

Zafar, S., Tayyab, F., Liaqat, A., Sikander, S., Hollins Martin, C.J., Martin, C. (2021). Translation and validation of the Birth Satisfaction Scale-Revised in Urdu for use in Pakistan. *International Journal of childbirth*.

Translation and validation of the Birth Satisfaction Scale-Revised in Urdu for use in Pakistan

Shamsa Zafar¹

Fareeha Tayyab²

Asma Liaqat³

Siham Sikander³

Caroline J. Hollins Martin⁴

Colin R. Martin⁵

¹Professor of Obstetrics and Gynaecology, Research centre for health and wellbeing, Fazaia Medical College, Air University Islamabad, Pakistan.

²Resident in Department of Obstetrics and Gynaecology, Pakistan Air Force Hospital, Islamabad, Pakistan

³Resident of Obstetrics and Gynaecology, Pakistan Air Force Hospital, Islamabad, Pakistan.

³Global Health Department, Health Services Academy, Islamabad.

⁴Professor in Maternal Health, School of Nursing, Midwifery and Social Care Edinburgh Napier University, Scotland, UK. EH11 4BN.

⁵Professor of Perinatal Mental Health, Institute for Clinical and Applied Health Research (ICAHR), University of Hull, UK, HU6 7RX.

***Corresponding author** ²Fareeha Tayyab (fareehatayyab@gmail.com)

Address for correspondence: Department of Obstetrics and Gynaecology,
Pakistan Air Force Hospital, University Road, E-9/4, Islamabad, Pakistan

Keywords: Birth satisfaction, birth experience, scales, psychometrics, replicability

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Abstract

Background: Satisfaction with the birth experience is increasingly recognised as critical to the well-being of mother and baby and thus accurate assessment of this key dimension is essential. The Birth Satisfaction Scale-Revised (BSS-R) has been shown to be a robust, valid, and reliable measure of birth experience. The current study sought to develop an Urdu version of the measure to be used in Pakistan.

Methods: Following translation, a cross-sectional design was used to examine the measurement properties of the *Pakistan (Urdu)-BSS-R* (P-BSS-R). Participants were a purposive sample of Pakistani postnatal women (n=200). Key psychometric properties were examined using Confirmatory Factor Analysis (CFA), internal consistency evaluation, and known-groups discriminant validity testing.

Results: The majority of measurement parameters for clinical application of the P-BSS-R were found to be acceptable with good known-groups discriminant validity and data fit to the tri-dimensional theoretical model of the BSS-R observed. However, some idiosyncratic observations were highlighted, including unexpected low internal consistency.

Conclusions: The P-BSS-R was found to be a generally valid and reliable measure of the experience, a caveat being low internal consistency warranting further investigation.

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Introduction

The experience of childbirth has long been established to have a spectrum of potential impacts on the well-being of women, with potential negative impacts increasing clinical concern (Grandone et al., 2020; Harrison, Ayers, Quigley, Stein, & Alderdice, 2020; Peiris-John, Park, Wells, Kool, & Wise, 2020; Picetti et al., 2020; Watson, White, Hall, & Hewitt, 2020). Childbirth is a challenging experience physiologically and for some women psychologically (Affonso & Domino, 1984; De Schepper et al., 2016; Dekel, Ein-Dor, Dishy, & Mayopoulos, 2020; Orovou et al., 2020). With reducing associated factors within the birthing environment critical for optimising clinical outcomes (International Consortium for Health Outcome Measurement, 2016). In addition, there is compelling evidence that links maternal well-being to that of the infant (Bang et al., 2020; Gilden et al., 2020; Sliwerski, Kossakowska, Jarecka, Switalska, & Bielawska-Batorowicz, 2020). Thus, appreciating women's birth experiences is crucial towards improving relationships with staff, the clinical environment, care provided, experiences of interventions, and understandings of their associations with outcomes (Alfaro Blazquez, Corchon, & Ferrer Ferrandiz, 2017; Nijagal et al., 2018; Nilver, Begley, & Berg, 2017).

Recognising that much is known about the clinical management of labour and childbirth, more recently attention has focused towards creating a more positive birth experience. For example, exploring what makes women feel safe, comfortable, and in control (Hollander et al., 2017), and relationships with birth satisfaction and postpartum well-being (Bryanton, Gagnon, Johnston, & Hatem, 2008; Harrison et al.,

2020; Hinic, 2016, 2017) . Central to these efforts is accurate assessment of birth satisfaction (Nijagal et al., 2018), with several measures developed for the purpose (Alfaro Blazquez et al., 2017; Nilver et al., 2017; Sawyer et al., 2013). However, Alfaro Blazquez et al. (2017) has highlighted that despite the variety of measures available, the content and quality of instruments is highly variable. Acknowledging the need for robust tools that are practical, appropriate, easy to understand and comprehensively scored, Alfaro Blazquez et al. (2017) reports that the original UK Birth Satisfaction Scale-Revised (BSS-R) (Hollins Martin & Martin, 2014) and the subsequent US-BSS-R version meet appropriate psychometric criteria (Barbosa-Leiker, Fleming, Hollins Martin, & Martin, 2015). Subsequent to the Alfaro Blazquez et al. (2017) systematic review, several translation and validation studies have revealed that the BSS-R has good to excellent psychometric properties and a transferable theory-informed measurement model across a variety of cultural contexts (Burduli, Barbosa-Leiker, Fleming, Hollins Martin, & Martin, 2017; Goncu Serhatlioglu, Karahan, Hollins Martin, & Martin, 2018; Jefford, Hollins Martin, & Martin, 2018; Martin et al., 2017; Nasiri, Kariman, & Ozgoli, 2020; Romero-Gonzalez et al., 2019; Skodova, Nepelova, Grendar, & Baskova, 2019; Skvirsky, Taubman-Ben-Ari, Hollins Martin, & Martin, 2019; Vardavaki, Hollins Martin, & Martin, 2015). As a unique birth satisfaction measure, the BSS-R is used to assess the three specific domains of (i) stress experienced during labour and birth (SE sub-scale), (ii) women's attributes (WA sub-scale), and (iii) quality of care (QC sub-scale). As such, the BSS-R can be used to measure individual subscales, and also accumulated to provide a total score of birth satisfaction, which together make it an ideal tool for both research and clinical purposes (Martin et al., 2018). The BSS-R is now recommended as the self-report measure of choice for measuring birth satisfaction

by the *International Consortium of Health Outcomes Measurement* (ICHOM), within their *Pregnancy and Childbirth Standard Set* (ICHOM, 2016). Since the ICHOM started recommending the *10-item-BSS-R* as the measure of choice for evaluating quality of intranatal care (2015), it has been validated for use in for example the US, Greece, Australia, Turkey, Spain, Israel, Italy, Iran, Slovak, Croatia etc. These country-specific *BSS-R*'s are available from (<https://www.bss-r.co.uk/>). To validate a *Pakistan (Urdu)-BSS-R* (P-BSS-R) the primary objectives of this study were to:

1. Confirm the tri-dimensional measurement model of the BSS-R to the P-BSS-R.
2. Evaluate the internal consistency of P-BSS-R Quality of Care (QC), Women's Attributes (WA), and Stress Experienced during Childbearing (SE) sub-scales and the total P-BSS-R scale.
3. Evaluate the known-groups discriminant validity of the P-BSS-R consistent with the approach taken in the original BSS-R development study.
4. Evaluate the divergent validity of the P-BSS-R consistent with the approach taken in the original BSS-R development study.

Method

Design

A cross-sectional design consistent with previous BSS-R validation studies was used (Romero-Gonzalez et al., 2019). The investigation was undertaken at PAF hospital, Islamabad. It is a tertiary care hospital where women report from all over Pakistan.

Participants

The study was carried out at PAF Hospital, Islamabad, Pakistan. It is a 600 bedded public sector hospital, with two units and serving a population of all socio-economic class. A purposive sample of consenting women was collected from labour wards and post-natal wards, who spoke the Urdu language, were low obstetric risk and aged 18-40 years recruited to the study between November 2019 to October 2020. Following informed consent, study participants completed the translated Urdu version of the P-BSS-R within 48 hours of giving birth. All women who did not speak Urdu language, admitted in critical care for more than 48 hours and who did not agree to participate were excluded.

Sample size calculation

Sample sizes for factor analyses are traditionally and in large part based on 'rules of thumb' with minimum sample sizes ranging from N=100 to N=200 (Kline, 2000). These recommendations represent broad generalisations and are not measure or model-specific. Addressing the minimum sample size issue in relation to the BSS-R and the three-factor measurement model Martin and Hollins Martin (2017) undertook a Monte Carlo simulation study to identify the minimum sample size for a factor analysis of the BSS-R within the context of an adequate and appropriately powered

study. They found that the minimum sample size for a BSS-R study examining the underlying measurement characteristics of the tool in terms of factor structure was N=175. The current study thus adopted both the larger of the 'rule of thumb' recommendations and Martin and Hollins (2017) minimum and thus a minimum sample of N=200 was specified.

Ethical approval

Ethical approval for the study was granted by the *Pakistan Air Force* (PAF) hospital ethical committee, Islamabad, Pakistan.

Measures

The BSS-R (Hollins Martin & Martin, 2014) is a multi-dimensional ten-item birth satisfaction self-report measure, which is scored on a five-point Likert scale that includes responses ranging from (i.) strongly agree, (ii.) agree, (iii.) neither agree or disagree, (iv.) disagree, (v.) strongly disagree. Some items are reverse scored, with three sub-scales being measured (i) *stress experienced during labour and birth* (SE), (ii) *quality of care* (QC), and *women's attributes* (WA). SE and QC sub-scales each comprise 4-items and the WA sub-scale comprises 2-items. Subscale and whole-scale scores can be calculated, with higher scores indicating greater birth satisfaction.

Translation of the BSS-R to Urdu

The original *UK (English)-BSS-R* was translated into Urdu language using the reverse translation method (Nespoli, Colciago, Pedroni, Perego, & Fumagalli, 2018), which is widely used (Tyupa, 2011) since it maintains essence of meaning in Urdu language. Translation to Urdu language was carried out by native speakers fluent in

both English and Urdu. Reverse translation was undertaken by another bilingual native who had not seen or read the UK-BSS-R and was not associated with this current research project. The reverse translated version was then compared for consistency against the original UK-BSS-R to ensure construct equivalence and congruence. Post these processes the final P-BSS-R was produced, and a pilot undertaken with (n=10) participants to evaluate item response pattern and spread and determine statement clarity. Further interviews were undertaken with (n=25) women to obtain their perspectives and understandings of questionnaire items and scale as a whole. Participants were asked if each item was comprehensible or required further clarification, and if each was a relevant component of birth satisfaction. There was no evidence from this process of ambiguity or difficulty in comprehension of any of the P-BSS-R items.

Statistical analysis

Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) (Brown, 2015) was used to evaluate *Objective 1*. Common to factor analysis techniques generally, CFA is underpinned by parametric assumptions of data normality (Brown, 2015). Data is thus initially screened for the presence of excessive skew and kurtosis of individual items and the identification and removal of multivariate outliers (Kline, 2000). Unlike the distributional characteristics of many questionnaires, previous psychometric investigations of the BSS-R have generally found no evidence of excessive skew/kurtosis and only a small percentage of multivariate outliers (Jefford et al., 2018; Nespoli et al., 2020; Romero-Gonzalez et al., 2019). The tri-dimensional measurement model of the BSS-R comprising of correlated factors of SE, WA and QC was evaluated by CFA. A single-factor model was also evaluated. CFA models were evaluated using maximum-likelihood estimation approach (Brown, 2015; Kline, 2011). Model fit was evaluated using the comparative fit index (CFI) (Bentler, 1990), the root mean squared error of approximation (RMSEA) (Steiger & Lind, 1980), and the square root mean residual (SRMR) (Hu & Bentler, 1999). Conventional threshold values of >0.90 (CFI), <0.08 (RMSEA) and <0.06 (SRMR) was selected for model acceptability evaluation.

Internal consistency

Internal consistency of the P-BSS-R sub-scales SE and QC, and total score was evaluated using Cronbach's alpha (Cronbach, 1951), with a threshold of 0.70 or greater indicating acceptability. The inter-item correlation (Pearson's r) was used to evaluate the two-item WA sub-scale the threshold values of 0.15-0.50 indicating acceptability (Clark & Watson, 1995), with this being a recommended alternative

method in relation to scales containing two-items (Eisinga, Grotenhuis, & Pelzer, 2013). Cronbach's alpha was calculated for the WA sub-scale, to allow comparison with the findings reported in the Hollins Martin and Martin (2014) UK original validation paper.

Known-groups discriminant validity

Consistent with previous investigations (Fleming et al., 2016; Romero-Gonzalez et al., 2019; Skvirsky et al., 2019; Vardavaki et al., 2015) known-groups discriminant validity (KGDV) of the BSS-R was examined by scrutiny of differences between BSS-R sub-scale and total scale scores as a function of delivery type with unassisted vaginal delivery (UVD), compared with intervention delivery (ID; elective Caesarean section (CS), emergency CS, suction cap and instrument).

Divergent validity

P-BSS-R sub-scale and sub-scale scores were correlated (Pearson's r) with the number of weeks gestation to evaluate divergent validity. No statistically significant correlations are predicted.

Results

Participants

Two-hundred and thirty-four women fulfilled the inclusion criteria for this study, of which (n=200) (85%) provided consent to participate. Examination of Mahalanobis distances revealed (n=5) multivariate outliers, which following removal left a dataset comprising (n=195) participants with complete P-BSS-R data. Participants' mean age was 28.62 (SD 4.70), and ranged from 18-40 years of age. Mean gestational age was 38.44 (SD 1.91) weeks. Seventy women (36%) were primigravidas. Means, SD, skew and kurtosis characteristics of P-BSS-R items, sub-scales and total scores are summarised in *Table 1*. No evidence of excessive skew or kurtosis was observed.

TABLE 1. HERE

Confirmatory factor analysis

The findings of the CFA's are summarised in *Table 2*. The single-factor model (model 1.) revealed a poor-fit to data. The three-factor model also revealed a poor fit to data (model 2.). Examination of modification indices (MI) revealed Item 1. "I came through childbirth virtually unscathed" to be problematic within the model and suggested this item would be more statistically appropriate to load on to the QC factor. The three-factor CFA was rerun with item 1. removed (model 3.) and an excellent fit to data was observed. Finally, a further three-factor model (model 4.) including all ten items, with item 1. specified as loading on to the QC factor was run, and again revealed an excellent fit to data.

TABLE 2. HERE

Correlational congruence

P-BSS-R sub-scale and total scores correlations are summarised in *Table 3*. All correlation combinations were statistically significant ($p < 0.05$), with the exception of WA-QC ($p = 0.13$). Using the correlational comparison method of Diedenhofen and Musch (2015) revealed no statistically significant differences between the current study and the original UK BSS-R development study, with again the exception of WA-QC.

TABLE 3. HERE

Internal consistency

P-BSS-R total scale and all sub-scales internal consistency observations are summarised in *Table 4* and were observed to be sub-optimal, although the total scale approached threshold for acceptability. Excepting the WA sub-scale comparisons between the current study and those of the Hollins Martin and Martin (2014) paper, revealed sub-scale and total scale Cronbach's alpha to be significantly lower than this original UK development study. Inter-item correlation of the P-BSS-R sub-scale WA items was $r = 0.49$, $p < 0.001$.

TABLE 4. HERE

Known-groups discriminant validity

QC sub-scale scores were observed to be significantly higher in the unassisted vaginal delivery group, compared with the intervention group (elective and emergency C-section combined). No other significant sub-scale or total scale score differences were observed. Descriptive and inferential data is summarised in *Table 5*.

TABLE 5. HERE

Divergent validity

Correlations between the P-BSS-R total and sub-scale scores and the number of weeks gestation, (total) $r = 0.12$, $p = 0.09$, (SE) $r = 0.01$, $p = 0.95$, and (WA) $r = 0.07$, $p = 0.33$ were non-significant. A significant positive correlation was observed between weeks gestations and the QC sub-scale, $r = 0.22$, $p = 0.002$.

Discussion

The findings from the current investigation confirm a number of previous findings regarding the BSS-R, and in addition provide new insights into both the characteristics of the measure and the clinical population. Consistent with previous translation and validation studies of the BSS-R, individual item, sub-scale and total scores were observed to have an absence of excessive skew and kurtosis (Jefford et al., 2018; Nespoli et al., 2020; Romero-Gonzalez et al., 2019; Skvirsky et al., 2019), thus confirming distributional normality and the consequent parametric approach to data analysis. To date, all previous translation and validation studies of the BSS-R that have used CFA, have reported a good fit to data consistent with the tri-dimensional measurement model of 3 sub-scales. Thus, a surprising finding was the poor-fit to this measurement model. It was observed that the key issue in poor fit was related exclusively to item 1. *“I came through childbirth virtually unscathed”*, which when specified to load on to the QC sub-scale, this alternative three-factor model was found to offer an excellent fit to data. Similarly, excluding item 1, running the established measurement model with the remaining 9-items also offered an excellent fit to data. Thus, confirming that the issue is fundamentally related to item 1, rather than the theoretical premise underpinning the measurement model. The research team reflected on possible reasons for this idiosyncratic finding and considered this may be representative of the perception of meaning of this question within the context of the overall birthing experience. Women may have perceived that if they were healthy and their baby was in good condition post-delivery, that they were unscathed, even when they had experienced a significant amount of trauma both psychologically and physically. Pakistani women may equate delivering a healthy infant, along with surviving themselves, as being due to receiving high quality

care provision. Bearing in mind that Pakistan has one of the highest maternal mortality ratios in South Asia, making the role of midwives crucial in providing life-saving services to the most vulnerable (<https://pakistan.unfpa.org/en/topics/maternal-health-8>). In developing countries, most childbirth occurs at home and is not assisted by skilled attendants, with this situation increasing risk of death for mother and infant. Since the health of the mother and her new-born infant are closely linked, access to high quality care during childbirth can make the difference between life and death for both mother and baby. In this respect, *"I came through childbirth virtually unscathed"* may present with different meaning compared with a UK mother who principally expects to survive childbirth. As such, findings from the CFA and this issue of Pakistani women interpreting item 1 differently to UK women, raises the question of suitability of using the P-BSS-R as a 3 sub-scale tool or simply as a total score instrument, which is recommended by the ICHOM (2016). Consequently, there are a few aspects to consider when concluding what recommendation to make. Firstly, the correlational analysis between subscales and total score was not significantly different to those found in the original BSS-R development study (Hollins Martin & Martin, 2014), in five of the six combinations evaluated. The correlation between WA and QC sub-scales was notable in terms of being significantly lower than that of the original validation study. However, given the issue of cultural interpretation differences between Pakistani and UK women, which relates to item 1 and is an SE sub-scale question; this observation does not present a compelling rationale against sub-scale use. However secondly and of greater concern, is the relatively low internal consistency observations found. Although it was exclusively the SE sub-scale that had a significantly lower Cronbach alpha compared with the original instrument development study, it is noteworthy that internal consistency for this sub-

scale was uncharacteristically low compared to previous BSS-R translations (Nasiri et al., 2020; Romero-Gonzalez et al., 2019; Skodova et al., 2019; Skvirsky et al., 2019), and thus impacts deleteriously on the alpha for the total scale. Martin et al. (2018) noted that contemporary evidence of the measurement characteristics of the BSS-R indicated that both the sub-scale scores and the total score can be used with confidence, dependent upon purpose of the study or its clinical context. However, the findings from the present study in terms of low SE sub-scale alpha, would suggest that for the current version of the P-BSS-R, that the total score would be more appropriately used simply because the whole scale internal consistency approaches acceptability. The items of the SE sub-scale may need future revision in view of the low alpha, since a participant population characteristic may have impacted upon Pakistani women's responses to this sub-scale. Hence, a more sensible approach might be to undertake further investigation to evaluate the internal consistency with participants from another Pakistani childbearing population, for purpose of corroborating and confirming whether revision of the P-BSS-R is indeed required. Thirdly, characteristics of the participant population is further questionable because of the findings from the known-groups validity evaluation. In the current study, no significant differences were observed as a function of delivery type, except for the group who delivered vaginally who achieved significantly higher QC scores compared with the instrumental delivery group. This contrasts markedly with other BSS-R studies, where differences as a function of delivery type were observed between groups on the SE sub-scale (e.g., Hollins Martin & Martin, 2014). In spite of these observations, the general dimensional structure supports that the BSS-R is a suitable instrument for measuring Pakistani women's birth satisfaction. Discussions that compare and contrast findings with prior BSS-R study results are mostly context

related and address cultural and socio-economic factors surrounding participant populations. With similarity, more research is required to determine further influences upon Pakistani women's birth satisfaction.

Study limitations

A first limitation of this study is that participants came from only one area of Pakistan. A second limitation is participant numbers (n=200), particularly given the small effects sizes in the KGDV analysis, this replication with a larger sample may provide further confidence in both the magnitude and directionality of groups differences or trends. A third limitation is lack of prior studies about birth satisfaction in Pakistan, with repetition helping develop psychometric knowledge in relation to improving the P-BSS-R and increasing understandings of regional variables that effect Pakistani women's birth experience. Certainly, a focus of a follow-on study would be to explore in greater detail and focus issues related to the lower than anticipated internal consistency observed in the current investigation.

Conclusion

This study has validated the psychometric properties of a *Pakistan (Urdu)-BSS-R* (P-BSS-R), which despite limitations has revealed itself to be a reasonably robust measure of birth satisfaction, particularly when total score is used. The majority of measurement parameters for clinical application were found to be acceptable with good know-groups discriminant validity and data fit to the tri-dimensional theoretical model of the BSS-R. As more high-quality research is conducted in Pakistan using the P-BSS-R, the landscape of women's experiences of childbirth is set to improve.

Obtaining the BSS-R

The BSS-R is available to use free of charge for research and clinical practice and readers are directed to the dedicated website www.bss-r.co.uk for more information about the measure and permission to use requests.

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Table 1. Mean, standard deviation and distributional characteristics of individual P-BSS-R items, sub-scale totals and the total P-BSS-R score. se = standard error of kurtosis.

Item	Item content	Domain*	Mean	SD	Min	Max	Skew	Kurtosis	se
BSS-R 1	I came through childbirth virtually unscathed	SE	3.37	0.74	0	4	-1.39	2.81	0.05
BSS-R 2	I thought my labour was excessively long	SE	2.33	1.17	0	4	-0.50	-0.77	0.08
BSS-R 3	The delivery room staff encouraged me to make decisions about how I wanted my birth to progress	QC	3.28	0.79	1	4	-1.10	1.00	0.06
BSS-R 4	I felt very anxious during my labour and birth	WA	1.54	1.14	0	4	0.39	-0.90	0.08
BSS-R 5	I felt well supported by staff during my labour and birth	QC	3.52	0.67	1	4	-1.58	3.05	0.05
BSS-R 6	The staff communicated well with me during labour	QC	3.57	0.61	1	4	-1.36	2.04	0.04
BSS-R 7	I found giving birth a distressing experience	SE	1.77	1.12	0	4	0.36	-0.89	0.08
BSS-R 8	I felt out of control during my birth experience	WA	2.07	1.21	0	4	-0.26	-1.21	0.09
BSS-R 9	I was not distressed at all during labour	SE	1.92	1.19	0	4	0.29	-1.11	0.09

BSS-R 10	The delivery room was clean and hygienic	QC	3.37	0.75	0	4	-1.45	2.86	0.05
Stress	Sub-scale total		9.39	2.55	1	16	0.11	0.37	0.18
Attributes	Sub-scale total		3.62	2.03	0	8	0.08	-0.94	0.15
Quality	Sub-scale total		13.75	1.98	8	16	-0.63	-0.41	0.14
Total	Total score		26.75	4.95	12	40	0.29	0.03	0.35

*Domain of the P-BSS-R. SE = Stress experienced during child-bearing, WA = Women's attributes, QC = Quality of Care.

Table 2. Confirmatory factor analysis of the P-BSS-R.

Model	χ^2 (df)	<i>p</i>	RMSEA	SRMR	CFI
1. Single factor	228.78(35)	<0.001	0.169	0.146	0.499
2. Three-factor	94.17(32)	<0.001	0.100	0.096	0.839
3. Three-factor nine-item	44.02(24)	0.008	0.066	0.053	0.941
4. Three-factor modified	49.44(32)	0.025	0.053	0.051	0.955

Note: Model 3 is identical to model 2 with the exception of item 1. Removed from the stress factor. Model 4 is identical to model 2 with the exception of item 1. specified as loading on the quality of care factor.

Table 3. Correlations of P-BSS-R sub-scales and total score and comparison with original UK BSS-R validation study (Hollins Martin and Martin, 2014).

Scale combination	Current study <i>r</i>	UK study <i>r</i>	Z	95% CI	<i>p</i>
Stress-Attributes	0.60	0.57	0.46	(-0.10 – 0.16)	0.64
Stress-Quality	0.29	0.26	0.33	(-0.15 – 0.21)	0.74
Attributes-Quality	0.11	0.35	2.60	(-0.42 – -0.006)	<0.01
Total score-Stress	0.88	0.86	0.84	(-0.03 – 0.07)	0.40
Total score-Attributes	0.76	0.80	1.04	(-0.12 – 0.03)	0.30
Totals score-Quality	0.59	0.63	0.65	(-0.16 – 0.08)	0.52

Table 4. Cronbach's alpha of P-BSS-R sub-scales and total score and comparison with original UK BSS-R validation study (Martin and Hollins Martin, 2014).

Degrees of freedom = 1.

Subscale	Current study	UK study	χ^2	p
Stress	0.39	0.71	17.19	<0.001
Attributes	0.66	0.64	0.06	0.81
Quality	0.65	0.74	2.77	0.10
Total score	0.69	0.79	6.50	0.01

Table 5. Comparison of P-BSS-R total and sub-scale scores differentiated by birth delivery type. Standard deviations are in parentheses, degrees of freedom = 193, CI = confidence interval.

P-BSS-R Scale	Unassisted vaginal delivery (N=98)	Assisted/ Operative delivery (N=97)	95% CI	<i>t</i>	<i>p</i>	Hedges <i>g</i>	Hedges <i>g</i> 95% CI	Effect size
Stress	9.38 (2.87)	9.40 (2.19)	-0.75 - 3.69	0.07	0.95	-0.010	-0.29 - 0.27	Negligible
Attributes	3.62 (2.11)	3.61 (1.95)	-0.56 - 0.59	0.05	0.96	0.007	-0.27 - 0.29	Negligible
Quality	14.14 (1.84)	13.35 (2.05)	0.24 - 1.34	2.84	0.005	0.40	0.12 - 0.69	Small
Total score	27.14 (5.45)	26.36 (4.39)	-0.62 - 2.18	1.10	0.27	0.16	-0.12 - 0.44	Negligible