the three basic psychological needs through autonomy-supportive consultation facilitated more autonomous motivation, which supported more autonomous forms of self-regulation, enabling patients to make their own choices regarding their health	2
Adaptation and validation of the encoding of observations using CONSUL-MCC: A self-determination theory-based tool to observe consultations in maternity care	We were able to adapt COUNSEL-CCE to the context of maternity care successfully. The results of psychometric testing as well as the qualitative assessment, indicated good construct validity.	3
Qualitative interaction analysis of prenatal consultation	Eight interactional mechanisms were identified, which were categorised into the following three overarching themes. • 'Lightheartedness': Works through two interactional mechanisms: the use of *mitigating language* and *humour*. • 'Orientation to agreement': The professional and the patient seem to be oriented towards demonstrating agreement and understanding by frequently using the word '*yes*', *vague words* and *interruptions*. • 'Offering information and options': Professionals give information and options. They *reduce interaction with the patient* and *give detailed and standardised information* while *they keep offering options*.	4
Quantify the frequency in which maternity care professionals use autonomy-supportive and autonomy-thwarting interactions in daily practice.	In general, the professionals' interactions are based on a small repertoire. • We found that professionals regularly use autonomy-supportive interactions and sometimes use structuring interactions. • They rarely use controlling interactions and hardly ever use chaotic interactions. • Within the factor 'autonomy support', professionals more frequently use an *attuning approach* than a *participatory approach*. • Within the factor 'structure', professionals more frequently use a *clarifying approach* than a *guiding approach*.	5
Insight into maternity care professionals' views on 'good' counseling.	The themes of 'good' counseling for prenatal anomaly screening according to professionals • Regarding the context of good counseling: *Time, Counselors' competence,* and *Ethical sensitivity.* • Within the interactions between patients and professionals during the process of good counseling: *Exploring the values of the parents Providing information, Free choice, Exploring the impact of the test results on the parents,* and *Guiding* · Regarding the outcome of good counseling: *Parents making their own choice, the right choice* and *no assurance of getting a healthy baby.*	6

INTEGRATION AND CRITICAL ANALYSIS OF OUR FINDINGS

The integrated findings from all the studies in this thesis are presented using the context-mechanism-outcomes framework of autonomy-supportive consultation (ASC), which is based on the realist review framework (Figure 7.1). First, we describe the findings regarding the context of ASC. Next, we describe the core findings of our research, the mechanisms, specifically the interactions between the maternity care professionals and the patient during the consultation. Finally, we describe the findings regarding the outcomes of ASC.

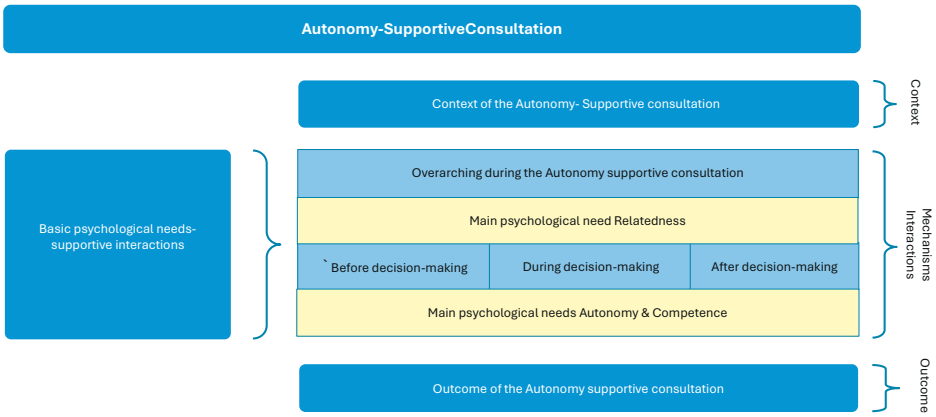

Figure 7.1. The context-mechanism-outcomes of autonomy-supportive consultation

Context of autonomy-supportive consultations

The aspects mentioned under this heading are not part of the professional-patient interaction during prenatal consultations but could affect this interaction. In our realist review, we found contextual aspects at the patient, healthcare professional and organisational levels.

- The patient can be limited by their physical condition, knowledge or psychological capacity. The support of important others could foster a patient's autonomy.
- The overarching contextual healthcare professional factor was competence, whereby attitude appeared to be the most important aspect. A rigid daily routine can be a contextual barrier to autonomy support.
- Autonomy support as an overall organisational strategy for good care can be stimulating (Chapter 2).

These findings largely align with the themes we found in our qualitative research into maternity care professionals' views on good counseling. Professionals mentioned that having enough time was a prerequisite for good counseling. They pointed out the importance of scheduling enough time for counseling and planning the counseling so that there is enough time for the parents to consider and make their decisions.

Counselors' competence was also reported as an important condition for good counseling whereby the professionals focused on knowledge and communication skills. The third theme, having ethical sensitivity, was specific to the context of counseling for prenatal screening (Chapter 6).

In other studies on decision-making support, scheduling sufficient time has also been mentioned as a challenging aspect[2]. Nowadays, maternity care professionals are facilitated by extra payment for the time needed for counseling for prenatal screening. Still, it is challenging for them to schedule enough time; maybe it is not the time itself but their routines that make it challenging to schedule enough time. Our realist review explicitly mentioned rigid routines as a contextual barrier to realize autonomy-supportive consultation. In general, routines are stable and not easy to change[3].

Within the theme of competence, maternity care professionals' focus on their competence in knowledge and skills could be partly explained by the history of mandatory training for counseling for prenatal training, which pays great attention to knowledge and, later on, also to communication skills.

Mechanisms: the interactions of maternity care professionals during consultation

To study the interactions of maternity care professionals during consultations, we first adapted COUNSEL-CCE, an SDT-based observation tool for use in the context of chronic care, to the context of maternity care to observe the specific basic psychological need-supportive and basic psychological need-thwarting interactions. All indicators of the original tool remained relevant. Four items were rephrased, one indicator was added,' Encourages to think about a possible approach with important kin', and all examples were adapted to maternity care. Psychometric testing indicated good construct validity. However, the characteristics of the data complicated further psychometric testing. Need-thwarting and some need-supportive interactions were hardly observed. Thereby, some of the need-supportive interactions were observed at the same frequency, which resulted in a lack of variance in the scores. We considered changing our 5-point Likert scale to a 3-point Likert scale, but this would reduce the specific information of our observations without adequately addressing our problems. We think that a tripartite observation tool which measured need-supportive interactions (need satisfaction), need-thwarting interactions (need frustration) and need-unfulfillment interactions (need dissatisfaction), could have been more useful, but in the absence of solid empirical support for a three-stages model, we could not have justified the use of such a measurement[4,5]. However, the studies on the third need made us aware of the meaning and the effect on the interaction of the unobserved interactions[4,5].

Regardless of the difficulties with psychometric testing, Coding and Observing Need-Supportive Consultation in Maternity Care Consultations (CONSUL-MCC) is a useful tool for structuring the observation of the need-supportive or need-thwarting interactions during maternity care consultations. The tool can be used for research but is also useful in the context of education. For this context, the tool can be extended with narrative

feedback and focus on specific aspects to reduce the number of interactions to be observed (Appendix).

Overarching autonomy-supportive interactions

Based on our realist review, relationship building is the most important overarching aspect of ASC. This means knowing the patient's medical history, concerns, expectations, beliefs, and life aspirations (Chapter 2). Our observational studies found that maternity care professionals build and protect their relationships in daily practice by minimising language, and humour and focusing on agreement. The effect of these interactions could be that relationships become somewhat superficial (Chapter 4). The overall healthcare climate during prenatal consultations was warm and friendly. Our quantitative study showed that professionals most frequently use interactions that 'give room to the patient' to build and protect their relationships (Chapter 5).

Professionals use a small repertoire of interactions that support patients' basic psychological needs to create an autonomy-supportive healthcare climate. Because of this, patients' basic psychological needs are only partly satisfied. This could ensure patients perceive the interaction during consultations as neglecting to their basic psychological needs, which could negatively affect the patients' engagement in consultations (Chapter 5). In the literature on autonomy support, this is called a laissez-faire (permissive) interaction style[6].

In our realist review, we found that controlling language and impatience are overarching aspects that could undermine patients' autonomy (Chapter 2). Maternity care professionals hardly use interactions that thwart patients' basic psychological needs and, thereby, their autonomy.

Before decision-making

Based on our realist review, meeting patients' basic psychological needs for competence and autonomy is important in the phase before decision-making. Professionals could fulfil patients' need for competence by facilitating their knowledge-building and understanding of their situation. Providing information is important, but according to our realist review, sharing professional knowledge, suggestions, and information about potential barriers is also important. Patients' basic psychological need for autonomy can be met by exploring what patients need (Chapter 2). In our observational studies, we found that maternity care professionals fulfil patients' need for competence mainly by providing information. (Chapters 4 & 5). When exploring patients' needs, maternity care professionals seem to focus on agreement, which could lead to less in-depth discussions (Chapter 4). They use more interactions to attune to the patient than interactions to invite the patient to participate actively in the consultation (Chapter 5). The focus on providing information we found in our observational studies is aligned with maternity care professionals' views on good counseling. In our qualitative research, providing information was the most frequently mentioned aspect of good counseling (Chapter 6). This survey was specifically about good counseling for prenatal screening.

Our research project was about interaction and decision-making in general during prenatal consultations. However, we assume that maternity care professionals' views on good counseling for prenatal screening also influence their views on good counseling in general.

During decision-making

In our realist review we found that exploring options and facilitating free choice are important aspects of the decision-making phase. Limiting or pseudo-choice hinders patients' need for autonomy (Chapter 2). In the observational studies, we found that maternity care professionals tend to keep all options open for their patients (Chapter 4). They use more interactions to clarify the options for patients than interactions to guide their patients' decision-making process (Chapter 5). We also found that maternity care professionals use interactions that reduce the impact of decisions. Their focus on agreement could lead to decisions being made too quickly and easily (Chapter 4). Professionals facilitate free choice mainly by using interactions that give room to the patient (Chapter 5).

After decision-making

According to our realist review, respect without judgment is important for fulfilling patients' need for autonomy after the decision is made. Professionals need to be aware that patients' preferences may change over time due to changing circumstances (Chapter 2).

The consultations included in our observation studies discussed a wide range of issues, and various decisions were made. In almost every consultation, there were high-stakes and low-stakes decisions to be made. Although decision-making processes in maternity care are mainly seen as shared decision-making, often, there are no two or more equivalent options. Where there are no equivalents, professionals may prefer the option that has scientific evidence to benefit the patient in their advice[7-11]. For example, the impact of the decision to participate or not in the whooping cough (pertussis) immunisation program or decisions regarding healthy behaviours, such as smoking cessation or infant feeding. In all decision-making processes, professionals tend to act in the same way, being non-directive about the process and outcome of the decision-making process. As shown in the example below on whooping cough immunisation in pregnancy, the professional is being non-directive, although there is scientific evidence of the benefit for the child (Chapter 4)

Example: *Whooping cough vaccination during pregnancy*

Maternity care professional: "We know it's safe, and that's why it's our job to give you information about it. Again, it is always your choice so you can decide for yourself what you would like to do with this just know that I have to provide that information. It's in here so think about it you can just do it from now on."

Outcome of autonomy-supportive consultations

Based on our realist review, patients who perceive autonomy support are more actively involved, with higher levels of well-being, decision satisfaction, and compliance for treatment or behavioural change (Chapter 2). According to our qualitative inquiry on maternity care professionals' views on good counseling, maternity care professionals find it important that patients make well-considered, informed choices (Chapter 6).

Our quantitative observational study also examined the healthcare climate as perceived by patients. Patients perceived the healthcare climate during prenatal consultations to be autonomy-supportive, although 44% of the patients perceived "dealing with emotions" as not applicable to the healthcare climate. Studies on patients' perceptions of prenatal care show that patients are more positive during pregnancy than after birth[12]. Our study measured the perceived healthcare climate immediately after the consultation, which could have influenced the results. The patient had very little time to reflect on their experience.

Overall, maternity care professionals create a warm, friendly healthcare climate during prenatal consultations. They provide information and offer patients the space to participate in their consultations and make their own choices. They seem to find it difficult to discuss issues more in-depth and intend to avoid discomfort and difficulties in their consultations.

IMPLICATIONS OF THE MAIN FINDINGS FOR AUTONOMY-SUPPORTIVE PRENATAL CONSULTATIONS

During prenatal consultations, an increasing number of issues need to be discussed, and decisions need to be made regarding maternity care, healthy behaviours, and parenthood[13]. ASC supports maternity care professionals in helping their patients during these decision-making processes and facilitates person-centred maternity care. ASC is also useful in maternity care to motivate patients to make healthier decisions[14]. ASC is an interaction style whereby professionals meet patients' basic psychological needs. This facilitates patients' self-regulated behaviour and thereby allows them to make choices regarding their health[15] (Figure 7.2).

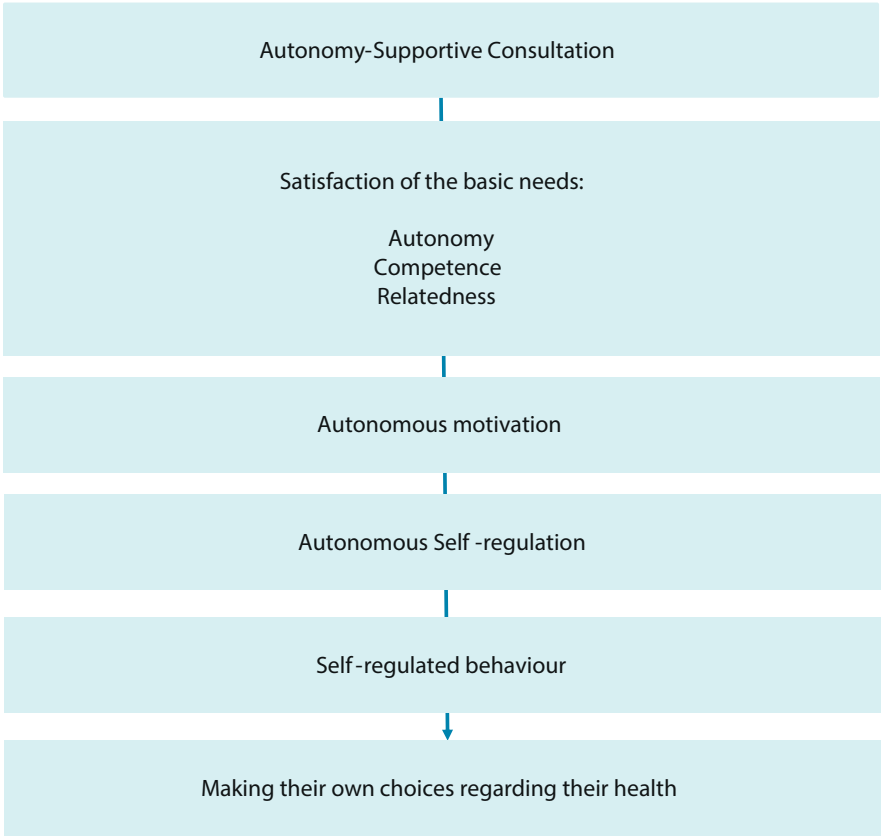

Figure 7.2. Model of Autonomy Supportive Consultation based on Ng et al., 2021[15].

Our findings show that some aspects of ASC have already been implemented in maternity care, which underlines the fact that ASC is useful in this context. However, there is room for improvement. Optimizing the interaction and support of patients' more autonomous decision-making during prenatal consultations could positively affect patients' well-being and experiences during pregnancy, birth, and their transition to parenthood[16,17,18]. This is especially relevant for patients who nowadays perceive a lack of autonomy and respect[19]. Although not all maternity care professionals find motivating parents to make a healthy start to their parenthood part of regular prenatal care, evidence shows that pregnancy is an important period in which people have higher compliance for behavioural change[20].

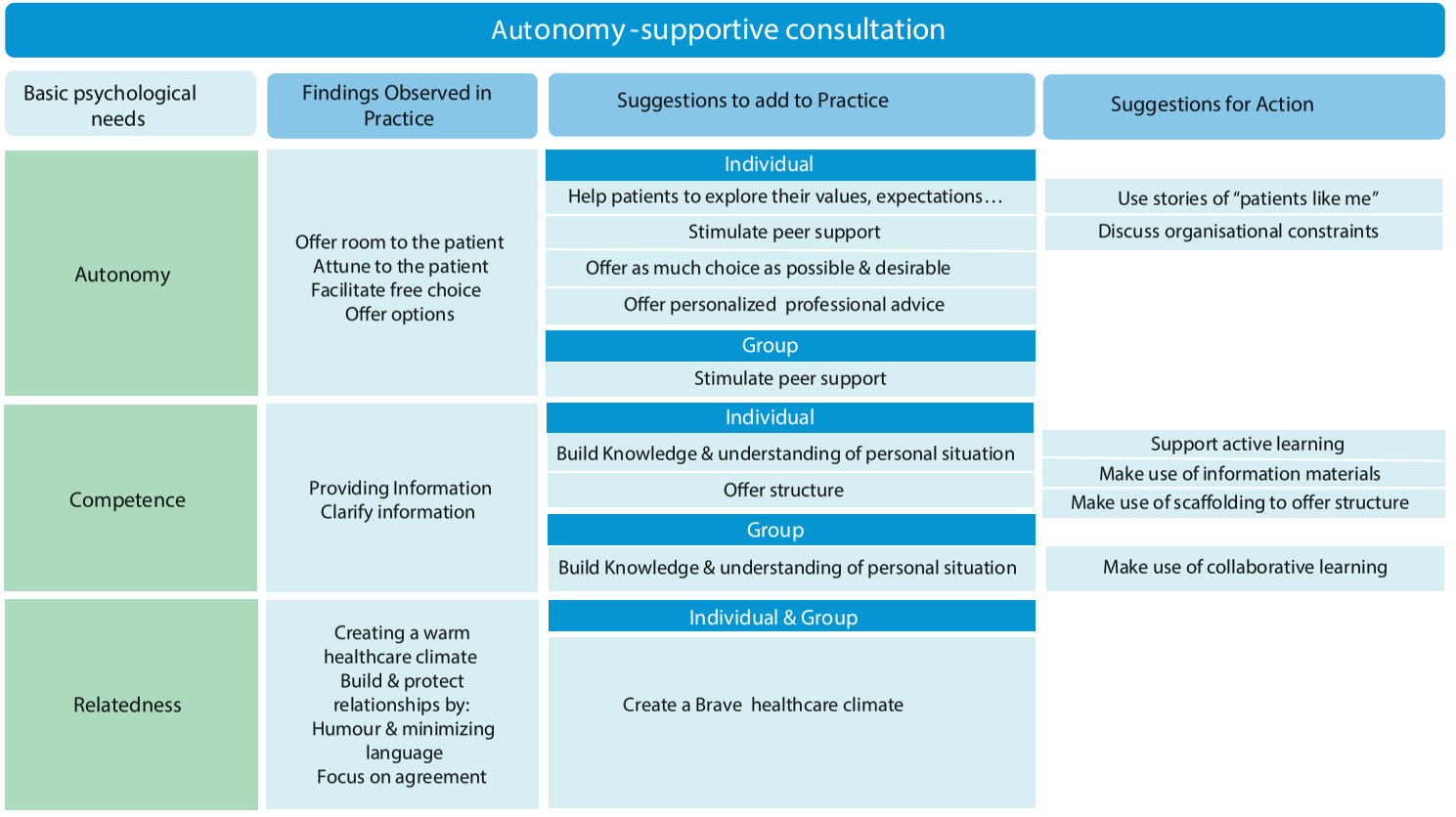

Figure 7.3. Findings observed in practice and suggestions to add to practice for maternity care professional

Implications for maternity care professionals

Maternity care professionals could optimize their ASC by using a wider variety of autonomy and competence-supportive interactions (Chapter 5). However, optimizing need-supportive interaction requires multiple approaches, with quality rather than quantity of support being the most important[21,22]. Also, given the rising complexity, we suppose a more fundamental revision of prenatal consultations is needed. Not all the elements we suggest are new; some already exist but seem to have been neglected. According to the model of autonomy-supportive consultation (Figure 2), the elements to optimize ASC are ordered along the three basic psychological needs: autonomy, competence and relatedness.

Fostering patients' Autonomy

In order to be self-regulated and make their own choices regarding their health, patients need to feel autonomous; they need to feel that they have choice and volition[23]. Healthcare professionals can support their patients' autonomy, creating an environment where they can act according to their values. To do so, it is important that they offer the patient as much choice as possible and desirable and help them actively explore their values, norms, goals, and expectations[24,25,26]. In this process, the organisational constraints need to be discussed; otherwise, patients may make choices based on unrealistic expectations[27]. An example in the context of maternity care is the time it would take for an epidural to become available. This could be done through an individual consultation, but additionally, group activities are also helpful for this goal. A reason for using group activities is the importance of support from important others, such as peers256,[28,29 p813, 30]. Another way to incorporate the input of important others into the decision-making process could be to use videos with stories of "patients like me". In the context of maternity care in the Netherlands, these videos are available via the Childbirth Network: zwangerverhalen (pregnancy stories) (Ervaringsverhalen—Childbirth Network). Special attention in this perspective must be given to the partner; their autonomy support increases patients' autonomous motivation and, thereby, their self-regulated behaviour[30,31]. Patients need the help of their healthcare professionals, but professionals differ in how they offer support. In a recent debate in a Dutch newspaper, Professor Smulders, working as an internist, proposed that many, especially young healthcare professionals, put their patients in a lonely position with too much responsibility[32]. After receiving all the information, professionals expect patients to make their own autonomous choices. Our findings showed that also maternity care professionals tend to offer a lot of room to the patient, but less support. Also, in other contexts, autonomy without guidance has been reported to be laissez-faire[33]. During the implementation of shared decision-making, there was a strong movement from paternalism to facilitating patients' autonomy[34]. Especially in maternity care, where the implementation of shared decision-making developed parallel to the implementation of prenatal anomaly screening, a topic which needs a non-directive attitude of professionals toward patients' choices[35]. Based on our findings, we think that it is important that professionals optimize their balance between facilitating free choice and helping patients by providing professional advice based on patients' norms, values, goals, expectations and personal situations[30]. To be able to give professional advice,

professionals need to really know and understand their patients[36, 37, 38]. The optimal balance depends on the specific circumstances of that particular patient[27, 30, 36, 39, 40]. To find the optimal balance, professionals need to explore how much autonomy a patient prefers and how much support patients receive from important others. It might be helpful to encourage the patient to actively involve important others, especially the partner, in the decision-making process. Professional advice fits in an autonomy supportive consultation when the professional does not expect the patient to always act in accordance with the professional advice[41, 42]. If patients decide not to change their behaviour or to choose an option other than the one recommended, this reflects an informed individual choice, and this decision should be respected[22 p796].

Building patients' Competence

For patients to be autonomously involved in decision-making during prenatal consultation, they need to feel competent[23]. They need to be well-informed and understand the information and its implications for their personal situation. To optimize this knowledge-building, maternity care professionals could use theories and models from the context of education. Research shows that people need to be actively involved in learning to optimize their knowledge-building[43]. Active learning is a term used for pedagogies focusing on people's engagement in the learning process rather than the transmission of information[44]. In the time the learner and the teacher are together, the focus is on applying knowledge, analysing and evaluating instead of providing information[44]. Translating this model to prenatal consultations means that patients could prepare themselves at home with information leaflets, information on the recommended websites or information videos. During the consultation, the understanding of the information is checked and confirmed, and the implications of this information for the personal situation are explored. In the current times, checking the knowledge concepts that patients build-up is particularly important because of the amount of incorrect information available, especially on social media[45]. This requires a different attitude on the part of professionals, comparable to the changes that teachers have had to make in the last decade. In teaching, there was the transition from teacher-centeredness, in which teachers transmit expert knowledge to students, to a climate in which teachers facilitate learners to learn and stimulate students to be engaged in deep learning activities[46]. In fact, healthcare professionals had to become health educators. They need to use a patient-centred approach in which the construction of knowledge and patients' understanding of their personal situation are the main goals[47 p215]. To support the patient, professionals could use scaffolding. This systematic approach supports a person in performing a task, e.g. understanding their personal situation, which is beyond their capacity without this support[47 p235]. In maternity care, scaffolding could be done by helping the patient with professional knowledge and offering structure. Within an autonomy-supportive context, offering structure is an effective way to help people improve their competence[33].

Next to the individual way of optimizing patients' knowledge-building, group activities could be used to make patients feel competent. These group activities complement individual prenatal care consultations and are accessible to all patients. Small groups

of patients of the same gestational age work together to build their knowledge and understanding[48 p243]. Beyond other benefits, which are explained within the context of the need for autonomy and relatedness, this collaborative learning facilitates multi-perspective learning in a rich social context[48 p243]. Patients who do not attend prenatal classes could particularly benefit from these group activities[49].

In our observational studies, patients' concepts were not discussed in depth (Chapter 4). Other studies have reported that it is more difficult to change this knowledge once patients have formed their concepts. Patients seem to prefer information that confirms their choice when they have already decided. This makes it difficult for patients to integrate information that contradicts their beliefs and values[30]. They suggest starting patient education early in the process.

Relatedness

The interaction between professionals and patients to fully meet the patient's need for competence and autonomy places great demands on the relationship between them. Therefore, it is also important to meet the third basic psychological need, relatedness. Patients need to feel connected[23]. This is why maternity care professionals work hard to create a warm, comfortable, and friendly climate during prenatal consultations. The healthcare climate maternity care professionals seek to create during consultations could be described as a safe space, implying that discomfort and difficulties do not enter that space[50]. The term safe space finds its origins in education, particularly in education on topics related to diversity. Arao and Clemens (2013)[51] state that pretending you can create a safe space that promises to protect and exempt people from difficulties is misleading and counterproductive. People need these difficulties in order to learn and understand. Arao and Clemens introduced the term 'brave space'. In a brave space, there is a risk of having a painful or difficult experience. However, in a brave space people know that they are cared for, their difficulties are acknowledged, and they feel supported[51]. In the context of prenatal consultations, discussing some issues may be experienced by patients as painful or difficult. For instance, thinking about the possibility that the child might not be healthy or realising that the preferred care is not always available or that the preferred care, based on the guidelines, is scientifically not optimal for the mother or child, e.g. formula milk. Prenatal consultations in a brave healthcare climate include allowing controversy, respecting all perspectives, acknowledging the impact and intentions and questioning for clarification[51]. Recognizing that prenatal consultations need a brave healthcare climate rather than a safe healthcare climate, could help professionals create a context in which issues can be discussed in-depth while maintaining patient-professional relatedness.

Implications for education

Research shows that healthcare professionals can be trained to support the autonomy of others[52, 53]. The largest training effect is found in inexperienced professionals[52]. This means that it is important to train future professionals in autonomy-supportive consultation during their initial training. Training is most effective when the basic psychological needs of the learners are met, for example, by using non-controlling

language and offering choices[52]. This is also very important when training experienced professionals through continuous professional development. Experiencing psychological need satisfaction is associated with positive changes in effectiveness and beliefs in autonomy-support, structure and intentions to apply autonomy-supportive interactions[53]. Skill-based training is more effective than knowledge-based training. To be effective, training also needs to have a follow-up activity, such as follow-up group meetings[52]. Finally, it is important to take pre-training beliefs, expectations and values into account. For that reason, it might be worthwhile to explain why controlling and laissez-faire (permissive) interaction styles are less effective than autonomy-supportive styles[52].

STRENGTHS AND LIMITATIONS

A strength of this thesis is the combination of qualitative and quantitative methods used to gain a deeper insight into ASC in maternity care. This included measuring the patients' perceptions of the healthcare climate, although the thesis's perspective was on the interactions of maternity care professionals. The use of a theoretical framework and having a broad interdisciplinary research team are other strengths of this thesis. The data being collected through actual observation of prenatal consultation in daily practice in maternity care is also a strength.

Several limitations of our studies are related to our sample. We did not explicitly include patients from minority groups, resulting in an underrepresentation of patients with lower levels of education and different cultural or ethnic backgrounds. In addition, our study was performed in a high-income country, which should be taken into account when applying our findings to maternity care in a different context. Furthermore, our observations were mainly done during the Corona pandemic, so most of the time, partners were not allowed to attend consultations.

The professionals were aware that they were being observed, which may have influenced their interactional practices. This limitation is inherent in observing interactions. They may have performed at their best, which needs to be taken into account while interpreting the findings.

Our analysis was limited to spoken interactions because we used audiotapes rather than video recordings. This deliberate choice allowed us to include a relatively diverse and large population of professionals and patients and to include the interactions during the whole consultation, including those that took place during a physical examination and the performance of an ultrasound.

Another limitation is that we only know how professionals interact, we do not know why they interact in a certain way. In our fifth study, we tried to find some clues by looking at the core element of counseling for prenatal screening according to maternity care professionals.

Although measuring patients' perceptions directly after the consultation contributed to our 100% responses, patients had very little time to reflect on the consultation, which may have affected our results.

SUGGESTIONS FOR FURTHER RESEARCH

The recommendations for improvement in this thesis are based on our findings and build on existing literature. Action research with maternity care professionals, patients, and their partners would be useful to develop new models of prenatal care. Inclusion should be an explicit point of interest in this research, as some groups do not receive the maternity care they need[54]. It is necessary to develop a maternity care system that provides optimal care for all.

In this thesis, the perceived healthcare climate is used as an outcome measure for autonomy-supportive consultation in maternity care. An important reason for examining the interactions and decision-making during prenatal consultations was that patients experienced forms of disrespect during pregnancy, labour, and birth. This perceived disrespect was predominantly related to a lack of communication or a lack of choice. It is therefore important to design a follow-up study on autonomy-supportive consultation that focuses on perceived communication, choice, and respect as outcome measures.

Understanding why maternity care professionals use certain interactions and avoid others would be useful in helping them optimize their autonomy-supportive interactions and improve their education. We therefore suggest further research to explore this phenomenon in more detail.

CONCLUSIONS

It is time for professionals to take the next step in providing person-centred care, where patients are actively involved and empowered to make their own choices regarding their health. To do this, they need to find the right balance between providing personalised professional advice and offering room to patients to make autonomous choices. This places high demands on the interaction between professional and patient, so professionals need to create a healthcare climate in which difficult and sometimes even painful issues can be discussed while, at the same time, patients feel respected and supported. ASC could help professionals to achieve this goal. This thesis has laid a foundation for developing training to facilitate maternity care and take this next step.

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CHAPTER 8

Summary

This thesis aims to unravel the interaction and decision-making support by maternity care professionals, midwives and obstetricians, during prenatal consultations in daily practice and offer professionals and teachers recommendations on optimizing the interaction and decision-making support during prenatal consultations.

This thesis also contributes to the research on Self Determination Theory (SDT) in healthcare. To our knowledge, this is pioneering research to examine maternity care consultations from the perspective of SDT, thereby enriching the existing body of knowledge in this field.

CHAPTER 1

The introduction provides a rationale for the research conducted. Every year, more than 300,000 people become parents in the Netherlands. For most of them, it is a life-changing but nice event. However, some of them are disappointed in maternity care and in themselves. They have frequently perceived a lack of autonomy and respect during pregnancy, labour and birth, predominantly related to a lack of communication or a lack of choice. Prior research underscores the urgent need for patients to actively engage in consultations to empower them to make health-related decisions. This places additional demands on the competencies of maternity care professionals. While there is a focus on person-centred care and decision-making in training and continuing professional education, professionals struggle with the task of supporting patients in decision-making. They often lean towards providing information to guide their patients' decision-making rather than actively stimulating patient participation and decision support. This PhD research aims to address this knowledge gap by unravelling the interaction and decision-making daily practice and offering recommendations on how professionals could optimize their interaction and decision-making support, particularly in maternity care. Optimizing the interaction and decision-making during prenatal consultations could positively affect not only the experiences during pregnancy but also during labour and birth.

Also the context for the research, maternity care in the Netherlands, is outlined, and the main concepts related to prenatal consultation are introduced. The amount of decision-making during prenatal consultation in high-income countries has increased in the past decades. Next to the physical examination, it includes a number of issues regarding care and lifestyle that need to be discussed and decisions that need to be made. Also, the interaction between maternity care professionals and patients has changed. Person-centred care has been introduced, including shared decision-making in which patients and professionals decide on the best care together. Decisions in the context of prenatal consultations could concern medical interventions, preferred care, or lifestyle changes. Finally, the context of prenatal consultations has become more complex; in the Netherlands, more than half of the patients are referred during pregnancy, labour or birth.

Next, the theoretical framework of autonomy-supportive consultation (ASC) is introduced. ASC is based on SDT, a motivation theory that postulates that people become more autonomously motivated when their basic psychological needs, autonomy, competence, and relatedness are satisfied. Autonomy-supportive consultation is a basic psychological need-supportive interaction style that facilitates more autonomous forms of motivation and, thereby, more self-regulated behaviour in patients, which enables them to make their own choices regarding their health.

Thus, the broad research question of this thesis was: "How can maternity care professionals optimize their interaction so that patients are more autonomously motivated and self-regulated and able to make their own choices regarding their health?".

CHAPTER 2

This chapter describes our realist review (based on context-mechanism-outcomes), in which we aimed to gain insight into contextual factors and mechanisms supporting or hindering autonomy-supportive consultation and the outcomes of such consultations. A total of 2792 articles were screened: 127 full-text articles were assessed for eligibility, of which 18 were included.

The **contextual factors** identified in our review were classified at patient, healthcare professional and organisational levels. The patient can be limited by their physical condition, knowledge or psychological capacity. The support of important others could foster a patient's autonomy. The overarching contextual healthcare professional factor was competence, which comprised knowledge, skills, and attitude, whereby attitude appeared to be the most important aspect. A rigid daily routine can be an organisational barrier to autonomy support. Autonomy support, as an overall organisational strategy for good care, can be stimulating.

The **mechanisms** we found that support or hinder patients' autonomy in relation to decision-making in consultation were ordered by overarching, before, during and after decision-making.

Overarching supporting mechanisms are relationship-building, using respectful language and taking time.

Overarching hindering mechanisms are using controlling language and impatience.

Mechanisms supporting autonomy *before decision-making* are exploring patients' needs, offering advice and facilitating patients' knowledge.

During decision-making, exploring options and facilitating free choice could support autonomy, while limiting patient choice could hinder patients' autonomy.

After decision-making, following up on patients' processes could support patients' autonomy, while judgment and the inability to accept patients' choices could hinder patients' autonomy.

As an **outcome** of autonomy-supportive consultation, we found higher decision satisfaction and compliance for treatment or behaviour change.

The realist review shows that fulfilling the three basic psychological needs autonomy, competence and relatedness, through autonomy-supportive consultation facilitates more autonomous motivation, which supports more autonomous forms of self-regulation, enabling patients to make their own choices regarding their health. Because of the importance of our findings for facilitating patients' choices, we propose an integrated model of shared decision-making with the underlying mechanisms found in our review and the theoretical foundation of SDT.

CHAPTER 3

This chapter reports the adaptation and validation of the encoding of observations using Coding and Observing Need-Supportive Consultation in Maternity Care Consultations (CONSUL-MCC): An SDT-based tool to observe consultations in maternity care. To facilitate structured observations in maternity care in daily practice, Coding and Observing Need-Supportive Counseling in Chronic Care Encounters (COUNSEL-CCE), developed for use in chronic care, was adapted to the context of maternity care and validated the encoding of observations in maternity care. This process contributes to enhancing the knowledge of the extent to which indicators of need-supportive or need-thwarting interactions are generic across different healthcare contexts and to the development of a universal tool for encoding autonomy-supportive consultation in practice. The experts and the patient representative indicated that all indicators used in the original tool were also relevant for use in maternity care. Four descriptions were rephrased to improve clarity, and one indicator: "stimulating patients to organise the support of next of kin", was added. All examples were replaced by examples of the context of maternity care.

The final version of the CONSUL-MCC was tested psychometrically in a sample of the target population. The sample consisted of 104 consultations of 23 different maternity care professionals. The 104 consultations were divided into 453 units of five minutes of audiotaped interaction. The results of psychometric testing indicated good construct validity. However, the data characteristics made it impossible to confirm the presumed factor structure and perform an accurate intraclass correlation. Although our sample consisted of 453 units, some of the indicators were either never observed or only a few times. These indicators were specifically related to need-thwarting interactions. Other indicators were mostly observed in the same frequency, which resulted in only a small variance.

It proved possible to adapt COUNSEL-CCE to the context of maternity care. Based on the results of our research, we assume that it is also possible to apply the COUNSEL-CCE to other care domains. To do so, it is necessary to adapt the descriptions of the indicators and the examples for each domain. Based on our research and the literature, it seems that the four factors, the eight subfactors and their underlying indicators are universally applicable to all healthcare domains. However, the appearance of the indicators can differ depending on the context.

The resulting CONSUL-MCC is useful for gaining insights into professionals' autonomy-supportive consultation. The tool could be helpful in collecting detailed feedback on the difficulties that interns or professionals experience in autonomy-supportive consultation in daily practice. For researchers, need-thwarting interactions are especially important in improving their knowledge of how interactions could hinder patients' self-regulated behaviour during consultation.

CHAPTER 4

The qualitative interaction analysis described in this chapter aimed to gain insight into the way professionals used mechanisms of ASC in prenatal consultation. A detailed description of interactions between maternity care professionals and their patients in daily practice could help identify what is needed to optimize ASC in daily practice. This study was part of a larger project for which data were collected during 101 consultations conducted by 21 maternity care professionals. The consultations were observed in real time and audiotaped. The prenatal consultations occurred in an academic hospital, a teaching hospital, 16 midwifery practices in urban and rural areas, and small and large practices. Patients were not selected a priori. We selected 20 of the 101 prenatal consultations for this current study because they contained fragments focused on decision-making. The 20 consultations contained a total of 28 fragments about decision-making.

Eight interactional mechanisms were identified, which were categorised into three overarching themes: (a) '**Lightheartedness**', (b) '**Orientation to agreement**', and (c) '**Offering information and options**'.

'**Lightheartedness**' describes two interactional mechanisms: the use of *mitigating language* and *humour*. '**Orientation to agreement**' describes how the professional and also the patient seem to be oriented towards demonstrating agreement and understanding by frequently using the word '*yes*', *vague words* and *interruptions*. The last theme, '**Offering information and options**', describes how professionals give information and options. They *reduced interaction with the patient* and *gave detailed and standardised information* while they *kept offering options*.

This study shows that in moments of decision-making, professionals use minimising language and humour as mechanisms to fulfil the psychological need for 'relatedness'.

Further, our results show that professionals use only a few mechanisms to meet the patients' psychological needs for 'competence' and 'autonomy'. Professionals mainly use information giving to meet patients' need for competence. The professionals keep all options open to meet patients' need for autonomy.

The results showed that it is possible to add minimising language and humour as mechanisms to fulfil the psychological need relatedness to existing concepts and models on ASC. Humour and minimising language are interaction mechanisms that enable professionals to minimise patients' discomfort or anxiety and to build or protect the relationship. Also, the mechanisms described in the theme 'Orientation to agreement' could positively affect the relationship between professional and patient. However, these mechanisms also have the potential to threaten this relationship because decisions could be made too easily without discussing the patient's concerns and expectations.

CHAPTER 5

This chapter presents a quantitative observation study during prenatal consultations in maternity care using the CONSUL-MCC. The aim of this study was to quantify the frequency with which maternity care professionals use basic psychological need-supportive, more specific **autonomy-supportive**, and **structuring interactions** and basic psychological need-thwarting, more specific **controlling** and **chaotic interactions** in daily practice. In addition, we aimed to establish whether there is an association between need-supportive and need-thwarting interactions and the characteristics of patients and professionals and whether there is an association between these interactions and the patient-perceived healthcare climate. In total, 104 consultations with 23 maternity care professionals were observed. The mean consultation duration was 21 minutes (range 7 – 73 minutes), resulting in 453 five-minute audio fragments. In total, 104 patients participated in this study.

In general, the professionals used interactions based on a small repertoire. We found that professionals regularly use **autonomy-supportive interactions**, such as '*leaves room to the patient to tell*' (2.34 (scale 0-4), SD=0.57), and they sometimes use **structuring interactions**, such as '*clarifies follow-up of patients' goals*' (1.77, SD=0.55). They rarely used **controlling interactions** (0.73, SD=0.46) and hardly ever used **chaotic interactions** (0.09, SD=0.11).

The contributions of the sub-factors to each factor differ. Within the factor '**autonomy support**', professionals more frequently used an *attuning approach* (2.31, SD=0.58) than a *participatory approach* (1.41, SD=0,80). Furthermore, within the factor '**structure**', professionals more frequently used a *clarifying approach* (1.81, SD=0.59) than a *guiding approach* (0.94, SD=0.55). There was a wide variation between the interaction items belonging to the sub-factors (*attuning, participative, guiding and clarifying*). Interaction items such as *'leaves room to the patient to tell'* (2.43, SD=0.57) were frequently

observed. Other items were rarely observed, such as '*summarises and requests repetition*' (0.18, SD=0.24).

In general, patients perceived the healthcare climate during prenatal consultations as positive. Their mean score on the 7-point Likert scale was above 6.28 for 14 of the 15 statements (6.29 - 6.95). Only statement 11, about the way maternity care professionals deal with the patient's emotions, scored lower (3.78).

The findings of our study show that maternity care professionals use interactions that support their patients' need for autonomy by offering room and choice. They also use interactions that provide information to meet patients' need for competence. Patients were rarely stimulated to be actively engaged in the consultations. The effect of rarely used interactions that stimulate active patient engagement could become stronger because the unfulfillment of basic psychological needs can cause more passive patient behaviour and disengagement.

CHAPTER 6

This chapter describes a qualitative inquiry, aiming to gain insight into maternity care professionals' views on 'good' counseling. Knowing their views might provide more insight into the mechanisms explaining professionals' focus on providing information and offering screening options rather than decision-making support. The online survey was part of the Trident study and was sent to 2813 maternity care professionals registered as prenatal counselors.

A total of 1426 maternity care professionals participated in this current study. Their answers to the open-ended question: 'In your opinion, what constitutes 'good' counseling for prenatal anomaly screening?' were coded and afterwards, we elaborated on emerging overarching themes through the lens of autonomy-supportive counseling. Lastly, we conducted a quantitative analysis of the qualitative data.

Themes regarding the **context** of good counseling were *time*, *counsellors' competence* and *ethical sensitivity*. Within the **interactions between patients and professionals** during the process of good counseling, *exploring the values of the parents* was found to be an overarching theme. Almost all professionals mentioned *providing information* as a theme before the decision-making. *Free choice, exploring the impact of the test results on the parents*, and *guiding* were found as themes in the interaction during the decision-making process. Based on the professionals' responses, themes regarding the **outcome** of good counseling, *parents making their own choice, the right choice,* and *no assurance of getting a healthy baby* were found as themes, with *parents making their own choice* being the most named aspect.

Looking at themes within the interactions between patients and professionals during the counseling process through the lens of autonomy-supportive counseling, not

all professionals mention all interactions to meet patients' three basic psychological needs as elements of good counseling. Patients' need for relatedness is fulfilled within the theme, exploring the patient's values. Patients' need for competence is fulfilled within the theme of providing information. In the words or phrases regarding information, professionals focus on providing information and hardly on discussing the information as a core element of counseling. Patients' need for autonomy is met within the themes of free choice, exploring the impact of the test results for the parents and guiding. Professionals seem to focus on free choice to fulfil patients' need for autonomy.

Professionals' views about free choice and parents making their own choice of whether to opt for prenatal screening or not are reflected in their non-directive attitude before and during the decision-making process, which complicates patients' more autonomous decision-making. Professionals need to offer structure to support patients' self-regulated behaviour, allowing them to make their own choices.

CHAPTER 7

This chapter contains a general discussion of this thesis, answering our broad research question: How can maternity care professionals their interaction so that patients are more autonomously motivated and self-regulated and able to make their own choices regarding their health?". The findings are presented according to the context, mechanism, and outcome of autonomy-supportive consultation, whereby the mechanism is at the heart of our research.

Maternity care professionals create a warm, friendly healthcare climate during prenatal consultations. They provide information and offer patients the room to participate in consultations and make their own choices. However, they seem to find it difficult to discuss issues in-depth, offer structure in order to facilitate the decision-making process of the patient and intend to avoid discomfort and difficulties in their consultations. This could hinder patients' more autonomous decision-making. Although some parts of ASC have already been implemented in maternity care, there is room to optimize autonomy support and thereby improve interaction and decision-making during prenatal consultations.

The implications of our findings for maternity care professionals are described according to the three basic psychological needs. To fulfil patients' need for autonomy, supporting patients in exploring their values, norms, expectations, fears, and wishes is important. In addition, personalised support of the decision-making process with professional advice is important. To fulfil patients' need for competence, it is particularly important to support the development of knowledge. Meeting the two above-mentioned competencies places high demands on the relationship between patient and professional; creating a brave space is needed. In a brave space, difficult and sometimes even painful subjects can be discussed with the certainty that there is always support and respect.

The strengths of our thesis are the use of a theoretical framework and the combination of quantitative and qualitative research to generate a deeper insight into ASC in maternity care and the data collection through observation of prenatal consultation. There are also some limitations. For example, we did not explicitly include patients from minority groups, resulting in an underrepresentation of patients with lower levels of education and other cultural or ethnic backgrounds. We also formulated suggestions for future research, such as developing new models of prenatal care through action research with maternity care professionals, patients, and their partners.

CONCLUSION

With this thesis, we have laid a foundation to develop training to facilitate maternity care professionals to optimize their interactions and decision-making during prenatal consultations. Our insight into the interactions and decision-making in daily practice and theoretical framework enables us to help maternity care professionals take the next step in providing person-centred maternity care.

Appendix

SAMENVATTING

Dit proefschrift heeft als doel om de interactie en ondersteuning bij besluitvorming tijdens prenatale consulten door professionals in de geboortezorg, verloskundigen en gynaecologen, in de dagelijkse praktijk te ontrafelen. Verder willen we aanbevelingen doen aan professionals en docenten om de interactie en ondersteuning bij besluitvorming tijdens prenatale consulten te optimaliseren.

Dit proefschrift draagt ook bij aan het onderzoek naar de zelfdeterminatietheorie (SDT) in de gezondheidszorg. Voor zover wij weten is dit het eerste onderzoek naar consulten in de geboortezorg vanuit het perspectief van SDT, waardoor de bestaande kennis op dit gebied wordt verrijkt.

HOOFDSTUK 1

In de inleiding wordt een onderbouwing gegeven voor het uitgevoerde onderzoek. Jaarlijks worden meer dan 300.000 mensen in Nederland ouders. Voor de meesten van hen is het een ingrijpende maar mooie gebeurtenis. Sommigen van hen zijn echter teleurgesteld in de geboortezorg en in zichzelf. Ze hebben een gebrek aan autonomie en respect ervaren tijdens de zwangerschap, bevalling en kraambed, voornamelijk gerelateerd aan een gebrek aan communicatie of een gebrek aan keuze. Eerder onderzoek onderstreept de dringende noodzaak voor patiënten om actief deel te nemen aan consulten om hen in staat te stellen om beslissingen over hun gezondheid te nemen. Dit stelt hoge eisen aan de competenties van professionals in de geboortezorg. Hoewel er in de opleiding en in bij- en nascholingen een focus ligt op persoonsgerichte zorg en besluitvorming, vinden professionals het lastig om patiënten te ondersteunen bij het nemen van beslissingen.

Professionals hebben de neiging om informatie te verstrekken om de besluitvorming van hun patiënten te begeleiden in plaats van actief de deelname van patiënten aan de besluitvorming te stimuleren. Dit promotieonderzoek heeft als doel om deze kennisklоof te dichten door de interactie en het besluitvormingsproces tussen professional en patiënt in de dagelijkse praktijk te ontrafelen en aanbevelingen te doen over hoe professionals hun interactie en ondersteuning bij besluitvorming kunnen optimaliseren, met name in de geboortezorg. Optimalisatie van de interactie en besluitvorming tijdens prenatale consulten kan niet alleen de ervaringen tijdens de zwangerschap, maar ook tijdens de bevalling positief beïnvloeden.

Verder wordt de context van het onderzoek, de Nederlandse geboortezorg, geschetst en worden de belangrijkste concepten met betrekking tot prenatale consulten geïntroduceerd. Het aantal besluiten dat tijdens prenatale consulten moet worden genomen is in landen met een hoog inkomen de afgelopen decennia fors toegenomen. Naast de lichamelijke controles worden in prenatale consulten diverse onderwerpen besproken en besluiten genomen. Ook de interactie tussen professionals in de

geboortezorg en patiënten is veranderd. Persoonsgerichte zorg is geïntroduceerd, inclusief gezamenlijke besluitvorming waarin patiënten en professionals samen beslissen over de beste zorg. Beslissingen in de context van prenatale consulten kunnen betrekking hebben op medische interventies, voorkeurszorg of veranderingen in leefstijl. Tot slot is de context van prenatale consulten complexer geworden; in Nederland wordt meer dan de helft van de patiënten tijdens de zwangerschap of bevalling verwezen van de eerste naar de tweede lijn.

Vervolgens wordt het theoretische kader van autonomie-ondersteunende consultvoering (ASC) geïntroduceerd. ASC is gebaseerd op SDT, een motivatietheorie die stelt dat mensen autonomer gemotiveerd raken als hun psychologische basisbehoeften autonomie, competentie en verbondenheid worden bevredigd. Tijdens autonomie-ondersteunende consultvoering gebruiken professionals een interactiestijl waarin zij tegemoet komen aan de psychologische basisbehoeften van patiënten. Hierdoor faciliteren zij autonomere vormen van motivatie en als gevolg daarvan meer zelfgereguleerd gedrag bij patiënten. Zo kunnen patiënten eigen keuzes maken met betrekking tot hun gezondheid.

De brede onderzoeksvraag van dit proefschrift was: “Hoe kunnen professionals in de geboortezorg hun interactie optimaliseren, zodat patiënten autonomer gemotiveerd en zelfgereguleerd zijn en eigen keuzes kunnen maken met betrekking tot hun gezondheid?”.

HOOFDSTUK 2

In dit hoofdstuk wordt onze realist review beschreven (gebaseerd op context-mechanisme-uitkomsten), waarin we inzicht wilden krijgen in contextuele factoren en mechanismen die autonomie-ondersteunende consultvoering faciliteren of belemmeren en de uitkomsten van dergelijke consulten. In totaal werden 2792 artikelen gescreend: 127 artikelen werden op basis van volledige tekst beoordeeld op geschiktheid, waarvan er 18 werden geïncludeerd.

De **contextuele factoren** die in onze review werden geïdentificeerd werden geclassificeerd naar patiënt-, zorgprofessional- en organisatieniveau. De patiënt kan worden beperkt door zijn fysieke conditie, kennis of psychologische capaciteit. De steun van belangrijke anderen kan de autonomie van een patiënt bevorderen. De overkoepelende contextuele zorgprofessionalfactor was competentie, die kennis, vaardigheden en houding omvat, waarbij houding het belangrijkste aspect leek te zijn. Een rigide dagelijkse routine kan een organisatorische barrière zijn voor autonomie-ondersteuning. Autonomie-ondersteuning, als een algehele organisatiestrategie voor goede zorg, kan stimulerend zijn.

De **mechanismen** die we vonden die de autonomie van patiënten met betrekking tot besluitvorming in consulten ondersteunen of belemmeren, werden geordend naar overkoepelend, en vóór, tijdens en na besluitvorming.

Overkoepelende ondersteunende mechanismen zijn relatieopbouw, respectvolle taal gebruiken en de tijd nemen.

Overkoepelende belemmerende mechanismen zijn controlerende taal gebruiken en het uiten van ongeduld.

Mechanismen die autonomie ondersteunen vóór besluitvorming zijn het onderzoeken van de behoeften van patiënten, het geven van advies en het faciliteren van de kennis van patiënten.

Tijdens besluitvorming kunnen het verkennen van opties en het faciliteren van vrije keuze de autonomie ondersteunen, terwijl het beperken van de keuze van de patiënt de autonomie van patiënten kan belemmeren.

Na besluitvorming kan het overnemen van de keuzes van patiënten in het proces de autonomie van patiënten ondersteunen, terwijl veroordelen en het onvermogen om de keuzes van patiënten te accepteren de autonomie van patiënten kunnen belemmeren.

Als **resultaat** van autonomie-ondersteunende consulten vonden we een hogere beslissingstevredenheid, beter therapietrouw en volhouden van gedragsverandering.

De realist review laat zien dat het vervullen van de drie psychologische basisbehoeften autonomie, competentie en verbondenheid, door middel van autonomie-ondersteunende consultvoering, meer autonome motivatie faciliteert. Meer autonome vormen van motivatie ondersteunen het zelfregulerend vermogen van patiënten, waardoor zij in staat zijn hun eigen keuzes te maken met betrekking tot hun gezondheid.

Omdat onze bevindingen belangrijk zijn voor het faciliteren van patiënten bij het maken van keuzes, stellen we een geïntegreerd model voor van gezamenlijke besluitvorming, met de onderliggende mechanismen die we in ons onderzoek hebben gevonden en de theoretische basis van SDT.

HOOFDSTUK 3

Dit hoofdstuk beschrijft de aanpassing en validatie van de codering van observaties met behulp van de Coding and Observing Need-Supportive Consultation in Maternity Care Consultations (CONSUL-MCC): een op SDT gebaseerde tool om consulten in de geboortezorg te observeren. Om gestructureerde observaties in de dagelijkse praktijk van de geboortezorg te vergemakkelijken werd de Coding and Observing Need-Supportive Counseling in Chronic Care Encounters (COUNSEL-CCE) ontwikkeld

voor gebruik in chronische zorg, aangepast aan de context van geboortezorg en werd de codering van observaties in de geboortezorg gevalideerd. Dit proces draagt bij aan het vergroten van de kennis over de mate waarin indicatoren van behoefte-ondersteunende of behoefte-belemmerende interacties generiek zijn in verschillende contexten van gezondheidszorg en aan de ontwikkeling van een universele tool voor het coderen van autonomie-ondersteunende consulten in de praktijk.

De experts en de patiëntvertegenwoordiger gaven aan dat alle indicatoren die in de oorspronkelijke tool werden gebruikt, ook relevant waren voor gebruik in de geboortezorg. Vier beschrijvingen werden geherformuleerd om de duidelijkheid te verbeteren en er werd één indicator toegevoegd: "patiënten stimuleren om de ondersteuning van naaste familieleden te organiseren". Alle voorbeelden werden vervangen door voorbeelden uit de context van geboortezorg.

De definitieve versie van de CONSUL-MCC werd psychometrisch getest in een steekproef van de doelpopulatie. De steekproef bestond uit 104 consulten van 23 verschillende geboortezorgprofessionals. De 104 consulten werden verdeeld in 453 eenheden van vijf minuten audio-opname van de interactie. De resultaten van de psychometrische test gaven een goede constructvaliditeit aan. De datakarakteristieken maakten het echter onmogelijk om de veronderstelde factorstructuur te bevestigen en een nauwkeurige intraclasscorrelatie uit te voeren. Hoewel onze steekproef uit 453 eenheden bestond, werden sommige indicatoren nooit of slechts een paar keer waargenomen. Deze indicatoren hadden specifiek betrekking op behoefte-belemmerende interacties. Andere indicatoren werden grotendeels in dezelfde frequentie waargenomen, wat resulteerde in slechts een kleine variantie.

Het bleek mogelijk om COUNSEL-CCE aan te passen aan de context van geboortezorg. Op basis van de resultaten van ons onderzoek gaan we ervan uit dat het ook mogelijk is om de COUNSEL-CCE aan te passen aan andere zorgdomeinen. Om dit te doen, is het noodzakelijk om de beschrijvingen van de indicatoren en de voorbeelden voor elk domein aan te passen. Op basis van ons onderzoek en de literatuur lijkt het erop dat de vier factoren, de acht subfactoren en hun onderliggende indicatoren universeel toepasbaar zijn op alle domeinen van de gezondheidszorg. De manier waarop de indicator zichtbaar is kan echter verschillen, afhankelijk van de context.

De resulterende CONSUL-MCC is nuttig om inzicht te krijgen in de autonomie-ondersteunende consulten van professionals in de geboortezorg. De tool kan nuttig zijn bij het verzamelen van gedetailleerde feedback over de moeilijkheden die stagiairs of professionals ervaren bij autonomie-ondersteunende consulten in de dagelijkse praktijk. Voor onderzoekers zijn behoefte-belemmerende interacties vooral belangrijk om hun kennis te verbeteren over hoe interacties het zelfregulerend gedrag van patiënten tijdens consulten kunnen belemmeren.

HOOFDSTUK 4

De kwalitatieve interactieanalyse die in dit hoofdstuk wordt beschreven was bedoeld om inzicht te krijgen in de manier waarop professionals mechanismen van ASC gebruikten in prenatale consulten. Een gedetailleerde beschrijving van interacties tussen professionals in de geboortezorg en hun patiënten in de dagelijkse praktijk kan helpen te identificeren wat nodig is om ASC in de dagelijkse praktijk te optimaliseren. Deze studie was onderdeel van een groter project waarvoor gegevens werden verzameld tijdens 101 consulten die werden uitgevoerd door 21 professionals in de geboortezorg. De consulten werden in de spreekkamer geobserveerd en opgenomen op audio. De prenatale consulten vonden plaats in een academisch ziekenhuis, een opleidingsziekenhuis, en 16 verloskundigenpraktijken in stedelijke en landelijke gebieden, in kleine en grote praktijken. Patiënten werden niet a priori geselecteerd. We selecteerden 20 van de 101 prenatale consulten voor deze huidige studie omdat ze fragmenten bevatten die gericht waren op besluitvorming. De 20 consulten bevatten in totaal 28 fragmenten over besluitvorming.

Er werden acht interactie-mechanismen geïdentificeerd, die werden ingedeeld in drie overkoepelende thema's: (a) **Luchthartigheid**, (b) **Oriëntatie op overeenstemming** en (c) **Informatie en opties aanbieden.**

Luchthartigheid beschrijft twee interactie-mechanismen: het gebruik van verkleinwoorden en humor. **Oriëntatie op overeenstemming** beschrijft hoe de professional en ook de patiënt lijken te zijn gericht op het tonen van overeenstemming en begrip door frequent gebruik van het woord 'ja', het gebruik van vage woorden en interrupties. Het laatste thema, **Informatie en opties aanbieden**, beschrijft hoe professionals informatie en opties geven. Ze verminderden de interactie met de patiënt en gaven gedetailleerde en gestandaardiseerde informatie terwijl ze opties bleven aanbieden.

Deze studie toont aan dat professionals tijdens besluitvorming verkleinwoorden en humor gebruiken als mechanismen om de psychologische behoefte aan 'verbondenheid' te vervullen. Verder tonen onze resultaten aan dat professionals slechts een paar mechanismen gebruiken om te voldoen aan de psychologische behoeften van patiënten aan 'competentie' en 'autonomie'. Professionals gebruiken het geven van informatie voornamelijk om te voldoen aan de behoefte van patiënten aan competentie. De professionals houden alle opties open om tegemoet te komen aan de behoefte van patiënten aan autonomie.

De resultaten lieten zien dat het mogelijk is om het gebruik van verkleinwoorden en humor toe te voegen als mechanismen om tegemoet te komen aan de psychologische basis behoefte verbondenheid. Humor en verkleinwoorden zijn interactiemechanismen die professionals in staat stellen om het ongemak of de angst van patiënten te minimaliseren en de relatie op te bouwen of te beschermen. Ook de mechanismen die beschreven worden in het thema 'Oriëntatie op overeenstemming' kunnen een positief effect hebben op de relatie tussen professional en patiënt. Deze mechanismen kunnen

deze relatie echter ook bedreigen omdat beslissingen te gemakkelijk genomen kunnen worden zonder de zorgen en verwachtingen van de patiënt te bespreken.

HOOFDSTUK 5

In dit hoofdstuk wordt de kwantitatieve observatiestudie tijdens prenatale consulten in de geboortezorg met behulp van de CONSUL-MCC gepresenteerd. Het doel van deze studie was om het voorkomen en de frequentie van de interacties te kwantificeren waarmee professionals in de geboortezorg in de dagelijkse praktijk tegemoet komen aan de psychologische basisbehoeften van patiënten. Door het gebruik van **Autonomie-ondersteunende** en **structurerende** interacties kunnen zij tegemoet komen aan de psychologische basisbehoeften, terwijl **controlerende** en **chaotische** interacties de vervulling van de psychologische basisbehoeften belemmeren. Daarnaast wilden we vaststellen of er een verband is tussen behoefte-ondersteunende en behoefte-belemmerende interacties en de kenmerken van patiënten en professionals en of er een verband is tussen deze interacties en het door de patiënt waargenomen zorgklimaat. In totaal werden 104 consulten met 23 professionals in de geboortezorg geobserveerd. De gemiddelde consultduur was 21 minuten (bereik 7 - 73 minuten), wat resulteerde in 453 audiofragmenten van vijf minuten. In totaal namen 104 patiënten deel aan deze studie.

Over het algemeen gebruikten de professionals interacties op basis van een klein repertoire. We ontdekten dat professionals regelmatig **autonomie-ondersteunende** interacties gebruiken, zoals 'geeft de patiënt de ruimte om te vertellen' (2,34 (schaal 0-4), SD=0,57), en dat ze soms **structurerende** interacties gebruiken, zoals 'verduidelijkt follow-up van de doelen van de patiënt' (1,77, SD=0,55). Ze gebruikten zelden **controlerende** interacties (0,73, SD=0,46) en bijna nooit **chaotische** interacties (0,09, SD=0,11).

De bijdragen van de subfactoren aan elke factor verschillen. Binnen de factor **autonomie-ondersteuning** gebruikten professionals vaker een afstemmende benadering (2,31, SD=0,58) dan een participatieve benadering (1,41, SD=0,80). Verder gebruikten professionals binnen de factor **structuur** vaker een verduidelijkende benadering (1,81, SD=0,59) dan een begeleidende benadering (0,94, SD=0,55). Er was een grote variatie tussen de interactie-items die bij de subfactoren (afstemmen, participatief, begeleidend en verduidelijkend) hoorden. Interactie-items zoals 'geeft de patiënt de ruimte om te vertellen' (2,43, SD=0,57) werden vaak waargenomen. Andere items werden zelden waargenomen, zoals 'vat samen en vraagt om herhaling' (0,18, SD=0,24).

Over het algemeen ervoeren patiënten het zorgklimaat tijdens prenatale consulten als positief. Hun gemiddelde score op de 7-punts Likertschaal was 6,29 of hoger voor 14 van de 15 uitspraken (6,29 - 6,95). Alleen uitspraak 11, over de manier waarop geboortezorgprofessionals omgaan met de emoties van de patiënt, had een lagere score (3,78).

De bevindingen van ons onderzoek laten zien dat geboortezorgprofessionals interacties gebruiken die de behoefte aan autonomie van hun patiënten ondersteunen door ruimte en keuze te bieden. Ze gebruiken ook interacties die informatie bieden om te voldoen aan de behoefte aan competentie van patiënten. Patiënten werden zelden gestimuleerd om actief betrokken te zijn bij de consulten. Het effect van het zelden gebruiken van interacties die actieve betrokkenheid van de patiënt stimuleren kan breder zijn, omdat in het algemeen het niet vervullen van fundamentele psychologische behoeften ook al kan leiden tot meer passief gedrag en desinteresse van de patiënt.

HOOFDSTUK 6

Dit hoofdstuk beschrijft een kwalitatief onderzoek, gericht op het verkrijgen van inzicht in de visies van professionals in de geboortezorg op 'goede' counseling. Kennis van hun visies kan meer inzicht geven in de mechanismen die de focus van professionals op het verstrekken van informatie en het aanbieden van screeningopties in plaats van ondersteuning bij besluitvorming verklaren. De online enquête was onderdeel van de Trident-studie en werd verzonden naar 2813 professionals in de geboortezorg die geregistreerd stonden als prenatale counselors.

In totaal namen 1426 professionals in de geboortezorg deel aan de huidige studie. Hun antwoorden op de open vraag: 'Wat is volgens u 'goede' counseling voor prenatale screening?' werden gecodeerd en daarna werkte we opkomende overkoepelende thema's uit door de lens van autonomie-ondersteunende counseling. Tot slot voerden we een kwantitatieve analyse uit van de kwalitatieve gegevens.

Thema's met betrekking tot de **context** van goede counseling waren "tijd", "competentie van counselors" en "ethische sensitiviteit". Binnen de **interacties** tussen patiënten en professionals tijdens het proces van goede counseling bleek "het verkennen van de waarden van de ouders" een overkoepelend thema te zijn. Vrijwel alle professionals noemden "het verstrekken van informatie" als thema vóór de besluitvorming. "Vrije keuze", "het onderzoeken van de impact van de testresultaten op de ouders" en "begeleiding" werden gevonden als thema's in de interactie tijdens het besluitvormingsproces. Op basis van de antwoorden van de professionals werden de volgende thema's gevonden met betrekking tot de **uitkomst** van goede counseling: "ouders die hun eigen keuze maken", "de juiste keuze" en "geen garantie op het krijgen van een gezonde baby". "Ouders die hun eigen keuze maken" kwam het meeste voor.

Als we kijken naar thema's binnen de interacties tussen patiënten en professionals tijdens het counselingproces door de lens van autonomie-ondersteunende counseling, noemen niet alle professionals alle interacties om te voldoen aan de drie fundamentele psychologische behoeften van patiënten als elementen van goede counseling. De behoefte van patiënten aan verbondenheid wordt vervuld binnen het thema "het onderzoeken van de waarden van de patiënt". De behoefte van patiënten aan competentie wordt vervuld binnen het thema "het verstrekken van informatie". In

de woorden of zinnen met betrekking tot informatie richten professionals zich op het verstrekken van informatie en nauwelijks op het bespreken van de informatie als een kernelement van counseling. De behoefte van patiënten aan autonomie wordt vervuld binnen de thema's: "vrije keuze", "het onderzoeken van de impact van de testresultaten op de ouders" en "begeleiding". Professionals lijken zich te richten op vrije keuze om te voldoen aan de behoefte van patiënten aan autonomie.

De opvattingen van professionals over vrije keuze en ouders die zelf kiezen of ze wel of niet voor prenatale screening kiezen, worden weerspiegeld in hun niet-directieve, niet sturende houding voor en tijdens het besluitvormingsproces, wat de meer autonome besluitvorming van patiënten bemoeilijkt. Professionals moeten structuur bieden om het zelfregulerend gedrag van patiënten te ondersteunen, zodat ze hun eigen keuzes kunnen maken.

HOOFDSTUK 7

Dit hoofdstuk bevat de algemene bespreking van dit proefschrift, waarmee onze brede onderzoeksvraag wordt beantwoord: Hoe kunnen professionals in de geboortezorg hun interactie zo vormgeven dat patiënten meer autonoom gemotiveerd en zelfregulerend zijn en in staat zijn om hun eigen keuzes te maken met betrekking tot hun gezondheid?" De bevindingen worden gepresenteerd volgens de context, het mechanisme en de uitkomst van autonomie-ondersteunende consulten, waarbij het mechanisme centraal staat in ons onderzoek.

Professionals in de geboortezorg creëren een warm, vriendelijk zorgklimaat tijdens prenatale consulten. Ze verstrekken informatie en bieden patiënten de ruimte om deel te nemen aan de consulten en hun eigen keuzes te maken. Ze lijken het echter moeilijk te vinden om kwesties diepgaand te bespreken, structuur te bieden om het besluitvormingsproces van de patiënt te vergemakkelijken en hebben de neiging om ongemak en moeilijkheden in hun consulten te voorkomen. Dit zou de meer autonome besluitvorming van patiënten kunnen belemmeren. Hoewel sommige onderdelen van ASC al zijn geïmplementeerd in de geboortezorg, is er ruimte om de autonomie-ondersteuning te optimaliseren en daarmee de interactie en besluitvorming tijdens prenatale consulten te verbeteren.

De implicaties van onze bevindingen voor professionals in de geboortezorg worden beschreven volgens de drie psychologische basisbehoeften. Om de behoefte aan autonomie van patiënten te vervullen, is het belangrijk om patiënten te ondersteunen bij het verkennen van hun waarden, normen, verwachtingen, angsten en wensen. Daarnaast is gepersonaliseerde ondersteuning van het besluitvormingsproces met professioneel advies belangrijk. Om de behoefte aan competentie van patiënten te vervullen, is het vooral belangrijk om de ontwikkeling van kennis te ondersteunen. Het vervullen van de twee bovengenoemde psychologische basisbehoeften stelt hoge eisen aan de relatie tussen patiënt en professional; het creëren van een 'brave space' is

nodig. In een 'brave space' kunnen moeilijke en soms zelfs pijnlijke onderwerpen worden besproken met de zekerheid dat er altijd steun en respect is.

De sterke punten van ons proefschrift zijn het gebruik van een theoretisch kader en de combinatie van kwantitatief en kwalitatief onderzoek om een dieper inzicht te genereren in ASC in de geboortezorg en de dataverzameling door observatie van prenatale consulten. Er zijn ook enkele beperkingen. Zo hebben we patiënten uit minderheidsgroepen niet expliciet opgenomen, wat resulteerde in een ondervertegenwoordiging van patiënten met een lager opleidingsniveau en culturele en etnische minderheidsachtergronden. We hebben ook suggesties geformuleerd voor toekomstig onderzoek, zoals het ontwikkelen van nieuwe modellen van prenatale zorg door middel van actieonderzoek met geboortezorgprofessionals, patiënten en hun partners.

CONCLUSIE

Met dit proefschrift hebben we een basis gelegd om trainingen te ontwikkelen om professionals in de geboortezorg te helpen hun interacties en ondersteuning bij besluitvorming tijdens prenatale consulten te optimaliseren. Ons inzicht in de interacties en besluitvorming in de dagelijkse praktijk en het theoretische kader stellen ons in staat om professionals in de geboortezorg te helpen de volgende stap te zetten in het leveren van persoonsgerichte geboortezorg.

DANKWOORD

Ik ben ongelofelijk dankbaar voor alle mensen die ik de afgelopen jaren heb mogen leren kennen. Zij hebben allemaal op hun eigen, unieke manier een bijdrage geleverd aan mijn ontwikkeling tot onderzoeker, zichtbaar in dit proefschrift.

Hooggeleerde vrouwe, lieve Rashmi, dank je wel voor je warme welkom in het onderzoeksteam Onderzoek van Onderwijs. Ik bewonder de manier waarop jij de Self-Determination theory voorleeft. Met veel plezier denk ik terug aan de organisatie van de SDT-conference in Egmond aan Zee waar je ons als promovendi intensief bij betrokken hebt. Een leerzame ervaring. Dankzij onze verbondenheid en je structuur, support en vertrouwen heb ik mij kunnen ontwikkelen als mens en onderzoeker.

(Co)promotoren: Saskia, dank je wel voor je kritische vragen die mij hielpen tot de kern te komen. Jij liet mij zien dat je op een vriendelijke manier veel impact kunt hebben. Corine, jij was mijn verloskundig geweten. Dank je wel voor alle mooie gesprekken over de uitdagingen in de geboortezorg. Linda, in 2015 schreef jij in je proefschrift "mocht je ook willen promoveren, dan weet je mij te vinden" en ik heb je gevonden. Dank je wel voor je kritische vragen en feedback. Jij hielp mij mijn gedachten te scherpen.

Leden van de promotiecommissie: hartelijk dank voor de tijd en moeite die jullie in het beoordelen van mijn proefschrift hebben gestoken.

Gea, dank je wel voor je aanmoediging om de uitdaging aan te gaan en te promoveren. Wim, Wilma en Ank: Dank voor de ruimte en jullie vertrouwen. Met jullie wil ik AVAG/Inholland bedanken voor de kans die ik heb gekregen om mij verder te ontwikkelen en nieuwe uitdagingen aan te gaan.

Collega's van het team Onderzoek van Onderwijs: Hartelijk dank voor alle gezelligheid. Met plezier denk ik terug aan onze (Sinterklaas) feesten en bezoeken aan (inter) nationale congressen. Anouk, mentor, vraagbaak en paranimf, wat had ik zonder jou moeten beginnen? Altijd stond jij klaar om mij te helpen bij het nemen van allerhande hobbels. Marianne, samen met jou zette ik de eerste stappen in het onderzoek van medisch onderwijs. Het was een warm welkom dat mij vertrouwen gaf te starten met mijn eigen promotieonderzoek. Anne, dank je wel voor de kennis en liefde die je mij hebt bijgebracht voor kwalitatief onderzoek. Andries, je vragen hielpen mij grip te krijgen op de analyse van mijn kwantitatieve data. Stéphanie, Ulviye en Cora, als ervaren promovendi waren jullie een bron van kennis en ervaring waar ik met plezier gebruik van heb gemaakt. Bart, zelfs in coronatijd was je bereid mij te helpen bij mijn datamanagement, dank je wel. Marnix, Carolyn, Jan Willem, Jettie, Lianne en Malou, als echte peers hebben wij samen onze stappen gezet op weg naar promotie, onze successen gevierd en onze teleurstellingen verwerkt. Marnix, Carolyn en Lianne, ik kijk uit naar jullie promotie. Ariadne, Lucille, Siema, Joram, Nourhan, Saskia, Emma, Louti, Sunia en Maite, met jullie komst werd de onderzoeksgroep verder verrijkt. Dank!

Collega's van AVAG: Dank voor jullie belangstelling en enthousiasme. Henk, geen artikel was voor jou onvindbaar, razendsnel zat het in mijn mail vaak vergezeld van andere artikelen die mogelijk ook interessant konden zijn. Tamara, dank je wel voor de manier waarop je in mijn agenda altijd "blokken" voor mijn onderzoek probeerde vrij te houden. Kamergenootjes: Wat had ik zonder jullie gemoeten? Kim, Marianne, Geeske, Senait en Dennis, ons wekelijks koffiemomentje was mijn baken in soms chaotische tijden. Na de sterke verhalen van Marianne, de streken van Wouter, Suus, Ilse en Thomas en de belevenissen van Senait kon ik er weer een week tegen.

Collega's van verloskundewetenschappen: Dank jullie wel voor de ruimte om 'op indicatie' bij jullie promovendidagen en trainingen aan te sluiten. Ik denk met veel plezier terug aan de training participatief actie-onderzoek.

Collega's Master Verloskunde: Ondanks de uitdagende opdracht die wij samen tot een goed einde wilden brengen, hadden jullie altijd interesse in mijn promotietraject. Hanneke, ik denk met plezier terug aan onze wandeling in Griekenland, bijzonder dat wij kort na elkaar onze promotietrajecten afronden.

Collega's van Inholland: Met sommigen van jullie werk ik al jaren samen, met anderen begint de samenwerking pas net vorm te krijgen, maar altijd ontmoette ik belangstelling voor mijn promotietraject en de ruimte een balans te houden tussen mijn werk als promovendus en beleidsadviseur/onderwijskundige. Dank jullie wel.

Coauteurs: Emma, Linda, Veerle, Ann, Petra, Jens, Lidewij, Janneke, Evi en Sifra, het was fijn met jullie samen te werken. Dank voor jullie ideeën, perspectieven en feedback. Veerle, dank je wel voor het warme welkom in Gent. Ik heb veel geleerd van het gezamenlijk oefenen van het coderen van interactie. Petra, jij zorgde dat naast het verloskundige ook het obstetrisch perspectief werd meegenomen.

Sven, Marije, Mario en de andere deelnemers aan de datasessies: Het was een verrijking om samen met jullie naar mijn en jullie data te kijken. Dankzij jullie ben ik een scherpere observator geworden.

Verloskundigen, gynaecologen en patiënten: Heel hartelijk dank voor jullie deelname aan en inbreng in mijn onderzoek, zonder jullie was dit proefschrift niet tot stand gekomen. Iris, dank je wel voor alle fijne gesprekken, mooie projecten en het mooie beeld dat wij samen hebben ontworpen.

Lieve vrienden en familie: Dank jullie wel voor jullie interesse, ruimte en onvoorwaardelijke steun. Meiden van mijn naaiclubje en mijn kookavond, dank jullie wel voor de ontspanning en het plezier waardoor ik weer vol energie verder kon met mijn onderzoek. Karin, onze rondjes bos zorgden voor rust en een frisse blik.

Lieve Wil, zonder je steun was ik niet aan dit promotietraject begonnen. Dank je wel, ook voor al je praktische hulp.

Lieve papa, van jou leerde ik mijn kansen te benutten. Mama en jij hebben mij altijd gestimuleerd nieuwe uitdagingen aan te gaan. Dank je wel voor die onvoorwaardelijke steun.

Lieve Robert, dank je wel voor de ruimte die ik van je heb gekregen om de uitdaging aan te gaan en te promoveren. In combinatie met jouw werk zorgde dat zeker in coronatijd voor een uitdaging. Nu ben jij weer aan de beurt, ik ben benieuwd wat jouw volgende stap wordt.

Lieve Bart, van jou heb ik geleerd door te zetten en om te gaan met teleurstellingen. Als een artikel werd afgewezen; gewoon opnieuw proberen.

Lieve Noortje, je bezoek aan de SDT- conferentie en ontmoeting met Richard Ryan inspireerde je de Self-Determination theory te gebruiken als theoretisch kader voor je bachelorthese. Wij hebben daar mooie discussies over gevoerd. Motivatie en moeilijke gesprekken zijn een rode draad in ons werk, dat geeft een extra dimensie aan onze band, bezegeld in je rol als paranimf.

PRESENTATIONS

Kors J, Patternotte E, Martin L, Verhoeven C, Schoonmade L, Peerdemans S & Kusurkar R. Factors influencing autonomy supportive consultation: a realist review (research presentation). AMEE 2019, Vienna, Austria.

Kors J, Patternotte E, Martin L, Verhoeven C, Schoonmade L, Peerdemans S & Kusurkar R. Factors influencing autonomy supportive consultation: a realist review (poster presentation). SDT-conference 2019, Egmond aan Zee, the Netherlands.

Kors J, Duprez V, Martin L, van Hecke A, Verhoeven C, Peerdeman S & Kusurkar R. A cross contextual adaptation and validation of the Coding and Observing Need-Supportive Counselling in Obstetric Care consultations (COUNSEL-OCC) (poster presentation) EACH-online 2020.

Kors J, de la Croix A, Martin L, Verhoeven C, Bakker P, Peerdeman S & Kusurkar R. Decision-making in prenatal consultations: a qualitative analysis of interactional practice (e-poster). AMEE 2021 in The Virtual Conference.

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Kors J, de la Croix A, Martin L, Verhoeven C, Bakker P, Peerdeman S & Kusurkar R. Autonomy-supportive decision-making in maternity care during prenatal consultations: a qualitative interaction analysis. SDT-conference 2023, Orlando, USA.

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Oosterbaan-Lodder S, **Kors J**, Visser C, Mørk Kvist B, Kusurkar R & Scheele F.(2023): Twelve tips for designing, implementing and sustaining interprofessional training units on hospital wards, Medical Teacher, DOI: 10.1080/0142159X.2023.2252591

SUMMARY OF TRAINING

	EC	Year
Courses		
Scientific integrity course or research ethics		2020
Presenting and pitching in English		2019
Qualitative research		2023
Participative action research		2022
Training Endnote	**5**	2018
Seminars, workshops, and master classes		
Masterclass KNAW		2019
Workshop conversation analyses (CA)	**0.5**	2018
(Inter)national conferences and symposia		
AMEE		2019, 2021
SDT-conference		2019, 2023
EACH		2020, 2022
NVMO		2018, 2019, 2020, 2024
NVMO PhD-days		2018, 2019
LEARN! symposium		2021
AHEAD interprofessional education		2019
Symposia; Mak, Meiboom, de Jonge & Kusurkar	**16.49**	
Events Research institute, activities, colloquia		
Burning questions		2018-2024
Research in progress		2024
NVMO journal club		2018-2019
Data-sessions Erasmus MC		2020- 2024
Midwifery science PhD-day		2019, 2020
Science Exchange Day	**10**	2018
Academic		
Organization NVMO PhD-days		2021
Organization VUmc Science Exchange Day		20
Organization Research in progress	**4**	2018-2023
Teaching, tutoring, mentoring		
Workshop Realist Review		2020
Students' academic internship		2018, 2019
Teaching and coaching midwifery students in qualitative research	**2.5**	2022-2024
Total	**38.49**	

ABOUT THE AUTHOR

Joyce Kors was born on November 7th, 1966, in Soest. In 1987, after her pre-university education at Farel College in Amersfoort, she studied midwifery at the midwifery academy (vroedvrouwenschool) in Heerlen. In 1990, she became a registered midwife and started working as an acting midwife. Later, she worked for many years as a midwife in Almere until 2001. She continued her career as a teacher in Midwifery and policy advisor at the Midwifery Academy Amsterdam Groningen. Alongside her job, she completed her Master of Education at Utrecht University in 2013. She participated in several projects, such as developing a new bachelor curriculum, a nationwide program to train maternity care professionals in counselling for prenatal screening and a joint degree Master in Midwifery. In 2016, she started to participate in research in medical education at the VUmc team Research in education. This resulted in 2018 starting her part-time PhD in "Autonomy-supportive prenatal consultation in maternity care". Currently, she works as a policy advisor and teacher-researcher at the Midwifery Academy Amsterdam Groningen. She lives with Robert and their two adult children, Noortje (1999) and Bart (2002).

Tool voor het observeren van prenatale consulten in de geboortezorg gebaseerd op de Self-Determination Theory

De CONSUL-MCC is een tool ontwikkeld voor gebruik tijdens (niet acute) consulten in de geboortezorg, zowel met als zonder partner. De consulten kunnen worden verricht door (klinisch) verloskundigen, gynaecologen, studenten verloskunde of AIO(S) verloskunde.

Met de CONSUL-MCC kunnen (aanstaande) professionals inzicht krijgen in de mate waarin zij autonomie-ondersteunende en autonomie-ondermijnende interacties gebruiken. Dit inzicht kan helpen om de autonomie ondersteuning door de professional tijdens het spreekuur te optimaliseren. Het optimaliseren van de autonomie-ondersteuning is belangrijk om patiënten te helpen bij het zelf maken van keuzes t.a.v. hun zwangerschap, bevalling en aanstaande ouderschap.

De CONSUL-MCC bestaat uit:

- Gebruiksaanwijzing, hoe de audiofragmenten kunnen worden beoordeeld met behulp van het scoreformulier
- Handleiding waarin elk item wordt beschreven en geïllustreerd aan de hand van voorbeelden
- Scoreformulier
- Formulier totaal overzicht scores

De CONSUL-MCC kan gebruikt worden voor zowel zelf-assessment als peer-assessment.

GEBRUIKSAANWIJZING

Om inzicht te krijgen in de mate waarin de professional autonomie-ondersteunende en autonomie-ondermijnende interacties gebruikt, wordt gebruik gemaakt van audio-opnames van consulten in de dagelijkse praktijk. De professional bepaalt vooraf zelf welke consulten worden gebruikt. Dit kunnen ad random consulten zijn maar er kan ook gekozen worden voor specifieke consulten bijvoorbeeld consulten waarin het bevalplan wordt besproken. Om een goed beeld te krijgen is het advies 3-5 consulten te gebruiken.

Toestemming

De professional vraagt vooraf toestemming aan de patiënt om het consult voor trainingsdoeleinden op te nemen. Na het beoordelen van het consult m.b.v. de CONSUL-MCC wordt de opname vernietigd.

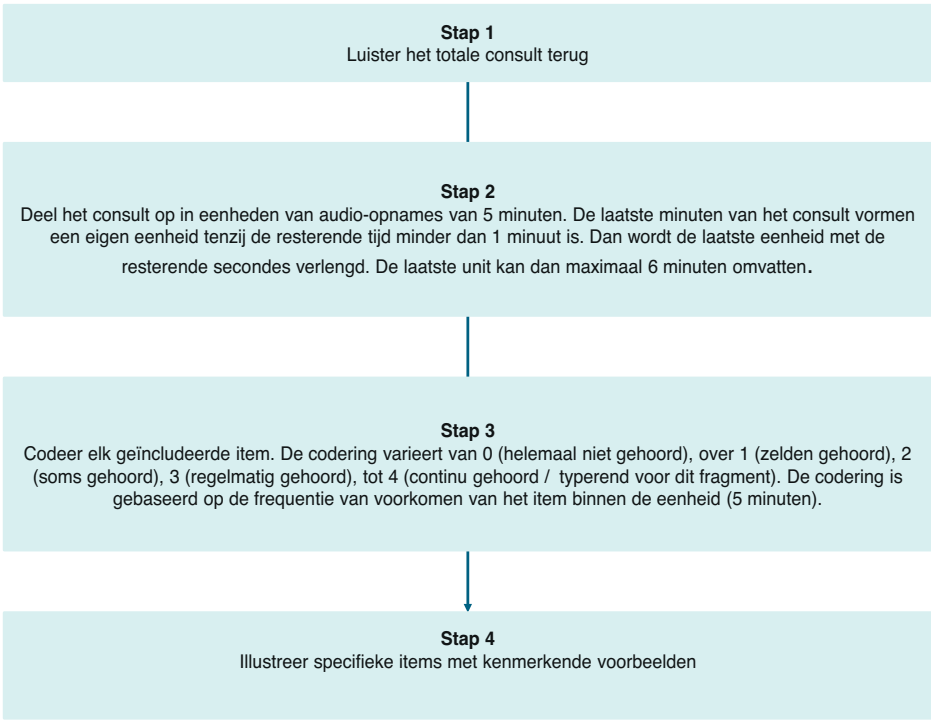
Opnames

De professional maakt audio-opnames van de gehele geselecteerde consulten.

Assessment

Voor het beoordelen van de consulten moet voldoende tijd worden genomen, richtlijn: 3 x de tijd van de opgenomen consulten. Er kan gekozen worden voor het beoordelen van de consulten op basis van alle 39 items of te focussen op specifieke aspecten, bijvoorbeeld de mate waarin de professional de agenda van de patiënt centraal plaats, en samen met de patiënt richting geeft (patiënt uitnodigen te participeren). Het voordeel van de focus op specifieke aspecten is dat meer in detail kan worden geluisterd en de beoordeling kan worden verrijkt met voorbeelden.

Voor de beoordeling worden de volgende stappen gevolgd:



Herhaal bovenstaande stappen voor elk consult. De totaalscores per consult kunnen worden ingevoerd in het totaaloverzicht voor het berekenen van de totaalscore.

Interpretatie van de score

Voor de interpretatie van de uitslag kan gebruik gemaakt worden van hoofdstuk 5 en 7 van de thesis: Optimizing Autonomy-Supportive Consultation, an investigation in the context of prenatal consultations in maternity care

Voor het bespreken van de scores en/of het organiseren van een methodische intervisiebijeenkomst kan contact worden opgenomen met de onderzoeker: joyce.kors@lnholland.nl

HANDLEIDING

	AUTONOMIE-ONDERSTEUNING AFSTEMMEND De mate waarin de professional vertrekt vanuit het perspectief van de patiënt			
	Item	**Toelichting**	**Voorbeeld experts geboortezorg**	**Authentieke voorbeelden geboortezorg**
	De professional…			
1	… laat ruimte om te vertellen	De professional laat ruimte voor de patiënt om te vertellen over zijn leefwereld en levensstijl. Neemt tijd voor de patiënt om zijn leefwereld te leren kennen. Het thema kan zowel door de patiënt als door de professional geïnitieerd worden.	"Hoe is het **nu** met je" en dan vervolgens laat de professional even de tijd aan de patiënt om na te denken en te antwoorden (professional-geïnitieerd). Patiënt: "ik ben best wel bang", reactie professional:" vertel eens…" (patiënt-geïnitieerd).	"Hoe is het gegaan?" "Hoe is het met je?"
2	… luistert reflectief en exploreert.	De professional luistert reflectief tijdens het gesprek én exploreert op die manier wat leeft bij de patiënt. De gevoelens en gedachten van de patiënt die de professional meent te herkennen worden weergegeven. De professional sluit aan bij wat de patiënt inbrengt in het gesprek, vraagt door.	"Ik hoor je zeggen dat je, je zorgen maakt, Kan je daar wat meer over vertellen? of Ik hoor je zeggen dat je het lastig vindt, wat is de reden dat het zo lastig is denk je? "Hoe was het om de uitslag te krijgen? Wat deed dat met jou?" Cholestase met leverfunctie afwijkingen bij 37 weken: Inleiden of afwachten waarbij de kans op een IUVD. Klopt het dat je het lastig vind om te kiezen voor wel of niet inleiden? Wat maakt de keuze zo moeilijk?	"Wat maakt dat je bent verandert, wat Down betreft?" "O, ja?…." " Op welke momenten voel jij, je wat minder?"

3	… sluit aan bij het referentiekader van de patiënt. Referentiekader patiënt: Het geheel van diens opvattingen en belevingen rond het onderwerp. Ook wel beschreven als belevingswereld of perspectief van de patiënt. (MAASglobaal)	De professional vertrekt vanuit het perspectief van de patiënt door na te gaan welke moeilijkheden en zorgen de patiënt ervaart bij het behalen van doelen of opvolgen van adviezen en houdt er rekening mee. De professional weet wie ze voor zich heeft. Is op de hoogte van de persoonlijke leefomstandigheden of stelt zich op de hoogte van de persoonlijke leefomstandigheden. (hoeft niet direct verloskunde gerelateerd te zijn)	"Hoe is het voor je om een keuze te maken over…? Wat maakt het zo moeilijk deze keuze te maken?" "Wat zou je nodig hebben ? Wat heb je nodig?"	"Je hebt je familie inmiddels ook weer gezien?" (was tijdelijk niet mogelijk vanwege Corona) "Volgens mij was dit niet helemaal jouw wens?" Bij bespreken belinstructies 2e partus duidelijk aansluiten bij voorgaande bevalling. Haalt hierbij bijvoorbeeld succeservaringen aan (ook apart coderen bij 25)
4	… gebruikt vragen die ruimte bieden aan de patiënt.	De professional gebruikt open vragen of vragen die ruimte bieden aan de patiënt. Dit item is veeleer professional-geïnitieerd. Bij item 1 kan de thematiek door beiden geïnitieerd worden. Patiënt laten nadenken om in actie te komen. Vragen zetten patiënt aan tot actie.	"Wat maakt het zo moeilijk een besluit te nemen over wel of niet inleiden bij 37 weken vanwege je afwijkende leverfunctiewaarden? Wat kan ik doen om je hierbij te helpen? Wat heb je van mij nodig om een keuze te kunnen maken?"	"Heb je een vermoeden hoe de baby ligt?" "Wat vind je van het bewegen van het kindje?"
5	… laat emoties toe, en benoemt deze actief	De professional laat emoties (negatieve of positieve) of reacties die wijzen op weerstand bij de patiënt toe **en** benoemt ze ook actief. Gevoelsreflectie door professional: aard van het gevoel wordt weergegeven en de intensiteit van de emotie (MAASglobaal)	"Ik krijg de indruk dat je het lastig vindt een keuze te maken omdat kiezen voor de NIPT de consequentie kan hebben dat je moet nadenken over het afbreken van je zwangerschap Dat idee grijpt je erg aan. Klopt dit?" "Ik krijg de indruk dat jij, je erg veel zorgen maakt over de bevalling, klopt dit?"	"Je zegt: Je baalt ervan.. *Nu ga ik huilen* Geeft niet…Het zit je gewoon dwars." " Je maakt je zorgen over een gewone bevalling?" "Wat baart je zorgen?"

6	… hanteert uitnodigende taal.	De professional hanteert uitnodigend taalgebruik waarbij woorden zoals 'kunnen' en 'proberen' worden gebruikt in plaats van woorden zoals 'moeten'.	Wat zou jou kunnen helpen bij je misselijkheid in de ochtend. Wat zou je er zelf mee willen doen? "Is het een mogelijkheid om de dilemma's die je ervaart bij het maken van een keuze t.a.v. prenatale screening te bespreken met iemand die dicht bij je staat? Zou dat je kunnen helpen?"	
		AUTONOMIE-ONDERSTEUNING - PARTICIPATIEF De mate waarin de professional de agenda van de patiënt centraal plaats, en samen met de patiënt richting geeft		
	Item	**Toelichting**	**Voorbeeld geboortezorg**	
	De professional…			
7	… geeft ruimte en laat tijd om te beslissen	De professional geeft ruimte en laat tijd om zelf tot een oplossing te komen, exploreren. Geeft ruimte om tot een beslissing te komen. Beslissing gerelateerd (beslissing kan heel klein of groot zijn).	"Stilte niet onmiddellijk zelf invullen, stilte laten om de patiënt te laten antwoorden, deze zelf na te laten denken, bij zichzelf laten stilstaan, zelf tot een keuze/ vraag te laten komen."	

8	… biedt inspraak	De professional biedt inspraak aan de patiënt omtrent zaken die te maken hebben met het omgaan met de aandoening. Dit item scoort ook hoog als de patiënt aan het woord blijft of zelf gespreksthema's aanbrengt.	"Wat wil je weten over de mogelijkheden voor prenatale screening?" "Hoe wil je de verschillende test mogelijkheden bespreken?" "Welke informatie heb je van mij nodig om een besluit te kunnen nemen?" "Wat heb je van mij nodig om een keuze te kunnen maken?" "Vind je het goed als ik je wat extra uitleg geef?"	" Is er verder nog iets dat je wilt bespreken/vragen?" "Ik maak mij voor dit moment geen zorgen dus wat mij betreft kunnen we de afspraak ook over 1 week plannen."
9	… verkent doelen van de patiënt.	De professional verkent de doelen van de patiënt. Dit item scoort ook hoog als de patiënt zelf doelen aanbreng / initieert. Benoemen van: hulpvragen, wensen, verwachtingen. (MAASglobaal)	"Wat is voor jou het doel van prenatale screening?" "Wat is voor jou het belangrijkste tijdens je zwangerschap?" " wat is voor jou erg belangrijk als we vooruit kijken naar de bevalling?"	" Wat wil jij vandaag bespreken?" Het werkelijke doel ligt vaak onder gespreksthema. Bijv: informatie willen over partus (thema) om zich goed te kunnen voorbereiden op partus (doel). Waar wil jij dat de bevalling doorgaat?
10	… stimuleert om na te denken over mogelijke aanpak.	De professional stimuleert de patiënt om zelf na te denken over een mogelijke aanpak en gaat samen met de patiënt aan de slag rond de aanpak van de doelen die de patiënt voorop heeft gesteld. Een open tussenkomst die stimuleert tot nadenken scoort hoger dan een richtinggevende tussenkomst. Zie voorbeelden [1] versus [2].	"Wat kan jou helpen met het maken van een keuze t.a.v. prenatale screening, manier van bevallen… "Hoe zie je dat concreet?" [1] "Wat kan ik doen om je te helpen je doel te bereiken?"[2] Doel kan ook zijn goede ervaring ondanks dat het anders loopt, bespreken bij bevalplan. b.v.: Wat zou jij graag willen als het onverhoopt toch een keizersnede wordt? Wat wil je niet?	"Wat ik begrijp is dat je de vorige bevalling in paniek raakte. Wat zouden we kunnen doen om dat deze keer te voorkomen?" "Heb je al uitgevonden wat helpt?" "Denk erover na"

10a	Stimuleert patiënt om samen met belangrijke partners (familie, vrienden en peers) na te denken	De professional stimuleert de patiënt om samen met belangrijke partners (familie, vrienden en peers) na te denken over een mogelijke aanpak en verschillende mogelijkheden. De peers ondersteunen de patiënt hierbij vanuit hun verbondenheid met de patiënt. (collectieve autonomie) Los van eventuele aanwezigheid tijdens het consult	Heb je de keuzemogelijkheden voor prenatale screening met je partner/ familie besproken? Hoe staat je partner/ familie tegenover jouw deelname aan prenatale screening/ thuis bevallen/ flesvoeding Wat vindt je man/ partner ervan? Hebben jullie het er ook samen over gehad?	" Je hebt nog tijd om er thuis over na te denken. Je kunt het boekje ook samen doornemen." "Misschien kan je man die controle dan meekomen." (controle voor bespreken bevalling)
11	… biedt een toelichting, een verklaring.	De professional biedt de patiënt een toelichting, verklaring, een rationale voor gemaakte afspraken of voor het uitvoeren van bepaalde taken of opdrachten. Hier legt de professional het zelf uit, bij item 24 (stimuleert zelfreflectie) laat de professional de patiënt nadenken over een mogelijke achterliggende verklaring bij item 29 geeft de professional enkel informatie of instructie, er komt dan niet aan bod hoe iets komt, waarom iets belangrijk is … Verklaren, toelichten, interpreteren, niet informeren (dan scoren bij item 29), hoe komt het… Uitleg bij echo of fundushoogte is informeren	" De baby ligt in stuit, dat is een minder gunstige positie om geboren te worden. Nu zijn er verschillende mogelijkheden. We kunnen bij 36 weken proberen een uitwendige versie te verrichten, je kunt er ook voor kiezen…" Roken heeft een negatief effect op je moederkoek, hij is door het roken minder goed doorbloed waardoor de baby kleiner blijft, dat is niet gezond	"Je bloeddruk is goed, dit zou ook een verklaring kunnen zijn dat deze baby groter is dan de vorige." Verklaren/ toelichten: Ik voel hier heel duidelijk het hoofdje in je bekken. De steken die je de afgelopen week hebt gevoeld worden veroorzaakt door het indalen van het hoofdje in het bekken

12	…peilt actief naar de mate van autonomie die de patiënt wenst	De professional peilt actief (expliciet en op zijn initiatief) naar de mate van autonomie die de patiënt wil en kan opnemen, welke rol de patiënt zelf wil opnemen bij het managen van zijn gezondheidstoestand. Dit gaat om het expliciet aan bod komen. Er wordt uitgeklaard welke rol de patiënt wenst op te nemen, hoeveel regie een patiënt zelf wenst op te nemen in zijn zorg/in aspecten van het leven met de aandoening/ in besluitvorming	Het peilen naar motivatie valt hier niet onder (item 22) Gaat om mate waarin patiënt zelf een actieve rol wenst te spelen. Patiënt gebruikt medicijnen met mogelijke gevolgen voor zwangerschap en kind, afstemmen of de patiënt dit zelf wil bespreken en uitzoeken of door de verloskundige. Weet je er al wat van? Vervolg roken/ prenatale screening (blijven) bespreken of patiënt geeft aan geen behoefte te hebben aan uitleg. v.b. bevalplan: we kunnen het samen invullen, je kan het ook zelf invullen. Ook expliciet zaken opnemen in bevalplan b.v. ik wil niet gecounseld worden over pijnbestrijding tijdens de partus Kan ook algemeen: In de zwangerschap wordt je geconfronteerd met heel veel keuzes, hoe vind je het maken van keuzes fijn. Op welke manier wil jij graag je keuzes maken?	

		CONTROLE - EISEND De mate waarin de professional vertrekt vanuit gezondheidsperspectief en de touwtjes zelf in handen wil houden		
	item	**toelichting**	**Voorbeeld Geboortezorg**	
	De professional…			
13	… toont zijn expertise, eist respect.	De professional toont zijn expertise, waarbij de patiënt wordt onderbroken of gecorrigeerd en respect wordt opgeëist. Dit kan zowel verbaal, als non-verbaal aanwezig zijn. Let hierbij ook op attitude van de professional. De professional stelt zich boven de patiënt. Attitude van niet gelijkwaardigheid	"Afwachten is nu niet mogelijk, ik wil dat je nu…" Of nog dwingender: je moet "Er zal niet makkelijk een professional te vinden zijn die jouw bevalling, op de door jou gewenste manier wil gaan begeleiden. Wij realiseren ons dat er vanwege je medische indicaties risico's aan jouw bevalling verbonden zijn en wij voelen ons voor jouw gezondheid en die van de baby. verantwoordelijk." "Uit ervaring weet ik dat u spijt van deze keuze gaat krijgen" Luister ik heb **hier** heel veel ervaring mee. Nu geen tijd om, alles uit te leggen u moet op mij vertrouwen. Vertrouw maar op mij.	"Wie is die huisarts die dit zegt? Dan moeten wij eens met hem gaan praten."

14	… hanteert controlerende taal, gebruikt imperatieven	De professional beveelt de patiënt, hanteert controlerende taal **of** gebruikt vaak imperatieven. Gesloten vragen en controlerende werkwoorden Gebiedende spreekstijl, komt frequent voor in taalgebruik binnen Nederlandse verloskunde. Frequentie scoren	Ik ga vast bij de planning een datum reserveren voor je geplande keizersnede vanwege de stuitligging/ keizersnede in de voorgeschiedenis." " Ik wil dat je nu naar het ziekenhuis gaat voor het laten maken van een hartfilmpje." Of " Je gaat nu naar het ziekenhuis gaat voor het laten maken van een hartfilmpje Ik wil dat u nu voor een extra controle naar het ziekenhuis gaat/ bij mij komt. Ik vind dat je meer moet gaan rusten. Je moet vanaf nu elke middag 11/2 uur gaan rusten. Ik wil dat je nu stopt met werken.	"Dan zal de assistente zo direct nog even je ijzergehalte prikken." "Nu ik dit gezien heb lijkt het mij goed een suikertest te doen." " Wat we zo ie zo doen is dat we over 4 weken een groeiecho inplannen" " Dan doen we dat nu meteen dan ben je er vanaf. "(bij angst voor vingerprik) "En dan mag je nu even niet kletsen als hij pompt." (bij meten RR)
15	… laat geen ruimte voor inbreng van de patiënt of neemt het gesprek over of Vult in voor de patiënt.	De professional doet of zegt zaken voor tijdens het gesprek en neemt het gesprek over van de patiënt. De professional blijft ook gewoon uitleg en duiding geven, zonder de patiënt de ruimte te laten om ergens dieper op in te gaan. De professional schetst algemeen het verloop van een bepaald ziektebeeld en vertrekt niet vanuit de situatie van de patiënt. Item 17 (onderbreekt de patiënt) miskent de bijdrage die een patiënt probeert te hebben in het gesprek	"De meeste cliënten besluiten een echo te laten maken, de kans dat er een afwijking wordt gevonden is klein dus laat hem maar gewoon maken " De "ja maar " als reactie op een initiatief/idee van de patiënt "Je bent vast erg geschrokken."	Informatie in een hoog tempo geven zodat de patiënt geen tijd heeft te reageren.

16	..bepaalt de thema's van het gesprek.	De professional bepaalt de agenda en welke thema's besproken worden of dringt hierbij de eigen voorkeur op. Professional bepaalt de agenda Scoren frequentie waarmee professional binnen de unit de thema's bepaalt. Indien het thema van de professional de volledige unit aanhoudt, scoor je dit ook hoog. Hieruit blijkt immers dat professional geen ruimte laat om thema te wijzigingen.	"Je moet eerst even op de bank gaan liggen..." Ik wil eerst weten hoe het met je gaat, dan wil ik graag je dossier compleet maken en het plan voor de bevalling bespreken. Je bent nu 34 weken vandaag staat het bespreken van het bevalplan op de agenda. "Ik wilde vandaag...." "Dan mag je nu even op de bank gaan liggen."	" Ik wil vandaag een echo maken, je ijzergehalte bepalen en je krijgt een nieuwe uitdraai mee." " Wat ik nog op de planning had staan."
17	... onderbreekt de patiënt.	De professional onderbreekt de patiënt, laat hem niet uitspreken. Miskent de bijdrage die een patiënt probeert te hebben in het gesprek (in vergelijking met item 15).	Ja maar: zonder voorbeeld. Ik wil terug naar.. Ik meet ondertussen je bloeddruk...	Voor patiënt de zin heeft afgemaakt door patiënt heen praten en invullen. "Dat klinkt echt typisch als een tweede kindje." " Ja, duidelijk..."

		CONTROLE - DOMINEREND De mate waarin de professional de eigen agenda centraal stelt, er sprake is van druk waarbij de patiënt 'als persoon' aangevallen wordt		
	item	**toelichting**	**Voorbeeld Geboortezorg**	
	De professional…			
18	…zet de patiënt onder druk	De professional zet de patiënt onder druk om bepaalde deadlines te halen of beslissingen te nemen door te wijzen op de negatieve consequenties of complicaties van het niet opvolgen van doelen, gebruikt (negatieve) resultaten om druk te zetten op de patiënt.	" Je moet vandaag of morgen beslissen of je een 20 weken echo wilt laten maken." "Als je het niet eens bent met ons beleid bij obesitas kunnen wij je zwangerschap hier niet begeleiden en is het beter een andere praktijk te zoeken." "Wanneer je niet op de begane grond kunt bevallen, kun je niet thuis bevallen." Je moet nu echt een besluit nemen, de tijd begint te dringen."	

19	… geeft kritiek.	De professional geeft negatieve, afbrekende kritiek op de patiënt indien die niet handelt zoals van hem verwacht wordt. Er zit een negatief waardeoordeel vervat in de boodschap, er wordt op de persoon gespeeld, dit in tegenstelling tot item 23 (geeft feedback)	"Het is wel een risico dat je neemt door te gaan voor een vaginale bevalling". "Door het vooraf niet te willen weten kunnen jij en wij ons niet voorbereiden op eventuele complicaties door een aandoening bij je kindje." Dit kan ook in non-verbale uitingen te zien zijn, bijvoorbeeld schudden met hoofd, of korte expressie "tje" , "ah zo" We hebben toch afgesproken dat je zou stoppen met roken maar nu blijk je toch 3 sigaretten per dag te roken Afwachten na 42 weken zwangerschap is echt heel onverstandig. Het is heel onverstandig om na een keizersnede zonder CTG te willen bevallen.	Voorbeeld borstvoeding/ kunstvoeding toevoegen Bij patiënt die geboorteplan is vergeten: O jé, huiswerk vergeten! "Het is dus geen foliumzuur maar een multivitaminen." "Ik kan maar één ding tegelijk"

20	… speelt in op schuld en schaamte.	De professional zet de patiënt onder druk door te appelleren aan zijn gevoel van zelfwaarde of trots. Speelt in op de schuld- en schaamtegevoelens om de patiënt te stimuleren, dit kan ook door het maken van ongepaste sociale vergelijkingen.	Roken ook hier goed voorbeeld: Ben je toch niet gestopt? Je weet toch hoe slecht het is voor de baby? Doordat jij het natuurlijk beloop wilt afwachten en af te zien van een inleiding neem je wel een risico. Je kind kan overlijden. Elke keer over BMI beginnen. Met jou gewicht kan je niet thuis of in bad bevallen. “Heb je dan niet het beste met je kindje voor?”	
21	… is geïrriteerd, ongeduldig	De professional is geïrriteerd, verliest het geduld.	Zuchten, intonatie, met een balpen/ nagels zitten tikken, op het horloge zitten kijken, opstaan,… Afraffelen: al lopende anamnese afnemen, alvast onderzoek tijdens het gesprek, weinig ruimte voor vragen (tijd inhalen)	

		COMPETENTIE-ONDERSTEUNING – BEGELEIDEND De mate waarin de professional ondersteuning geeft die de patiënt bekwamer		
	Item	**Toelichting**	**Voorbeeld geboortezorg**	
	De professional…			
22	… stelt samen realistische doelen.	De professional stelt samen met de patiënt haalbare, realistische (tussentijdse) doelen. De professional formuleert het doel en de patiënt neemt dit over waarbij de formulering in lijn is met de wens van de patiënt. (max **2** score)	" Je hebt vandaag heel veel informatie gekregen, wanneer denk je een keuze te kunnen maken?" "Denk je zelf een besluit te kunnen nemen of heb je daarbij ondersteuning nodig?" "Hoeveel sigaretten minder zou je willen roken de komende week?" "Het lijkt mij verstandig ….., Ja, je hebt helemaal gelijk ik moet de knop omzetten en beter aan mijzelf denken."	Voorbeelden toevoegen

23	… biedt taakgerichte of progressiegerichte feedback.	De professional biedt taakgerichte feedback over zaken die de patiënt gedaan heeft, gedrag dat hij gesteld heeft. Dit kan eventueel gebeuren aan de hand van werkpunten en tips. De professional geeft positieve en progressiegerichte feedback om de patiënt te motiveren. Het gaat over actuele zaken, over het hier en nu. Is neutraal geformuleerd, de patiënt komt vooruit met de boodschap, in tegenstelling tot item 19 (geeft kritiek) of item 34 (ongepaste feedback) Feedback dient toe te werken naar versterking van competentie (competent zijn) van de zwangere. Louter informeren over fysiologische verloop valt heir niet onder (bijv. jouw bloeddruk is goed' = item 29)	"Ik merk dat u zich goed op dit consult heeft voorbereid". "Goed dat u alle vragen naar aanleiding van ons vorige gesprek heeft opgeschreven". Een complimentje geven aan de patiënt. "Ik vind het echt heel knap dat je alle problemen met de woningbouwvereniging zo goed hebt opgelost." "Mooie bloeddruk". "Het kindje is goed gegroeid". " "De meting komt precies overeen met de duur van je zwangerschap". "Goede bloeduitslagen".	"Keurige bloeddruk, deze past goed in je rijtje bloeddrukken, heel netjes bij deze zwangerschapsduur." De bovenrand van je navel staat nu navelhoogte. Dat past precies bij jouw zwangerschapsduur van 24 weken. Het kindje groeit mooi volgens verwachting.
24	… stimuleert zelfreflectie.	De professional stimuleert zelfinzicht van de patiënt door middel van zelfreflectie. Hier laat de professional de patiënt nadenken (bij item 11 legt de professional het zelf uit).	"Wat maakt het zo moeilijk een keuze te maken?" "Wat zou je kunnen helpen bij het nemen van een besluit?" "Hoe komt het dat je liever niet wilt nadenken over je bevalling?"	"Hoe kunnen we er voor zorgen dat een inleiding voor jou niet direct een doemscenario wordt?" "Is dat zo of voel je dat zo?" "Stel dat ik zeg dat deze baby 8 pond wordt, wat zou dat voor jou betekenen?"

25	… haalt succeservaringen aan.	De professional haalt situaties aan waarin de patiënt al eerder succeservaringen had. Het gaat over eerder gesteld gedrag en doet zich mogelijk meer voor bij situaties van herval. (item 23 gaat over actueel gedrag) Bij referentie aan eerdere succeservaring deze er concreet bij benoemen. Is niet positieve feedback geven (dan scoren bij item 23)	"De vorige keer is het je ook gelukt een goede OGTT te laten prikken ondanks je prikangst." "De vorige keer heb je het bij de vaginale echo ook heel goed gedaan." "Je bent al heel goed geminderd met roken, die laatste stap lukt ook vast." "Je bent al eerder gestopt met roken wat maakte toen dat het lukte?" "Je bent al een keer eerder bevallen, toen bij Luuk is alles ook heel voorspoedig/ goed gegaan"	"Heb je al eerder in je leven heel erge pijn gehad? Nu dat lijkt mij heel pijnlijk. Als je weet hoe je daar toen mee omging." "Vorige keer ben je heel mooi thuis bevallen." Als de baby zo doorgroeit wordt de baby 7 pond, dat is eerder gelukt."

26	… hanteert hulpmiddelen.	De professional hanteert hulpmiddelen om de verbale informatie te verduidelijken. Wanneer deze hulpmiddelen worden gebruikt als verduidelijking tijdens het gesprek zelf, scoort dit hoger. Wanneer echter een brochure, schema, curve wordt meegegeven om thuis te lezen, zonder te overlopen tijdens het gesprek, scoort dit **'1'** . Gebruik van buik patiënt en echobeeld als hulpmiddel voor verbale uitleg Niet alleen centimeter gebruiken maar waarde en betekenis ook toelichten. Alleen verwijzen naar informatie (site/ folder) is patiënt het zelf uit laten zoeken. (scoren onder item 38)	Gebruik van flowchart prenatale screening, informatie brochures, plastic modellen/ tekeningen. Informatie opzoeken op de PC en er gebruik van maken in het gesprek om zaken te verduidelijken naar de patiënt toe; de professional wijst op zichzelf bepaalde spieren/ organen aan om een mechanisme te verduidelijken Op poster ontwikkeling aanwijzen.	Gebruik echobeeld. Folders/ mapjes/boekjes Gebruik poster/ plastic model Tekening maken

		COMPETENTIE-ONDERSTEUNING – VERDUIDELIJKEND De mate waarin de professional verduidelijking geeft en verwachtingen communiceert naar de patiënt		
	Item	**Toelichting**	**Voorbeeld geboortezorg**	
	De professional…			
27	… geeft alternatieven.	De professional geeft een overzicht van de verschillende mogelijkheden/alternatieven voor de patiënt.	" naast de NIPT is er ook nog de mogelijkheid van de combinatietest of alleen de echo bij 20 weken". Alles is goed normaal maken wij een nieuwe afspraak voor over 3 weken maar als jij liever na 2 of 4 weken terugkomt is dat ook goed. Naast inleiden kun je ook elke dag een CTG laten maken en afwachten. Er zijn meer vormen van pijnbestrijding bijvoorbeeld warm water (douche/bad), je kunt in heel veel verschillende houdingen bevallen bijvoorbeeld staand gehurkt…	"Het kan zijn dat het deze keer weer snel gaat en we weer net op tijd het ziekenhuis bereiken. We kunnen die tijd ook gebruiken om alles thuis voor te bereiden (Hoe zou dat voor jullie zijn?)" "Je mag tussendoor altijd bellen om het hartje te komen luisteren."

28	… gebruikt gepaste rolmodellen.	De professional gebruikt gepaste voorbeelden van andere patiënten als rolmodellen waarmee de patiënt zich kan identificeren Dichterbij dan algemene referentiegroep bv primen, moet persoonlijk zijn. Moet herkenbaar en bekrachtigend/positief zijn	"Je bent niet de enige die het lastig vind een besluit te nemen, heel veel zwangere vinden het een lastige keuze, maar uiteindelijk lukt het iedereen een besluit te nemen." Refereren aan eigen moeder, zus vriendin	"Klassiek 2e kindje…."
29	… geeft informatie.	De professional geeft duidelijke en beknopte (mondelinge) informatie.	"Een kind wordt met downsyndroom geboren. Het is een aandoening die niet meer over gaat. Mensen met downsyndroom hebben een verstandelijke beperking en zien er vaak ook anders uit. Van tevoren is niet te zeggen hoe ernstig de beperking zal zijn." Informatie over pijnbeheersing voor en nadelen van de verschillende vormen. Informatie over thuisbevallen, borstvoeding rh- screening.	Informeren: Ik voel het hoofd hier beneden, het zit al een klein stukje in het bekken.

30	… vat samen en vraagt herhaling.	De professional vat samen wat werd gezegd, herhaalt of vraagt aan de patiënt om de gegeven informatie kort te herhalen. Belangrijk is na te gaan of het gesprek tot verheldering voor de patiënt leidt. Hoe meer componenten (samenvatten, herhalen, laten herhalen), hoe hoger de score. Enkel samenvatten scoort een '1'. Wanneer de professional effectief vraagt aan de patiënt om de informatie kort even te herhalen, scoort dit een '4'. Zelden hoger 2 met name 1	" We hebben het zojuist gehad over de mogelijkheden voor prenatale screening aan het begin van de zwangerschap. Kun je voor mij herhalen wat de belangrijkste verschillen zijn tussen de combinatietest en de NIPT-test". "Wat haal jij eruit als de belangrijkste verschillen." "Kun jij zeggen… Kun je samenvatten wat ik heb gezegd dan kan ik kijken of ik duidelijk ben geweest." "Wat zijn voor jou de belangrijkste verschillen tussen een epiduraal en remifentanil."	

31	… verduidelijkt doelopvolging.	De professional maakt duidelijk hoe de opvolging van de gemaakte doelen gebeurt.	" Ik ga nu 4 maanden met verlof. Ik zal opschrijven wat we besproken hebben en welke vragen nog open staan. Mijn collegae zullen daar bij je op terugkomen." "Je komt volgende week bij mijn collega voor de echo en dan zien wij elkaar weer over 4 weken." "Mocht je vóór de volgende afspraak je besluit genomen hebben, dan kun je dat ook telefonisch aan mij doorgeven, zodat ik de papieren alvast voor je in orde kan maken." "Volgende keer gaan we het hebben over de bevalling, misschien wil je partner dan meekomen." "Je komt volgende week bij mijn collega voor de echo, die zal ook de uitslag met je bespreken en wat je daarmee wilt. Uiteraard ben ik ook beschikbaar voor vragen."	"in ieder geval een afspraak over 2 weken dan kunnen wij ook bloed afnemen." "Als jullie vast naar beneden gaan dan gaan we daar nog bloedruk meten en wat te doen de komende vier weken bespreken."
32	… gebruikt aangepaste taal.	De professional gebruikt een taal die is aangepast aan het niveau van de patiënt, een taal die verstaanbaar is voor de patiënt. De professional vermijd vakjargon. Alleen vermijden van vakjargon scoort max 3. Echt best doen om aan te sluiten bij taal en woordkeuze patiënt is 4.	De professional spreekt niet over partus of sectio maar over bevalling en keizersnede. De professional spreekt over vlokkentest i.p.v. chorionvilliebioptie. Epiduraal = ruggeprik	

		CHAOTISCH WERKEN - OPGEVEND De mate waarin de professional de zaken eerder laat lopen zoals ze lopen en niet langer meer ingrijpt.		
	Item	**Toelichting**	**Voorbeeld geboortezorg**	
	De professional…			
33	… geeft informatie die de patiënt in onduidelijkheid laat	De professional geeft onduidelijke, foutieve of dubbelzinnige informatie over het gedrag dat de patiënt stelt of verwacht wordt te stellen. Het is voor de patiënt niet duidelijk wat hij/zij moet doen. Als patiënt zelf ongevraagd gaat herhalen/ samenvatten of die het goed begrepen heeft	Reactie patiënt: "Nu zegt u dat er bij een stuitligging in principe een keizersnede wordt gedaan vorige keer zei u dat er, in overleg met mij, een keuze wordt gemaakt op basis van.." Reactie patiënt:" U zegt nu dat ik vandaag een besluit moet nemen maar in de folder staat..". Ook een overload aan informatie geven Bak aan informatie, niets mee kunnen Maar vorige keer zeiden ze dat er vandaag een echo zou worden gedaan	
34	… geeft ongepaste feedback.	De professional geeft ongepaste/onterechte feedback over gedrag of de aanpak die de patiënt stelt (proces of handelingsgericht) Deze vorm van feedback is weinig of niet behulpzaam voor de patiënt, de feedback creëert onduidelijkheid of twijfel bij de patiënt (in tegenstelling tot item 23 "geeft taak of progressiegerichte feedback")	" Hoe kan je nu een besluit nemen als je niet eens de brochures hebt gelezen?" " Hoe wil je nu een goede keuze maken als je de keuzehulp niet hebt ingevuld?" "Als u mijn vrouw was dan zou ik!"	

35	… gebruikt een onlogische gespreksopbouw.	De professional gebruikt een onlogische, onsamenhangende opbouw tijdens het gesprek.	De professional springt van de hak op de tak en moet vaak terugkeren om zaken of termen duidelijk te maken. Professional geeft geen duidelijk overzicht van de mogelijkheden voor prenatale screening. Heeft het door elkaar over de 20 weken echo en screening aan begin van de zwangerschap. Informatie op verkeerde tijdstippen: Bij 6 weken op de echo een drieling ontdekt en dan gelijk beginnen over reductie. Bij 12 weken beginnen over de partus. Bij prim van 40 jaar aan begin zwangerschap al aangeven dat zij nooit 40 weken gaat worden.	

36	… negeert reacties of wimpelt zorgen af	De professional negeert reacties van de patiënt zowel verbaal, als non verbaal. De professional wimpelt op een nonchalante wijze door patiënt geuite zorgen af in plaats van hier verder op in te gaan en dieper te kijken vanwaar de zorgen bij de patiënt komen.	De professional gaat niet in op bezorgdheden/vragen die de patiënt verbaal uit. De patiënt uit tijdens het gesprek een diepe zucht, maar de professional vraagt niet vanwaar de zucht komt of wat deze teweegbrengt. “ Maak je nu geen zorgen, al miljoenen vrouwen hebben een kind op de wereld gezet.” “ je bent je onnodig zorgen aan het maken”. Het komt altijd goed. Geen één kind blijft zitten ze komen er allemaal uit. Er is er nog nooit ééntje blijven zitten. “Niet ingaan op opmerking van patiënt. Ik heb in het begin van de zwangerschap nog 1 keer veel gedronken, dat was om te vieren dat de test negatief was”	“Zwangere: jij (partner) wilt liever niet naar het ziekenhuis in Tiel hè? Partner: Ik heb daar geen goed gevoel bij.” Verloskundige negeert deze opmerking.

		CHAOTISCH WERKEN - AFWACHTEND De mate waarin de professional weinig tot geen houvast biedt aan de patiënt		
	item	**toelichting**	**Voorbeeld Geboortezorg**	
	De professional…			
37	… laat de patiënt begaan. (iemand niet storen, iemand met rust laten) (www.woorden .org)	De professional laat de patiënt betijen in zijn/ haar gedrag of keuzes en komt niet tussen. Signaal missen/ niet oppikken	"Het is jouw keuze, als dat is wat je wilt vind ik het prima". " Je moet het zelf weten.. het is jouw bevalling/ zwangerschap" Het is onverstandig om tegen ons advies met bloedverlies in de zwangerschap naar huis te gaan maar als u dat wilt. Als jij niet wilt stoppen met roken is dat jouw keuze. Als jij niet ingeleid wilt worden "We zullen wel zien hoe het loopt."	
38	… laat de patiënt het zelf uitzoeken	De professional laat op alle vlakken de patiënt het zelf uitzoeken. Het gaat hierbij om het ontbreken van begeleiding en coaching door de professional. Het probleem wordt niet samen met de patiënt opgelost. Keuze bij de patiënt leggen zonder tool/informatie/ begeleiding bij het maken van de keuze aan te reiken.	Komt in GZ vaker voor bij leefstijl onderwerpen. Als patiënt keer op keer te veel blijft eten en daardoor teveel aankomt, geen feedback meer geven op het gewicht Hier hebben jullie een folder, ik hoor wel waar jullie voor gekozen hebben.	

39	… is afgeleid, afwezig.	De professional is bezig met andere zaken, is afwezig tijdens het gesprek, heeft weinig aandacht voor de patiënt. Wanneer de professional wordt afgeleid door een externe factor dient hier ook hoog te worden gescoord.	De professional zit op de computer bezig, naar het computerscherm te kijken in plaats van de naar de patiënt, zit documenten op te zoeken tijdens het gesprek, neemt de telefoon op wanneer deze overgaat, wordt afgeleid door een collega die even binnenkomt voor een snelle vraag, …	Tussendoor telefoon. Assistente die iets komt vragen over een andere patiënt.

SCOREFORMULIER PER CONSULT

	Consultnummer:								
	De professional	0-5 min.	5-10	10-15	15-20	20-25	25-30[1]	Totaal score[2] Per item	Voorbeelden
	AUTONOMIE-ONDERSTEUNING AFSTEMMEND								
1	… laat ruimte om te vertellen								
2	… luistert reflectief en exploreert.								
3	… sluit aan bij het referentiekader van de patiënt.								
4	… gebruikt vragen die ruimte bieden aan de patiënt.								
5	… laat emoties toe, en benoemt deze actief								
6	… hanteert uitnodigende taal.								
	AUTONOMIE-ONDERSTEUNING - PARTICIPATIEF								
7	… geeft ruimte en laat tijd								
8	… biedt inspraak								
9	… verkent doelen van de patiënt.								

10	… stimuleert om na te denken over mogelijke aanpak.								
10a	…stimuleert patiënt om samen met belangrijke partners (familie, vrienden en peers) na te denken								
11	… biedt een toelichting, een verklaring.								
12	…peilt actief naar de mate van autonomie die de patiënt wenst								
	CONTROLE - EISEND								
13	… toont zijn expertise, eist respect.								
14	… hanteert controlerende taal, gebruikt imperatieven								
15	… laat geen ruimte voor inbreng van de patiënt of neemt het gesprek over.								
16	..bepaalt de thema's van het gesprek.								
17	… onderbreekt de patiënt.								
	CONTROLE - DOMINEREND								
18	…zet de patiënt onder druk								
19	… geeft kritiek.								
20	… speelt in op schuld en schaamte.								
21	… is geïrriteerd, ongeduldig								

	COMPETENTIE-ONDERSTEUNING – BEGELEIDEND								
22	… stelt samen realistische doelen.								
23	… biedt taakgerichte of progressiegerichte feedback.								
24	… stimuleert zelfreflectie.								
25	… haalt succeservaringen aan.								
26	… hanteert hulpmiddelen.								
	COMPETENTIE-ONDERSTEUNING – VERDUIDELIJKEND								
27	… geeft alternatieven.								
28	… gebruikt gepaste rolmodellen.								
29	… geeft informatie.								
30	… vat samen en vraagt herhaling.								
31	… verduidelijkt doelopvolging.								
32	… gebruikt aangepaste taal.								
	CHAOTISCH WERKEN - OPGEVEND								
33	… geeft informatie die de patiënt in onduidelijkheid laat								
34	… geeft ongepaste feedback.								

35	… gebruikt een onlogische gespreksopbouw.								
36	… negeert reacties of wimpelt zorgen af								
	CHAOTISCH WERKEN - AFWACHTEND								
37	… laat de patiënt begaan.								
38	… laat de patiënt het zelf uitzoeken								
39	… is afgeleid, afwezig.								

[1] Bij langere consulten kunnen extra kolommen worden ingevoegd

[2] De totaal score per item wordt berekend door de scores per eenheid van 5 minuten bij elkaar op te tellen en te delen door het aantal eenheden. (0-5 + 5-10+ 10-15/3)

TOTAAL OVERZICHT SCORES

		Totaalscore per item consult 1	Totaalscore per item consult 2	Totaalscore per item consult 3	Totaalscore per item consult 4	Totaalscore per item consult 5	Totaalscore per item over alle consulten
	AUTONOMIE-ONDERSTEUNING AFSTEMMEND						
1	… laat ruimte om te vertellen						
2	… luistert reflectief en exploreert.						
3	… sluit aan bij het referentiekader van de patiënt.						
4	… gebruikt vragen die ruimte bieden aan de patiënt.						
5	… laat emoties toe, en benoemt deze actief						
6	… hanteert uitnodigende taal.						
	Totaalscore Autonomie ondersteuning Afstemmend 1						
	AUTONOMIE-ONDERSTEUNING - PARTICIPATIEF						
7	… geeft ruimte en laat tijd						
8	… biedt inspraak						

9	… verkent doelen van de patiënt.						
10	… stimuleert om na te denken over mogelijke aanpak.						
10a	…stimuleert patiënt om samen met belangrijke partners (familie, vrienden en peers) na te denken						
11	… biedt een toelichting, een verklaring.						
12	…peilt actief naar de mate van autonomie die de patiënt wenst						
	Totaalscore Autonomie ondersteuning Participatief[2]						
	CONTROLE - EISEND						
13	… toont zijn expertise, eist respect.						
14	… hanteert controlerende taal, gebruikt imperatieven						
15	… laat geen ruimte voor inbreng van de patiënt of neemt het gesprek over.						
16	..bepaalt de thema's van het gesprek.						
17	… onderbreekt de patiënt.						

	Totaalscore Controle Eisend[3]						
	CONTROLE - DOMINEREND						
18	…zet de patiënt onder druk						
19	… geeft kritiek.						
20	… speelt in op schuld en schaamte.						
21	… is geïrriteerd, ongeduldig						
	Totaalscore Controle Dominerend[4]						
	COMPETENTIE-ONDERSTEUNING – BEGELEIDEND						
22	… stelt samen realistische doelen.						
23	… biedt taakgerichte of progressiegerichte feedback.						
24	… stimuleert zelfreflectie.						
25	… haalt succeservaringen aan.						
26	… hanteert hulpmiddelen.						
	Totaalscore competentie-ondersteuning Begeleidend[5]						
	COMPETENTIE-ONDERSTEUNING – VERDUIDELIJKEND						
27	… geeft alternatieven.						

28	… gebruikt gepaste rolmodellen.						
29	… geeft informatie.						
30	… vat samen en vraagt herhaling.						
31	… verduidelijkt doelopvolging.						
32	… gebruikt aangepaste taal.						
	Totaalscore competentie-ondersteuning Verduidelijkend[6]						
	CHAOTISCH WERKEN - OPGEVEND						
33	… geeft informatie die de patiënt in onduidelijkheid laat						
34	… geeft ongepaste feedback.						
35	… gebruikt een onlogische gespreksopbouw.						
36	… negeert reacties of wimpelt zorgen af						
	Totaalscore Chaotisch werken Opgevend[7]						

	CHAOTISCH WERKEN - AFWACHTEND						
37	… laat de patiënt begaan.						
38	… laat de patiënt het zelf uitzoeken						
39	… is afgeleid, afwezig.						
	Totaalscore Chaotisch Werken Afwachtend[8]						

[1] Som totaalscore over alle consulten 6 items Autonomie ondersteuning Afstemmend/ 6
[2] Som totaalscore over alle consulten 7 items Autonomie ondersteuning Participatief/ 7
[3] Som totaalscore over alle consulten 5 items Controle eisend/ 5
[4] Som totaalscore over alle consulten 4 items Controle dominerend/ 4
[5] Som totaalscore over alle consulten 5 items Competentie ondersteuning begeleidend/ 5
[6] Som totaalscore over alle consulten 6 items Competentie ondersteuning verduidelijkend/ 6
[7] Som totaalscore over alle consulten 4 items Chaotisch werken opgevend/ 4
[8] Som totaalscore over alle consulten 3 items Chaotisch werken Afwachtend/ 3

Interpretatie van de score

Voor de interpretatie van de uitslag kan gebruik gemaakt worden van hoofdstuk 5 en 7 van de thesis: Optimizing Autonomy-Supportive Consultation, an investigation in the context of prenatal consultations in maternity care.

Voor het bespreken van de scores en/of het organiseren van een methodische intervisiebijeenkomst kan contact worden opgenomen met de onderzoeker: joyce.kors@hvhl.nl.