

Exploring the Subconcepts of the Wittmann-Price Theory of Emancipated Decision-Making in Women's Health Care

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Purpose: To explore the subconcepts of the Wittmann-Price Theory of Emancipated Decision-Making (EDM); which is proposed as a new theoretical model for the nursing care of women to increase women's satisfaction with decision-making about healthcare issues. Infant feeding method was used as the clinical exemplar.

Design and Method: A descriptive correlational design was used to test the five identified subconcepts of EDM (empowerment, flexible environment, personal knowledge, reflection, and social norms) in women's healthcare. The relationship of emancipated decision-making and satisfaction were explored with the Subject Demographic Questionnaire (SDQ), the Wittmann-Price Theory of Emancipated Decision-making Scale (EDMS), and the Satisfaction with Decision (SWD) scale. The research design was retrospective, without random sampling of subjects. Four research questions were posed for this investigation. Women who had uncomplicated deliveries and met the selected criteria were enrolled (N=97).

Findings: All five subconcepts of EDM were scored on subscales on the EDMS; flexible environment and personal knowledge had the highest mean scores. Pearson correlations showed that all five subscales were significantly related to each other except reflection with personal knowledge and reflection with social norms. A significant relationship was found between the EDM and satisfaction with the decision. Personal knowledge and flexible environment were the best predictors of satisfaction with the decision.

Conclusions: The Wittmann-Price Theory of EDM is a theoretical model with implications for nursing care of women who are involved in a healthcare decision, such as choice of infant feeding. Further studies are needed to determine the importance of each of the subconcepts in relation to emancipated decision-making.

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Decisional science in healthcare is an important area of study because consumers today have more knowledge available to them than ever before. This knowledge results in more options and more information to incorporate into each healthcare choice. Pierce and Hicks (2001) reflected this dilemma by stating, "Given the ubiquitous nature of human decision-making and the nature of the current healthcare environment, it is imperative to further develop this knowledge and integrate it into clinical care" (p. 267).

Decisional science in health care of women, particularly including social norms, lacks development (Button, 1999), and the building of decisional science in nursing has lagged behind that of other disciplines (Noone, 2002). The natural developmental events in a woman's life, such as childbirth

and menopause, make healthcare decisions important for continued well being throughout the lifespan (Andrist, 1998; Brown, Carroll, Boon & Marmoreo, 2002).

Infant feeding method was chosen as the clinical exemplar because it is a current topic in women's health, and it has generated social awareness and spurred much research (Healthy People 2010). The three choices used most by new mothers, breastfeeding, bottle feeding, or combination

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Table 1. Definitions the Components of the Wittmann-Price Theory of EDM

<p><i>Emancipated decision-making</i> is a theoretical concept indicating a process of reaching a more positive state of being, a state of freedom in choice, by first acknowledging the affective experience of oppression. The oppression is recognizable when it produces a dilemma in decision-making by socially sanctioning one alternative as superior to the others. To arrive at an emancipated decision, the woman must cognitively reflect upon the choices. Reflection can be accomplished with or without dialogue. An emancipated decision is arrived at using personal knowledge in combination with empowerment. An emancipated decision requires a flexible environment and produces satisfaction with the decision (Wittmann-Price, 2004).</p> <p><i>Empowerment</i> is the process that provides the resources, tools, and environment to develop, build, and increase ability and effectiveness of others to set and reach goals for individual and social needs (Hokanson-Hawks, 1992).</p> <p><i>Flexible environment</i> is an internal and external environment that is responsive and resilient to increased choices, thus enhancing self-esteem and satisfaction (August-Brady, 2000).</p> <p><i>Personal knowledge</i> is a way of knowing that has components of self-awareness. It is both subjective and objective and is described as the ability to understand one's self. Personal knowledge influences everything one does because it is being aware of one's own personal feelings (Berragan, 1998).</p> <p><i>Reflection</i> is a technique that requires critical thought either with oneself (self-dialogue) or another individual or group (dialogue; Shor, 1992). It is a critical thinking process to assist the client to develop the learning technique of "knowing thyself." It is a self-analytical process to identify contradiction between what one intends to achieve in any given situation and the way one is behaving (Johns, 1999); it includes both the person and the situation (Penney & Warelow, 1999).</p> <p><i>Social norms</i> refer to a woman's awareness that the external environment promotes one of the possible alternatives as more acceptable than another. It originates as recognizing that knowledge development occurs in a social context, and the social context can exert unequal power and influence over knowledge, thereby influencing individual perception (Berragan, 1998).</p> <p><i>Satisfaction with decision-making</i> is a positive feeling about a decision that successfully meets the client's expectations and incorporates the client's values on which the client is the ultimate authority (Mahon, 1996).</p>

feeding (breastfeeding with bottle-feeding supplementation), are acceptable. Infant feeding method is a significant healthcare decision because it affects a woman personally as well as her lifestyle (Rodriquez-Garcia, 1990).

Current decision-making frameworks and research about women's health care have been developed within the social norms of the established healthcare system. The healthcare system in the US has strong paternalistic influences (Arslanian-Engoren, 2002; Holmes, 2002). The Wittmann-Price Theory of EDM assumes that social norms within the healthcare system can influence women's choices about healthcare issues. The Wittmann-Price Theory of EDM represents a positive process for women faced with healthcare decisions and contains identifiable subconcepts that can be applied in professional nursing care. The EDM subconcepts, synthesized from clinical practice and an extensive review of the literature, are: empowerment, flexible environment, personal knowledge, reflection, and social norms. They are shown, along with EDM, SWD, and infant feeding, in **Table 1**. The concept analysis of emancipated decision-making was previously published (Wittmann-Price, 2004); this analysis was focused on the results of the first exploration of the theory in a practice setting. One proposed measurable outcome of an emancipated decision-making process is satisfaction with the decision, the outcome variable in this study.

Background

The current healthcare environment shows some change in emphasis from patient compliance or adherence to patients' more active decision-making processes. Decision-making has evolved from provider-directed to a collaborative activity or shared decision-making process between

provider and patient to enhance patients' rights (Rothert & O'Connor, 2001). Pierce and Hicks (2001) preferred "patient-centered" decision-making to be congruent with the current healthcare milieu in which patient preferences are seriously considered. Regardless of the terminology, the decision-making process in health care includes many variables. Several decision-making models and theories exist, but none pertain exclusively to women as a population that can be affected differently by social norms within the healthcare environment.

Rothert and O'Connor (2001) outlined characteristics of decision-making as a process with specific components: it has at least two people participating, one as the provider and one as the patient, both parties are involved in the decision-making, information is shared, and both parties agree on a decision (Rothert & O'Connor, 2001). The Ottawa Decision Support Framework (ODSF) is a decisional aid that can be used to guide clients in making decisions in clinical practice. The tool devised in 1996 is a framework for assisting patients with decisions that produce conflict or decisions that are produced from a new situation such as a medical diagnosis (O'Connor, Jacobson, & Stacey, 2002). The ODSF framework has a three step process: (a) assessing the options of a decision to determine needs; (b) providing support to meet those needs; and (c) evaluating the decision-making process.

In their conflict model of decision-making, Janis and Mann (1977) outlined five types of decision-making outcomes that can be identified when a person perceives a stressor in a life situation. The outcomes range from "unconflicted adherence" in which a person chooses to ignore making the decision, to a person who makes the decision vigilantly after conscientiously reflecting on all the alternatives.

Methods

The framework proposed by Pierce and Hicks (2001) indicate that all decisions have four basic underlying premises. Three premises include values: (a) the personal appraisal of each outcome; (b) uncertainties or probabilities of the outcomes of each choice, which can be derived from objective or subjective data; and (c) the consequence or outcome which may show one option as more attractive than another. The fourth option, "decisional hazard," shows one alternative as more attractive than another, thus deterring adequate appraisal of the other.

Pierce and Hicks (2001) delineated clear objectives of decision-making in clinical practice. These include: (a) helping patients become more efficient, given their limited physical and cognitive resources; (b) reducing the psychological stress of making the decision; (c) helping patients avoid decision hazards; and (d) helping patients to arrive at decisions that accurately reflect their preferences and values.

The Wittmann-Price theory of EDM is proposed to decrease the decisional hazard caused by social norms indicating that one alternative is more appropriate than another. All decision-making theories or models are based on an assumed disruption in a person's normal pattern and that change has several possible alternatives. Knowledge is a strong component of all the decision-making theories, and it is needed to reach an informed decision. Not all decision-making theories include either personal knowledge as a valid way of knowing or the social norms that may specifically influence women. Satisfaction with the decision is included in many models as an outcome measure; however, differentiating satisfaction with the decision from the consequences of the choice is important (Rothert & O'Connor, 2001).

The purpose of this study was to test the subconcepts of EDM (empowerment, flexible environment, personal knowledge, reflection, and awareness of social norms) in women's health care, with women's choice of infant feeding method as the clinical exemplar. This study was done to explore the relationship of emancipated decision-making and satisfaction with the decision. The type of infant feeding chosen by participants was not investigated because no preference was given to any of the three choices (breast-feeding, bottle feeding, and combination breast and bottle feeding) identified in this study. The exemplar was purposely presented in as much of a value-free manner as possible in order not to obscure the results about the decision-making process itself.

The four research questions were: (a) "What are women's scores on emancipated decision-making and the five subconcepts of emancipated decision-making?" (b) "What are the relationships among the five subconcepts of an emancipated decision-making process and the total emancipated decision-making scores?" (c) "What is the relationship between an emancipated decision-making process and satisfaction with the decision about infant feeding method in women?" and (d) "Does the combination of the subconcepts of emancipated decision-making predict satisfaction with the decision about infant feeding method in women better than any one element alone?"

This study had a descriptive correlational design. The research design was retrospective, without random sampling, because of self-selection of hospitalized participants.

Participants ($N=97$) who delivered uncompromised term infants and who had decided on and enacted an infant feeding method within the first day of birth were recruited at a northeastern U.S. Level III hospital. Participants in this study were at least 18 years of age, had delivered an uncompromised infant, had initiated feeding within the first day, had reported being comfortable reading and writing English, and had no history of breast surgery.

The age of the sample ($n=96$) ranged from 18 to 50 ($M=29.74$, $SD=5.78$). Of the participants who had other children ($n=57$), parity ranged from 1 to 5 with 36% of the sample having one other child and 25% having two or more children ($M=1.1$, $SD=1.12$). The sample was mostly White (78%) and the majority (88%) lived with the infant's father. They were well-educated, with more than 80% indicating that they had at least some college education.

Data collection was done by the researcher. The tool consisted of a survey which included three instruments: the Subject Demographic Questionnaire (SDQ), the Emancipated Decision-Making Scale (EDMS), and the Satisfaction with Decision (SWD) scale. After hospital IRB approval the data-collection instrument with an explanatory letter were distributed. Consent was implied upon completion of the instrument. The instrument was returned by the participants, to a secured box on the nursing unit.

SDQ

The first instrument used in this study was the SDQ designed by the researcher to describe the sample specific to this exemplar. It included age to eliminate teenage subjects under the age of 18; although legally they are considered emancipated minors, they might have developmental issues that interfere in independent decision-making (Martens, 2001). Second, the SDQ included participants' ethnicity because the literature has indicated cultural influences on feeding choices (Underwood et al., 1997). The SDQ also included participants' primary language and whether they were comfortable reading and writing English; this information was used to ensure understanding of information being sought and to avoid complications with implied consent. Other questions were income, education, employment, parity, feeding method, and with whom they were living at the time.

EDMS

The EDMS was constructed by the researcher. Statements to measure each of the five subconcepts were developed and a 5-point Likert scale was used to describe the intensity, 5 being "strongly agree." The final version had 35 items with a Flesh-Kincaid reading level at grade 6.9.

Table 2. Reliability of EDMS and Subscales Scores from Pilot Study

Subscale	Number of items	Pilot study alpha
TOTAL	35	.88
Empowerment	3	.59
Flexible environment	4	.81
Personal knowledge	12	.81
Reflection	5	.71
Social norms	11	.75

The EDMS was judged by five experts to establish content validity. The five experts included all doctorally educated nurses with expertise in decisional science or women's health care.

A pilot study ($N=18$) was conducted in the summer of 2004 to gather estimated reliability data for the EDMS. The alpha coefficients of the five subscales are shown in Table 2. The final EDMS had a Cronbach's alpha for internal consistency of .88. Although the reliability of the empowerment subscale was .59, those questions were retained for exploratory purposes. One difficulty in conceptualizing empowerment was the small number of items in this subscale. Another difficulty was that empowerment, which was defined as professional information provided to women, may have been difficult to separate from personal knowledge because infant feeding decisions are often made preconceptually (Dix, 1991; Handfield & Bell, 1995; Oxby, 1994). Empowerment might be a more evident subconcept in a decision that requires a shorter time.

In the current study the EDMS was scored as a unidimensional scale and a summed total score was used for all analyses.

SWD

The Satisfaction with Decision (SWD) instrument, designed by Holmes-Rovner et al. (1996), was used to measure each woman's satisfaction with her decision about infant feeding. Holmes-Rovner et al. reported a Cronbach alpha internal consistency reliability of .86.

Findings

Research question 1: What are the scores on emancipated decision-making and the five subconcepts of emancipated decision making? Mean scores of the EDMS subscales were all high, at or above the midpoint of 3.0 based on a 5-point Likert scale. All five subscales had a mean range of 3.5 to 4.3 (Table 3).

Research question 2: What are the relationships among the five subconcepts of an emancipated decision-making process and the total emancipated decision-making score? Pearson correlations of the five subscales of EDMS showed that the subscales were significantly related to emancipated decision-making (Table 4).

Table 3. Mean Scores of EDMS Total and Subscales

	Mean	Range	SD
Total EDMS	4.02	2.46–4.81	.74
Flexible environment	4.30	2.5 0–5	.54
Personal knowledge	4.26	3.17–5	.52
Social norms	3.97	2.27–5	.60
Empowerment	3.62	1.00–5	.49
Reflection	3.50	2.00–5	.40

Research question 3: What is the relationship between an emancipated decision-making process and satisfaction with the decision about infant feeding method in women? The findings showed a significant relationship between emancipated decision-making and the participants' satisfaction with the decision ($r=.74$, $p<.001$; Table 5).

Research Question 4: Does the combination of the subconcepts of emancipated decision-making predict satisfaction with the decision about infant feeding method in women better than any one element alone? The combination of personal knowledge and flexible environment explained 62.2% of the variance in satisfaction with the decision (Table 6).

Discussion

The results of this study showed that emancipated decision-making by women was enhanced when empowerment, flexible environment, personal knowledge, reflection, and awareness of social norms were in place in the healthcare environment, as shown by the high scores on the EDMS in all areas. On the EDMS, flexible environment had the highest mean score compared to the other four subconcepts. A flexible environment is one that can be emancipating because it includes respect for different types of knowledge, such as personal knowledge and knowledge gained from reflective practices (August-Brady, 2000).

Table 4. Pearson Correlations of 5 EDM Subscales and Total EDM Scores ($N=97$)

	Total EDMS	Flexible environment	Personal knowledge	Reflection	Social norms
Empowerment	$r=.56$ $p<.001$	$r=.40$ $p<.001$	$r=.24$ $p=.019$	$r=.38$ $p<.001$	$r=.47$ $p<.001$
Flexible environment	$r=.81$ $p<.001$		$r=.67$ $p<.001$	$r=.35$ $p<.001$	$r=.47$ $p<.001$
Personal knowledge	$r=.85$ $p<.001$			$r=.15$ $p=.152$	$r=.62$ $p<.001$
Reflection	$r=.47$ $p<.001$				$r=.15$ $p=.153$
Social norms	$r=.83$ $p<.001$				

Table 5. Pearson Correlations of EDMS Total and Subscales Scores With SWD (N=95)

	<i>r</i>	<i>p</i>
Total EDMS	.74	<.001
Empowerment	.24	.020
Flexible environment	.63	<.001
Personal knowledge	.77	<.001
Reflection	.19	.073
Social norms	.59	<.001

Personal knowledge, or the woman's ability to know what is best for herself and her infant, scored second highest of the subconcept means. Personal knowledge may be a type of knowing that women readily use. It is regarded as true and important knowledge because it comes from her own experience (Polanyi, 1958).

Social norms, which can be verbally or nonverbally transmitted to the woman, and make her aware that one choice is more socially acceptable, scored the third highest mean. Women in this study likely were aware of what choice in infant feeding methods is more socially accepted by the larger society, such as in the *Healthy People 2010* campaign. This factor must be acknowledged on some level in the decision-making process regardless of whether the final choice was the same or different from the socially promoted choice (Bean, 2001; Earle, 2000; Hauck & Iruita, 2003; Lothian, 1998; Mazingo, Davis, Droppleman, & Merideth, 2000; Swanson & Power, 2005).

The sample studied may have had a general sense of empowerment as shown by the mean above the possible midpoint in this subscale. This result may have been related to the homogeneous characteristics of the sample. Because empowerment in this study was defined as information provided to the woman by healthcare professionals, the probability is high that most participants had prior access to health care because of their income level, and they probably had sought prenatal care and educational offerings. The empowerment subscale had a low reliability coefficient, so conclusions about this subscale are deferred until retesting with a different exemplar is completed.

Reflection, related to thinking about alternative, infant-feeding choices, may not have been a timely subconcept for these participants, causing it to score the lowest mean. Reflection may need to be measured earlier in the decision-making process for this exemplar. The thought process

Table 6. Stepwise Multiple Regression of EDMS Subscales on Satisfaction With Decision-Making

	<i>R</i>	<i>R</i> ² change	<i>F</i> change	<i>p</i>
Personal knowledge	.77	.59	132.11	<.001
Flexible environment	.79	.04	8.62	.004

regarding infant feeding choices may have occurred long before this study was conducted (Wambach & Koehn, 2004; Williams, Innis, Vogel, & Stephen, 1997) and if the decision had been taken to another cognitive level, it may have been part of a different concept, the woman's personal knowledge base.

This study showed support for the Wittmann-Price theory of EDM to promote positive patient outcomes by supporting women in the decision-making process and ultimately to increase their satisfaction with decisions. Additional study is needed to enable professional nurses to be emancipators, who can provide women with flexible, reflective environments and personal knowledge for making healthcare decisions.

These results are limited in generalizability by virtue of the population studied. The sample was White, upper-middle-class, well-educated women and the results may not be generalized to other populations of women. Other limitations inherent in this study may pertain to the definitions of the subconcepts and the multicollinearity of EDMS subscores. The insufficient reliability of the empowerment subscale makes assumptions about the relationship of empowerment to other subscales and the total EDM score tentative. Empowerment should be reanalyzed with a different exemplar, particularly one with the healthcare decision made in a shorter period of time. Another issue that may have affected the results of this study was institutional policy that allowed unlimited visiting hours, thereby decreasing the women's privacy when participating in the study. The influence of another person or other people in the room could not be controlled during data collection.

Conclusions

Women who used an emancipated decision-making process based on empowerment, flexible environment, personal knowledge, reflection, and awareness of social norms were more satisfied with their decisions about infant feeding. Personal knowledge and flexible environment were the most significant subconcepts for women making emancipated decisions. Further analysis showed that the subconcepts of personal knowledge and flexible environment were the best predictors of satisfaction with the decision, and EDM scores and SWD scores were significantly and positively related.

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