NursingOpen _Open Access_ WILEY

Return-to-work self-efficacy questionnaire: Cross-cultural adaptation and validation in China

Ting Wang[1] | Mu Jin[2] | Ruiqi Zhu[2] | Li Zheng[3] | Danni Wang[2] | Xin Zhao[1,2] | Xueping Zhao[2]

[1]Department of Nursing, First Affiliated Hospital of Soochow University, Suzhou, China

[2]Medical Department, School of Nursing, Soochow University, Suzhou, China

[3]Department of General Surgery, Second Affiliated Hospital of Soochow University, Suzhou, China

Correspondence
Xueping Zhao, Medical Department, School of Nursing, Soochow University, No. 1 Shizi Road, Suzhou, Jiangsu Province, China.
Email: g41o7vw3dcr@126.com

Xin Zhao, Department of Nursing, First Affiliated Hospital of Soochow University, No. 899 Pinghai road, Gusu district, Suzhou, Jiangsu province, China.
Email: mumu011120@163.com

Abstract

Aim: To develop a Chinese version of the return-to-work self-efficacy (RTW-SE-11) and verify its reliability and validity.

Design: A validation study.

Methods: The RTW-SE-11 was translated into Chinese according to the Brislin's model, and then the semantic adjustment of questionnaire was carried out through multi-field expert evaluation and preliminary investigation.

Results: All 11 items of the original questionnaire were retained. Content validity index (CVI) of the Chinese version of RTW-SE-11 indicated good validity, with Inter-rater Agreement (IR) of 0.97, item CVI of 0.90–1.00 and questionnaire CVI of 0.91. Cronbach's α coefficient of RTW-SE-11 (Chinese version) was 0.923, suggesting high internal consistency, with test–retest reliability of 0.799 and half-fold reliability of 0.926.

Patient or public contribution: The Chinese version of the RTW-SE-11 questionnaire confirmed good reliability and validity for the assessment of return to work self-efficacy in Chinese breast cancer patients.

KEYWORDS
breast cancer, care, nursing, return to work, self-efficacy

1 | INTRODUCTION

Breast cancer has become the most common malignant tumour in Chinese women, accounting for 12.2% of newly diagnosed breast cancer worldwide (Chen et al., 2022; Fan et al., 2014). According to China's cancer statistics report (Cao et al., 2021; Chen et al., 2022; Xia et al., 2022), the incidence of breast cancer increases by 3%–4% every year, the growth rate is two to three times of the world average level, and this trend will continue in the future. The incidence of breast cancer is high, but with the popularization of early screening and the continuous improvement of comprehensive treatment technology, the mortality rate of breast cancer patients in most countries and regions can remain stable, or even fall steadily (Boere et al., 2022; Mattick et al., 2022; Wilkinson & Gathani, 2022). According to the National Institutes of Health statistics from 2010 to 2016, the 5-year survival rate of breast cancer patients after surgery is 90%, and 82% in China (Zeng et al., 2018). It can be seen that breast cancer patients have better cure prospects and longer, higher quality survival (Fei et al., 2015).

In China, most breast cancer patients are middle-aged and young women, who are at an important stage of career development (Liu

Ting Wang, Mu Jin and Ruiqi Zhu contributed equally to this study.

et al., 2023). As the backbone of their families, most patients with breast cancer may have to go back to work after surgery. The fundamental reason for this trend is to maintain financial independence and improve social interaction (Fan et al., 2022; Li et al., 2022; Xia et al., 2022). Return-to-work (RTW) is a symbol of patients' occupational rehabilitation and return to society (Porro, Campone, et al., 2022). It is considered as one of the key indicators of complete recovery and is of great significance to the development of individuals, families and society (Hoving et al., 2009; Porro, Durand, et al., 2022). Complex and diverse factors, including sociodemographic, economic and job-related factors, influence breast cancer patients' return to work after surgery. Among them, self-efficacy (SE) becomes an important psychological factor. SE is defined as an individual's belief in his ability to successfully perform an activity or behaviour. Bandura believes that SE is highly predictive of the initiation and continuous execution of behaviours (Bandura, 1986; Bilodeau et al., 2022). Applying this theory to the sick employees, it can be expected that the sick employees with high loneliness will be absent for a shorter time than the sick employees with low loneliness (Algeo et al., 2022). SE affects their decision-making process and follow-up, and has been proven to be effective in predicting successful return to work after recovery (Nieuwenhuijsen et al., 2013; Rosbjerg, Hansen, et al., 2021; Volker et al., 2015). SE of returning to work has been a hot topic in the research of cancer patients in recent years. Previous studies (Black et al., 2018; Duijts et al., 2017; Rosbjerg, Zachariae, et al., 2021) have shown that understanding the developmental trends of RTW-SE can lead to targeted and appropriate interventions to improve the RTW of cancer survivors.

It is very important to use reliable and valid measurements of RTW-S (Porro et al., 2020). A review of domestic and foreign literature has found that the questionnaire for evaluating SE of returning to work mainly includes five types, including regression work SE Questionnaire (Dionne et al., 2005), ROSES (Corbiere et al., 2017), RTW-SE-19 (Shaw et al., 2011), RTW-SE-10 (Brouwer et al., 2011) and RTW-SE-11 (Rosbjerg, Hansen, et al., 2021). These questionnaires showed good reliability and validity, but their limitations also limited clinical application. The first four measures were primarily used to measure workers' beliefs about their ability to return to normal job duties, particularly those who had suffered back pain or upper limb musculoskeletal injuries. However, these questionnaires do not seem to be entirely appropriate for cancer patients with cognitive decline and increased negative emotions due to specific treatments. RTW-SE-11 was originally designed by Dutch scholar Lagerveld et al. (2017) as an evaluation tool for the return to work of individuals with psychological disorders. It has good reliability, with Cronbach's alpha (α) value ranging from 0.90 to 0.97. Subsequently, it is widely used in patients with chronic diseases and cancer, and does not limit occupational types. The Brazilian version RTW-SE has been proved to be an effective evaluation tool for Brazilian workers' SE in returning to work (Silva-Junior et al., 2018). In addition, as a tool for clinical evaluation and screening, RTW-SE can provide healthcare workers with a better understanding of patients' expectations for returning to work (Huijs et al., 2017), thus providing a more accurate match,

and it is also used by clinical workers to monitor and evaluate interventions. Leensen et al. (2017) used this questionnaire to evaluate SE of cancer patients' return to work in the intervention study, and the results showed that SE was significantly correlated with return to work. Wolvers et al. (2018) used this questionnaire to explore the effects of work ability, return to work SE, work value and fatigue on cancer patients' return to work after chemotherapy.

However, few studies have measured the level of SE in breast cancer patients returning to work, possibly due to the lack of appropriate measurement tools. Effective and reliable assessment tools for SE of returning to work can facilitate the expert assessment of rehabilitative related work. It is of practical clinical significance to conduct graded guidance and intervention for breast cancer survivors with different levels of SE to help them return to work as soon as possible. Therefore, this study aimed to conduct cross-cultural adjustment and verification of RTW-SE, and preliminarily measure the level of SE of return to work in Chinese breast cancer patients with this questionnaire, so as to provide a measurement tool and reference for research on return to work.

2 | METHOD

This study was conducted in strict accordance with the Declaration of Helsinki and received ethical approval from the ethics committee of the Ethical Committee of our hospital (approval number: SUDA20200630H01). All subjects were informed of the purpose, and written informed consent was obtained.

2.1 | Translation and cross-cultural adaptation process

Firstly, we contacted the original author, Lagerveld et al. (2017), via email for authorization. Second, translation and cross-cultural adaptation of RTW-SE-11 were performed according to the Brislin's translation model (Jones et al., 2001). The methodology followed a systematic five-step procedure, as following:

- *Forward translation*: Two bicultural translators whose native language is Chinese independently completed two versions of the measures in simplified Chinese. One translator had clinical experience, while the other is an English Translation major.
- *Reconciliation*: Three experienced clinical experts who are fluent in English were invited to select the translation that could best express the meaning of the original entry.
- *Back translation*: Two native English translators (i.e. one proficient in Chinese and another linguistics expert) completed the back translation.
- *Expert review*: One psychologist, one native Chinese linguist and two health experts were recruited to independently review all versions and select the most appropriate version or translate an alternative. Thereafter, the translation project manager combined

all previous versions to format, proofread and make the necessary item modifications.

- *Pretesting*: Pretest was conducted to evaluate the comprehensibility and acceptability of the translated questionnaire, and the measures were further modified based on the participants' feedback. They responded to the cognitive interview after completing RTW-SE. Interviews sought opinions on layout, phrasings of instructions and items, missing aspects, acceptability and the questionnaire in general. A total of 10 working-age patients with breast cancer were recruited for cognitive interviews according to the recommendation (Kaat et al., 2018).

2.2 | Setting and sample

This study utilized a cross-sectional research design. By using convenience sampling, eligible patients with breast cancer from two tertiary hospitals in Suzhou, Jiangsu Province, China, were recruited from January 2019 to July 2020. Eligible patients were invited to complete the questionnaire face to face and ask on the spot if they did not understand the procedure.

The inclusion criteria for patients were as follows:

- Aged 18–55.
- Had a diagnosis of stage I–IV breast cancer.
- Received medical treatment for breast cancer for at least 1 month.
- Had employment relationship in the work labour before the illness.
- Signed an informed consent form.

The exclusion criteria were as follows:

- Severe cognitive impairment, inability to communicate normally.
- Complicated with other malignant tumours.
- Had returned to work, or retired.

We have read and evaluated the 'RTW' module published by Lagerveld and colleagues in the Netherlands (Lagerveld et al., 2017) and the one by Silva et al. (2017) since they may not fit Chinese culture. For the sample size of psychometric evaluation, the ratio of cases to variables was 10:1, which was according to the requirements of exploratory factor analysis (EFA) (Norris & Lecavalier, 2010). Given the 20% invalid questionnaires, the final sample size was 132 cases. Eligible applicants were invited to participate in the study. Participants were requested to respond to the questionnaires after the study aims, benefits and potential risks were explained. They were likewise requested to respond to the following aspects:

- *Demographic characteristics*: Sociodemographic variables, clinical characteristics and work-related factors: sex, date of birth, education level and marital status; categorized into breast cancer, treatment modalities (i.e. surgery, chemotherapy, radiotherapy and/or hormonal treatment), and time since diagnosis; type of contract

(i.e. permanent, temporary or self-employed), nature of work (i.e. mental activity, physical activity, or mix) and date of sick leave.

- *RTW-SE questionnaire-11*: After obtaining the authorization of the original author, the Chinese version of RTW-SE-11 was completed through forward translation, reconciliation, back translation, expert review, pre-experiment and cross-cultural adjustment according to the Brislin's translation model. The participants responded to the Chinese version of the questionnaire '重返工作自我效能量表'.
- *General self-efficacy questionnaire (GSES)*: GSES is the most widely used SE assessment tool at present. It measures individuals' general views of themselves and reflects the level of their SE. The Chinese version of GSES comprises 10 items with 1–4 response categories (1 = completely incorrect, 4 = completely correct). Total scores were calculated; the higher the score, the higher the SE. The retest was performed 3 months after the first test, we calculated the Cronbach's α reliability coefficient to evaluate the reliability coefficient of the scale. Cronbach's α coefficient was 0.87 and the retest reliability coefficient was 0.83.

2.3 | Statistical analysis

Epidata 3.1 and SPSS 22.0 software were used for data entry and analysis. Statistical significance was set at $p < 0.05$. Descriptive analysis of the general data was performed using percentage and mean (standard deviation). Pearson correlation analysis and critical ratio were used for item analysis. Content validity index (CVI), EFA and Pearson correlation analysis were used to test the content, structure and criterion-related validities, respectively, of the questionnaire. Cronbach's α coefficient, split-half reliability and reliability were used to test the reliability of the questionnaire.

3 | RESULTS

3.1 | Characteristics of participants

A total of 132 volunteer participants, all of whom were female, completed RTW-SE. They were between 25 and 55 years old and the mean age was 43.17 (7.56) years. Five patients had underlying diseases (i.e. 3 hypertension, 1 asthma and 1 chronic glomerulonephritis). Other demographic characteristics are shown in Table 1.

3.2 | Translation and adaptation

During the translation of the questionnaire, grammatical structure and expression methods were adjusted according to the language expression habits of the Chinese. The questionnaire's introductory remarks did not explain the filling rules of the original questionnaire. Therefore, the Chinese version of the questionnaire instruction included the following aspects based on the literature review

TABLE 1 Demographic and clinical characteristics of the study sample (n = 132).

Variables	Frequency	Percentage
Educational background		
Primary school or below	16	12.12
Secondary school	37	28.03
High school	25	18.94
University or above	54	40.91
Residence		
Urban	99	75.00
Rural	33	25.00
Marital status		
Married	120	90.91
Single	4	3.03
Divorced	7	5.30
Widowed	1	0.76
Child-bearing history		
Yes	126	95.45
No	6	4.55
Number of children		
≤1	94	71.21
≥2	38	28.79
Religion		
Yes	18	13.64
No	114	86.36
Work type		
Manual	47	35.61
Non-manual	14	10.61
Mixed	71	53.79
Current employment		
Employed	12	9.09
Medical leave	95	71.97
Unemployed	25	18.94
Monthly family income		
≤¥3000	32	24.24
¥3001–¥5000	42	31.82
>¥5001	58	43.94
Medical insurance		
Employee health insurance	107	81.06
Rural health insurance	9	6.82
Without health insurance	16	12.12
Medical treatment		
Targeted therapy	27	20.45
Chemotherapy	73	55.30
Radiotherapy	17	12.88
Endocrine therapy	15	11.36

and consultation with experts: 'Check '√' below the appropriate □. There is no right or wrong answer, no need to think over'.

For the 'Return-To-Work Self-Efficacy Questionnaire', the initial literal translation is '重返工作自我效能问卷' in Chinese. Experts agreed that this 'Questionnaire' had a strict construction process, theoretical basis and Likert scoring standard. It is supposed to be a questionnaire. Therefore, the questionnaire name is '重返工作自我效能问卷'.

For item 7, two patients enrolled in the pretest and one expert asked the following question: What are the 'potential problems'? Considering that the potential problems faced by each profession are relatively different and cannot be described in detail, the panel of experts added annotations (e.g. emergencies) after discussing the items.

3.3 | Evaluation of the translated version's psychometric properties

3.3.1 | Item analysis

A certain degree of correlation exists between the scores of each item and the total score in the Chinese version of RTW-SE-11, with the correlation coefficient ranging from 0.587 to 0.872. The difference was statistically significant ($p < 0.05$).

The 132 questionnaire scores were arranged in descending order, in which the top 27% and bottom 73% were classified as high and low groups respectively. In investigating the differences in each item between the high and low groups, the results showed that the differences between them were statistically significant ($p < 0.05$). The absolute value of all items' critical ratio is above 3.0. Hence, all items can be retained (Table 2).

TABLE 2 Analysis results of differentiation degree of each item in Chinese questionnaire (n = 132).

Item	High group (mean [SD])	Low group (mean [SD])	CR (t)	p-Value
1	5.58 (0.58)	3.55 (1.11)	9.713	<0.01
2	5.69 (0.55)	3.40 (1.28)	10.017	<0.01
3	5.54 (0.51)	4.15 (1.17)	6.621	<0.01
4	5.65 (0.56)	3.52 (1.20)	9.716	<0.01
5	5.54 (0.76)	3.35 (1.10)	9.557	<0.01
6	5.23 (0.71)	3.00 (1.16)	9.714	<0.01
7	5.58 (0.50)	3.55 (1.18)	9.629	<0.01
8	5.35 (0.69)	2.90 (1.03)	10.622	<0.01
9	5.23 (0.82)	3.18 (1.06)	8.401	<0.01
10	5.50 (0.51)	3.88 (1.14)	7.902	<0.01
11	4.81 (0.98)	2.55 (1.13)	8.338	<0.01

Abbreviation: SD, standard deviation.

3.4 | Validity

3.4.1 | Content validity

A total of 10 clinicians comprising mammary surgeons, psychologists, nursing teachers and hospital administrators from Beijing and Suzhou were selected to evaluate the content validity of the questionnaire. Two rounds of expert consultation were conducted and the recovery rate of both rounds was 100%. The results of the second round of consultation with 10 experts are as follows: inter-rater agreement=0.91, item-level CVI=0.9 to 1, and questionnaire-level CVI=0.91 (Table 3).

3.4.2 | Construct validity

EFA was used to test the structure validity of the questionnaire. The Kaiser–Meyer–Olkin (KMO) value of the questionnaire was 0.922, and the Bartlett spherical test reached a significance level ($\chi^2=918.284$, $p<0.001$). These results are consistent with the standard of KMO given by Kaiser and suitable for factor analysis. The principal component analysis method was adopted, and the principle of extracting factors with eigenvalue above 1 was adopted. The maximal variance orthogonal rotation method was used to generate one factor with eigenvalue above 1, and the cumulative variance contribution rate was 58.21%. The gravel diagram shows that the broken line tends to flatten out after component 2 and decreased substantially beforehand, thereby indicating the appropriateness of extracting 1 common factor from 11 items (Table 4; Figure 1).

3.4.3 | Criterion-related validity

This study measured simultaneous validity. The correlation analysis method was used to test the criterion-related validity of RTE-SE-11

and GSES. The results indicated that the score of the Chinese version of RTW-SE-11 was positively correlated with GSES ($r=0.523$, $p<0.05$), thereby showing a moderately strong correlation.

3.5 | Reliability

3.5.1 | Internal consistency

Cronbach's α coefficient of the questionnaire was 0.923 (considered 'excellent'), indicating high internal consistency. Split-half reliability was 0.926.

3.5.2 | Test–retest reliability

After 3 weeks, RTW-SE-11 was sent to 30 participants who had not experienced any major stress event within 3 weeks to respond to it anew (retest) by convenient sampling method. Intraclass correlation coefficient (ICC) was used to evaluate the retest reliability of the questionnaire. The ICC was 0.799. An excellent agreement between test–retest of RTW-SE-11 was found, thereby reflecting the stability of the questionnaire across time.

4 | DISCUSSION

While preserving the original context, the Chinese version of the RTW-SE-11 questionnaire applied to breast cancers also considered the characteristics of the Chinese cultural context. Effort was exerted to maintain the concept, item, semantic and operation present in the Chinese version equivalent with the original questionnaire. After rigorous translation and multi-disciplinary cooperation, the Chinese version of RTW-SE-11 had been adjusted to the optimal state.

**TABLE 3** Score of the second round of expert consultation ($n=10$).

Item	Expert										The number of experts who scored 3/4	I-CVI
	1	2	3	4	5	6	7	8	9	10		
1	4	4	4	4	4	4	3	4	3	4	10	1
2	3	4	4	4	4	3	3	4	3	3	10	1
3	4	4	4	4	4	4	3	3	3	4	10	1
4	4	4	4	4	4	4	3	4	3	4	10	1
5	4	4	4	4	4	3	3	4	3	4	10	1
6	4	4	4	4	4	3	3	2	3	4	9	0.9
7	4	4	4	4	4	4	3	4	4	4	10	1
8	4	4	4	4	4	4	3	4	3	4	10	1
9	4	4	4	3	4	3	3	4	3	4	10	1
10	4	4	4	3	4	4	3	4	3	4	10	1
11	4	4	4	4	4	4	3	4	3	4	10	1

Abbreviation: I-CVI, content validity index.

TABLE 4 Factor load condition of the Chinese questionnaire after rotation (*n* = 132).

Items		1
4	I am able to complete my tasks	0.889
8	I can cope with work pressure	0.860
5	I am able to cope with situations, in which I need to devote myself to work	0.853
7	I can focus on work	0.814
10	I can motivate myself to finish my work	0.779
2	Due to my emotions, I will not be able to complete my tasks	0.749
1	I can cope with the difficulties at work	0.747
9	I will not be able to deal with potential problems at work (e.g. emergencies)	0.710
11	I can cope with the physical needs at work	0.704
3	I will set my personal work boundaries	0.637
6	I do not have the energy to do anything outside of work	0.593

FIGURE 1 The gravel figure of the Chinese questionnaire.
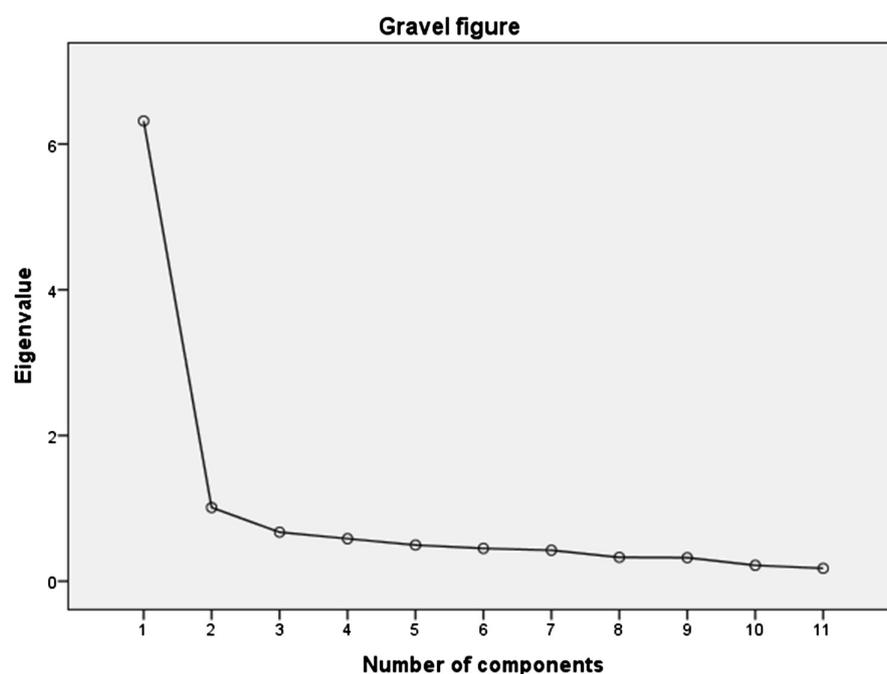
In general, the feasibility of the questionnaire is guaranteed by the compliance of the research object, and the number of items in the questionnaire will directly affect the compliance of the research object. This study was based on field survey, questionnaire on-site distribution, recovery, timely inspection and improvement of information, and good completion rate of the effective questionnaire recovery. Hence, the Chinese version of RTW-SE-11 has good feasibility.

The cumulative variance contribution rate of one common factor extracted using EFA was similar to the result of the original questionnaire. This outcome indicated that the extracted factors could considerably explain the questionnaire content and that the item composition was reasonable. That is, the Chinese version of RTW-SE-11 had good structural validity. The dimension was consistent with the original questionnaire and presented a one-factor structure. GSES is a general measure of SE. We hypothesized that the higher the general SE, the higher the level of RTW-SE. The

correlation results have indicated that the RTW-SE scores correlate strongly with GSES. For reliability, all items are above the minimal acceptable criterion, suggesting that RTW-SE-11 has satisfactory internal consistency reliability and test–retest reliability. Moreover, RTW-SE-11 appears to be stable across time.

Herein, we observed therapy-induced pain and fatigue were significantly more likely to interfere with RTW rates. Social support services and post-treatment inpatient cancer rehabilitation programs were helpful in keeping patients connected to their professional lives. Mental issues and the development of depression during follow-up remains an issue particularly for younger patients.

We previously conducted a French consensus study resulting in a model describing the multifactorial process of the return to work of breast cancer survivors (the REWORK-BC model). An initial assessment of the RTW-SE may be relevant in order to establish a basal score and better understand the feelings surrounding RTW.

At present, the RTW research in China remains in the preliminary stage, and the majority of the studies are qualitative research. The introduction of measurement tools for RTW-SE is conducive to the development of quantitative research. Liu et al. (2022) used Rasch model analysis to assess the psychometric properties of the Chinese return-to-work SE questionnaire and found that the RTW-SE-11 questionnaire can be used as a reliable and validated instrument for measuring SE to return to work in young and middle-aged Chinese patients with stroke (Liu et al., 2022). The use of such instruments may be beneficial in the discussion of factors that promote workers to RTW in the labour market. Objective parameters for assessment of RTW-SE may serve to orient interventions targeting the working conditions and process of reintegration with favourable impact on cancer patients' expectations on their RTW. For those having chemotherapy, the difficulties of concentration posed problems of comprehension of these items. A French adaptation (Porro et al., 2020) has been made and the patients have asked that the inverted items no longer be inverted. The French translation and adaptation of the RTWSE-11 was particularly faithful to the semantic, idiomatic, functional, experiential, conceptual and operational aspects of the original version. Future more studies are needed to focus on the psychometrics evaluations of the questionnaire.

We expect that scientifically validated tools will have a positive influence on social reintegration via RTW and contribute in monitoring the efficiency of this process. As an assessment of SE predicting the time to and success in returning to work, RTW-SE may be used as a clinical assessment and screening tool to investigate patients' expectations of RTW, served to monitor the progression of the attempts to return to work for medical personnel to accurately implement interventions. RTW-SE may likewise be beneficial in the discussion of factors that influence the permanence of workers in the labour market after RTW.

Several limitations in this present study must be considered. Firstly, the main limitation of this study is the small sample size. Although this quantity already meets the criterion of reliability and validity test, it may still be underpowered to detect some differences. Secondly, the two hospitals we selected are both located in the same prefecture-level city in China, so the sample representation is slightly inadequate, the scale may have some region bias. In addition, all the breast cancer patients we collected were the female patients, which may affect the validation of the questionnaire in the population to some extent.

5 | CONCLUSION

Through the localization of the RTW-SE-11 questionnaire, a Chinese version with good reliability and validity was preliminarily formed in this study. This version can be used to measure the level of SE for returning to work of patients with breast cancer. The introduction of the questionnaire can promote the development of the evaluation tool for patients' RTW in China and also help health workers in evaluating the level of patients' RTW-SE, thereby providing theoretical

basis for adopting targeted interventions to promote patients' complete rehabilitation.

CONFLICT OF INTEREST STATEMENT

The authors declare that they have no competing interests.

DATA AVAILABILITY STATEMENT

All data generated or analysed during this study are included in this published article.

ETHICS STATEMENT

In this study, all methods were performed in accordance with the relevant guidelines and regulations. This study was conducted in strict accordance with the Declaration of Helsinki and received ethical approval from the ethics committee of the Ethical Committee of the First Affiliated Hospital of Soochow University, China (approval number: SUDA20200630H01).

CONSENT FOR PARTICIPATE

All subjects were informed of the purpose, and written informed consent was obtained.

CONSENT FOR PUBLICATION

Not applicable.

ORCID

Xin Zhao https://orcid.org/0000-0001-5235-0502

REFERENCES

Algeo, N., Bennett, K., & Connolly, D. (2022). Breast cancer survivorship and employment in Ireland: Legislative systems and the return to work of women with breast cancer. *Work*, *71*(4), 927–939. https://doi.org/10.3233/WOR-205044

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*(3), 359–373.

Bilodeau, K., Gouin, M. M., Lecours, A., Lederer, V., Durand, M. J., Kilpatrick, K., Lepage, D., Ladouceur-Deslauriers, L., & Dorta, T. (2022). Acceptability and feasibility of a return-to-work intervention for posttreatment breast cancer survivors: Protocol for a co-design and development study. *JMIR Research Protocols*, *11*(4), e37009. https://doi.org/10.2196/37009

Black, O., Keegel, T., Sim, M. R., Collie, A., & Smith, P. (2018). The effect of self-efficacy on return-to-work outcomes for workers with psychological or upper-body musculoskeletal injuries: A review of the literature. *Journal of Occupational Rehabilitation*, 28(1), 16–27. https://doi.org/10.1007/s10926-017-9697-y

Boere, I., Lok, C., Poortmans, P., Koppert, L., Painter, R., Vd Heuvel-Eibrink, M. M., & Amant, F. (2022). Breast cancer during pregnancy: Epidemiology, phenotypes, presentation during pregnancy and therapeutic modalities. *Best Practice & Research. Clinical Obstetrics & Gynaecology*, 82, 46–59. https://doi.org/10.1016/j.bpobgyn.2022.05.001

Brouwer, S., Franche, R. L., Hogg-Johnson, S., Lee, H., Krause, N., & Shaw, W. S. (2011). Return-to-work self-efficacy: Development and validation of a scale in claimants with musculoskeletal disorders. *Journal of Occupational Rehabilitation*, 21(2), 244–258. https://doi.org/10.1007/s10926-010-9262-4

Cao, W., Chen, H. D., Yu, Y. W., Li, N., & Chen, W. Q. (2021). Changing profiles of cancer burden worldwide and in China: A secondary analysis of the global cancer statistics 2020. *Chinese Medical Journal*, 134(7), 783–791. https://doi.org/10.1097/CM9.0000000000001474

Chen, N., Zhang, X. Y., Ma, L. L., Zhao, G. D., & Yan, Y. X. (2022). Trends of cancer mortality in Xi'an City, China: 2005-2020. *Journal of Cancer Research and Clinical Oncology*, 148, 2781–2792. https://doi.org/10.1007/s00432-022-04046-6

Corbiere, M., Negrini, A., Durand, M. J., St-Arnaud, L., Briand, C., Fassier, J. B., Loisel, P., & Lachance, J. P. (2017). Development of the return-to-work obstacles and self-efficacy scale (ROSES) and validation with workers suffering from a common mental disorder or musculoskeletal disorder. *Journal of Occupational Rehabilitation*, 27(3), 329–341. https://doi.org/10.1007/s10926-016-9661-2

Dionne, C. E., Bourbonnais, R., Fremont, P., Rossignol, M., Stock, S. R., & Larocque, I. (2005). A clinical return-to-work rule for patients with back pain. *CMAJ*, 172(12), 1559–1567. https://doi.org/10.1503/cmaj.1041159

Duijts, S. F. A., van der Beek, A. J., Bleiker, E. M. A., Smith, L., & Wardle, J. (2017). Cancer and heart attack survivors' expectations of employment status: Results from the English longitudinal study of ageing. *BMC Public Health*, 17(1), 640. https://doi.org/10.1186/s12889-017-4659-z

Fan, L., Strasser-Weippl, K., Li, J. J., St Louis, J., Finkelstein, D. M., Yu, K. D., Chen, W. Q., & Goss, P. E. (2014). Breast cancer in China. *The Lancet Oncology*, 15(7), e279–e289. https://doi.org/10.1016/S1470-2045(13)70567-9

Fan, X., Zhang, B., He, Y., Zhou, X., Zhang, Y., Ma, L., Li, X., & Wu, J. (2022). Burden of disease due to cancer – China, 2000-2019. *China CDC Weekly*, 4(15), 306–311. https://doi.org/10.46234/ccdcw2022.036

Fei, X., Wu, J., Kong, Z., & Christakos, G. (2015). Urban-rural disparity of breast cancer and socioeconomic risk factors in China. *PLoS One*, 10(2), e0117572. https://doi.org/10.1371/journal.pone.0117572

Hoving, J. L., Broekhuizen, M. L., & Frings-Dresen, M. H. (2009). Return to work of breast cancer survivors: A systematic review of intervention studies. *BMC Cancer*, 9, 117. https://doi.org/10.1186/1471-2407-9-117

Huijs, J., Koppes, L. L. J., Taris, T. W., & Blonk, R. W. B. (2017). Work characteristics and return to work in long-term sick-listed employees with depressive symptoms. *Journal of Occupational Rehabilitation*, 27(4), 612–622. https://doi.org/10.1007/s10926-017-9696-z

Jones, P. S., Lee, J. W., Phillips, L. R., Zhang, X. E., & Jaceldo, K. B. (2001). An adaptation of Brislin's translation model for cross-cultural research. *Nursing Research*, 50(5), 300–304. https://doi.org/10.1097/00006199-200109000-00008

Kaat, A. J., Schalet, B. D., Rutsohn, J., Jensen, R. E., & Cella, D. (2018). Physical function metric over measure: An illustration with the patient-reported outcomes measurement information system (PROMIS) and the functional assessment of cancer therapy (FACT). *Cancer*, 124(1), 153–160. https://doi.org/10.1002/cncr.30981

Lagerveld, S. E., Brenninkmeijer, V., Blonk, R. W., Twisk, J., & Schaufeli, W. B. (2017). Predictive value of work-related self-efficacy change on RTW for employees with common mental disorders. *Occupational and Environmental Medicine*, 74(5), 381–383. https://doi.org/10.1136/oemed-2016-104039

Leensen, M. C. J., Groeneveld, I. F., van der Heide, I., Rejda, T., van Veldhoven, P. L. J., Berkel, S. V., Snoek, A., Harten, W. V., Frings-Dresen, M. H. W., & de Boer, A. (2017). Return to work of cancer patients after a multidisciplinary intervention including occupational counselling and physical exercise in cancer patients: A prospective study in The Netherlands. *BMJ Open*, 7(6), e014746. https://doi.org/10.1136/bmjopen-2016-014746

Li, A., Shen, Z., Sun, Z., Yun, S., Tian, X., Hu, Z., Wang, Z., & Ye, Y. (2022). Occupational risk factors and breast cancer in Beijing, China: A hospital-based case-control study. *BMJ Open*, 12(2), e054151. https://doi.org/10.1136/bmjopen-2021-054151

Liu, F., Zhang, Z., Lin, B., Ping, Z., & Mei, Y. (2022). Assessing the psychometric properties of the Chinese return-to-work self-efficacy questionnaire using Rasch model analysis. *Health and Quality of Life Outcomes*, 20(1), 27. https://doi.org/10.1186/s12955-022-01929-7

Liu, X., Wang, Y., & Lu, D. W. W. (2023). Age-period-cohort model analysis of incidence and mortality trend of breast cancer in Chinese women from 1990 to 2019 Chinese. *Gen Med*, 26(1), 34–41.

Mattick, L. J., Nazario, C. M., Rosario-Rosado, R. V., Schelske-Santos, M., Mansilla-Rivera, I., Ramirez-Marrero, F. A., Nie, J., & Freudenheim, J. L. (2022). Perinatal factors, female breast cancer, and associated risk factors in Puerto Rico: Evidence from the Atabey epidemiology of breast cancer study. *Cancer Causes & Control*, 33(3), 373–379. https://doi.org/10.1007/s10552-021-01531-0

Nieuwenhuijsen, K., Noordik, E., van Dijk, F. J., & van der Klink, J. J. (2013). Return to work perceptions and actual return to work in workers with common mental disorders. *Journal of Occupational Rehabilitation*, 23(2), 290–299. https://doi.org/10.1007/s10926-012-9389-6

Norris, M., & Lecavalier, L. (2010). Evaluating the use of exploratory factor analysis in developmental disability psychological research. *Journal of Autism and Developmental Disorders*, 40(1), 8–20. https://doi.org/10.1007/s10803-009-0816-2

Porro, B., Campone, M., Moreau, P., & Roquelaure, Y. (2022). Supporting the return to work of breast cancer survivors: From a theoretical to a clinical perspective. *International Journal of Environmental Research and Public Health*, 19(9), 5124. https://doi.org/10.3390/ijerph19095124

Porro, B., de Boer, A., Frings-Dresen, M. H. W., & Roquelaure, Y. (2020). Self-efficacy and return to work in cancer survivors: Current knowledge and future prospects. *European Journal of Cancer Care*, 29(6), e13304. https://doi.org/10.1111/ecc.13304

Porro, B., Durand, M. J., Petit, A., Bertin, M., & Roquelaure, Y. (2022). Return to work of breast cancer survivors: Toward an integrative and transactional conceptual model. *Journal of Cancer Survivorship*, 16(3), 590–603. https://doi.org/10.1007/s11764-021-01053-3

Rosbjerg, R., Hansen, D. G., Zachariae, R., Stapelfeldt, C. M., Hoejris, I., Rasmussen, M. T., Drysdale, S. W., & Labriola, M. (2021). Validation of the return to work self-efficacy questionnaire in a population of employees undergoing treatment for cancer. *European Journal of Cancer Care*, 30(2), e13373. https://doi.org/10.1111/ecc.13373

Rosbjerg, R., Zachariae, R., Hansen, D. G., Hoejris, I., Duijts, S., Gehr, N. L., Andersen, I. D., & Labriola, M. (2021). Physical activity, return to work self-efficacy, and work status among employees undergoing chemotherapy for cancer – A prospective study with 12

months follow-up. *BMC Cancer, 21*(1), 169. https://doi.org/10.1186/s12885-021-07824-6

Shaw, W. S., Reme, S. E., Linton, S. J., Huang, Y. H., & Pransky, G. (2011). 3rd place, PREMUS best paper competition: Development of the return-to-work self-efficacy (RTWSE-19) questionnaire--psychometric properties and predictive validity. *Scandinavian Journal of Work, Environment & Health, 37*(2), 109–119. https://doi.org/10.5271/sjweh.3139

Silva, J. S. J., Griep, R. H., Lagerveld, S. E., & Fischer, F. M. (2017). Brazilian cross-cultural adaptation of "return-to-work self-efficacy" questionnaire. *Revista de Saúde Pública, 51*, 8. https://doi.org/10.1590/S1518-8787.2017051006778

Silva-Junior, J. S., Souto, E. P., Fischer, F. M., & Griep, R. H. (2018). Validity and test-retest reliability of the Brazilian version of the return-to-work self-efficacy questionnaire. *Revista de Saúde Pública, 52*, 65. https://doi.org/10.11606/S1518-8787.2018052000237

Volker, D., Zijlstra-Vlasveld, M. C., Brouwers, E. P., van Lomwel, A. G., & van der Feltz-Cornelis, C. M. (2015). Return-to-work self-efficacy and actual return to work among long-term sick-listed employees. *Journal of Occupational Rehabilitation, 25*(2), 423–431. https://doi.org/10.1007/s10926-014-9552-3

Wilkinson, L., & Gathani, T. (2022). Understanding breast cancer as a global health concern. *The British Journal of Radiology, 95*(1130), 20211033. https://doi.org/10.1259/bjr.20211033

Wolvers, M. D. J., Leensen, M. C. J., Groeneveld, I. F., Frings-Dresen, M. H. W., & De Boer, A. (2018). Predictors for earlier return to work of cancer patients. *Journal of Cancer Survivorship, 12*(2), 169–177. https://doi.org/10.1007/s11764-017-0655-7

Xia, C., Dong, X., Li, H., Cao, M., Sun, D., He, S., Yang, F., Yan, X., Zhang, S., Li, N., & Chen, W. (2022). Cancer statistics in China and United States, 2022: Profiles, trends, and determinants. *Chinese Medical Journal, 135*(5), 584–590. https://doi.org/10.1097/CM9.0000000000002108

Zeng, H., Chen, W., Zheng, R., Zhang, S., Ji, J. S., Zou, X., Xia, C., Sun, K., Yang, Z., Li, H., Wang, N., Han, R., Liu, S., Li, H., Mu, H., He, Y., Xu, Y., Fu, Z., Zhou, Y., … He, J. (2018). Changing cancer survival in China during 2003-15: A pooled analysis of 17 population-based cancer registries. *The Lancet Global Health, 6*(5), e555–e567. https://doi.org/10.1016/S2214-109X(18)30127-X