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**Citation:** Borona, G., Gualdana, G., Maga, G., Del Bo, E., Arrigoni, C., Brigante, L., Daniele, M., Caruso, R. & Magon, A. (2023). Breastfeeding Self-Efficacy: A Systematic Review of Psychometric Properties Using COSMIN. *Journal of Human Lactation*, 39(4), pp. 595-614. doi: 10.1177/08903344231190624

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Table 1. Description of included studies and participants' characteristics

Type of tool	First author (year)	Country	Language	Participants	Setting (timing)	
				N	Characteristics	
BSES	Dennis et al. (1999)	Canada	English	130	In-hospital breastfeeding mothers; women older than 18 years; mean age 28.7 y (18-41 years); 92.7% Caucasian women; the sample was divided equally based on parity: the parity distribution was equal among participants; 81.5% vaginal birth.	Postpartum unit at a large teaching hospital in a midsize Canadian city
	Torres et al. (2003)	Puerto Rico	Spanish	100	In-hospital breastfeeding mothers; women >18 years; mean age 27 y (19-41); Puerto Rican women; 50% multiparous (56% with previous breastfeeding experience); 63% vaginal birth; at least 37 weeks gestation; single and low-risk pregnancy.	Postpartum unit at a large private hospital in San Juan, Puerto Rico (June 2001)
	Creedy et al. (2003)	Australia	English	300	Pregnant women intending to breastfeed; women >18 years; mean age 28.5 years (18-41); 86% Caucasian women; at least 36 weeks gestation; single and low-risk pregnancy.	Antenatal clinic of a large teaching hospital in Brisbane, Australia (January – July 2001)
	Dai et al. (2003)	China	Mandarin	186	In-hospital breastfeeding mothers; women >18 years; mean age 27.76 years (21-39); all Mandarin literate; all primiparous; 70% vaginal birth; at least 37 weeks gestation; single and low-risk pregnancy.	A large university-based gynecologic and obstetric hospital in Tianjin City, China (September 2001 – January 2002)
	Oriá et al. (2009)	Brazil	Portuguese	117	Pregnant women intending to breastfeed; women's mean age 25.8 years (13-42); 47.7%	A large teaching health center clinic (July – October 2007)

multiparous (91.5% with previous breastfeeding experience); at least 30 weeks gestation.

Eksioglu et al. (2011) Turkey Turkish 165 All breastfeeding women; women >18 years; mean age 27.32 years (20-39); 55% primiparous; 53.3% vaginal birth; at least 37 weeks gestation; single and low-risk pregnancy. Two Mother and Child health-care units in Altındağ district, Izmir, Turkey (September 2006 – February 2007)

Dennis et al. (2003) Canada English 491 All breastfeeding mothers; women >18 years; mean age 29 years (18-44); 45% primiparous; 76% vaginal birth; at least 37 weeks gestation; single pregnancy. British Columbia, near Vancouver (April 2001 – January 2002)

Wutke et al. (2007) Poland Polish 105 In-hospital breastfeeding mothers; women >16 years; mean age 28 years (17-42); 70% primiparous; 55% vaginal birth; at least 37 weeks gestation; single pregnancy. Five urban hospitals in Lodz, Poland (June – August 2004)

Gregory et al. (2008) U.K. English 165 In-hospital breastfeeding mother; women older than 18 years; 52% Caucasian, 36% Southeast Asian; 51% primiparous; 63% vaginal birth; at least 36 weeks gestation when they gave birth. Women's Hospital in Edgbaston, Birmingham (January – March 2005)

BSES-SF

Tokat et al. (2010) Turkey Turkish 194 Pregnant women in their third trimester intending to breastfeed: women >18 years; mean age 25.9 years (19-36); 50% primiparous; single pregnancy. Postnatal breastfeeding mothers in their first week postpartum: women >18 years; mean age 24.4 years (18-34); 50% primiparous; 69.3% vaginal birth; at least 37 weeks gestation; single pregnancy. Two public and two private hospitals in Izmir, Turkey (September – November 2006)

McCarter-Spaulding et al. (2010)	USA	English	153	In-hospital breastfeeding mothers; Black women of African descent; women >18 years; single pregnancy; at least 37 weeks gestation.	Three maternity units of a large urban teaching hospital in the North-Eastern US (January – June 2006)
Zubaran et al. (2016)	Brazil	Portuguese	89	In-hospital breastfeeding mother; women's mean age was 25.4 years (14-42 years); 59% vaginal birth; single and low-risk pregnancy.	University of Caxias do Sul general hospital in Southern Brazil (December 2004 – September 2005)
Dennis et al. (2011)	Canada	English	103	Pregnant adolescents considering breastfeeding; mean age 16.8 years (15-19); single pregnancy; 95% vaginal birth; healthy newborns; at least 34 weeks gestation when recruited; at least 37 weeks gestation when they gave birth."	Two prenatal clinics at a tertiary care setting in Manitoba, Canada (October 2004 – October 2005)
Wan-Yim et al. (2012)	China	Hong Kong Chinese	176	In-hospital breastfeeding mothers who were 48-72h postpartum; women's mean age was 16.8 years (18-42 years); 50% primiparous.	University teaching hospital in Hong Kong (September 2006 – June 2007)
Oliver-Roig et al. (2012)	Spain	Spanish	135	In-hospital breastfeeding mothers recruited on second day postpartum; women >18 years; mean age 30.1 years; 49% primiparous; 80% vaginal birth; single pregnancy; at least 36 weeks gestation.	One public hospital in Orihuela, Spain
Bosnjak et al. (2012)	Croatia	Croatian	190	In-hospital breastfeeding mothers; women older than 18 years; mean age was 30 years (18-41 years); 52% primiparous; 84% vaginal birth; single and low-risk pregnancy; healthy baby.	Sveti Duh University Hospital in Zagreb, Croatia
McQueen et al. (2013)	Australia	English	130	In-hospital Aboriginal breastfeeding mothers; women's mean age was 24.5 (SD=6.1 Years); 35% primiparous; single pregnancy; at term delivery; healthy infant.	Urban tertiary care hospital and a rural community hospital in north-western Ontario (July 2010 – March 2011)

Gerhardsson et al. (2014)	Sweden	Swedish	120	Women recruited during routine follow-up visit in hospital, 1st week postpartum; mean age 31 years (21-43); 34% primiparous; 37-41 weeks' gestation; healthy infant.	University hospital (October – November 2012)
Nanishi et al. (2015)	Japan	Japanese	378	In-hospital breastfeeding mothers; women's older than 16 years; mean age was 30.8 years; 42% primiparous; 87% vaginal birth; single pregnancy.	Two non-Baby-Friendly Hospitals in Japan (August 2010 – January 2011)
Petrozzi et al. (2016)	Italy	Italian	122	In-hospital breastfeeding mothers; women's mean age was 32.2 years (17-42 years); 41% primiparous 84% vaginal delivery; healthy baby.	Versilia Hospital, Lido di Camaiore, Italy (February – August 2011)
Wan Yim et al. (2016)	China	Mandarin	562	In-hospital breastfeeding mothers; women's older than 18 years; mean age was 29.7 years; 81% primiparous; 44.5% vaginal birth; at least 37 weeks gestation when they gave birth; single pregnancy, healthy baby.	In a teaching hospital in Guangzhou (January – December 2012)
Brandao et al. (2018)	Portugal	Portuguese	373	Pregnant women recruited at 30-34 weeks gestational; women older than 17 years; mean age was 30 years (range 18-44 years); 80% primiparous; single pregnancy.	Two public hospitals in the Northern Portugal (October 2012 – May 2014)
Amini et al. (2019)	Iran	Persian	379	Breastfeeding mothers referring to a health center for neonatal vaccination; women older than 16 years; mean age was 30.13 years (range 16-45 years); 58% primiparous.	Health center for neonatal vaccination in Tehran, Iran (July – September 2017)
Asgarian et al. (2019)	Iran	Farsi	174	In-hospital breastfeeding mothers; women's mean age was 28.33 years (range 16-42 years); 55% primiparous.	Izadi teaching hospital in Qom, Iran (November – December 2015)

	Basu et al. (2020)	India	Hindi	210	Mother of an infant child (aged below 1 year) who had successfully initiated breastfeeding to their infants for at least 15 days since birth; adult women older than 18 years; mean age was 25.95 years; 47% primiparous.	Public health center located in the North-East district of Delhi (January – June 2019)
	Iliadou et al. (2020)	Greece	Greek	173	Pregnant women who received routine care at the department above 32 weeks gestational age; women older than 18 years; mean age was 32.6 years; all nulliparous.	Outpatient Maternity Department of a large tertiary maternity hospital in Athens, Greece (May – December 2016)
	Economou et al. (2021)	Cyprus (Greece)	Greek	284	Mothers who gave birth to a live infant (above 37 weeks gestational); women older than 18 years;; 49% primiparous; 44% vaginal birth; single and multiple pregnancy.	24 private clinics in Cyprus (during a period of 6-8 weeks)
	Radwan et al. (2022)	United Arab Emirates	Arabic	457	Women older than 18 years; mean age was 31.38 years (range 18-45 years); single pregnancy, healthy baby; 23% primiparous.	Ten private and public hospitals. Abu Dhabi, Dubai, Sharjah and Fujairah (February 2018 – July 2019)
P-BSES	Wells et al. (2006)	Georgia (USA)	English	279	Pregnant women in any stage of pregnancy; women's mean age was 22 years (range 15-42 years)	Prenatal care clinic and maternal office at a large public hospital in Atlanta (August 1998 – July 1999)
	Pineiro-Albero et al. (2012)	Spain	Spanish	234	Pregnant women in their third trimester of pregnancy; women's mean age was 30.5 years (range 16-44 years); 56% nulliparous; single pregnancy.	A public hospital in Yecla, Spain
	Aydin et al. (2018)	Turkey	Turkish	326	Pregnant women in their third trimester of pregnancy; women's age range was 19-34 years; low-risk pregnancy.	Erzurum Nene Hatun Maternity Hospital and Atatürk University Research Hospital's Obstetrics and Gynecology Clinic (December 2014 – September 2015)

	Hazar et al. (2018)	Turkey	Turkish	200	Pregnant women in their third trimester of pregnancy (29 weeks and above); women's mean age was 27.9 years.	Clinic of Pamukkale University Health Research and Application Center and Denizli Public Hospital (April – June 2015)
PREPBS	McKinley et al. (2019)	USA	English	124	Pregnant women; women older than 18 years; mean age was 26.2 years (range 18-38 years); 33% nulliparous; single and low-risk pregnancy.	University Medical Center in southern United States (seven weeks in Spring 2017)
P-BSES-SF	Silva-Tubio et al. (2021)	Spain	Spanish	1183	Pregnant women in their third trimester (28-42 weeks); women's mean age was 31.74 years; 53% nulliparous; 76% vaginal birth; single pregnancy, healthy and full-term new-borns.	Six hospitals in eastern Spain
BSES-EBF	Boateng et al. (2019)	Uganda	Acholi and Langi	239	Pregnant women; women's mean age was 25.2 years (range 16-42 years); 23% primiparous; single pregnancy.	Antenatal Care clinic at the Gulu Regional Referral Hospital, Uganda (October 2012 – January 2015)
BPEBI	Cleveland et al. (2005)	USA	English	479	Volunteer women between 17 and 59 years; mean age 26 years; 25% previously had been pregnant; 2% currently pregnant.	West Virginia University Morgantown (Spring Semester of the 2000)

Table 2. Description of tools and measurement properties reported

Type of tool	References	Number of items and domains	Response option	Range of score	Time of administration	Psychometric proprieties reported
BSES	Dennis et al. (1999)	32 items Two dimensions (Breastfeeding technique and Intrapersonal thoughts)	Likert scale (1-5, with 1 not at all confident and 5 always confident)	Range score from 43 to 215. 168.5 (SD 25.3) was the mean breastfeeding self-efficacy score obtained.	BSES was completed after admission at the Postpartum unit. (self-administered). At six postnatal weeks, women were telephoned to determine their infants' feeding status.	Content validity Structural validity Internal consistency Hypotheses testing for construct validity Criterion validity
	Torres et al. (2003)	32 items Two dimensions (Intrapersonal thoughts and Technique)	5 point-Likert-type scale	BSES mean score was 131.8 (SD 22.07)	BSES and a demographic questionnaire were self-administered before hospital discharge (usually within 48 hours from birth).	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
	Creedy et al. (2003)	31 items Two dimensions (Intrapersonal thoughts and Technique)	5 point-Likert-type scale	Range score: 31-155. Antenatal BSES mean score: 126.16 (SD 23.85). 1-week BSES mean score: 139.86 (SD 23.87). 4-week BSES mean score: 142.26 (SD 21.25)	BSES and HHLS were self-administered antenatally while waiting for a clinic appointment. Then, all participants were telephoned at one week and four months postpartum to determine the infant feeding method and readminister the BSES and the HHLS.	Structural validity Internal consistency Reliability Hypotheses testing for construct validity Criterion validity
	Dai et al. (2003)	32 items Two Dimensions (Technique and	5 point-Likert-type scale	Range score 70-150. BSES mean score was 118.78 (SD=16.53)	BSES, EPSD, and a demographic questionnaire were self-administered before hospital discharge. Women were telephoned	Content validity Structural validity Internal consistency Cross-cultural validity

		Intrapersonal Thoughts)			at four and eight postnatal weeks to obtain information regarding infant feeding status and to readminister the EPDS.	Hypotheses testing for construct validity Criterion validity
Oriá et al. (2009)	33 items Two Dimensions (Technique and Intrapersonal Thoughts)	5 point-Likert-type scale (1=totally disagree 5=totally agree)	(Not reported)		BSES and a demographic questionnaire were completed by oral interviews during a prenatal visit.	Content validity Structural validity Internal consistency Cross-cultural validity Reliability Hypotheses testing for construct validity
Eksioglu et al. (2011)	33 items Two dimensions (Intrapersonal thoughts and Technique)	5 point-Likert-type scale	BSES mean score was 131.8 (SD=22.07). The 1-week postpartum BSES mean score was 151.22; the 4-week postpartum BSES mean score was 154.99; the 8-week postpartum BSES mean score was 155.52.		BSES and sociodemographic questions were administered at the first postnatal week. Then the BSES was administered at four and eight postnatal weeks. Interviews were conducted in the mothers' own homes at a mutually convenient time.	Content validity Structural validity Internal consistency Cross-cultural validity Reliability Criterion validity
BSES-SF	Dennis et al. (2003)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 55.88 (SD=10.85)	Women were recruited antenatally and postnatally. BSES-SF was administered at one, four and eight postnatal weeks.	Structural validity Internal consistency Hypotheses testing for construct validity Criterion validity

Wutke et al. (2007)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 55.5	BSES-SF was administered after birth before hospital discharge, then data collection continued via telephone at eight and 16 postnatal weeks.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
Gregory et al. (2008)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 46.46 (SD=12.75)	BSES-SF was administered during hospital staying and at four postnatal weeks.	Structural validity Internal consistency Hypotheses testing for construct validity Criterion validity
Tokat et al. (2010)	14 items One dimension	5 point-Likert-type scale	Antenatally, BSES-SF mean score was 58.52 antenatally (SD=8.80) Postnatally, BSES-SF mean score was 60.09 (SD=8.2)	BSES-SF was administered antenatally during the third trimester and, postnatally in the first postnatal week.	Content validity Structural validity Internal consistency Cross-cultural validity Reliability Hypotheses testing for construct validity Criterion validity
McCarter-Spaulding et al. (2010)	14 items One dimension	5 point-Likert-type scale	(Not reported)	BSES-SF was completed before hospital discharge.	Structural validity Internal consistency Hypotheses testing for construct validity Criterion validity
Zubaran et al. (2016)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 63.6 (SD=6.22)	BSES-SF was completed before hospital discharge, then between the second and the 12 <sup>th</sup> postnatal week.	Content validity Structural validity Internal consistency Cross-cultural validity

					Hypotheses testing for construct validity Criterion validity
Dennis et al. (2011)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 51.72 (SD=7.69)	BSES-SF was administered at 34 weeks gestation and then at one and four postnatal weeks.	Structural validity Internal consistency Reliability Hypotheses testing for construct validity Criterion validity
Wan-Yin et al. (2012)	14 items One dimension	5 point-Likert-type scale	Range score 17-69 BSES-SF mean score was 41.1 (SD=10.7)	BSES-SF was completed before hospital discharge at 48-72 hours postpartum.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
Oliver-Roig et al. (2012)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 51.94 (SD=11.22)	BSES-SF was completed before hospital discharge during the second postnatal day.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
Bosnjak et al. (2012)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 55 (SD=7)	BSES-SF was completed before hospital discharge, then at one and six postnatal months.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity

McQueen et al. (2013)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 51.32 (SD=11.74)	BSES-SF was completed before hospital discharge at 48 hours postpartum, then at four and eight postnatal weeks.	Structural validity Internal consistency Hypotheses testing for construct validity Criterion validity
Gerhardsson et al. (2014)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 57.4 (SD=8.8)	BSES was completed during the first postnatal week at the time of the routine follow-up visit.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
Nanishi et al. (2015)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 42.39 (SD=10.57)	BSES-SF was completed before hospital discharge.	Internal consistency Criterion validity
Petrozzi et al. (2016)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 54.8 (SD=9.4)	BSES-SF was completed before hospital discharge at 48-72 hours postpartum.	Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
Wan Yin et al. (2016)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 47.3 (SD=10.5)	BSES-SF was completed before hospital discharge within 72 hours postpartum.	Content validity Structural validity Internal consistency Criterion validity
Brandao et al. (2018)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 57.93 (SD=7.90)	BSES-SF was administered antenatally at 30-34 weeks gestational.	Content validity Structural validity Internal consistency Cross-cultural validity

					Hypotheses testing for construct validity Criterion validity
Amini et al. (2019)	14 items One dimension	5 point-Likert-type scale	Range score 14-69. BSES-SF mean score was 50.80 (SD=8.91).	BSES-SF was administered postnatally in a health center for neonatal vaccination.	Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
Asgarian et al. (2019)	14 items One dimension	5 point-Likert-type scale	Range score 24-70. BSES-SF mean score was 54.32 (SD=10.50)	BSES-SF was completed during the first postnatal day.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity
Basu et al. (2020)	14 items Two dimensions	5 point-Likert-type scale	BSES-SF mean score was 54.7 (SD=16.1).	BSES-SF was administered to mothers of infant under one year.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
Iliadou et al. (2020)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score before birth was 44.2 (SD=11.2). 3 days after birth BSES-SF mean score was 47.7 (SD=12.1).	BSES-SF was administered antenatally (> 32 weeks gestational) and three days after birth.	Structural validity Internal consistency Cross-cultural validity Criterion validity

	Economou et al. (2021)	14 items Two dimensions	5 point-Likert-type scale	(Not reported)	BSES-SF was assessed 24-48 hours after birth and at the first postnatal month.	Content validity Structural validity Internal consistency Cross-cultural validity Reliability Hypotheses testing for construct validity Criterion validity
	Radwan et al. (2022)	14 items One dimension	5 point-Likert-type scale	BSES-SF mean score was 52.22 (SD=11.93)	BSES-SF was completed immediately postpartum while still at the maternity ward.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
P-BSES	Wells et al. (2006)	20 items One dimension	5 point-Likert-type scale	(Not reported)	P-BSES was completed during pregnancy.	Content validity Structural validity Internal consistency Hypotheses testing for construct validity
	Pineiro-Albero et al. (2012)	20 items Four dimensions	5 point-Likert-type scale	P-BSES mean score was 72.32 (SD=13.36)	P-BSES was completed in the third trimester of pregnancy.	Content validity Structural validity Internal consistency Cross-cultural validity Hypotheses testing for construct validity Criterion validity
	Aydin et al. (2018)	20 items One dimension	5 point-Likert-type scale	Range score 48-95. P-BSES mean score was 73.5 (SD=8.0)	P-BSES was completed in the third trimester of pregnancy, then retest after two weeks.	Content validity Structural validity Internal consistency

						Cross-cultural validity Reliability
	Hazar et al. (2018)	19 items Four dimensions	5 point-Likert-type scale	(Not reported)	P-BSES was completed in the third trimester of pregnancy.	Content validity Structural validity Internal consistency Cross-cultural validity
PREPBS	McKinley et al. (2019)	39 items Four dimensions	10 point-response scale	P-BSES mean score was 299.5.	P-BSES was completed during pregnancy.	Content validity Structural validity Internal consistency Reliability Hypotheses testing for construct validity Criterion validity
P-BSES-SF	Silva-Tubio et al. (2021)	12 items Three dimensions	5 point-Likert-type scale	PBSES-SF mean score was 43.37 (SD=8.58)	P-BSES was completed in the third trimester of pregnancy, then retested, including the BSES-SF, during postpartum hospitalization.	Structural validity Internal consistency Reliability Hypotheses testing for construct validity Criterion validity
BSES-EBF	Boateng et al. (2019)	9 items Two dimensions	5 point-Likert-type scale	(Not reported)	BSES-EBF was completed one and three months after births.	Content validity Structural validity Internal consistency Reliability Hypotheses testing for construct validity Criterion validity
BPEBI	Cleveland et al. (2005)	27 items Five dimensions	Visual analogue scale line that is 100 millimetres	(Not reported)	BPEBI was completed by volunteers randomly selected from	Content validity Structural validity Internal consistency

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be marked from  
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female students at a land-grant  
university and returned by mail.

Hypotheses testing for  
construct validity

Table 3. Methodological quality of measurement properties and quality of results per study

First author (year)	Content Validity		Structural Validity		Internal consistency		Cross-cultural Validity		Reliability		Hypotheses testing		Criterion Validity		Measurement Error	
	M	Q	M	Q	M	Q	M	Q	M	Q	M	Q	M	Q	M	Q
<b>BSES</b>																
Dennis et al. (1999) <i>English version, Canadian population</i>	D	+	A	+	I	?	N	?	N	?	A	+	I	?	N	?
Torres et al. (2003) <i>Spanish version</i>	D	+	A	+	I	?	D	?	N	?	V	+	I	?	N	?
Creedy et al. (2003) <i>English version, Australian population</i>	N	-	A	+	I	?	N	?	A	?	V	+	I	?	N	?
Dai et al. (2003) <i>Mandarin version</i>	D	+	A	-	I	?	D	?	N	?	V	?	I	?	N	?
Oriá et al. (2009) <i>Portuguese version</i>	D	+	D	+	V	+	D	?	A	+	V	+	N	?	N	?
Eksioglu et al. (2011) <i>Turkish version</i>	D	+	A	-	I	?	D	?	A	-	N	?	I	?	N	?
<b>BSES-SF</b>																
Dennis et al. (2003) <i>English version, British population</i>	N	?	V	+	A	+	N	?	N	?	A	+	I	?	N	?

Wutke et al. (2007) <i>Polish version</i>	D	+	D	?	V	+	A	?	N	?	V	+	I	?	N	?
Gregory et al. (2008) <i>English version, multi-ethnic English population</i>	N	?	D	?	V	+	N	?	N	?	A	+	I	?	N	?
Tokat et al. (2010) <i>Turkish version</i>	D	+	D	?	V	+	D	?	D	?	A	+	I	?	N	?
McCarter-Spaulling et al. (2010) <i>English version, American Black women</i>	N	?	A	?	V	+	N	?	N	?	V	+	I	?	N	?
Zubaran et al. (2016) <i>Portuguese version, Brazilian population</i>	D	+	D	+	V	+	A	?	N	?	V	-	I	?	N	?
Dennis et al. (2011) <i>English version, Canadian population</i>	N	?	V	+	V	+	N	?	A	?	V	+	I	?	N	?
Wan-Yim et al. (2012) <i>Cantonese version</i>	D	+	V	?	V	+	D	?	N	?	V	+	V	+	N	?
Oliver-Roig et al. (2012) <i>Spanish version</i>	D	+	A	?	V	+	A	?	N	?	V	+	I	?	N	?
Bosnjak et al. (2012) <i>Croatia version</i>	D	+	D	-	V	+	A	?	N	?	V	+	I	?	N	?
McQueen et al. (2013)	N	?	V	+	V	+	N	?	N	?	V	+	I	?	N	?

*English version,  
Aboriginal women*

Gerhardsson et al. (2014) <i>Sweden version</i>	D	+	A	-	V	+	A	?	N	?	V	+	A	?	N	?
Nanishi et al. (2015) <i>Japanese version</i>	N	?	N	?	V	+	N	?	N	?	N	?	V	+	N	?
Petrozzi et al. (2016) <i>Italian version</i>	N	?	A	?	V	+	A	?	N	?	A	?	V	+	N	?
Wan-Yim et al. (2016) <i>Mandarin version</i>	D	+	V	?	V	+	N	?	N	?	N	?	I	?	N	?
Brandao et al. (2018) <i>Portuguese version, Portuguese population</i>	D	+	A	+	I	?	A	?	N	?	V	+	I	?	N	?
Amini et al. (2019) <i>Iranian version</i>	N	?	V	?	V	+	A	?	N	?	A	?	N	?	N	?
Asgarian et al. (2019) <i>Irian-Farsi version</i>	D	?	A	-	V	+	A	?	N	?	A	-	N	?	N	?
Iliadou et al. (2020) <i>Greek version</i>	N	?	V	+	V	+	D	?	N	?	N	?	I	-	N	?
Economou et al. (2021) <i>Greek–Cyprus version</i>	D	?	V	+	V	+	A	?	D	-	A	+	V	+	N	?
Basu et al. (2020) <i>Hindi version</i>	D	?	V	+	I	?	D	?	N	?	A	+	D	?	N	?

Radwan et al. (2022) <i>Arabic version</i>	A	?	V	+	V	+	A	?	N	?	A	+	A	+	N	?
<b>P-BSES</b>																
Wells et al. (2006) <i>English version</i>	D	-	A	-	V	+	N	?	N	?	A	+	N	?	N	?
Pineiro-Albero et al (2012) <i>Spanish version</i>	D	+	V	+	V	+	A	?	N	?	V	+	I	?	N	?
Aydin et al. (2018) <i>Turkish version</i>	D	+	V	-	V	+	A	?	D	+	N	?	N	?	N	?
Hazar et al. (2018) <i>Turkish version</i>	V	-	V	+	V	+	A	?	N	?	N	?	N	?	N	?
<b>PREPBS</b>																
McKinley et al. (2019) <i>English version</i>	D	+	A	+	V	+	N	?	D	+	A	+	A	-	N	?
<b>P-BSES-SF</b>																
Silva-Tubio et al. (2021) <i>Spanish version</i>	N	?	V	-	V	+	N	?	D	?	A	+	V	+	N	?
<b>BSES-EBF</b>																
Boateng et al. (2019) <i>Acholi and Langi version</i>	D	-	V	+	V	+	N	?	A	-	V	+	A	+	N	?
<b>BPEBI</b>																

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Cleveland et al. (2005)  
*English version*

D + A + I - N ? N ? V + N ? N ?

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Note. M = Methodological quality: V = Very good; A = Adequate; D = Doubtful; I = Inadequate; N = Not applicable.  
Q = Quality of the measurement properties: sufficient (+), insufficient (-) or indeterminate (?).

Table 4. Rating and grading

Type of tool (n of studies)	Content Validity		Structural Validity		Internal consistency		Cross-cultural Validity		Reliability		Hypotheses testing for construct validity		Criterion Validity	
	Rating	QOE	Rating	QOE	Rating	QOE	Rating	QOE	Rating	QOE	Rating	QOE	Rating	QOE
BSES (n=6)	+	Moderate	+	Moderate	+	Low	?	NA	+/-	NA	+	Moderate	?	NA
BSES-SF (n=22)	+	Moderate	+	Moderate	+	High	?	NA	+/-	NA	+	Moderate	+	High
P-BSES (n=4)	+	Moderate	+	Moderate	+	High	?	NA	+	Moderate	+	Moderate	+/-	NA

Note.

Overall quality: sufficient (+); insufficient (-); inconsistent (+/-); indeterminate (?); Not applicable (NA)

Grading quality of evidence = QOE: High; Moderate; Low; Very low – according to modified GRADE approach

(a) Content Validity [BSES<sub>(n)</sub>=5; BSESE-SF<sub>(n)</sub>=13; P-BSES<sub>(n)</sub>=2]

(b) Structural Validity [BSES<sub>(n)</sub>=5; BSESE-SF<sub>(n)</sub>=16; P-BSES<sub>(n)</sub>=4]

(c) Internal Consistency [BSES<sub>(n)</sub>=6; BSESE-SF<sub>(n)</sub>=20; P-BSES<sub>(n)</sub>=4]

(d) Cross-cultural validity [BSES<sub>(n)</sub>=4; BSESE-SF<sub>(n)</sub>=15; P-BSES<sub>(n)</sub>=3]

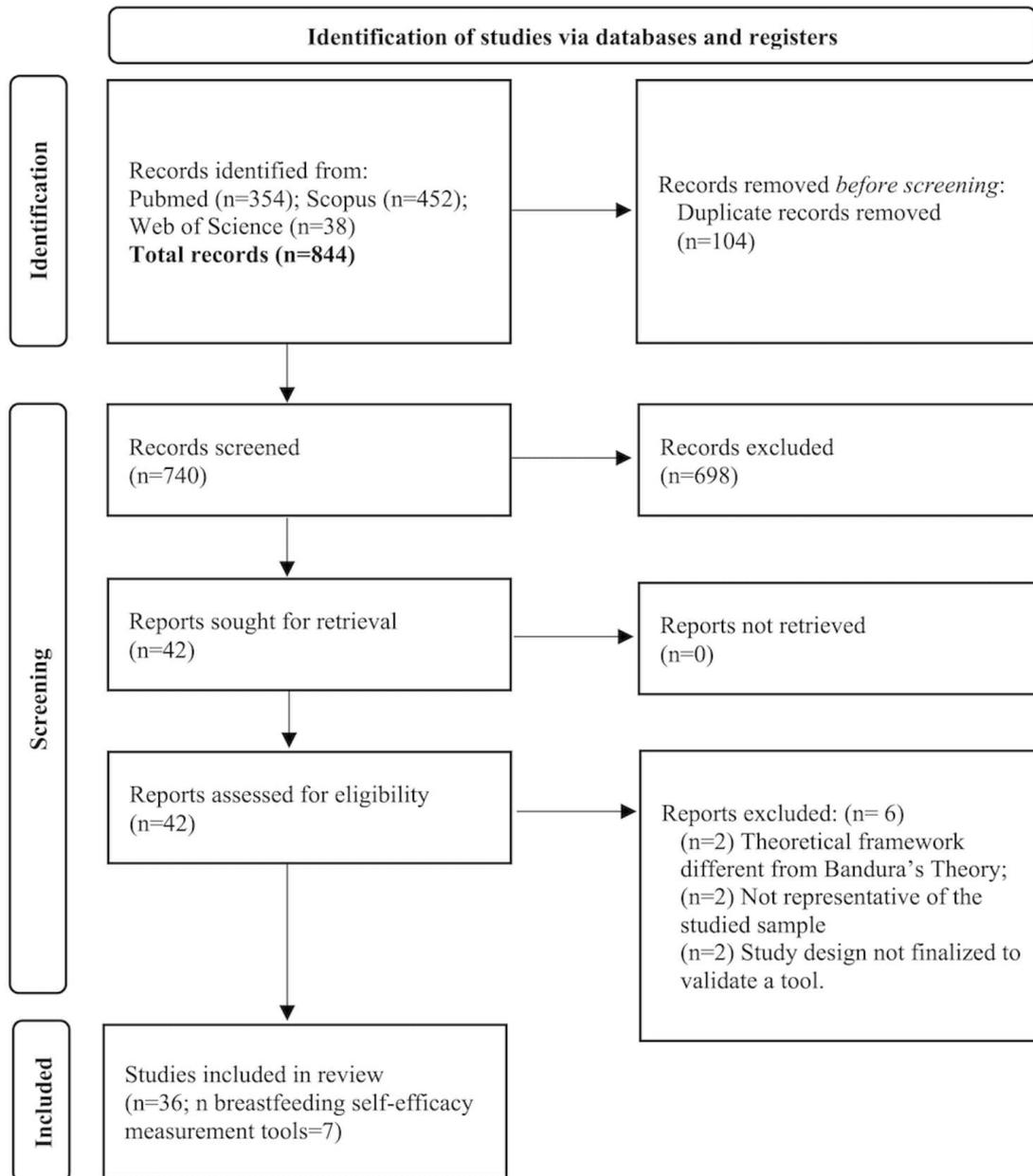
(e) Reliability [BSES<sub>(n)</sub>= 6; BSESE-SF<sub>(n)</sub>= 22; P-BSES<sub>(n)</sub>= 2]

(f) Hypotheses testing [BSES<sub>(n)</sub>=4; BSESE-SF<sub>(n)</sub>= 17; P-BSES<sub>(n)</sub>=2]

(g) Criterion Validity [BSES<sub>(n)</sub>=6; BSESE-SF<sub>(n)</sub>=5; P-BSES<sub>(n)</sub>=2]

BSES = Breastfeeding Self-Efficacy Scale; BSES-SF = Breastfeeding Self-Efficacy Scale – Short Form; P-BSES = Prenatal Breastfeeding Self-Efficacy Scale

**Figure 1. PRISMA Flow Diagram**



## Supplementary File 1. Literature search strategy

Databases	Search queries (Last updated on July 2022)	Records
PubMed	<p>((("Self Efficacy"[Mesh] OR efficacy, self) AND ("Breast Feeding"[Mesh] co feeding, breast OR breastfeeding OR breast feeding, exclusive OR exclusive breast feeding OR breastfeeding, exclusive OR exclusive breastfeeding)) AND ((instrumentation[sh] OR methods[sh] OR "Validation Studies"[pt] OR "Comparative Study"[pt] OR "psychometrics"[MeSH] OR psychometr*[tiab] OR clinimetr*[tw] OR clinometr*[tw] OR "outcome assessment (health care)"[MeSH] OR "outcome assessment"[tiab] OR "outcome measure*[tw] OR "observer variation"[MeSH] OR "observer variation"[tiab] OR "Health Status Indicators"[Mesh] OR "reproducibility of results"[MeSH] OR reproducib*[tiab] OR "discriminant analysis"[MeSH] OR reliab*[tiab] OR unreliab*[tiab] OR valid*[tiab] OR "coefficient of variation"[tiab] OR coefficient[tiab] OR homogeneity[tiab] OR homogeneous[tiab] OR "internal consistency"[tiab] OR (cronbach*[tiab] AND (alpha[tiab] OR alphas[tiab])) OR (item[tiab] AND (correlation*[tiab] OR selection*[tiab] OR reduction*[tiab])) OR agreement[tw] OR precision[tw] OR imprecision[tw] OR "precise values"[tw] OR test-retest[tiab] OR (test[tiab] AND retest[tiab]) OR (reliab*[tiab] AND (test[tiab] OR retest[tiab])) OR stability[tiab] OR interrater[tiab] OR inter-rater[tiab] OR intrarater[tiab] OR intrarater[tiab] OR intertester[tiab] OR inter-tester[tiab] OR intratester[tiab] OR intra-tester[tiab] OR interobserver[tiab] OR inter-observer[tiab] OR intraobserver[tiab] OR intra-observer[tiab] OR intertechnician[tiab] OR inter-technician[tiab] OR intratechnician[tiab] OR intra-technician[tiab] OR interexaminer[tiab] OR inter-examiner[tiab] OR intraexaminer[tiab] OR intra-examiner[tiab] OR interassay[tiab] OR inter-assay[tiab] OR intraassay[tiab] OR intra-assay[tiab] OR interindividual[tiab] OR inter-individual[tiab] OR intraindividual[tiab] OR intra-individual[tiab] OR interparticipant[tiab] OR inter-participant[tiab] OR intraparticipant[tiab] OR intra-participant[tiab] OR kappa[tiab] OR kappa's[tiab] OR kappas[tiab] OR repeatab*[tw] OR ((replicab*[tw] OR repeated[tw]) AND (measure[tw] OR measures[tw] OR findings[tw] OR result[tw] OR results[tw] OR test[tw] OR tests[tw])) OR generaliza*[tiab] OR generalisa*[tiab] OR concordance[tiab] OR (intraclass[tiab] AND correlation*[tiab]) OR discriminative[tiab] OR "known group"[tiab] OR "factor analysis"[tiab] OR "factor analyses"[tiab] OR "factor structure"[tiab] OR "factor structures"[tiab] OR dimension*[tiab] OR subscale*[tiab] OR (multitrait[tiab] AND scaling[tiab] AND (analysis[tiab] OR analyses[tiab])) OR "item discriminant"[tiab] OR "interscale correlation*" [tiab] OR error[tiab] OR errors[tiab] OR "individual variability"[tiab] OR "interval variability"[tiab] OR "rate variability"[tiab] OR (variability[tiab] AND (analysis[tiab] OR values[tiab])) OR (uncertainty[tiab] AND (measurement[tiab] OR measuring[tiab])) OR "standard error of measurement"[tiab] OR sensitiv*[tiab] OR responsive*[tiab] OR (limit[tiab] AND detection[tiab]) OR "minimal detectable concentration"[tiab] OR interpretab*[tiab] OR ((minimal[tiab] OR minimally[tiab] OR clinical[tiab] OR clinically[tiab]) AND (important[tiab] OR significant[tiab] OR detectable[tiab]) AND (change[tiab] OR difference[tiab])) OR (small*[tiab] AND (real[tiab] OR detectable[tiab]) AND (change[tiab] OR difference[tiab])) OR "meaningful change"[tiab] OR "ceiling effect"[tiab] OR "floor effect"[tiab] OR "Item response model"[tiab] OR IRT[tiab] OR Rasch[tiab] OR "Differential item functioning"[tiab] OR DIF[tiab] OR "computer adaptive testing"[tiab] OR "item bank"[tiab] OR "cross-cultural equivalence"[tiab])))) NOT (("addresses"[Publication Type] OR "biography"[Publication Type] OR "case reports"[Publication Type] OR "comment"[Publication Type] OR "directory"[Publication Type] OR "editorial"[Publication Type] OR "festschrift"[Publication Type] OR "interview"[Publication Type] OR "lectures"[Publication Type] OR "legal cases"[Publication Type] OR "legislation"[Publication Type] OR "letter"[Publication Type] OR "news"[Publication Type] OR "newspaper article"[Publication Type] OR "patient education handout"[Publication Type] OR "popular works"[Publication Type] OR "congresses"[Publication Type] OR "consensus development conference"[Publication Type] OR "consensus development conference, nih"[Publication Type] OR "practice guideline"[Publication Type]) NOT ("animals"[MeSH Terms] NOT "humans"[MeSH Terms]))</p>	N=354

<b>Scopus</b>	TITLE-ABS-KEY ( ( breastfeeding OR breast-feeding ) AND ( self-efficacy ) AND ( instrument OR scale OR measurement OR questionnaire ) )	N=452
<b>Web Of Science (WOS)</b>	<p># 4 38 #1 AND #2 AND #3 Editions = A&amp;HCI , BKCI-SSH , BKCI-S , CCR-EXPANDED , ESCI , IC , CPCI-SSH , CPCI-S , SCI-EXPANDED , SSCI</p> <p>#3 597,049 ((TI=((questionnaire OR scale OR instrument OR measurement))) AND LA=(English)) AND DT=(Article) Timespan: 1999-01-01 to 2022-07-06 (Publication Date) Editions = A&amp;HCI , BKCI-SSH , BKCI-S , CCR-EXPANDED , ESCI , IC , CPCI-SSH , CPCI-S , SCI-EXPANDED , SSCI</p> <p>#2 12,812 ((TI=(self-efficacy)) AND LA=(English)) AND DT=(Article) Timespan: 1999-01-01 to 2022-07-06 (Publication Date) Editions = A&amp;HCI , BKCI-SSH , BKCI-S , CCR-EXPANDED , ESCI , IC , CPCI-SSH , CPCI-S , SCI-EXPANDED , SSCI</p> <p>#1 9,937 ((TI=((breastfeeding OR breast-feeding))) AND LA=(English)) AND DT=(Article) Timespan: 1999-01-01 to 2022-07-06 (Publication Date) Editions = A&amp;HCI , BKCI-SSH , BKCI-S , CCR-EXPANDED , ESCI , IC , CPCI-SSH , CPCI-S , SCI-EXPANDED , SSCI</p>	N=38