Received: 7 November 2024 | Revised: 11 December 2024 | Accepted: 31 December 2024

DOI: 10.1111/aogs.15049

ORIGINAL RESEARCH

Rating of overall childbirth experience: A qualitative study of a quantitative measurement

Frida Viirman[1] | Reidun Jidrot[1,2] | Linn Lundström[1,3] | Lisa Ljungman[1]

[1]Department of Women's and Children's Health, Akademiska Sjukhuset, Uppsala University, Uppsala, Sweden

[2]Primary Health Care Center Tierp, County of Uppsala, Uppsala, Sweden

[3]County Hospital Karlstad, Karlstad, Sweden

Correspondence
Frida Viirman, Department of Women's and Children's Health, Akademiska Sjukhuset, Uppsala University, Uppsala SE-75185, Sweden.
Email: frida.viirman@uu.se

Funding information
Region Uppsala Research and Development Grant, Grant/Award Number: LUL-990477; Regional Research Council Mid Sweden, Grant/Award Number: RFR-980752

Abstract

Introduction: Overall childbirth experience scores are used both in research and in clinical settings. Since it is still not fully understood what assessment of childbirth experience on a single-item numeric rating scale or visual analog scale represents, the aim of this study was to explore women's reasoning and thoughts when rating overall childbirth experience numerically.

Material and Methods: A qualitative interview study of 26 women was conducted using a think-aloud technique at a university referral hospital in Sweden. A manifest qualitative content analysis was performed to generate categories and sub-categories representing how women decided which single value should represent their experience of giving birth.

Results: Two main categories emerged from the analysis. The first, *Strategies for choosing a number*, reflects variations in how the women approached the rating scale itself and includes five sub-categories, each relating to a different strategy: (1) Comparison, (2) Start from the maximum value, (3) Start from the middle, (4) Weigh certain experiences more heavily, and (5) A means to an end. The second category, *Specific factors considered in the rating*, includes four sub-categories, representing groups of factors contributing to the final childbirth experience score: (1) The time period, (2) Events linked to strong emotions, (3) Perceived support, and (4) Previous expectations. What the women included in their overall childbirth experience was hence translated into a number, using strategies from the first category and factors from the second category.

Conclusions: The considerable variations in how women approach the rating scale, and what they include in the assessment of overall childbirth experience, suggest that not only the childbirth experience itself but also the reasoning when evaluating it, is multifaceted. A standardized phrasing of the question and a clear purpose for the evaluation is warranted to strengthen the validity of the measurement. When used clinically for identifying women in need of support after childbirth, the rating should be followed by a conversation about the experience of giving birth, independent of the value chosen.

Abbreviation: CS, cesarean section

KEYWORDS
birth satisfaction, childbirth experience, labor, numeric rating scale, think aloud, visual analog scale

1 | INTRODUCTION

Giving birth is a momentous life event, with the potential to affect a woman's health also in the long term. A positive childbirth experience is connected to higher self-esteem decades after giving birth, and thus recognized by WHO as an important outcome of labor and birth.[1,2] However, around 10% of birthing women perceive childbirth as negative, and is thereby at elevated risk of developing postpartum depression and other mental health problems.[3,4] The strongest predictor for developing post-traumatic stress disorder (PTSD) after giving birth is a negative childbirth experience.[5,6] It can also cause fear of birth, resulting in a wish for cesarean section (CS) in subsequent pregnancy, or delay or refrainment from ever getting pregnant again.[7,8]

Childbirth is a deeply subjective experience, meaning that only the woman herself can determine whether it was a positive or negative experience. There is no gold standard for measuring childbirth experience, but several multi-item instruments have been developed and validated.[9,10] These aim to capture various dimensions of the childbirth experience, since the phenomenon is multifaceted, encompassing a complex combination of physical sensations and psychological responses. For pragmatic reasons such as being time and energy-consuming, these multi-item questionnaires are not commonly used in clinical practice. Instead, childbirth experience is usually assessed using a single-item measurement of overall experience, rated on a visual analog scale, numeric rating scale (NRS), or Likert scale. This can be used to identify women with low ratings, indicative of the need for additional support after a negative experience. In Sweden and Finland, a numeric rating of overall childbirth experience before discharge from the hospital is a common clinical routine. In Sweden, the score is included in the Swedish Pregnancy Register, which is used for quality improvement and research.[11,12] The single-item measurement of overall childbirth experience, or general satisfaction with childbirth, has been used as exposure or outcome in research studies internationally, and also as a validation tool when developing new questionnaires assessing childbirth experience.[13–16]

Some validation of the single-item measurement of overall childbirth experience has been done, showing moderate correlation with the multi-item instruments Wijma Delivery Experience Questionnaire B and Childbirth Experience Questionnaire 2.[17–20] However, it is still not fully understood what rating of overall childbirth experience represents, and what women include in their assessment. Furthermore, there is a lack of studies exploring women's cognitive processes during the evaluation of overall childbirth experience. A deeper understanding of the validity of other rating scales, that is, concerning fear of childbirth, has been accomplished by interviewing respondents about their thoughts during the assessment.[21]

Key message

Qualitative content analysis revealed heterogeneity in how women reason during the numeric rating of overall childbirth experience. Additional information is warranted when the childbirth experience score is used to identify women who may have experienced childbirth as traumatic.

To be able to fully evaluate findings from studies using single-item measurement of overall childbirth experience as exposure or outcome, further investigation also of this measurement is needed. Hence, the aim of this study is to explore women's reasoning and thoughts when rating overall childbirth experience on a single-item NRS. To the best of our knowledge, this has not previously been done.

2 | MATERIAL AND METHODS

2.1 | Study design

This was a qualitative, exploratory study based on semi-structured, face-to-face interviews with 26 women at a university referral hospital in Sweden with 4000 annual births. Eligible for participation were women, ≥18 years old, who understood Swedish or English, had given birth to a live infant, and who according to clinical routine had rated overall childbirth experience. At this hospital, this means the use of a printed NRS 1–10, with anchors "1 = very poor experience" and "10 = very good experience" with the instruction "Please mark the number best corresponding to your *overall* childbirth experience". The NRS is introduced by the text "A birth is a complex experience. Depending on what happens, some parts may feel better and other parts worse. In order for us to be able to give you the best possible care and follow-up, we wish to take part of your overall birth experience."

2.2 | Procedure

After having rated childbirth experience before discharge from the hospital 6 h to 3 days postpartum, eligible women received oral and written information about the study from their nurse assistants. Participants who matched the inclusion criteria, and who gave their written consent, were interviewed in their private hospital rooms at the maternity ward, usually with their partner and

newborn present. Background characteristics [age, educational level, civil status, mode of birth, parity, and childbirth experience score (range 1–10)] were collected in a separate questionnaire before the interview started.

The interviews were conducted using a retrospective think-aloud technique, aiming to reflect the cognitive processes that led to every woman's childbirth experience rating. The think-aloud technique is recommended when the study subject of interest is the problem-solving process itself, rather than the result of it, and means that the informant verbalizes everything that comes to their mind when solving a task or answering a question.[22,23] In this study, women were asked to "think aloud," and describe how they reasoned when they rated their childbirth experience. The interviews were performed in proximity in time to the rating itself, to minimize recall bias. Follow-up clarification questions were asked when needed. After the first three interviews, the interview guide was slightly amended by adding more follow-up questions to gain richer descriptions of women's reasoning. The interviews lasted 2–18 minutes, 5 on average. All interviews were conducted by RJ, audio recorded, and transcribed verbatim by the interviewer shortly after the interviews. No repeat interviews or field notes were made, but information about interrupting sounds or events, often related to the newborn, was included in the detailed transcripts.

A convenience sampling strategy was used. Women were recruited consecutively during weekdays when the interviewer was present at the maternity ward during 2 weeks in September 2021. To determine an adequate sample size, the concept of "information power" was used.[24] Inclusion continued until RJ and FV found no new information in the transcripts.

2.3 | Data analyses

Descriptive statistics were used to calculate the characteristics of the sample, presented as means and standard deviations (SD) or numbers (*n*) and percentages (%). There were no missing values. All statistical analyses were performed using IBM SPSS Statistics version 28.0 (IBM Corp., Armonk, NY, USA). Manifest qualitative content analysis according to Graneheim and Lundman was used to analyze the interviews.[25] Answers were brought together into one text per woman and read several times. In the next step, meaning units were identified and condensed if necessary. Meaning units were thereafter labeled as codes without interpretation, before being clustered into sub-categories including codes with internally similar and externally diverse manifest content. Sub-categories with similarities were merged into categories with a higher degree of interpretation. The coding was conducted separately by LLu and FV, followed by comparison and slight revision, before continued joint analysis and generation of sub-categories and categories. In the next step, LLu, FV, and LLj discussed and revised the analysis until consensus was reached. During the analysis, all researchers were blinded from the childbirth experience ratings itself.

2.4 | Positionality statement

FV and RJ both had clinical experience of working with new mothers and of collecting childbirth experience ratings, FV as a registered nurse-midwife, and RJ as a nurse assistant. Neither of them worked at the maternity ward during data collection. RJ conducted the interviews and LLu the data analysis as part of their master's theses during their final year as medical students, supervised and trained by FV and LLj. LLj is a clinical psychologist working in the field of medical psychology. FV has extensive clinical experience in childbirth, and from counseling of pregnant women with fear of birth. All members of the research team are female.

3 | RESULTS

Of the 26 women interviewed, more than half were primiparous and gave birth spontaneously vaginally. Fifteen percent of the women gave birth by planned CS and one of four by unplanned CS. There were no immediate CS in the sample. Overall childbirth experience varied between 3 and 10, with a majority of the women rating ≥8. Four women (15%) reported a negative childbirth experience (≤4). Sample characteristics are given in Table 1.

TABLE 1 Demographic and obstetric characteristics of the study population of mothers giving birth at a Swedish university referral hospital in September 2021. (*n* = 26).

Characteristics	Mean [SD] or *n* (%)
Age, years	31.3 [3.3]
Education, years	
>12	17 (65)
10–12	9 (35)
Civil status	
Cohabitant	25 (96)
Single mother	1 (4)
Parity	
Primiparous	15 (58)
Parous	11 (42)
Mode of birth	
Spontaneous vaginal	14 (54)
Vacuum extraction	1 (4)
Planned CS	4 (15)
Unplanned CS	7 (27)
Overall childbirth experience	
1–4	4 (15)
5–7	6 (23)
8–10	16 (62)

Abbreviations: CS, cesarean section; SD, standard deviation.

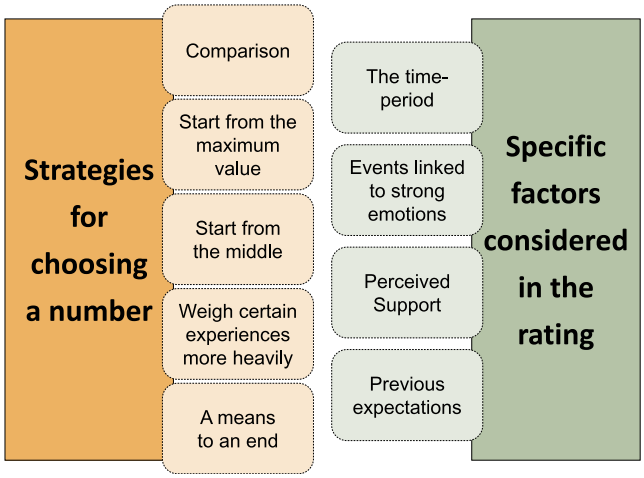

FIGURE 1 Map of categories (solid lines) and sub-categories (dashed lines) derived from qualitative content analysis, representing women's reasoning when rating overall childbirth experience on a single-item numeric rating scale.

In the qualitative content analysis, two main categories representing women's reasoning when rating overall childbirth experience emerged: *Strategies for choosing a number*, encompassing methods used by the women when determining which value corresponded to their experience, and *Specific factors considered in the rating*, representing groups of factors contributing to the rating itself. The findings are illustrated in Figure 1, and presented with sub-categories below.

3.1 | Strategies for choosing a number

The category *Strategies for choosing a number* encompasses different ways in which the women decided how to numerically rate their childbirth experience, and includes five sub-categories: *Comparison*; *Start from the maximum value*; *Start from the middle*; *Weigh certain experiences more heavily*; and *A means to an end*; each sub-category relating to a different strategy.

3.1.1 | Comparison

One strategy the women described was to base their rating on a comparison between the current birth and other events. Parous women tended to compare the present birth to previous experiences of labor and birth, which was reflected in the number they chose.

> Well, then I thought… I have given birth vaginally once before. And I kind of compared, just quickly, and that experience was maybe a five? Four, maybe? And then, this one was much, much better. And then I compared it with before. How they welcomed us and so on. It was very different.
>
> (P24)

Primiparas, on the other hand, evaluated different experiences of their labor and birth and compared them against each other. They also described an uncertainty in how to rate, based on their lack of previous experience of childbirth. Some primiparas described having had no specific preferences before giving birth and being open to most options. Feeling pleasantly surprised by the childbirth process, they chose a high rating.

3.1.2 | Start from the maximum value

Another strategy was to use the maximum value, 10, as a starting point, and lower it based on negative events during the labor process. The women represented in this sub-category all interpreted the maximum value as equivalent to the ideal childbirth experience, and explained why they had lowered the number. Fear, unplanned events such as instrumental birth, or discomfort during examinations are some examples of what had influenced the rating.

> The reason why it didn't end up as a ten or a nine is because it didn't turn out quite as I had expected… We had, you know, thought that I would give birth vaginally, and then… that didn't happen. So that kind of lowered the experience.
>
> (P16)

Starting from the maximum value could also manifest itself in not being able to identify anything that caused dissatisfaction, and therefore choosing to rate their childbirth experience by selecting the maximum value.

> …we have nothing to complain about, so then it's a ten, I think.
>
> (P14)

3.1.3 | Start from the middle

Other women used the middle of the scale as their starting point. Various factors then raised or lowered the value.

> I started from the middle. That was like five, six. And I thought it was like a three, a four something… and I based the three on the fact that there was a lot of trouble. But then, that it ended up being a four, uh… that was because the staff was so good. So that weighed up… one step, I thought.
>
> (P22)

Women also described how the final value corresponded to a mean value, representing all experiences during childbirth.

3.1.4 | Weigh certain experiences more heavily

The women described a series of events that occurred during childbirth, where particular experiences contributed more strongly to the final value. Positive experiences could even out negative ones. One woman described the long wait for epidural anesthesia as a negative event, but not as anything she included in her final rating:

> So if I'm going to consider the waiting time then… then maybe I should have lowered it to a nine. But it's not the end of the world, because… ah… everything else was really good, I think.
>
> (P14)

Some women emphasized how the fact that they had given birth to a healthy child, sometimes in combination with themselves feeling well despite childbirth, led to a high value by default. There were also descriptions of how experiences during the actual birth were considered most important for the final value chosen because that time period was easiest to remember during the rating process.

Women also described how negative experiences were the most significant factor in their rating. Despite the presence of positive experiences, the overall negative impression determined which value they chose

> No but I think the score… I don't feel that it was a good experience… and then I want to be on the lower half.
>
> (P02)

3.1.5 | A means to an end

The rating could also have strategic purposes. Some women seemed to want to influence future care by means of rating their childbirth experience as poor. One woman scored low to ensure that her negative childbirth experience would be followed up on.

> Um, and then I reasoned as such, that I chose to rate quite low because… I think that… the difficult parts are still big important parts. And I think if I rate based on the good parts, maybe… maybe nothing will happen with the poor parts then. That's how I reasoned.
>
> (P18)

Another woman stated that she had a mainly positive experience, but rated lower because her partner found the situation difficult, something she wanted to mark. Similarly, ratings were sometimes made as political statements. One of the low ratings was a personal manifestation of how more resources should be allocated to maternity care, while another woman rated high to express gratitude for having access to good quality maternity care.

3.2 | Specific factors considered in the rating

When asked to describe their reasoning during the assessment of childbirth experience, the women mentioned different factors that contributed to the value chosen. These formed the category *Specific factors considered in the rating*, which includes four sub-categories: *The time period*; *Events linked to strong emotions*; *Perceived support*; and *Previous expectations*, all representing aspects of the childbirth experience relevant to the women.

3.2.1 | The time period

The time period represented in the rating varied widely. For most of the women, the childbirth experience corresponded to a time period starting at arrival at the hospital and ending at birth. Others included time before admission, starting from the onset of labor contractions, or the waters breaking at home. Some women included antenatal visits for planning the birth with an obstetrician, whom they met also at birth, in their childbirth experience, thus expanding the time period to several months prior to the birth itself. For some women, the childbirth experience also encompassed events from the postnatal ward, while others did not consider time after birth in their rating.

3.2.2 | Events linked to strong emotions

One aspect of the rating concerned specific events during childbirth, resulting in strong emotions that influenced how the women evaluated their childbirth experience. Such events included giving birth to a healthy baby, or avoiding severe perineal tears, resulting in feelings of happiness or relief. Experiences of intense pain, or severe complications, could induce fear that affected the overall childbirth experience. Fear was also present at CS, in situations where women felt exposed and subjected to specific fears, such as phobia of needles.

Feelings of being abandoned in a difficult situation could originate in the staff not being sufficiently present during times when the women were in particularly great need of support. It could also relate to how the women's needs were overlooked when the staff did not have time for them, or that women felt disbelieved.

> I got really, really bad pain. And it was so bad. And, yeah… it just got worse and worse and I felt like… people didn't really… believe me. Because it was… um, 'Yeah, she has an epidural, she'll be fine'.
>
> (P03)

Prolonged labor sometimes resulted in women experiencing they had performed poorly during labor, causing feelings of shame and disappointment with their own bodies, which was reflected in the rating.

3.2.3 | Perceived support

The experience of support affected the rating both positively and negatively. Women described how the attitude and competence of the care providers were strong contributors to their overall childbirth experience. The care providers' ability to create a sense of security was often described as a factor that could mitigate the impact of negative experiences during childbirth. Negative encounters with the care providers include experiences of not being psychologically validated during challenging phases of the labor, or care providers not being present in the birthing room to the desired extent, or midwives being rude or unkind. Also, the partner's support influenced the rating positively for some women, whereas others did not mention partner support.

3.2.4 | Previous expectations

Whether the birth experience aligned with the woman's expectations of childbirth was also considered in the rating. Unrealized expectations often lead to a lower rating. It could involve the need to induce labor despite hoping for a spontaneous onset, or a desire for an epidural that was not administered. In several cases, expecting a vaginal birth but ending up giving birth by CS, either elective or unplanned, strongly contributed to the rating.

> Yeah… I mean… so, because I had… eh… unplanned C-section. I… initially hoped I would be able to give birth naturally, and I had read about…eh… water birth and all these things… and, yeah, really hoped that it would be a very positive experience and then, it wasn't…
>
> (P13)

Fulfilled expectations, often related to the desired onset of labor or mode of birth, resulted in a sense of satisfaction that was reflected in the rating. Expectations could also encompass concerns regarding the availability of care. One woman described how relief at actually being admitted to the birth clinic of her choice contributed to her high rating. Moreover, unfounded fears related to childbirth could also result in a positive childbirth experience.

> I'm kind of terrified of a vaginal delivery. It's like a horror scenario. To instead get an elective cesarean, that proceeds according to the plan, that becomes a very positive experience… because it's so much better than a vaginal delivery.
>
> (P11)

4 | DISCUSSION

In this study, 26 women's thoughts when rating overall childbirth experience were explored. Qualitative analyses resulted in two main categories representing women's reasoning when deciding which single value should represent their experience of giving birth. *Strategies for choosing a number* reflected variations in how the women approached the scale itself, and *Specific factors considered in the rating* reflected how perceived events and feelings contributed to the chosen value. However, it should be noted that these categories are not completely independent constructs. Despite being clearly separate categories, connections are inevitable. Using the strategy *Start from the maximum value* meant lowering the number based on negatively perceived events related to, for example, strong emotions, support, or expectations, all represented in the category *Specific factors considered in the rating*. What the women included in their overall childbirth experience was hence translated into a number, using strategies from the first category and factors from the second category.

Overall, considerable variations were seen in how the women approached the rating scale, suggesting that not only the childbirth experience itself but also the reasoning when evaluating it is multifaceted. In our study, a standardized phrasing of the question about overall childbirth experience was used, yet a great variation in how it was interpreted by the women was found. This heterogeneity might be even more pronounced in settings using an oral assessment of childbirth experience, which is the case at most birth clinics in Sweden and Finland,[26,27] since greater variability in how the question is asked can be expected when the exact phrasing is shaped by the person asking. To optimize reliability in the rating of overall childbirth experience we recommend the use of a standardized question, together with a clear purpose of the rating.

In the sub-category, *A means to an end*, descriptions of women rating low, despite a mainly positive experience of labor and birth, were included. This was a surprising result, not seen in previous research, and relevant to consider when evaluating results from studies using a single-item measurement of overall childbirth experience. This finding also has clinical relevance, highlighting the need to always have a conversation about childbirth experience, independent of the value chosen, when using NRS or visual analog scale for identifying women in need of support after a negative experience. The value itself is to blunt to be a reliable indicator of who needs support and follow-up after childbirth. Rating of overall childbirth experience on a single-item NRS before discharge from the hospital might still identify some of these women, but since a negative childbirth experience has been shown to sometimes develop over time, follow-up measures are necessary.[28]

Great variations were found concerning which *time period* study participants included in their rating of childbirth experience. Some women's end-point was the birth, while others included also time in the postnatal ward. This reflects different interpretations of the task of rating childbirth experience. Expanding the end point beyond birth itself indicates that contentment with the hospital visit, rather than the childbirth experience, may be what is expressed by the value chosen. It could also reflect individual definitions of the concept of childbirth experience, illustrating the subjectivity in what matters most to different women, represented in the sub-category

Weigh certain experiences more heavily. To include, individual planning of the birth with an obstetrician during pregnancy in one's childbirth experience was unexpected, but may illustrate the impact of continuity of care on the childbirth experience since the women in these cases also met the obstetrician in conjunction with giving birth. The impact of continuity of care on childbirth experience has recently been acknowledged in a Cochrane review about midwife continuity of care models but is apparently relevant also in the continuity of other professions during pregnancy and childbirth.[29]

The experiences included in *Specific factors considered in the rating* to a great extent corresponded with the established view of what the concept of childbirth experience encompasses, that is, strong emotions related to feeling safe, secure, and in control; the impact of supportive care providers; and expectations.[30–32] This finding suggests that the single-item measurement of overall childbirth experience indeed captures the multidimensionality of childbirth experience. This is in contrast to previous studies using a quantitative design, where overall childbirth experience ratings poorly reflected experiences of professional support.[16,20,33] A trusting relationship between the woman and her care providers is crucial to the experience of childbirth,[34,35] yet challenging to capture by questionnaires. In the present study, experiences of care-provider interactions were salient enough to form the sub-category *Perceived support*. Experiences related to unmet support needs were also represented in the sub-category *Specific events linked to strong emotions*. Thus, by using a qualitative design, a more comprehensive account of what women include in their rating of overall childbirth experience was captured, compared with previous studies comparing the single-item measurement to multi-item instruments. Our results thereby highlight the need to ensure that questionnaires measuring childbirth experience also reflect aspects related to supportive care providers.

This study has several strengths, starting with the method of data collection. Individual interviews provided rich descriptions of women's reasoning when rating overall childbirth experience. Some interviews were very short, which could be deemed a limitation of the study, but the credibility of the results was strengthened by the interviewer ending each interview by ensuring that the women had shared everything they wished for on the topic. The think-aloud interview technique helped the women to focus on how they reasoned when they chose the value that corresponded to their overall childbirth experience, in contrast to traditional in-depth interviews exploring the experience itself. Moreover, the recruitment of participants continued until no new information was gained in the interviews. Transcripts or findings were not presented to participants for member checks. However, it should be acknowledged that women might have felt hampered in their accounts by being interviewed at the maternity ward, instead of at a neutral place. This arrangement was a prerequisite for using the think-aloud method without introducing recall bias by expanding the time between the rating and the interview.[23] Another strength is that the researchers were blinded from the women's background characteristics during the qualitative analyses, and hence neutral to the data, which enhances the confirmability of the results.

A variation of parity, birth modes, and childbirth experience ratings were represented in the sample. However, women in the study were highly educated, and to a greater extent gave birth by CS, compared with the national population. Among the women who gave birth by CS, the vast majority had experienced labor, which strengthens the transferability of results. A limitation which must be considered when interpreting the results is the exclusion of women not fluent in Swedish or English. Information on how many eligible women who declined participation was not collected, but 26 included women aligns well with the expected number of eligible women rating childbirth experience at office hours during the data collection period, when 108 women in total gave birth.

5 | CONCLUSION

Women's reasoning when assessing overall childbirth experience on a single-item rating scale includes variations both in how the women approach the scale and in the specific events and feelings that contribute to the chosen value. This heterogeneity should be considered when using the measurement in research and in clinical practice. A standardized phrasing of the question and a clear purpose of the evaluation is warranted to strengthen the validity of the measurement. Moreover, when used clinically for identifying women in need of support after childbirth, the single-item measurement of overall childbirth experience should be followed by a conversation about the experience, independent of the value chosen. Future research is needed to evaluate how support is best measured.

AUTHOR CONTRIBUTIONS

Frida Viirman and Lisa Ljungman initiated and designed the study and supervised the data collection. Reidun Jidrot conducted the interviews. Data analysis was performed by Linn Lundström, Frida Viirman, and Lisa Ljungman. All authors were involved in the interpretation of the results. Frida Viirman wrote the first draft of the manuscript. Reidun Jidrot, Linn Lundström, and Lisa Ljungman contributed to and approved the final version for submission.

FUNDING INFORMATION

This work was supported by Regional Research Council Mid Sweden (grant RFR-980752) and Region Uppsala Research and Development Grant (grant LUL-990477).

CONFLICT OF INTEREST STATEMENT

None.

ETHICS STATEMENT

Ethical approval was obtained from the Swedish Ethical Review Authority on April 15, 2020 (Dnr. 2019-06534).

ORCID

Frida Viirman https://orcid.org/0000-0003-1384-3181

REFERENCES

1. Simkin P. Just another day in a woman's life? Women's long-term perceptions of their first birth experience. Part I. *Birth*. 1991;18:203-210.
2. World Health Organization. *WHO Recommendations: Intrapartum Care for a Positive Childbirth Experience*. World Health Organization; 2018. Accessed December 20, 2022. https://apps.who.int/iris/handle/10665/260178
3. Hosseini Tabaghdehi M, Kolahdozan S, Keramat A, Shahhossein Z, Moosazadeh M, Motaghi Z. Prevalence and factors affecting the negative childbirth experiences: a systematic review. *J Matern-Fetal Neonatal Med*. 2020;33:3849-3856.
4. Bell AF, Andersson E. The birth experience and women's postnatal depression: a systematic review. *Midwifery*. 2016;39:112-123.
5. Andersen LB, Melvaer LB, Videbech P, Lamont RF, Joergensen JS. Risk factors for developing post-traumatic stress disorder following childbirth: a systematic review. *Acta Obstet Gynecol Scand*. 2012;91:1261-1272.
6. Horsch A, Garthus-Niegel S, Ayers S, et al. Childbirth-related posttraumatic stress disorder: definition, risk factors, pathophysiology, diagnosis, prevention, and treatment. *Am J Obstet Gynecol*. 2024;230:S1116-S1127.
7. Dencker A, Nilsson C, Begley C, et al. Causes and outcomes in studies of fear of childbirth: a systematic review. *Women Birth*. 2019;32:99-111.
8. Shorey S, Yang YY, Ang E. The impact of negative childbirth experience on future reproductive decisions: a quantitative systematic review. *J Adv Nurs*. 2018;74:1236-1244.
9. Nilvér H, Begley C, Berg M. Measuring women's childbirth experiences: a systematic review for identification and analysis of validated instruments. *BMC Pregnancy Childbirth*. 2017;17:203.
10. Ratislavová K, Horová J, Marek P. Measuring Women's satisfaction with childbirth: a literature review of measurement properties. *Zdr Varst*. 2024;63:100-108.
11. Joensuu JM, Saarijärvi H, Rouhe H, et al. Effect of the maternal childbirth experience on a subsequent birth: a retrospective 7-year cohort study of primiparas in Finland. *BMJ Open*. 2023;13:e069918.
12. Stephansson O, Petersson K, Björk C, Conner P, Wikström AK. The Swedish pregnancy register - for quality of care improvement and research. *Acta Obstet Gynecol Scand*. 2018;97:466-476.
13. Junge C, von Soest T, Seidler A, Eberhard-Gran M, Garthus-Niegel S. Severe recalled labor pain and elective cesarean section in a subsequent delivery: a cohort study of Norwegian parous women. *Acta Obstet Gynecol Scand*. 2021;100:1678-1687.
14. Diaz-Ogallar MA, Hernandez-Martinez A, Linares-Abad M, Martinez-Galiano JM. Mother-child bond and its relationship with maternal postpartum depression. *J Reprod Infant Psychol*. 2024;2:1-24. doi:10.1080/02646838.2024.2397126
15. Falk M, Nelson M, Blomberg M. The impact of obstetric interventions and complications on women's satisfaction with childbirth a population based cohort study including 16,000 women. *BMC Pregnancy Childbirth*. 2019;19:494.
16. Place K, Kruit H, Rahkonen L. Comparison of primiparous women's childbirth experience in labor induction with cervical ripening by balloon catheter or oral misoprostol - a prospective study using a validated childbirth experience questionnaire (CEQ) and visual analogue scale (VAS). *Acta Obstet Gynecol Scand*. 2022;101:1153-1162.
17. Wijma K, Wijma B, Zar M. Psychometric aspects of the W-DEQ; a new questionnaire for the measurement of fear of childbirth. *J Psychosom Obstet Gynecol*. 1998;19:84-97.
18. Dencker A, Taft C, Bergqvist L, Lilja H, Berg M. Childbirth experience questionnaire (CEQ): development and evaluation of a multidimensional instrument. *BMC Pregnancy Childbirth*. 2010;10:1.
19. Larsson C, Saltvedt S, Edman G, Wiklund I, Andolf E. Factors independently related to a negative birth experience in first-time mothers. *Sex Reprod Healthc*. 2011;2:83-89.
20. Viirman F, Hesselman S, Poromaa IS, Svanberg AS, Wikman A. Overall childbirth experience: what does it mean? A comparison between an overall childbirth experience rating and the childbirth experience questionnaire 2. *BMC Pregnancy Childbirth*. 2023;23:176.
21. Ternström E, Hildingsson I, Haines H, Rubertsson C. Pregnant women's thoughts when assessing fear of birth on the fear of birth scale. *Women Birth*. 2016;29:e44-e49.
22. Ericsson KA, Simon HA. *Protocol Analysis: Verbal Reports as Data*. MIT Press; 1993.
23. Van SMW, Barnard YF, Sandberg JA. *The Think Aloud Method: A Practical Guide to Modelling Cognitive Processes*. Academic Press; 1994.
24. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. *Qual Health Res*. 2016;26:1753-1760.
25. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today*. 2004;24:105-112.
26. Adler K, Rahkonen L, Kruit H. Maternal childbirth experience in induced and spontaneous labour measured in a visual analog scale and the factors influencing it; a two-year cohort study. *BMC Pregnancy Childbirth*. 2020;20:415.
27. Johansson C, Finnbogadóttir H. First-time mothers' satisfaction with their birth experience – a cross-sectional study. *Midwifery*. 2019;79:102540.
28. Waldenström U. Women's memory of childbirth at two months and one year after the birth. *Birth*. 2003;30:248-254.
29. Sandall J, Fernandez Turienzo C, Devane D, et al. Midwife continuity of care models versus other models of care for childbearing women. *Cochrane Database Syst Rev*. 2024;4:CD004667.
30. Larkin P, Begley CM, Devane D. Women's experiences of labour and birth: an evolutionary concept analysis. *Midwifery*. 2009;25:e49-e59.
31. Leinweber J, Fontein-Kuipers Y, Karlsdottir SI, et al. Developing a woman-centered, inclusive definition of positive childbirth experiences: a discussion paper. *Birth*. 2023;50:362-383.
32. Webb R, Ayers S, Bogaerts A, et al. When birth is not as expected: a systematic review of the impact of a mismatch between expectations and experiences. *BMC Pregnancy Childbirth*. 2021;21:475.
33. Turkmen S, Tjernström M, Dahmoun M, Bolin M. Post-partum duration of satisfaction with childbirth. *J Obstet Gynaecol Res*. 2018;44:2166-2173.
34. Aannestad M, Herstad M, Severinsson E. A meta-ethnographic synthesis of qualitative research on women's experience of midwifery care. *Nurs Health Sci*. 2020;22:171-183.
35. Chabbert M, Panagiotou D, Wendland J. Predictive factors of women's subjective perception of childbirth experience: a systematic review of the literature. *J Reprod Infant Psychol*. 2021;39:43-66.

How to cite this article: Viirman F, Jidrot R, Lundström L, Ljungman L. Rating of overall childbirth experience: A qualitative study of a quantitative measurement. *Acta Obstet Gynecol Scand*. 2025;104:658-665. doi:10.1111/aogs.15049