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Building confidence and trust in Ireland's National Maternity Services Workforce –What matters most and how?

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ABSTRACT

National surveys on care experiences are increasingly adopted as regulatory mechanisms for improving care quality and increasing public trust in healthcare services. Based on data collected as part of Ireland's 2020 National Maternity Experience Survey, this study investigates care-related factors that contribute most to confidence and trust in the professional workforce (or carers) within Irish maternity services. The survey covered the full spectrum of maternity care and received 3,206 responses which were analysed using structural equation modelling. Results show that trust in carers may be enhanced through greater attention to the quality of interpersonal aspects of maternity care in a few core areas. We found that factors related to *dignity and respect* ($\beta = 0.270$), *involvement in decision-making* ($\beta = 0.186$), *pain management* ($\beta = 0.172$), and *communication* ($\beta = 0.151$) are core determinants of confidence and trust in the professional workforce of maternity services. Perceived quality of care in these four aspects increased on average, with the women's age. *Women under 29* rated their experiences in these areas as significantly lower than the average. *Women with a disability* also rated their experiences significantly lower than average in three core areas. Our results suggest that trustworthy, equitable, and high-quality maternity care requires ongoing development of interpersonal skills within the maternity services professional workforce particularly in caring for younger women (under 29 years) and those with a disability.

1. Introduction

The concept of trust in hospitals and the services they provide has become increasingly important in recent years [25]. In the healthcare context, trust is one of the essential and fundamental parts of building a sustainable long-term relationship between patients and healthcare staff [24]. Patient trust can be defined as a set of attitudes or expectations that the clinician will perform their duties in their best interests [12]. Perception of trust between patients and their care providers generally increases their satisfaction and health outcomes [3,7]. There is also evidence that patient trust in their physicians increases the chances of communication about medical problems and subsequent adherence to received medical advice [1]. However, recent studies suggest that

trust in public healthcare systems is declining in general and particularly amongst minority groups [3].

1.1. Why is trust important in maternity care?

Trust is essential in maternity care where women feel vulnerable due to their health needs creating a power imbalance between them and their carers [32]. Without trust, care providers including midwives and obstetricians are unable to provide appropriate care [14,17]. Albeit there are several studies on patient experience, patient satisfaction, service quality, and how trust relates to these concepts [7,27]; studies on determinants of trust in healthcare settings and maternity services, in particular, are very few. The exceptions include a study by [14] which examined how trust could be rebuilt with women that have had trau-

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matic birth experiences. Trust, together with privacy, community, and culture were further identified as important factors in maternity care for Aboriginal women [23]. A similar study [26] involving women from minority and marginalised groups in British Columbia, Canada, identified mistrust in healthcare providers as having a harmful and negative impact on the maternity care of women from this cohort. These studies provide some initial, but nuanced, understanding of what factors may be related to women's trust in maternity services and possible impacts in the context of women from minority groups.

1.2. Determinants of trust in maternity care – what we know

Past studies have investigated determinants of patient trust in healthcare settings. For instance, Chang et al. [7] showed that perceived quality of service in terms of responsiveness, reliability, and assurance increases patient trust. In the context of maternity services, four groups of factors including patient, provider, health facility, and community factors were found to be determinants of trust based on the interactions between care-users and providers, health facility managers, and policymakers [32]. Trust factors related to care-users include *prior birth experiences, perceived risks and harms, childbirth outcomes, and maternal health literacy*. Factors associated with providers or caregivers include *empathy and respect, responsiveness (including personalised attention), and provider capability*.

While respectful care has been related to quality of maternity experience [35], empirical evidence on how it impacts trust is not available. More generally, respectful care should aim to preserve dignity, privacy and confidentiality, ensure freedom from harm and abuse, and provide informed choices and ongoing support during labour and childbirth [6]. The importance of respectful care in maternity services have been studied in different national settings [30,31]. In these studies, respectful care is associated with improved utilisation and quality of maternal care. Results from these studies also show that reducing maternal and early neonatal mortality and morbidity depends on not only increasing facility-based care, but also promoting respectful care. When women feel supported, respected, and safe, and have the opportunity to participate in shared decision-making with their providers, they are more likely to have a positive birth experience [5].

Pain management has also been associated with quality of obstetrics care [36]. Meanwhile, it has been established that doctors showing respect to patients and gaining patient trust during the healthcare process are critical to establishing understanding between patient and doctor, which subsequently affects patient healthcare outcomes [20]. While factors such as informational support [34] and clarity of explanations [2] have been associated with patients' trust more generally, others factors such as attentiveness [28], pain management, and communication have been associated with enhanced overall satisfaction. These factors are yet to be tested for their influence on women's overall trust in maternity services contexts.

1.3. Contributions of the study

The few available studies on trust in maternity services have understandably largely focused on minority groups in different communities or focus on niche contexts (e.g., trust in healthcare services during Covid-19). There is some empirical evidence on the effect of empathy and respect, responsiveness, personalised attention, and perceived maternity service capability on trust by women in their carers (midwives, nurses, obstetricians, etc.) or maternity services as a whole. This study expands the empirical evidence base on determinants of women's trust in the maternity services professional workforce by investigating the effects of care factors on trust, the relative importance of these factors, and revealing insights on how these factors engender trust.

Specifically, by analysing Ireland's 2020 National Maternity Survey data (the only available data in the series so far) involving 3205 women

from 19 public maternity services, we determined the effect and the strength of 10 major factors on *confidence and trust* in the professional workforce of these maternity services. These factors include *information provision, involvement of women in decision making, involvement their partners or advocate, respect and dignity, attention, personalised attention by carers, communication, responsiveness, pain management, and clarity of explanations*. To understand how these factors engender trust, we selected and analysed related free-text comments provided by the women on their care experiences that were collected as part of the survey. The comments provide insights into the conditions associated with good experience and areas for improvement for each of the identified determinants. Finally, we examined if there were differential experiences amongst socio-demographic groups in particular: age-group, disability, and ethnicity regarding these core trust determinants.

2. Materials and methods

This study seeks to answer the following research questions (RQ) using a qualitative research design: *What are the core determinants of women's confidence and trust in the professional workforce in maternity services? How do these trust factors matter from the women's perspective?*

2.1. Research context

Our research is carried out in the context of the first Irish National Maternity Experience Survey (NMES) conducted under the auspices of the National Care Experience Programme (NCEP) in 2020 as secondary research. The research employs a sequential mixed method design [11] and aims to provide evidence for improving the quality of maternity care services in Ireland. The NMES includes 65 structured, tick-box questions and three open-ended or free-text questions. Women aged 16 or older who gave birth in October and November of 2019 in one of the 19 maternity services were eligible to participate in the survey. A total of 3205 women responded to the survey out of an eligible population of 6357. According to data from the Central Statistical Office (CSO) of Ireland,¹ there were 59,294 live births in 2019; consisting of 30,271 males and 29,023 females. Women who did not have a postal address (e.g., homeless, traveller women) and women who had a concealed pregnancy, a pregnancy termination, or experienced a pregnancy loss or stillbirth were excluded. Women whose baby was taken into care were also excluded.

2.2. Ethics approval and consent to participate

All eligible respondents were contacted by post between February and March 2020 and provided with the necessary background information on the survey including how to access the online questionnaire. Participation in the survey was voluntary and confidential. Women could opt out of the survey if they did not wish to take part [19]. The National Maternity Experience Survey complied with the General Data Protection Regulation (GDPR) and Data Protection Act 2018. All respondents gave their consent to use the data provided for research and publication.

2.3. Data collection

The first seven sections of the NMES were designed to collect data on *women's experiences* through the consideration of the following stages of maternity care: Care while pregnant (Antenatal Care); Care during labour and birth; Care in hospital after the birth; Specialised care for the baby; Feeding the baby; Care at home after the birth; Overall Care, including Open-ended questions. The closed-ended survey

¹ <https://www.cso.ie/en/releasesandpublications/ep/p-vsar/vitalstatisticsannualreport2019/births2019/>

questions measure women's experiences using a 3-, 4-, 5-, or 6-point scale (Appendix A).

The last section of the survey is devoted to collecting the *demographic* data of the participant. The NMES respondents' demographic information is presented in Table 1. The largest cohort of women was between the ages of 30 and 39 (72.36 %). Most respondents belong to the white ethnic group (94.1 %) and only 18.22 % of respondents have one or several disabilities listed in the survey. A comparison² between respondent and non-respondent groups reveals that the lowest response rate is amongst 16–24-year-olds, while the highest response rate is amongst 35–39-year-olds. In terms of the length of stay in the hospital, those who stayed in the hospital for 0–1 day had the lowest response rate, whereas the highest response rate (53 %) was observed amongst people who stayed in the hospital for 4–5 days.

The data from the *closed-ended* part of the NMES questionnaire was used to develop the measurement model of the *indicators* for 11 factors associated with women's maternity care experiences and trust in the professional workforce. The data from the *open-ended* part of the NMES was used for the (qualitative) elaboration of the determinants identified.

2.4. Measures and procedure

Our sequential mixed-method approach was implemented in two major steps. The *first* step comprised of quantitative analysis of the responses of the closed-ended part of the questionnaire using to determine the core determinants of confidence and trust in professional workforce. The *second* step involved the qualitative analysis of the open-ended responses to elaborate on how the established set of core determinants engender confidence and trust in the professional workforce in the maternity services.

To develop the measurement model, 35 indicators (closed-ended questions) were selected from the NMES data (with less than 20 % of missing data) and then categorised into 11 constructs comprising 10 potential determinants and 1 construct representing the outcome – confidence and trust in the professional workforce (see Appendix B). The development of the constructs proceeded in three steps – (a) categorisation of the indicators into thematic groups; (b) checking for the coherence of the emergent constructs; and (c) refining the constructs by removing indicators with poor fit. This resulted in a measurement model with *eleven* constructs: (1) *Information* (8 items) covers provision of the best available information by the healthcare service to enable women to make informed decisions about their care. (2) *Involvement* (5 items) covers empowering women to participate in their own care decisions, as well as support in making decisions about infant feeding. (3) *Respect & Dignity* (3 items) covers ensuring women's right to be treated with respect, courtesy, and consideration. (4) *Attention* (2 items) covers providing women with adequate care by trained and qualified health professionals who are involved in every step of care during delivery. (5) *Confidence & Trust* (3 items) covers supporting the development of a relationship of trust between a woman and her health care providers. (6) *Communication* (8 items) covers establishing and maintaining effective (adapted to the stage of women's care and circumstances) communication systems between all health workers, women and their families, and these systems. (7) *Responsiveness* (2 items) covers ensuring that maternity care providers are sensitive and responsive to the broad spectrum of circumstances that impact on the health and wellbeing of women and their babies. (8) *Involvement of partner and/or companion* (1 item) covers providing services to enable women to have a partner or person by their side to help them make informed decisions about their care. (9) *Pain management* (1 item) covers providing all available options for pain relief during childbirth, as well as information about their

Table 1

Demographics profile of respondents including their age, ethnicity, and disability groups (N = 3205).³

Population Data	Number		
Total Birthing Population in Ireland in 2019	59,294		
Total Birthing Population in survey collection months (Oct & Nov 2019)	6357		
Total Birthing Population between Oct & Nov 2019 that responded	3205		
Characteristic	Participant		
	Number	Survey%	Pop. %
<i>Age group (years)</i>			
<25 years	155	4.84	9.30
25 to 29 years	451	14.07	16.90
30 to 34 years	1173	36.60	34.20
35 to 39 years	1146	35.76	31.70
40 and above	280	8.74	7.9
<i>Ethnic group</i>			
White	2969	94.10	87.0
Minority (Black or Black Irish, Asian or Asian Irish, or Other, including mixed group/background)	186	5.90	13.0
<i>Disability group³</i>			
Yes	584	18.22	22.2
No	2622	81.78	78.8

impact. (10) *Personal attention* (1 item) covers the provision of maternity care based on the woman's personal choice, combined with the assessed needs of the woman and/or her child. (11) *Clarity of explanation* (1 item) covers clearly explaining to women all examinations and procedures, providing answers to questions, discussing, and explaining examination/test results. Full description of all measurement items and constructs are presented in the Appendix B. *Ten* hypotheses were specified to test the relationship between the 10 *potential determinants* and *confidence and trust* (see Appendix C).

2.5. Data analysis

We used SmartPLS 3.3.9 software [15] to determine the core determinants of women's confidence and trust in their professional carers. *First*, a reflective measurement model was developed (based on Fig. 1). *Second*, the measurement model was evaluated to establish its reliability and validity using the following three measures: (1) indicator loadings and internal consistency reliability – Cronbach's alpha (α) and Composite Reliability (CR); (2) convergent validity (average variance extracted, AVE); and (3) discriminant validity. The constructs' discriminant validity was tested using the (i) Fornell-Larker; (ii) cross-loading; and (iii) heterotrait-monotrait (HTMT) criteria. *Third*, we estimated the path coefficients for the structural model; coefficient of determination (R^2); and size effect (f^2) for the relevance of the construct measures [15]. In addition, a bootstrap procedure with 5000 iterations was performed to examine the statistical significance of the weights of sub-constructs and the estimated path coefficients (β).

To provide an explanation for the *how* the identified confidence and trust determinants matter to the women, we analysed the free-text responses to two questions in the NMES dataset: "What was particularly good about your maternity care?", and "Was there anything that could be improved?". For each of these sets of free-text responses, we applied the content analysis strategy comprising the following two steps. *First*, we searched for comments containing the list of keywords associated with each construct. *Second*, we filtered the samples obtained, extracting only aspects where there are mentions of "Confidence" and/or "Trust". The filtered comments were analysed to establish trust condi-

³ The closest census data available is the national census of 2022. To compare the survey respondent demographics with that of women in the population we examined the percentage of women with/without a disability and the ethnicity of women living in Ireland.

² https://yourexperience.ie/wp-content/uploads/2020/11/NMES_Technical_Report_2020_Final.pdf

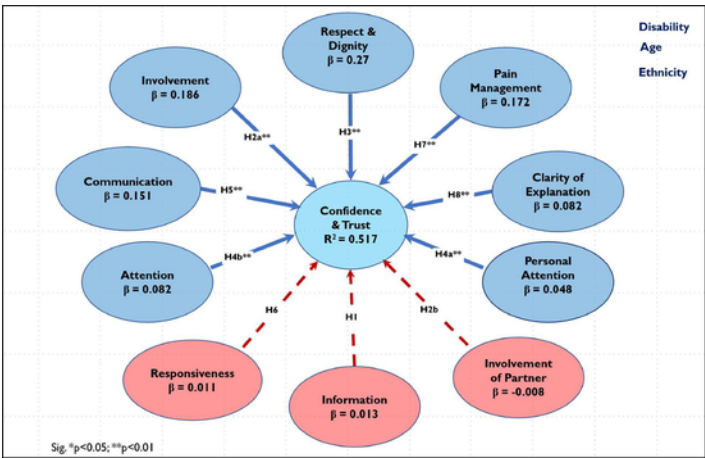


Fig. 1. Structural Model Analysis Results.

tions for each of the constructs by examining statements connecting the constructs directly with strengthening or reducing confidence and trust in the workforce.

Finally, we employed a one-sample *t*-test with a 95 % confidence level to determine if there were statistically significant differences between the mean scores of various socio-demographic groups (disability, ethnicity, and age) and the overall sample mean for the identified core (Top-4) determinants of confidence and trust in the professional workforce.

3. Results

3.1. Measurement model assessment

Individual indicator reliability (outer loadings) values for 29 of the 31 indicators from multi-item constructs exceeded the accepted threshold of 0.4 [22]. The *internal consistency reliability* is assessed using Cronbach's alpha (α) and Composite Reliability (CR). Cronbach's alpha value does not meet the given thresholds for 3 out of 7 multi-item constructs. Composite Reliability values for most constructs show good internal consistencies, ranging from 0.702 to 0.914. Therefore, we can argue that our measurement model has an acceptable level of internal consistency reliability. Most constructs demonstrate good *convergent validity* which explains more than 50 % of the variance. *Forrell-Larker criterion* was satisfied [13] for all constructs except Communications. Full report on the validity and reliability of the model is provided in Appendices D, E, F & G.

3.2. Structural model analysis – determining what factors matter most

The structural analysis model confirms the influence of the different dimensions of perceived quality of maternity care (the factors) on women's confidence and trust in the professional workforce. Seven constructs out of the ten factors in our model had significant positive effect on confidence and trust (Table 2). We discuss each of significant factors below and provide some explanations on how these factors matter based on the analysis of the free-text comments as described above (see Table 3 and Appendix H for details).

The greatest influence on the confidence and trust is the experience of *Respect and Dignity* at all stages of care (H3: β = 0.270, p-value < 0.001). From the women's perspective, respect and dignity leads to a trusting relationship with the professional staff. This is characterised by professionalism, attentiveness, calmness, empathy, accessibility, and thoroughness of health professional; and specifically, the attentiveness and calmness of midwives (see Appendix H).

Giving women the opportunity to be *Involved in decisions* about care was found to significantly increase their perceptions of Confidence and Trust (H2a: β = 0.186, p-value < 0.001). Women's confidence and trust here is associated with the consultant's perceived ability, perceived value of their consultant's advice, and being comfortable with their consultant's decision-making.

Communication skills (H5: β = 0.151, p-value < 0.001) of professional staff engenders confidence and trust. For the women, confidence and trust emerge through the following communication related actions: continuity of care enabling a trusting relationship to develop with the midwife who is a consistent communication source; the ability to express preferences and concerns to kind and knowledgeable staff; access to staff who can explain and clarify doubts; and nurses willing to help instil confidence in the women's own abilities to cope.

Table 2
Bootstrapped results and path coefficients.

Path-> Confidence and Trust	H	Original Sample	Sample Mean	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Decision*
Information	H1	0.013	0.015	0.018	0.762	0.446	Not supported
Involvement	H2a	0.186	0.187	0.025	7.587	< 0.001	Supported
Involvement of partner or companion	H2b	-0.008	-0.007	0.013	0.566	0.571	Not supported
Respect and Dignity	H3	0.270	0.270	0.026	10.263	< 0.001	Supported
Attention	H4a	0.048	0.048	0.016	3.104	0.002	Supported
Personal Attention	H4b	0.082	0.082	0.018	4.621	< 0.001	Supported
Communication	H5	0.151	0.151	0.032	4.772	< 0.001	Supported
Responsiveness	H6	0.011	0.011	0.019	0.558	0.577	Not supported
Pain management	H7	0.172	0.171	0.020	8.565	< 0.001	Supported
Clarity of explanation	H8	0.082	0.082	0.021	3.862	< 0.001	Supported

* For the hypothesis to be accepted, the t-value must be greater than 1.95 and p-values less than 0.05 ([15]b).

Table 3
Conditions for core confidence and trust determinants.

Construct	Examples of comments on good experience	Examples of comments on improvement
Respect and Dignity	"I was treated with excellent care and dignity by the staff as I was highly anxious having had a previous miscarriage"	"The nurse did not treat me with dignity or respect my views. She gave me conflicting information at a crucial time when I was particularly vulnerable"
Involvement in Decisions About Your Care	"I had full faith in my consultant and was happy that I could contact her at any time. I felt I was very much part of decisions made and involved in making a plan for my labour"	"The staff in the hospital did not ask me about my preferences or discuss their intentions with me. We have a right to make informed decisions about our care"
Pain Management	"Midwives are very open to all options of pain relief, discussed each option with me, suggested position changes"	"Better explanation of pain relief options before and during labour is needed. It is difficult to take in the information whilst in labour"
Communication	"Excellent Communication between health professionals in relation to my care and excellent listening to my needs when pregnant and during labour"	"More communication after my baby was born about what was going on with me. Asked question nobody answered"
Personal Attention	"Care & compassion and attention to my mental well-being was of paramount importance to them"	"Individualised care that accommodated my special family circumstances during pregnancy"
Clarity of Explanation	"Midwives were very conscientious in explaining all that was happening during labour"	"A bit more information and awareness around pregnancy related illnesses would be good"
Confidence and Trust	"Attending private consultant throughout pregnancy created feelings of trust and confidence that we would receive a high standard of care"	"My [Anaesthesiologist] who administered my epidural did a very poor job and did not give me confidence"

Clarity of answers and explanations of the results of tests, procedures and treatments, their benefits, and risks (H8: $\beta=0.082$, $p\text{-value}<0.001$) engenders confidence and trust when care decisions need to be made. Women's confidence and trust is contingent on being given a full and clear explanation of the process (e.g., inducing labour) and when care diverges from the expected pathway, they are provided with a clear explanation for the changes.

Women's understanding that the staff are willing and able to do everything possible to help them cope with pain during labour and delivery, i.e., a high level of *pain management* in the hospital (H7: $\beta=0.172$, $p\text{-value}<0.001$), enhances the feeling of confidence and trust. Women's feelings of confidence and trust increases when the articulation of the pain they experience is taken seriously regardless of dilation stage; and when their well-being is prioritised when deciding upon pain relief options.

Attention by the professional staff (H4a: $\beta=0.048$, $p\text{-value}=0.002$) engenders confidence and trust. According to the women, attention that inspires trusts includes responsive nurses, caring nurses that excel at pain management and experienced midwives on the labour ward

Table 4
Average ratings for the Top-4 core factors by Disability, Age and Ethnicity groups.

Core Determinants	Mean	Disability Groups		Ethnicity Groups		Age Groups				
		With Disability	Without Disability	White	Other	<25 years	25 to 29 years	30 to 34 years	35 to 39 years	40 and above
Dignity and Respect	3.75	3.70*	3.76	3.75	3.83**	3.50**	3.70*	3.76	3.79**	3.80*
Involvement	3.53	3.45**	3.55	3.52	3.62*	3.29**	3.42**	3.52	3.58*	3.64**
Pain management	4.39	4.34	4.41	4.38	4.58*	4.15*	4.19*	4.40	4.45	4.57**
Communication	4.35	4.29*	4.37	4.35	4.51**	4.03**	4.23**	4.34	4.42**	4.53**

Sig.

* $p<0.05$;

** $p<0.01$.

that provide knowledge, care, and support, during and after delivery. Similarly, *Personalised Attention* (H4b: $\beta=0.082$, $p\text{-value}<0.001$) to women also increases trust. Women felt more confident and trustful of care providers when they understand the individual and, in some cases, specialised care needs of women based on their medical history; and when, following delivery of a child, women's needs are still attended to.

However, interestingly, providing women with enough *Information* regarding their health, and certain aspects of the treatment, appears not to significantly increase women's confidence and trust (H1: $\beta=0.013$, $p\text{-value}=0.446$). Similarly, *Responsiveness* to women's needs by professional staff and the entire maternity care service system was found not to significantly affect women's confidence and trust (H6: $\beta=0.011$, $p\text{-value}=0.557$). Finally, the desire of women to involve their *partner and/or companion* in caring for them during labour and birth, had no significant impact on women's confidence and trust (H2b: $\beta=-0.008$, $p\text{-value}=0.571$).

In our model, the determinants explained 51.7 % (R^2) of the variance in the measure of confidence and trust in professional workforce (Appendix I). Such levels of R^2 are considered very significant for exploratory social science research ([15]b). Size effect (f^2) analysis revealed three significant small correlational effect sizes [8] (see Appendix J). The Structural Model analysis results are presented Fig. 1 and Appendix L.

Finally, we determined if there were differential experiences amongst the different socio-demographic groups (disability, ethnicity, and age) with respect to the aspect of care corresponding to core determinants of confidence and trust in professional workforce. Specifically, we check if the average ratings for each group was significantly different from the entire sample average (Table 4).

Women with a disability (18.2 %) rated their care experiences significantly lower than average in the aspects of dignity and respect, involvement in decision making, and communication. However, their average ratings for pain management were not significantly lower than the sample average. In terms of ethnicity, minorities (about 5.9 %) rated their experiences significantly higher than the average rating for all four core determinants of confidence and trust. Regarding age-groups, the average ratings for all four core determinants consistently increased with age with women 40 and above rating their experiences highest and significantly above the sample average. Women between 35 and 39 also rated their experiences significantly higher than the sample averages for three of the 4 core determinants. Meanwhile, women under 25 years (4.8 %) rated their experiences lowest and significantly below the average ratings for each core determinant. Women between 25 and 29 years (14.1 %) on average rated their experiences significantly lower the sample average across all four core determinants.

4. Discussion

Most existing studies on maternity care experience in public health institutions have largely focused on the structural issues associated with the delivery of equitable and satisfactory maternity services to minority

and migrant communities in different parts of the world. For instance, social and structural determinants of health inequalities was examined in the United States [10] and developing countries [33] while [4] examined migrants' dissatisfaction and negative experience of maternity care in Norway. These studies are valuable both from the research and policy perspectives as they improve our understanding of problems and possible solutions to inequitable healthcare. Our work complements these studies by offering additional evidence on mechanisms that could be employed in building trust in public maternity services and allows us to examine the experience of minority groups in context.

This study strengthens the evidence on the centrality of *interpersonal-based service encounters* in engendering women's confidence and trust in the professional workforce. Specifically, *dignity and respect, involvement in decision making, pain management, and communication were established as the core determinants of confidence and trust in the professional workforce of maternity services*. In addition, clarity of explanation, personal attention, and quality of information provided to women also contribute to building confidence and trust in maternity services professional workforce. Our findings on the differential experiences of women with *disabilities* and *younger women* (under 29) appear to support existing evidence on the plight of minorities in different communities. For instance, in research exploring the experiences of young mothers, the authors found that younger mothers need additional support and information about their care [29]. At the same, it is noteworthy that women from the ethnic minority group in our study rated their experiences on average significantly higher than the sample average across all four core indicators; this suggests that the maternity care contexts and other factors may indirectly affect the care experience of minority women. These findings have significant policy implications for building trust in maternity services in Ireland and similar environments which we elaborate below.

Need for continued efforts in promoting respectful maternal care – the provision of maternal which respects the diversity and protection of women and babies as well as the promotion of dignity, privacy and autonomy of women are mandated by the Irish Government's National Standards for Safer Better Maternity Services [18]. Dignity and Respect is also one of the eight areas of the Irish government's National Healthcare Charter [21]. While majority of the women in the survey reported that they were treated with dignity and respect [16], younger women (under 29) and women living with disabilities rated their experience in this aspect of care significantly lower than the average. Evidence from studies on respectful care during childbirth [31] indicates the risk of these two relatively underrepresented cohorts (i.e. younger women and those living with disability) disengaging with maternity services if they (continue to) experience non-respectful care during childbirth. Thus, maternity service providers require mechanisms for delivering what these two cohorts of women value as respectful maternal care.

Strengthening initiatives for delivering equitable maternity care – more generally, maternity care providers also need to develop initiatives that will ensure an equitable experience for women with disabilities and younger women (under 29 years) by addressing their particular maternity care needs. These initiatives should cover the involvement of these cohorts of women in decisions relating to their care, pain management during labour and communication. Ireland already has equality legislation stating that all services should be provided to people with disabilities without discrimination. The National Standards for Safer Better Maternity Services also mandates that women and their babies have equitable access to maternity services based on their assessed needs. However, the recognition of choice in maternity care is only truly meaningful for women with disabilities if these choices are actionable and made within the context of informed discussions. Such dialogues must also acknowledge and value the unique experiences of women with disabilities, as well as the necessity for specialized training and education for healthcare providers [9].

Given that the National Maternity Experience Survey is one of main instruments for monitoring compliance of maternity service providers with the National Standard for Safe Better Maternity Service, addressing the above initiatives should strengthen the perception of person-centred care particularly for the two cohorts of women.

Finally, we note that our work has some *limitations*. The first is related to the use of a secondary dataset and the implications for our measurement model. Four (4) out of 11 constructs in our model are single-item constructs, thus having low content validity and weak reliability. Second, our dataset did not allow us to explore how these determinants vary with different socio-demographic categories like ethnicity. There is a relatively small proportion of the ethnic and minority populations in Ireland using the maternity services (under 6 %). A further limitation arises from that fact that outcomes such as birthing a healthy baby versus experiencing complications can bias a woman's maternity experience all else being equal. Dealing with such a cognitive bias is a limitation of such surveys and it is an issue we will continue to explore in our later work. Despite these limitations, our findings still provide rigorous empirical evidence on how to build greater trust and confidence in the professional workforce and maternity services in the Republic of Ireland and similar environments.

5. Conclusions

Our study sought to contribute to a better understanding of how confidence and trust may be rebuilt in the public maternity services in Ireland by analysing the National Maternity Experience Survey 2020 dataset. We have identified the top four determinants of confidence and trust in the maternity services' professional workforce; these are women's perception of being treated with *dignity and respect, involvement in decision making, pain management, and communication*. We have also elaborated on how these factors can engender confidence and trust. Finally, women with disabilities and younger women (under 29) rate their experiences lower than the average along these core dimensions of their maternity care.

Declaration of Competing Interest

None.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.healthpol.2023.104947](https://doi.org/10.1016/j.healthpol.2023.104947).

References

- [1] Alimena S, Air M.E. Trust, satisfaction, and confidence in health care providers among student and professional dancers in France. *Med Probl Perform Art* 2016;31(3):166–73. <https://doi.org/10.21091/mppa.2016.3030>.
- [2] Alrubaiee L, Alkaa'ida F. The Mediating Effect of Patient Satisfaction in the Patients' Perceptions of Healthcare Quality – Patient Trust Relationship. *Int J Marketing Stud* 2011;3(1):103–27.
- [3] Bachman H, Moses R, Gangopadhyay N, Poddar D. Rebuilding trust in healthcare: what do consumers want and need organizations to do? *Deloitte Insights* 2021.
- [4] Bains S, Sundby J, Lindsog B.V, Vangen S, Diep L.M, Owe K.M, et al. Satisfaction with maternity care among recent migrants: an interview questionnaire-based study. *BMJ Open* 2021;11(7):e048077.
- [5] Bohren M.A, Tunçalp Ö, Miller S. Transforming intrapartum care: respectful maternity care. *Best Practice & Research Clinical Obstetrics & Gynaecology* 2020;

- 67:113–26. <https://doi.org/10.1016/J.BPOBGYN.2020.02.005>.
- [6] Bracher M, Wagland R, Corner J. *Exploration and analysis of free-text comments from the 2013. Wales Cancer Patient Experience Survey (WCPES) 2014*.
 - [7] Chang C, Chen S, Lan Y. Service quality, trust, and patient satisfaction in interpersonal-based medical service encounters. *BMC Health Serv Res* 2013.
 - [8] Cohen J. Statistical Power Analysis for the Behavioral Sciences. *Statistical Power Analysis for the Behavioral Sciences* 2013. <https://doi.org/10.4324/9780203771587>.
 - [9] Collins B, Hall J, Hundley V, Ireland J. Effective communication : core to promoting respectful maternity care for disabled women. *Midwifery* 2023;116: 103525. <https://doi.org/10.1016/j.midw.2022.103525>.
 - [10] Crear-Perry J, Correa-de-Araujo R, Lewis Johnson T, McLemore M.R, Neilson E, Wallace M. Social and structural determinants of health inequities in maternal health. *Journal of Women's Health* 2021;30(2):230–5.
 - [11] Creswell J.W. *Research design - Qualitative, quantitative and mixed methods approaches*. 3rd ed. SAGE Publications Inc; 2009.
 - [12] Croker J.E, Swancutt D.R, Roberts M.J, Abel G.A, Roland M, Campbell J.L. Factors affecting patients' trust and confidence in GPs: evidence from the English national GP patient survey. *BMJ Open* 2013;3(5):1–8. <https://doi.org/10.1136/bmjopen-2013-002762>.
 - [13] Fornell C, Larcker D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research* 1981;18(1):39. <https://doi.org/10.2307/3151312>.
 - [14] Greenfield M, Jomeen J, Glover L. After last time, would you trust them?—Rebuilding trust in midwives after a traumatic birth. *Midwifery* 2022;113: 103435.
 - [15] Hair J.F, Risher J.J, Sarstedt M, Ringle C.M. When to use and how to report the results of PLS-SEM. *European Business Review* 2019;31(1):2–24. <https://doi.org/10.1108/EBR-11-2018-0203>.
 - [16] Health Service Executive. (2020). *Listening, Responding and Improving: The HSE response to the findings of the National Maternity Experience Survey*. <https://www.hse.ie/eng/services/publications/hse-response-to-the-findings-of-the-national-maternity-experience-survey-2020.pdf>
 - [17] Hewitt L, Dadich A, Hartz D.L, Dahlen H.G. Midwife-centred management: a qualitative study of midwifery group practice management and leadership in Australia. *BMC Health Serv Res* 2022;22(1):1203.
 - [18] HIQA. (2016). *National Standards for Safer Better Maternity Services*. <https://www.hiqa.ie/sites/default/files/2017-02/national-standards-maternity-services.pdf>
 - [19] HIQA. (2020). *National Maternity Experience Survey 2020: report on maternity care provided in the community by general practitioners, practice nurses and midwives*.
 - [20] Ho A.F, Zhou Y, Kirby J.J, Rahman M.M, Tessitore K, Abdel-Raziq Y, et al. Causal Effect Analysis of Demographic Concordance of Physician Trust and Respect in an Emergency Care Setting. *Open Access Emergency Medicine: OAEM* 2021;13:503. <https://doi.org/10.2147/OAEM.S334495>.
 - [21] HSE. (2012). *National Healthcare Charter: what you can expect from your health service and what you can do to help people*. <https://www.hse.ie/eng/about/who/qid/person-family-engagement/national-healthcare-charter/national-healthcare-charter.pdf>
 - [22] Hulland J. Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal* 1999;20(2):195–204.
 - [23] McCalman P, McLardie-Hore F, Newton M, McLachlan H, Forster D. Trust, privacy, community, and culture: important elements of maternity care for Aboriginal and Torres Strait Islander women giving birth in Victoria. *Women and Birth* 2022;36(1):e150–60. <https://doi.org/10.1016/j.wombi.2022.06.001>.
 - [24] McKinstry B, Ashcroft R, Car J, Freeman G.K, Sheikh A. Interventions for improving patients' trust in doctors and groups of doctors. *Cochrane Database Syst Rev* 2006;3. <https://doi.org/10.1002/14651858.CD004134.PUB2>.
 - [25] Middleton N, Hadjigeorgiou E, Kolokotroni O, Christodoulides V, Koliandri I, Nicolaou C, et al. Identifying barriers to the educational role of midwives in Cyprus and defining determinants in behaviour terms using the Behaviour Change Wheel: a mixed-method formative study. *BMC Health Serv Res* 2022;22(1):1–22.
 - [26] Niles P.M, Stoll K, Wang J.J, Black S, Vedam S. I fought my entire way": experiences of declining maternity care services in British Columbia. *PLoS One* 2021;16(6):e0252645.
 - [27] Nordrum J, Kennedy D. Improving Healthcare Service Quality: listen to the Patient and Take a Comprehensive Approach. *J Fam Med* 2015;2:1040. 2(5). <http://austinpublishinggroup.com/family-medicine/fulltext/jfm-v2-id1040.php>.
 - [28] Rabiah A.S, Bismo A, Kevin Y, Riantini R.E. Segmentation Analysis of Satisfaction Factors of Millennial Moms during their Maternity Period toward Hospital Services in Indonesia-Palarch's. *Journal Of Archaeology Of Egypt/Egyptology* 2020;4(7): 2944–57. <https://archives.palarch.nl/index.php/jae/article/download/1604/1612>.
 - [29] Robb Y, McNery D, Hollins Martin C.J. Exploration of the experiences of young mothers seeking and accessing health services. *J Reprod Infant Psychol* 2013;31(4): 399–412. <https://doi.org/10.1080/02646838.2013.832181>.
 - [30] Rosen H.E, Lynam P.F, Carr C, Reis V, Ricca J, Bazant E.S, et al. Direct observation of respectful maternity care in five countries: a cross-sectional study of health facilities in East and Southern Africa. *BMC Pregnancy Childbirth* 2015;15(1):1–11. <https://doi.org/10.1186/s12884-015-0728-4>.
 - [31] Shakibazadeh E, Namadian M, Bohren M.A, Vogel J.P, Rashidian A, Nogueira P.V, et al. Respectful care during childbirth in health facilities globally: a qualitative evidence synthesis. *An International Journal of Obstetrics and Gynaecology* 2017;1–11. <https://doi.org/10.1111/1471-0528.15015>.
 - [32] Sripad P, Merritt M.W, Kerrigan D, Abuya T, Ndwiwa C, Warren C.E. *Determining a Trusting Environment for Maternity Care : a Framework Based on Perspectives of Women, Communities, Service Providers, and Managers in Peri-Urban Kenya* 2022; 3. <https://doi.org/10.3389/fgwh.2022.818062>. April.
 - [33] Srivastava A, Avan B.I, Rajbangshi P, Bhattacharyya S. Determinants of women's satisfaction with maternal health care: a review of literature from developing countries. *BMC Pregnancy Childbirth* 2015;15(1):1–12. <https://doi.org/10.1186/s12884-015-0525-0>.
 - [34] Tarrant C, Stokes T. Factors associated with patients' trust in their general practitioner: a cross-sectional survey. *Br J Gen Pract* 2003;53(495):798–800. <https://pubmed.ncbi.nlm.nih.gov/14601357/>.
 - [35] Tripathi V, Stanton C, Strobino D, Bartlett L. Development and validation of an index to measure the quality of facility-based labor and delivery care processes in sub-Saharan Africa. *PLoS One* 2015;10(6):1–29. <https://doi.org/10.1371/journal.pone.0129491>.
 - [36] Wassihun B, Alemayehu Y, Gultie T, Tekabe B, Gebeyehu B. Non-pharmacological labor pain management practice and associated factors among skilled attendants working in public health facilities in Gamo and Gofa zone, Southern Ethiopia: a cross-sectional study. *PLoS One* 2022;17:1–11. <https://doi.org/10.1371/journal.pone.0266322>. 4 April.