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Turkish validity and reliability of the Haptotherapeutic Well-Being Scale

Burcu Küçükkaya^{1*}, Hafsa Kübra Işık² and Gülay Rathfisch³

Abstract

Objectives Haptotherapy fosters a sense of unity between the body, mind, and emotions. In addition, it contributes to expanding the woman's perception of her pregnancy and developing a more positive attitude towards pregnancy and childbirth. The study aims to examine the Turkish validity and reliability of the Haptotherapeutic Well-Being Scale, which will be used to evaluate the well-being levels of haptonomy and haptotherapy practices in women.

Design The study was methodological type.

Methods The study conducted between October 20 and December 20, 2023, with 242 women who volunteered to participate by sharing forum pages on social media (Facebook, Instagram) via the web. Data were collected using a personal information form, including sociodemographic and obstetric characteristics and the Haptotherapeutic Well-Being Scale.

Results The Haptotherapeutic Well-Being Scale consists of 14 items and five sub-dimensions. In confirmatory factor analysis, all path coefficients were statistically significant ($p < 0.001$). The overall Cronbach's Alpha and sub-dimension values of the scale are above 0.90. There is a positive and very strong correlation between all sub-dimensions of the scale ($p < 0.001$).

Conclusion The Haptotherapeutic Well-Being Scale was found to be valid and reliable for the Turkish sample.

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Keywords Women, Haptonomy, Haptotherapeutic, Scale, Reliability, Validity

Introduction

Pregnancy is a multidimensional experience of physical, mental, and spiritual transformations in the female body. In this experience, while the mind seeks an environment of safety and comfort in this unknown journey, different emotions cause different touches on the physical

and spiritual bodies of the woman. A woman who is in balance and aware of these holistic changes completes this period of great change with pleasant memories and a strong sense of awareness. It is very important for the woman to maintain this holistic balance in every sense during pregnancy. For example, different emotional states with low frequency, such as fear, will make it difficult for the woman to stay centered [1, 2].

Approximately 10% of pregnant women experience severe fear of labor [1, 2]. The etiology of fear of labor is multifactorial and may be related to specific fears as well as a more generalized tendency to anxiety [3, 4]. Women with severe fear of childbirth and their newborns are at risk of various complications, including preterm delivery, gestational hypertension, preeclampsia, emergency

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cesarean section, excessive pain, medication use during labor, low birth weight, prolonged labor, trauma anxiety, increased risk of postpartum stress and depression, and later emotional and behavioral problems of the child [3–7]. Many studies have evaluated interventions designed to reduce the fear of childbirth [8]. Kuo et al. examined the effectiveness of an integrated childbirth education program that included information and discussion about the fear of childbirth, anxiety, and depression [9]. Veringa-Skiba et al. examined the effect of cognitive awareness training on the fear of childbirth in pregnant women [10]. Toohill et al. and Fenwick et al. examined the effectiveness of individual psycho-education by telephone in women with moderate and severe fear of childbirth [11, 12]. All of these studies reported a decrease in fear of childbirth and showed a decrease in cesarean delivery, birth interventions, and psycho-social factors. However, they provide little information about clinically meaningful psychological health outcomes in the long term. It is also reported in the literature that attempts to reduce the fear of childbirth in pregnant women are not always successful [10, 12]. Rydinget et al. found that expectant mothers who applied to specially trained midwives because of fear of childbirth during pregnancy had a more frightening birth experience and reported post-traumatic stress symptoms related to childbirth more frequently compared to women in the comparison group [13]. In addition, in a study by Verbeek et al. on pregnant women diagnosed with DSM-IV anxiety, it was found that the mean birth weight in the cognitive behavioral therapy group was lower than 275 g, and the mean gestational age was almost one week shorter than in the usual care group [14].

Over the past decade, clinical experience suggests that fear of childbirth can be effectively reduced through haptotherapy and haptonomi [15]. Haptotherapy is a therapy that uses sensory awareness and experience as a starting point [16]. When there is pain, everyone wants to get rid of it as soon as possible. However, pain can also be a sign that one needs to do something about oneself. There can be an imbalance between thinking, feeling, and acting, between what one needs or wants and what one can do [16]. For many people, learning to accept the physical, psychological, and/or social consequences of an illness or pain is also a challenge. There can also be situations where a person loses themselves, where they completely identify with their pain. Haptotherapy uses talks, experiential exercises, and emotional touch to help the person feel what is going on physically and emotionally [16, 17]. In this way, the person learns to experience how their body reacts and how they cope with these physical reactions [16, 17]. Through this, haptotherapy contributes to an

increased awareness of one's body and emotions. The aim is to create or restore the balance between thinking, feeling, and acting. As a result, people can better feel their limits, distinguish between what is possible and what is not, increase their resilience, and thus adopt a stronger, more vigorous attitude towards life and find themselves again [16–19]. Haptotherapy practices are designed to create a change in a woman's perception of her pregnancy and to develop a more positive attitude toward pregnancy and childbirth. In addition, haptotherapy can improve a pregnant woman's readiness for the upcoming birth process, which is expected to lead to a decrease in fear of childbirth [20–22].

Haptonomy is a field that deals with tactile and emotional contact and defines the relationship between parents and the unborn baby [19]. This practice also helps the mother to adapt to pregnancy and psychologically prepare for delivery [23]. A limited number of studies have shown that haptonomy can reduce the fear of childbirth, protect from maternal depression, and increase prenatal attachment [24–26]. In addition, smooth pregnancy and delivery, strengthening the relationships between spouses, and marital bonding can be counted among the benefits of haptonomi [26]. When the national and international literature is examined, it is stated that there are not enough scientific studies despite the benefits of haptonomi [26, 27].

Haptotherapy and haptonomy affect the pregnancy process, delivery, and postpartum periods of pregnant women, and there is no scale that specifically evaluates the effect of these practices on the well-being level of women during these periods in our country. Therefore, this study aimed to examine the Turkish validity and reliability of the Haptotherapeutic Well-Being Scale, developed by Klabbbers et al. in 2022, to evaluate the effect of haptotherapy and haptotherapy practices on women's well-being levels in the Turkish population [17]. No international or national studies on the planned research topic were found in the literature review. The study is considered to be unique in this aspect.

Methods

Research desing

This study is methodological research to assess validity and reliability and was conducted between 20.10.2023 and 20.12.2023 on women who volunteered to participate in the study by sharing on social media (Facebook, Instagram) forum pages via the web. Also the study was conducted in two phases: Adaptation of the SCOPE Turkish into and Validation of the psychometric properties of the SCOPE (Fig. 1).

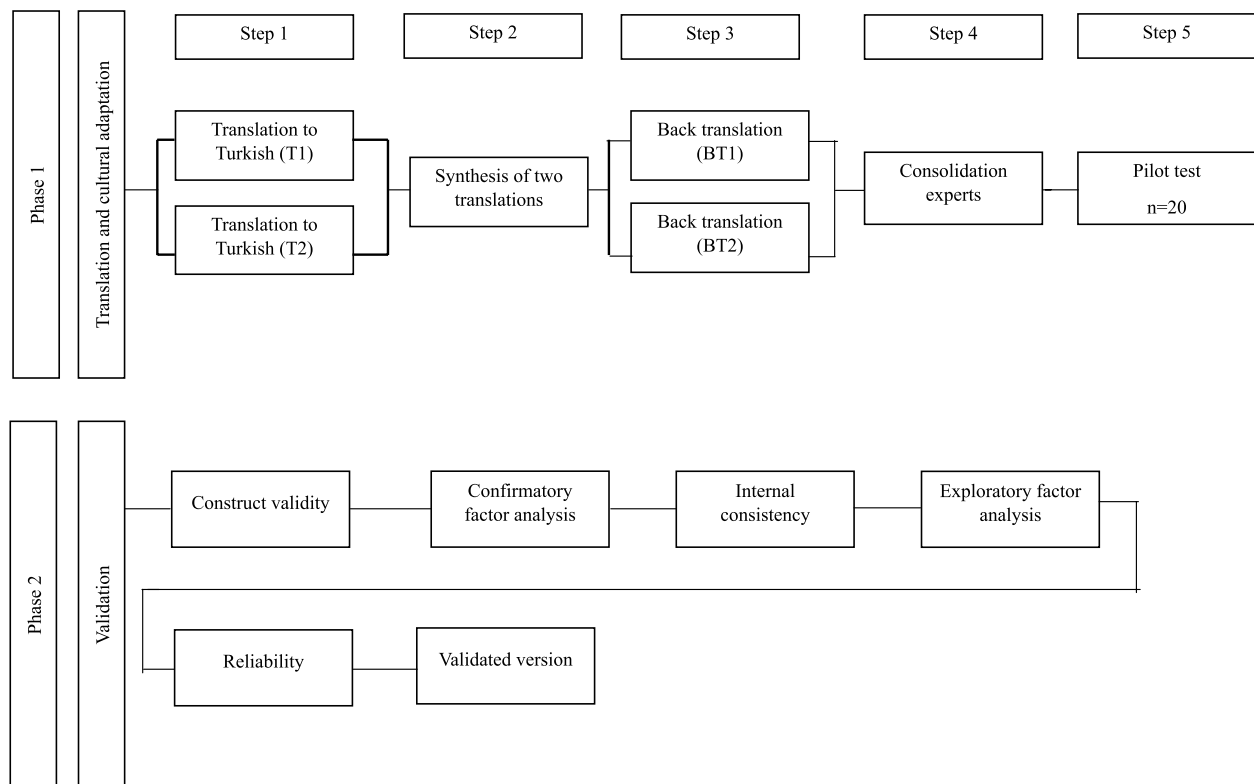


Fig. 1 General description of the translation, cultural adaptation, and validation algorithm of Turkish Scale on Haptotherapeutic Well-Being Scale (SCOPE)

Participants

This methodological study aimed to perform Turkish validity and reliability analysis of the Haptotherapeutic Well-Being Scale. Within the scope of the Turkish Validity and Reliability study, the 'Haptotherapeutic Well-Being Scale' consists of 14 items [17]. In scale adaptations, it is recommended to select a sample of at least 10–15 times the number of scale items [28]. In this study, the sample size was determined to be 210 people by taking 15 times the number of items. Considering the data loss, the total number of individuals to be sampled was determined as 252 by increasing the sample size by 20%. Inclusion criteria included women over 18, living in Türkiye, using social media (Facebook, Instagram), and agreeing to participate in the study. Women who were illiterate in Turkish, had hearing-vision problems or mental disabilities, did not have social media (Facebook, Instagram), and did not volunteer to participate in the study were excluded.

Data collection

Women who use social media (Facebook, Instagram) were invited to participate in the study. Electronic informed consent was provided on the first page of the

online survey. The questionnaire consists of two parts. The first part included sociodemographic and obstetric characteristics of women. The second part includes a 14-item, 4-point Likert-type scale translated into Turkish in line with language, content validity, and expert opinions.

Study stages

Before starting the study, written permission was obtained from the authors of the Haptotherapeutic Well-Being Scale (HWBS). Then, two different linguists translated the scale from English to Turkish. The researchers then examined the Turkish versions of the scale, and the Turkish version of the scale was created. The Turkish form was then translated from Turkish to English by another linguist [29]. Compatibility was achieved between the Turkish and English versions of the scale.

In order to evaluate the content validity of the Turkish version of the scale, 12 expert researchers in the field of gynecology and obstetrics were consulted. The experts were asked to evaluate the items as 1-Not Appropriate, 2-Somewhat Appropriate, 3-Reasonably Appropriate, and 4-Very Appropriate. Experts were asked to suggest items not evaluated as "very appropriate". In the

Davis technique, the content validity index which is calculated by dividing the number of experts who marked the options a (The item is appropriate) and b (The item needs minor revision) for each item by the total number of experts providing opinions is expected to be over 0.80 [30]. Based on expert opinions, the content validity index (CVI) value of the scale was calculated to be 96%, meaning that content validity was ensured. The items were reorganized by considering the experts' suggestions. The scale was administered to 252 women over 18 who were included in the study sample after scoring.

Pilot study

After confirming the expert opinions, a pilot study was conducted to test the comprehensibility of both the translation and the content. It is recommended to conduct the pilot study with 20–30 people with similar characteristics and not to include the pilot study in the sample [31–33]. The pilot study was conducted with 20 women with similar characteristics. The pilot study showed that the scale items were understandable regarding language and content. These 20 women in the pilot study were not included in the sample.

Ethical statement

The study was approved by Bayburt University Non-interventional Clinical Research Ethics Committee (14.09.2023/Number of Decisions:14). Electronic informed consent was provided on the first page of the online survey. All participants were informed electronically on the first page of the survey that they were willing to participate and that they could withdraw from the survey at any time. The study was conducted following the Declaration of Helsinki.

Statistical analysis

Data were analyzed with IBM SPSS V23 and IBM AMOS V24. Normal distribution was examined with multiple normality assumptions and the Kolmogorov–Smirnov test. In confirmatory factor analysis, first-level CFA was used. The path diagram of the scale was created (Figs. 2 and 3). Since the multiple normality assumption was not met, Bootstrap ML (Maximum likelihood) was used as the calculation method, and 5000 resamples were preferred in the Bootstrap analysis. Cronbach's alpha coefficient was used to determine the internal consistency of the total and subscales of the scale. Tukey summability test was applied to evaluate the summability level of the scale. Spearman's rho correlation coefficient was used to examine the relationship between scale scores that did not fit the normal distribution. Analysis results were presented as mean \pm standard deviation and

median (minimum–maximum). The significance level was accepted as $p < 0.05$.

Results

Table 1 presents the sociodemographic and obstetric characteristics of the participants. The mean age of the women who participated in the study was 33.89 ± 8.55 years (Min: 19- Max: 56). It was determined that 42.1% of the women had a university and above education, 64.9% were not working, 85.1% were married, and 78.1% had income equal to expenses. In the study, it was seen that 95.5% of the women had health insurance, the majority of them did not smoke (84.7%), did not drink alcohol (97.9%), and 60.3% did not perform physical exercise. Among the women included in our study (single and married/divorced), 31.8% had their first pregnancy, 28.9% had no live birth, 93.0% had no curettage, and 87.2% had no miscarriage.

Table 2 presents the results of the Kaiser–Meyer–Olkin and Bartlett Sphericity tests of the scale. The KMO value showed that the data were suitable for factor analysis. The KMO value of 0.90 is excellent, while 0.80, 0.70, 0.60, and 0.50 indicate very good, good, average, and weak values, respectively [34]. In this study, the KMO value was found to be 0.946, which is considered to be very good. The Bartlett's Test of Sphericity value was calculated as 6336.997 ($p < 0.001$). According to the Bartlett test, the data were correlated with each other. This is another indicator of suitability for factor analysis [35].

Table 3 presents the results of the Confirmatory Factor Analysis of the scale. As a result of the first level confirmatory factor analysis with a total of 14 items and five sub-dimensions and after three different modification procedures, model fit values were obtained as CMIN/DF=7.176, RMSEA=0.160, CFI=0.938, GFI=0.814, TLI=0.912, IFI=0.938, SRMR=0.043. In addition, all path coefficients of all items were statistically significant ($p < 0.001$).

Table 4 shows the descriptive statistics and reliability results of the items. While the average score obtained from item H1 was 3.07, the average score obtained from item H9 was 2.45, the average score obtained from item H11 was 2.38, and the average score obtained from item H14 was 2.94. While the average score obtained from item H2 was 2.31, the average score obtained from item H3 was 2.21. While the average score obtained from item H4 was 3.06, the average score obtained from item H7 was 3.05, and the average score obtained from item H10 was 2.91. While the average score obtained from item H5 was 3.07, the average score obtained from item H6 was 3.00, and the average score obtained from item H8 was 2.55. While the average score obtained from item H12

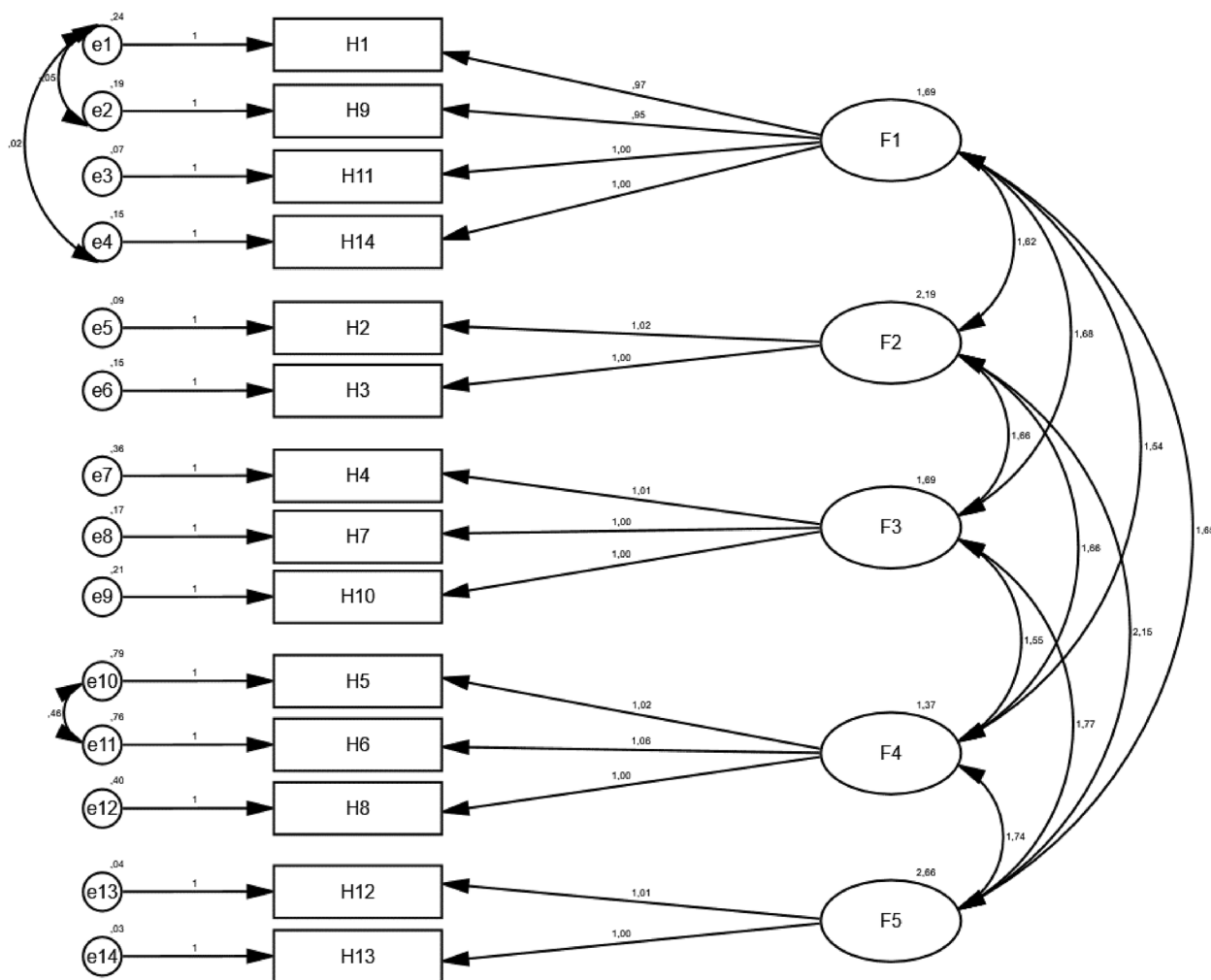


Fig. 2 Non-standard PATH coefficients. *Note: F1: Psychological well-being, F2: Physical health, F3: Autonomy, F4: Relationships with others, F5: Touching and being touched

was 2.53, the average score obtained from item H13 was 3.02.

The psychological well-being score consisted of four items; Cronbach’s Alpha value was 0.975, with high reliability. The Physical Health score consisted of 2 items; Cronbach’s Alpha value was 0.973 with high reliability. The autonomy score consisted of three items, and Cronbach’s Alpha value was found to be highly reliable at 0.952. Relationships with others score consisted of three items, and Cronbach’s Alpha value was 0.905 with high reliability. The touching and being touched scores consisted of two items; Cronbach’s Alpha value was highly reliable, with 0.993. The scale consisted of 14 items, and Cronbach’s Alpha value was 0.983, with high reliability. The scale was not summable ($F=36,732; p<0.001$).

Table 5 shows the descriptive statistics and correlation results of scale Scores. The mean Psychological

Well-Being score of the participants was 12, the mean Physical Health score was 4.83, the mean Autonomy score was 9.07, the mean Relationships with Others score was 7.57, and the mean Touching and being touched score was 5.08. There is a statistically significant positive relationship between Psychological Well-Being and Physical Health scores ($r=0.774; p<0.001$). There is a statistically significant positive and very high relationship between Psychological Well-Being and Autonomy scores ($r=0.957; p<0.001$). There is a statistically significant positive and very high relationship between Physical Health and Autonomy scores ($r=0.818; p<0.001$). A statistically significant positive and very high correlation is observed between Psychological Well-Being and Relationships with Others scores ($r=0.867; p<0.001$). There is a statistically significant positive and very high relationship between

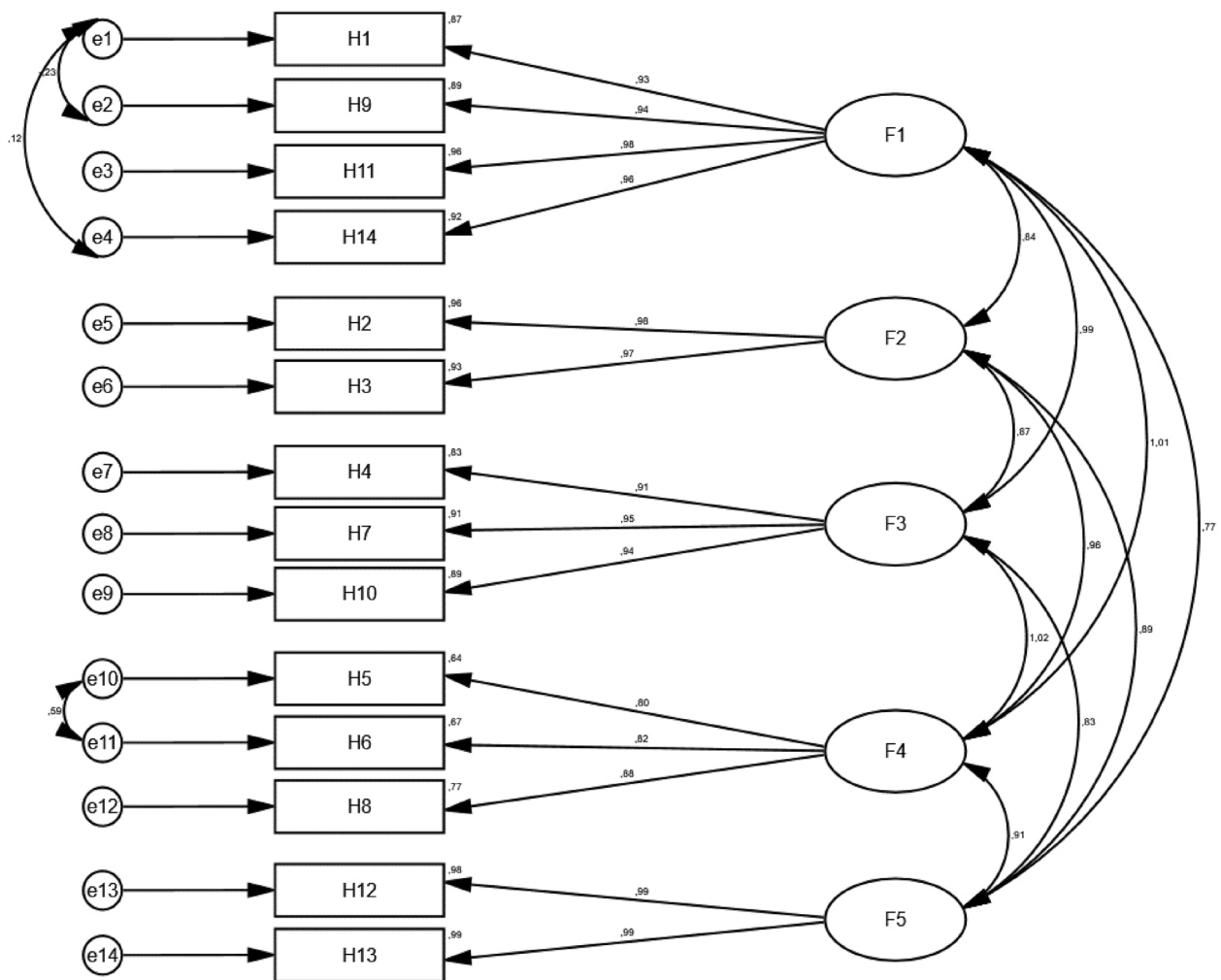


Fig. 3 Standard PATH coefficients. *Note: F1: Psychological well-being, F2: Physical health, F3: Autonomy, F4: Relationships with others, F5: Touching and being touched

Physical Health and Relationships with Others scores ($r=0.87$; $p<0.001$). There is a statistically significant positive and very high relationship between Autonomy and Relationships with Others scores ($r=0.896$; $p<0.001$). A statistically significant positive correlation exists between Psychological Well-Being and Touching and Being touched scores ($r=0.706$; $p<0.001$). There is a statistically significant positive and very high relationship between Physical Health and Touching and Being touched scores ($r=0.866$; $p<0.001$). There is a statistically significant positive high correlation between Autonomy and Touching and Being touched scores ($r=0.778$; $p<0.001$). A statistically significant positive and very high relationship exists between Relationships with Others and Touching and Being touched scores ($r=0.861$; $p<0.001$).

Discussion

It has been reported that haptonomy practice helps to increase women’s psychological well-being during pregnancy, birth, and the postpartum period and is effective in preventing mental disorders, reducing fear of childbirth, and strengthening mother-infant attachment [24–26]. In line with the literature findings, haptonomy practice constitutes one of the basic practices of midwifery care. However, the limited number of studies on the subject, especially the lack of a scale that specifically evaluates the effect of haptonomy practice on women’s well-being level, limits the field of study. In this direction, the study aims to have an idea about the validity and reliability of the Haptotherapeutic Well-Being Scale developed by Klabbers and Vingerhoets (2022) in Turkish culture and to have an idea about its use in the clinical environment [17].

Table 1 Participants' Sociodemographic and Obstetric Characteristics (n = 242)

Variables	±SD		
Age	33.89 ± 8.55 (Min: 19- Max: 56)		
		n	%
Education Status	Primary School	28	11.6
	Middle School	60	24.8
	High School	52	21.5
	University and above	102	42.1
Employment Status	Working	85	35.1
	Not working	157	64.9
Marital Status (n: 242)	Married	206	85.1
	Single	36	14.9
Income Status	Income Less Expenses	35	14.5
	Income Equals Expenses	189	78.1
	Income Exceeds Expenses	18	7.4
Family Type	Nuclear	226	93.4
	Extended	16	6.6
Health Assurance	Yes	231	95.5
	No	11	4.5
Smoking	Yes	37	15.3
	No	205	84.7
Alcohol	Yes	5	2.1
	No	237	97.9
Physical Exercise	Yes	96	39.7
	No	146	60.3
Number of Pregnancy	No pregnancy or Single	40	16.5
	1	77	31.8
	2	62	25.6
	3 and above	63	26.1
Number of Live Births	No Live Birth or Single	70	28.9
	1	56	23.1
	2	67	27.7
	3 and above	49	20.3
Number of Curettage	No curettage or Single	225	93.0
	1	12	5.0
	2	5	2.1
Number of Miscarriages	No Miscarriage or Single	211	87.2
	1	22	9.1
	2 and above	9	3.7

\bar{X} Mean

SD Standard deviation, min Minimum, max Maximum

Table 2 KMO and Bartlett's Test

Kaiser–Meyer–Olkin Measure of Sampling Adequacy		,946
Bartlett's Test of Sphericity	Approx. Chi-Square	6336,997
	df	91
	Sig	,000

In the literature, confirmatory factor analysis verifies the predetermined structure by creating a latent variable (factor) based on the changes observed through a previously created model [36, 37]. In our study, a Path Diagram was created by examining a large number of goodness-of-fit indices, factor loadings, and t-tests to test the scale in the CFA of the previously developed Haptotherapeutic Well-Being Scale [38]. The values generally examined for model fit are χ^2/df (CMIN/DF), GFI, CFI, IFI, RMR, and RMSEA [36, 39]. As a result of the primary level confirmatory factor analysis and three different modification procedures performed in our study, model fit values were determined as CMIN/DF=7.176, RMSEA=0.160, CFI=0.938, GFI=0.814, TLI=0.912, IFI=0.938, SRMR=0.043. Based on these results, it can be said that the scale has acceptable fit indices. In our study, all path coefficients of all items in the Path Diagram were statistically significant.

One of the main features sought in a measurement tool is its reliability [40]. In testing reliability, the Cronbach alpha value is used to evaluate whether the scale items measure the same construct and whether they are consistent within themselves [29, 41]. In the literature, it has been reported that the Cronbach alpha coefficient should exceed 0.70 or 0.80 [42, 43]. According to the results of the analysis, the overall Cronbach alpha coefficient of the scale was 0.98, and according to the sub-dimensions, 0.975 for psychological well-being, 0.973 for physical health, 0.952 for autonomy, 0.905 for relationships with others, 0.993 for touching and being touched. Analyses indicated that the scale was highly reliable. According to the results of our current study, the overall and subscale Cronbach's alpha coefficients were higher than the original scale [17]. In the original scale, the fact that it was conducted during the perception of COVID-19 was thought to have a limiting effect on the responses to the "touch and being touched" sub-dimensions. In the original form of the scale, it was reported that there was a moderate correlation between physical health and psychological well-being, a strong correlation between autonomy and psychological well-being, a strong correlation between relationships with others and psychological well-being, a moderate correlation between touch and being touched and psychological well-being, a moderate correlation between autonomy and physical health, a moderate correlation between autonomy and relationships with others, a moderate correlation between relationships with others and autonomy, and a moderate correlation between touch and being touched and relationships with others [17]. When scale correlations were evaluated in our study, it was determined that there was a very strong positive correlation between all sub-dimensions.

Table 3 CFA results

			β_1	β_2	S. error	Test statistic	p
H1	<--	Psychological well-being	0.972 (0.926—1,016)	0.933 (0.905 – 0.955)	0.029	33.644	<0.001
H9	<--	Psychological well-being	0.947 (0.888—1,001)	0.942 (0.911 – 0.968)	0.028	33.292	<0.001
H11	<--	Psychological well-being	0.999 (0.965—1,034)	0.981 (0.972 – 0.989)	0.023	43.048	<0.001
H14	<--	Psychological well-being	1 (1—1)	0.959 (0.938 – 0.975)			
H2	<--	Physical health	1.019 (0.981 – 1.064)	0.981 (0.964 – 0.996)	0.023	43.464	<0.001
H3	<--	Physical health	1 (1—1)	0.966 (0.947 – 0.982)			
H4	<--	Autonomy	1.008 (0.939 – 1.077)	0.908 (0.864 – 0.943)	0.038	26.449	<0.001
H7	<--	Autonomy	0.999 (0.949 – 1.052)	0.953 (0.927 – 0.974)	0.031	32.183	<0.001
H10	<--	Autonomy	1 (1—1)	0.942 (0.897 – 0.973)			
H5	<--	Relationships with Others	1.022 (0.88 – 1.175)	0.802 (0.73 – 0.868)	0.059	17.377	<0.001
H6	<--	Relationships with Others	1.059 (0.929 – 1.2)	0.818 (0.757 – 0.872)	0.059	18.001	<0.001
H8	<--	Relationships with Others	1 (1—1)	0.879 (0.824 – 0.921)			
H12	<--	Touching and being touched	1.013 (0.996 – 1.035)	0.992 (0.984 – 0.999)	0.012	82.963	<0.001
H13	<--	Touching and being touched	1 (1—1)	0.994 (0.986—1)			

β_1 : Non-standard path coefficients

β_2 : Standardized path coefficients

Table 4 Descriptive statistics and reliability results of the items

	Mean	S. deviation	Item-total correlation	Cronbach's Alpha when the item is deleted	Cronbach's Alpha
Psychological well-being					
H1	3.07	1.36	0.868	0.982	0.975
H9	2.45	1.54	0.908	0.981	
H11	2.38	1.53	0.899	0.982	
H14	2.94	1.44	0.905	0.982	
Physical health					
H2	2.31	1.50	0.852	0.982	0.973
H3	2.21	1.52	0.857	0.982	
Autonomy					
H4	3.06	1.37	0.913	0.981	0.952
H7	3.05	1.34	0.882	0.982	
H10	2.91	1.31	0.887	0.982	
Relationships with Others					
H5	3.07	1.38	0.907	0.982	0.905
H6	3.00	1.33	0.927	0.981	
H8	2.55	1.67	0.883	0.982	
Touching and being touched					
H12	2.53	1.65	0.886	0.982	0.993
H13	3.02	1.36	0.929	0.981	

TUKEY summability test ($F = 36.732, p < 0.001$), Overall Cronbach's Alpha = 0.983

In the literature, it is stated that the number of items in the scale affects Cronbach's alpha coefficient and that adding or removing items can increase reliability. It has also been reported that the internal consistency coefficient can be increased by looking at the item-total

correlations and removing negative values lower than 0.20 [36]. In our study, it was observed that the item-total correlations were positive and high, and accordingly, Cronbach's alpha coefficient did not decrease much when the item was deleted. In the literature, the significance

Table 5 Descriptive statistics and correlation results of scale scores

	Mean ± S. deviation	Median (min–max)	1	2	3	4	5
1. Psychological well-being	12 ± 5.17	12 (4–20)	1				
2. Physical health	4.83 ± 3.03	4 (2–10)	$r=0.774; p<0.001$	1			
3. Autonomy	9.07 ± 4.01	9 (3–15)	$r=0.957; p<0.001$	$r=0.818; p<0.001$	1		
4. Relationships with others	7.57 ± 4	6 (3–15)	$r=0.867; p<0.001$	$r=0.87; p<0.001$	$r=0.896; p<0.001$	1	
5. Touching and being touched	5.08 ± 3.3	4 (2–10)	$r=0.706; p<0.001$	$r=0.866; p<0.001$	$r=0.778; p<0.001$	$r=0.861; p<0.001$	1

r: Spearman's rho Correlation Coefficient

value should be greater than 0.05, and the item-total correlation coefficients should be positive and greater than 0.20 so as not to impair the scale's summability [36, 44]. In our study, although the item-total correlation coefficients were positive and greater than 0.20, according to the TUKEY summability test, it was determined that it was not suitable to obtain a total score by summing the scale item scores ($p < 0.001$).

Limitations

In addition to the strengths of the study, it has some limitations. While collecting research data through an online survey provides the opportunity to include women from every region of Türkiye, it limits the study findings by revealing bias that may arise from women who do not use social media or do not have access to technological materials that enable them to fill out the survey.

Conclusion

The high alpha coefficients of the sub-dimensions of the scale indicate that the items in the sub-dimensions are consistent with each other. According to the CFA results, the reliability of the scale was confirmed. The score of each item is evaluated from 1 to 5. The score of the psychological well-being sub-dimension is between 4 and 20, the score of the physical health sub-dimension is between 2 and 10, the score of the autonomy sub-dimension is between 3 and 15, the score of the relationships with others sub-dimension is between 3 and 15, and the score of the touching and being touched sub-dimension is between 2 and 10. It is scored out of 10. A high score from the subscales indicates a high level of psychological well-being, physical health, autonomy, relationships with others, and touch and being touched. As a result, this study determined that the Haptotherapeutic Well-Being Scale is valid, reliable, and suitable for Turkish culture. High scores obtained from the scale mean that the level of haptotherapeutic well-being is also good.

Haptotherapy helps to increase awareness of one's body and emotions. It also contributes to a change in the woman's perception of her pregnancy and a more positive attitude towards pregnancy and childbirth. In raising awareness and creating positive perceptions, the scale can also be used in clinical research, including women in support programs.

Acknowledgements

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Data transparency statement

Data and syntaxes supporting research findings are available to the corresponding author upon reasonable request. Data is not publicly available due to privacy and ethical restrictions.

Authors' contributions

Burcu Küçükaya, Hafsa Kübra Işık and Gülay Rathfisch developed the study design. Burcu Küçükaya and Hafsa Kübra Işık were responsible for patient recruitment and data collection. Burcu Küçükaya and Hafsa Kübra Işık processed the data and performed data analyses. Burcu Küçükaya, Hafsa Kübra Işık and Gülay Rathfisch interpreted the data. Burcu Küçükaya and Hafsa Kübra Işık wrote the first draft of the manuscript with support of Gülay Rathfisch. All authors critically reviewed and approved the final draft of the manuscript.

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Availability of data and materials

Data supporting research findings are available to the corresponding author upon reasonable request. Data is not publicly available due to privacy and ethical restrictions.

Declarations

Ethics approval and consent to participate

This study was conducted in accordance with relevant guidelines and regulations that guide ethical human research. Bayburt University Non-Interventional Clinical Research Ethics Committee (14.09.2023/ 14) approved this study. The authors electronically obtained informed consent from all participants and conducted according to the principles of the Declaration of Helsinki (version 2013).

Consent for publication

All participants provided written informed consent.

Competing interests

The authors declare no competing interests.

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