

# Measuring the purpose in life in the adult population: A scoping review

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Somrudee Arunjit<sup>1</sup>\*, Karnsunaphat Balthip<sup>1</sup>, and Jos M. Latour<sup>2</sup>

- <sup>1</sup> Faculty of Nursing, Prince of Songkla University, Songkhla, Thailand
- <sup>2</sup> Faculty of Health, University of Plymouth, Plymouth, United Kingdom

### **Abstract**

**Background:** The purpose in life can motivate individuals to realize that life is essential for existence and well-being. Adults might experience crises that can lead to a lack of purpose in life. Consequently, promoting purpose in life is necessary, but it requires a suitable measurement scale.

**Objective:** This scoping review aimed to identify and map the content, psychometric properties, and answer option scales of instruments intended to measure purpose in life in adult populations.

Design: A scoping review was employed.

**Data Sources:** The database used was PubMed. The libraries were APA PsycNet, Wiley Online Library, and Cochrane Library. The search strategy was performed between 1 November 2023 and 14 February 2024.

**Review Methods:** This review used the scoping review framework described by Arksey and O'Malley. The identified instruments were assessed for quality based on the COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) criteria. This study also used the PRISMA Extension for Scoping Reviews (PRISMA-ScR) reporting guideline.

**Results:** A total of 348 studies were identified, and seven articles were involved in the final synthesis. These seven articles included five instruments measuring the concept of purpose in life, of which two instruments had two versions: 1) Purpose in Life Test (20 items, 4 items); 2) Life Engagement Test (6 items); 3) Psychological Well-Being (120 items, 18 items); 4) Self-Assessment Goal Achievement (9 items); and 5) National Institutes of Health Tuberculosis Meaning and Purpose Scale Age 18<sup>+</sup> (18 items). The validity of all instruments was tested using factor analysis, known groups, face, concurrent, convergent, discriminant, and construct validity. The reliability of four instruments was tested by Cronbach's alpha and Spearman-Brown formula.

**Conclusion:** Five instruments measuring purpose in life in the adult population with adequate psychometric properties were identified. The clinical implication of this study suggests that nurses may consider employing an appropriate instrument to assess the purpose of life in the adult population, thus enabling them to offer holistic, individualized care to adults, particularly addressing the spiritual dimension.

### Keywords

purpose in life; adult; psychometrics; scoping review; psychological well-being

Somrudee Arunjit, RN, MScN Faculty of Nursing, Prince of Songkla University, Songkhla, Thailand Email: somrudee@bcnnakhon.ac.th

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\*Corresponding author:

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### **Background**

Purpose in life (PIL) is essential because it adds value to living (Frankl, 1992). PIL promotes self-esteem, positive thinking, and optimism, leading to a sense of health and well-being (Anderson et al., 2022; Balthip et al., 2016; Frankl, 1992; Lewis, 2017). PIL can guide life and help develop the wisdom to deal with problems, especially in adulthood (Frankl, 1992; Kim et al., 2022; Reawtaisong & Supwirapakorn, 2017). This is an age where there are many responsibilities, particularly in work, family, the economy, and health. These responsibilities can become crises that adults may face, causing them to feel insecure (Kaplan et al., 2016).

Nurses play an important role in promoting good health in all dimensions of adults, especially the spiritual dimension, of which purpose in life is one aspect. For a person to have a PIL, it is crucial that the nurse assesses their PIL to promote a purpose in life. However, a literature review found that measuring the PIL mostly focused on general people (Schultz, 2015) and older adults (AshaRani et al., 2022).

A literature review on the measurement of PIL in general people found 12 instruments used to measure PIL, including the Frankl Questionnaire, Purpose in Life Test, Seeking of Noetic Goals, Life Purpose Questionnaire, Ryff's Scales of Psychological Well-being Purpose Subscale, Purpose in Life Scale, Life Engagement Test, Revised Youth Purpose Survey, Existence of Purpose in Life Subscale, Sense of Coherence

Scale, Life Regard Index, and Life Attitude Profile-Revised (Schultz, 2015). A literature review on the PIL of older adults conducted a systematic review of the conceptualization, measures, and determinants (AshaRani et al., 2022) and illustrated five instruments used to measure the PIL of older adults, including Ryff's Psychological Well-Being Scale, Purpose in Life Test, National Institutes of Health Tuberculosis Meaning and Purpose Scale Age 18+, Life Engagement Test, and K-1Scale.

Although previous studies described some instruments that can be used for measuring the PIL of adults, there are no specific instruments for measuring the PIL that require specific and validated assessment instruments that can guide the enhancement of the PIL of individual adults. Thus, this scoping review aimed to identify and map the content and psychometric properties and propose option scales of instruments to measure PIL in adult populations.

### Methods

A scoping review methodology uses the framework developed by Arksey and O'Malley (2005). This framework consists of five steps: 1) identifying the research question, 2) identifying relevant studies, 3) study selection, 4) charting the data, and 5) collating, summarizing, and reporting the results. This study used the reporting guideline' PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation' (Tricco et al., 2018) and the 'COSMIN methodology for systematic

reviews of Patient-Reported Outcome Measures (PROMs)' (Mokkink et al., 2018).

### **Identifying the Research Question**

In this review, the scope of inquiry focuses on the analysis of instruments to measure the PIL of the adult population. The questions formulated within the scope of this review are: 1) Which PIL instruments are used in the adult population? 2) What items and/or domains have been developed in the instruments measuring PIL in the adult population? and 3) What are the answer options scales and psychometric properties of the PIL instruments in the adult population?

### **Identifying Relevant Studies**

This study's search strategy is to identify empirical research in adult PIL instruments. Keywords were identified, and related databases and libraries facilitated the identification of empirical literature. The search strategy included the four key elements from the COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) format: 1) construct, 2) population, 3) type of instrument, and 4) measurement properties (Mokkink et al., 2018). The electronic database used was PubMed. The libraries used were APA—PsycNet, Wiley Online Library, and Cochrane Library. The article reference list was mapped. The search strategy was performed between 1 November 2023-14 February 2024 (See Supplementary File 1). Keywords, databases, and libraries used for searching are presented in Table 1.

Search Search words Number of articles from each database/library no. PubMed American Wiley Cochrane **Psychological Online** Library Association Library S1 "Purpose in life" OR "Purpose in life test" OR "Life purpose" OR "Goal" 260 11,181 2,492 OR "Goal test" OR "Life goal" #Title S2 S1 AND "Adult" 2.672 207 422 202 S3 S2 AND "Assessing" OR "Measurement" OR "Measuring" OR "Scale" OR 557 317 202 83 "Instrument" OR "Questionnaire" OR "Tool" S4 S3 AND "Validity" OR "Reliability" OR "Psychometric" 152 172 Database search limits used 14 By validation study By adult 14 8 By article 8 148 14 By Language

Table 1 Keywords and databases used for searching

### **Study Selection**

By full text

Summary of the number of selected articles

The relevant studies from databases and libraries were identified and exported to the Zotero program, a citation management instrument (Yamacharuen, 2019). Duplicates were identified and removed. The eligibility criteria for inclusion of the articles were: 1) an instrument assessing the PIL concept, 2) the development and testing of an instrument measuring the PIL concept, 3) an adult population, 4) the language was English, and 5) a full-text article. The exclusion criteria of the articles were case studies, case reports, conference abstracts, and reviews. In addition, articles using the term 'meaning in life' without explicit reference to 'purpose in life' were excluded because of a different concept. The

selected full papers were reviewed based on the inclusion criteria by the research team [S. A., K. B., J. M. L.].

148

172

### **Quality Appraisal**

14

14

8

The research team checked the quality of the articles using the COSMIN Risk of Bias checklist for PROMs (Mokkink et al., 2018). The scoring criteria were: V = very good; A = adequate; D = doubtful; I = inadequate; N = not applicable. The assessment topics of the articles were content validity, structural validity, internal consistency, cross-cultural validity, measurement invariance, reliability, measurement error, criterion validity, hypotheses testing for construct validity, and responsiveness. Additionally, the GRADE system was used to

rate the quality of the evidence, graded by quality level, including high, medium, low, and very low.

### **Charting the Data**

The research team developed a data chart model according to the COSMIN methodology (Mokkink et al., 2018). The extracted data include authors, year of publication, name of instrument, design, target populations, subscale, number of items, score system, psychometric properties, and quality of the evidence. Two researchers [S. A. and K. B.] discussed charting to determine how to extract data following research questions and objectives.

### **Data Analysis and Synthesis**

From the analysis of relevant text, a narrative synthesis of the characteristics of the PIL assessment instrument was formed (Arksey & O'Malley, 2005). This included an overview of the instrument's name and the design of the concepts measured

in the instruments. The number and detailed formulated items used in the instruments were identified and summarized. The psychometric properties were identified and presented in an overview to determine the statistical properties.

### Results

### Selection of Study

A total of 348 related articles were identified. After removing the duplicates, 346 articles were selected to review the titles and abstracts. After screening the titles and abstracts, 333 articles were unrelated to an instrument assessing the PIL. Four articles were not developing and testing an instrument to measure the PIL, and two were not in English (Spanish and Swedish versions). Therefore, seven articles were identified as relevant and included in reading the full-text articles. Of those, the inclusion criteria were met. Finally, seven articles were involved in the evidence synthesis (Figure 1).

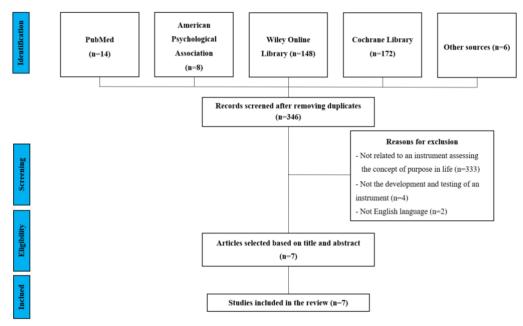


Figure 1 The COSMIN Flow chart (Mokkink et al., 2018)

### **Study Characteristics**

The seven articles included five instruments measuring the PIL (Brubaker et al., 2013; Crumbaugh, 1968; Ryff, 1989; Ryff & Keyes, 1995; Salsman et al., 2014; Scheier et al., 2006; Schulenberg et al., 2011). The five identified instruments were:

1) Purpose in Life Test, 2) Life Engagement Test, 3) Psychological Well-Being, 4) Self-Assessment Goal Achievement, and 5) National Institutes of Health Tuberculosis Meaning and Purpose Scale Age 18<sup>+</sup>. The Purpose in Life Test had two versions: 20 items (Crumbaugh, 1968) and 4 items (Schulenberg et al., 2011). The Psychological Well-Being instrument had two versions: 120 items (Ryff, 1989) and 18 items (Ryff & Keyes, 1995).

### **Content and Psychometric Properties of Instruments**

Of the seven included studies consisting of five instruments, the target population ranged from 104 to 7,108 adults. Most instruments are unidimensional, but the Psychological Well-Being has six subscales. The number of questions or items ranged between four to 120. All instruments used a Likert

scale for the answer option scale. The Likert scales differ between the instruments using a 5 to 7-point scale. The testing of the psychometric properties included various validity and reliability tests. The validity tests used were: structural validity by exploratory factor analysis (Life Engagement Test 6 items, Psychological Well-Being 120 items), confirmatory factor analysis (Purpose in Life Test 4 items, Psychological Well-Being 18 items, the National Institutes of Health Tuberculosis Meaning and Purpose Scale Age 18+18 items), known-groups validity (Self-Assessment Goal Achievement 9 items), face validity (Self-Assessment Goal Achievement 9 items), concurrent validity (Purpose in Life Test 20 items), convergent validity (Life Engagement Test 6 items), and discriminant validity (Life Engagement Test 6 items, Psychological Well-Being 120 items). The reliability estimates were tested in four instruments by using the Spearman-Brown formula (Purpose in Life Test 20 items), the test-retest and the alpha coefficient (Life Engagement Test 6 items, Psychological Well-Being 120 items), and the alpha coefficient (Purpose in Life Test 4 items, Psychological Well-Being 18 items). The National Institutes of

Health Tuberculosis Meaning and Purpose Scale Age 18<sup>+</sup> (18 items) does not specify a method for calculating reliability values

### Instrument 1: Purpose-in-Life Test (PIL)

The PIL measurement was developed by Crumbaugh (1968) and was created to verify that it is consistent with the meaning and purpose in life based on Viktor Frankl's concepts. This instrument includes 20 items. The validation study sample consisted of 1,151 adult persons. The answer option scale is a 7-point Likert scale with different answers related to the item, for example, 'In life I have' (no goals to clear goals); 'My existence is' (meaningless to meaningful). Validity was tested by concurrent validity of the PIL scores in both groups, where the adult patient PIL score correlated with the normal group was 0.47. The internal consistency of the PIL was measured by the Spearman-Brown formula and resulted in an adequate reliability of 0.92. This instrument's strength is that it is a measuring instrument based on the concept of meaning and purpose in life and has an appropriate number of questions. The weaknesses of this instrument are the questions related to psychological distress and well-being. In conclusion, the PIL is suitable for use to measure the PIL of the adult person.

In addition, the PIL measurement that was developed by Crumbaugh (1968) was developed as a short form (PIL-SF) by Schulenberg et al. (2011). It was created from a brief 20-item measurement into 4 items. The validation study sample consisted of 298 adult persons. The answer option scale is a 7-point Likert scale. The validity was tested by confirmatory factor analysis (CFA): the Root Mean Square Error of Approximation (RMSEA) was less than 0.06. The Comparative Fit Index (CFI), the Adjusted Goodness of Fit Index (AGFI), and the Tucker-Lewis Index (TLI) exceeded 0.90. The PIL-SF 4 items correlated with well-being and psychological distress was 0.81. The reliability tested by the alpha coefficient was 0.86. The strength of this measuring instrument is based on the PIL concept and adult persons and that adults spent less time answering questionnaires. The weakness of the instrument is the number of short questions. In conclusion, the PIL-SF is suitable for use to measure the PIL of an adult person.

### Instrument 2: The Life Engagement Test (LET)

The LET measurement by Scheier et al. (2006) was created through activities that the person valued. This instrument includes six items. The validation study sample consisted of 2,076 adult persons. The answer option scale is a 5-point Likert scale, '1 = strongly disagree' to '5 = strongly agree.' The structural validity from the exploratory factor analysis (EFA) used principal component analyses with varimax rotation and Kaiser normalization by maintaining factors with Eigen values >1. It was found that the variance in the LFT was 43%-62%. Factor loadings for all the LET items within the samples ranged from 0.57-0.86. The convergent validity of the LFT was significantly related to other psychosocial factors, with high coefficients of 0.58. The discriminant validity, the LFT correlations with the PIL, was 0.73. The reliability was tested using two methods: test-retest and internal consistency reliability using the alpha coefficient. The test-retest correlations ranged from 0.61-0.76, and the alpha coefficient was 0.72-0.87. This instrument's strength is that adult persons spend less time answering questionnaires,

and the instrument consists of specific questions about their PIL. The weakness of the instrument is the number of short questions. In conclusion, the LFT is suitable for measuring the purpose of the adult person's life.

### Instrument 3: Ryff's Psychological Well-Being (PWB)

The PWB measurement was relevant to the psychological theory, which points to different parts of positive functioning. The initial Ryff's PWB instrument included 120 items divided into six domains (Ryff, 1989). The instrument was shortened to 18 items divided into six domains and validated (Ryff & Keyes, 1995). The PWB is constructed with six theoretical domains: 1) autonomy, 2) environmental mastery, 3) personal growth, 4) positive relations with others, 5) purpose in life, and 6) self-acceptance. The PWB (120 items) is assessed by a 6point Likert scale: '1 = strongly agree' to '6 = strongly disagree'. The PWB (18 items) is evaluated by a 6-point Likert scale: '1 = completely disagree' to '6 = completely agree.' The validity of the PWB was tested initially with the 120-item version and 18-item version. Structural validity from the EFA was assessed using principal component analysis, and the Varimax method found that the variance in well-being was 51.1% (Ryff, 1989). Discriminant validity: the six scales have significant correlations with the previous measures of positive functioning with coefficients between 0.25-0.73. Similarly, there were significant correlations with previous negative functioning measures with coefficients between -0.30 and 0.60 (Ryff, 1989). Structural validity from the CFA by the AGFI found that the questionnaire did not have much congruence with the empirical data because the AGFI was 0.85-0.89 (Ryff & Keyes, 1995), which should be greater than 0.90 (Pasunon, 2015). Structure analysis to highlight the necessity for the theory that drives the instrument reveals t-values around 0.50. This high correlation indicates structural redundancy (Ryff & Keyes, 1995). The strength of this instrument is that it can assess wellbeing in conjunction with purpose in life. The weakness of the instrument is that it has a large number of questions (Ryff, 1989), and the questionnaire did not have much congruence with the empirical data, which indicated structural redundancy (Ryff & Keyes, 1995). In conclusion, the PWB can be used to measure the PIL of the adult person.

### Instrument 4: The Self-Assessment Goal Achievement (SAGA)

The SASG by Brubaker et al. (2013) was created through the goal setting of each adult patient to develop the doctor's treatment plan to suit the adult patient. This instrument includes nine items. The validation study sample comprised 104 adult patients with lower urinary tract symptoms (LUTS). The answer option scale has two modules: 1) the baseline module and 2) the follow-up module. The answer option scale is assessed by a 5-point Likert scale. The baseline module is '1=not very important goal' to '5=very important goal'. The follow-up module is '1=did not achieve goal' to '5=greatly exceeded goal'. The face validity reveals that the questionnaire can be measured. The structural validity by known-groups validity found that the questionnaire had the characterization power of the variables at the significance level of 0.01. The reliability was not assessed because goals differed between patients and changed all the time. This instrument's strength is the benefit gained from measurement,

which affects treatment planning for adult patients. The weakness is this instrument has not been tested for reliability. In conclusion, if PIL is measured in patients with urinary tract symptoms, this instrument is appropriate, but it needs to be tested for reliability before its actual use.

## Instrument 5: National Institutes of Health (NIH) Tuberculosis Meaning and Purpose Scale Age 18<sup>+</sup>

The NIH Tuberculosis Meaning and Purpose Scale Age 18<sup>+</sup> measurement by Salsman et al. (2014) was created to evaluate psychological well-being (PWB). This instrument includes 18 items. The validation study sample contained 552 adults aged 18 and above. The answer option scale is a 5-point Likert scale by items 1-14' 1 = Strongly disagree' to '5 = Strongly agree' and items 15-18' 1 = Not at all' to '5 = Very much' Structural validity from the CFA by the CFI = 0.94, TLI

= 0.98, and RMSEA = 0.131. The internal consistency of this instrument was measured with a reliability of  $\geq$  0.95. The strength has an appropriate number of questions, and the instrument consisted of specific questions about their PIL. The weakness of this instrument is that the answer option scale has two components. This may require clarification before participants complete the questionnaire. In conclusion, this instrument is suitable for measuring the PIL of an adult person.

### **Critical Appraisal of the Articles**

The quality of articles according to COSMIN principles by the GRADE approach (Mokkink et al., 2018) found that one article was of high quality (Scheier et al., 2006). Six articles are of moderate quality (Brubaker et al., 2013; Crumbaugh, 1968; Ryff, 1989; Salsman et al., 2014) (Supplementary File 2).

Table 2 Characteristics of the instruments that measure the purpose in life of the adult population

Authors and publication year	PROM and Design	Target population	Subscales, Number of items, and Score system	Validity	Reliability	Quality
(Crumbaugh, 1968)	The Purpose in Life test (PIL)  Cross-validation of the purpose in life test based on Viktor Frankl's concepts	Non-patients and psychiatric patients ( <i>n</i> = 1,151)	20 items 7-points Likert scale	Concurrent validity: PIL scores of patients correlate with the normal group was 0.47	The Spearman- Brown formula to 0.92	Moderate
(Schulenberg et al., 2011)	The Purpose in Life test: Short Form (PIL-SF) Revision and validity testing	Undergraduates (n = 298)	4 items 7-points Likert scale	Structural validity from CFA by the RMSEA was less than 0.06  Concurrent validity: PIL scores correlated with wellbeing and psychological distress was 0.81  The CFI, AGFI, and TLI exceed 0.90	The reliability tested by the alpha coefficient was 0.86	Moderate
(Scheier et al., 2006)	The Life Engagement Test (LET)  Cross-validation of the purpose in life test based on activities that are personally valued	Community sample, osteoarthritis patients, and women with breast cancer ( <i>n</i> = 2,076)	6 items 5-point Likert scale	Structural validity from the EFA was 43%-62% of the variance Factor loadings were 0.57-0.86  Convergent validity, the LFT is significant in relation to the other psychosocial factors with high coefficients of 0.58  Discriminant validity, the LFT correlations with the PIL was 0.73	The test- retest correlations ranged from 0.61-0.76 The alpha coefficient is a coefficient of 0.72-0.87	High
(Ryff, 1989)	Psychological Well-Being (PWB) Initial development and validity testing	Adults ( <i>n</i> = 321)	6 subscales of psychological wellbeing: 1) Autonomy, 2) Environmental mastery, 3) Personal growth, 4) Positive relations with others, 5) Purpose in life, 6) Self-acceptance 120 items; 20 items per scale 6-point Likert scale	Structural validity from the EFA was 51.1% of the variance  Discriminant validity, the six scales have significant and strong correlations with the prior measures with coefficients as high as 0.73	The test- retest correlations of 0.82 The alpha coefficient is a coefficient of 0.90	Moderate

Table 2 (Cont.)

Table 2 (Cont.)	<b>'</b>					
(Ryff & Keyes, 1995)	Psychological Well-Being (PWB) Revision and validity testing	Noninstitutionalized English-speaking adults, age 25 years and older ( <i>n</i> = 1,108)	6 subscales of psychological wellbeing: 1) Autonomy, 2) Environmental mastery, 3) Personal growth, 4) Positive relations with others, 5) Purpose in life, 6) Self-acceptance  18 items; 3 items per scale  6-point Likert scale	Structural validity from the CFA by the AGFI was 0.85-0.89  Structure analysis reveals <i>t</i> -values around 0.50	The alpha coefficient is a coefficient of 0.33-0.56	Moderate
(Brubaker et al., 2013)	The Self- Assessment Goal Achievement (SAGA)  Improving individualized treatment plans by setting achievable treatment goals	Adult patients with lower urinary tract symptoms (LUTS) ( <i>n</i> = 104)	9 items 5-point Likert scale	Face validity reveals that the questionnaire can be measured  Known-groups validity reveals the questionnaire had the characterization power of the variables at a significance level of 0.01	The reliability was not assessed	Moderate
(Salsman et al., 2014)	The National Institutes of Health (NIH) Tuberculosis Meaning and Purpose Scale Age 18+ Cross-validation of the PIL test based on psychological well-being	Adults 18 and above years of age (n = 522)	18 items 5-point Likert scale	The CFA by the CFI = 0.94, TLI = 0.98., and RMSEA = 0.131	The reliability was ≥ 0.95	Moderate

Table 2 illustrates the characteristics of an instrument that measures the PIL of the adult population. Each instrument can be interpreted as follows: 1) Both the PIL test with 20 items and the PIL test with 4 items exhibit good concurrent validity and excellent reliability. 2) The LFT demonstrates good validity and reliability. 3) The PWB (120 items) displays good validity and reliability. However, although the PWB (18 items) undergoes structural analysis with t-values within acceptable criteria and has good reliability, the AGFI value is lower than normal. This indicates that the questionnaire did not have much congruence with the empirical data. 4) The SAGA shows good validity, but there is no reliability test. 5) The NIH Tuberculosis Meaning and Purpose Scale Age 18+ has CFI and TLI values within acceptable criteria. Although it is highly reliable, the RMSEA has values greater than 0.1, indicating that the questionnaire's consistency with empirical data is poor (Bernstein et al., 2019; Fabrigar et al., 1999; Hu & Bentler, 1999; Koo & Li, 2016; Pasunon, 2015).

### Discussion

### **Summary of the Findings**

This scoping review aimed to identify and map the content, psychometric properties, and answer option scales for instruments that intend to measure PIL in adult populations. There were five instruments identified measuring PIL in the adult population: 1) Purpose in Life Test, 2) Life Engagement Test, 3) Psychological Well-Being, 4) Self-Assessment Goal Achievement, and 5) National Institutes of Health Tuberculosis

Meaning and Purpose Scale Age 18<sup>+</sup>. Existing PIL instruments have been developed for various aims: the PIL Test was developed to test the theory, and LET was developed to find PIL through hands-on activities. PIL is one domain of the PWB instrument, which was developed to assess the well-being of adults in positive structures. Self-Assessment Goal Achievement was developed to guide the treatment plan, and the NIH Tuberculosis Meaning and Purpose Scale Age 18<sup>+</sup> was developed to find a relation with psychological well-being.

The literature review concerning the PIL of adults found that 23 studies worldwide used the PIL test (20 items), the LET (6 items), the PWB (18 items), and the NIH Tuberculosis Meaning and Purpose Scale Age 18+ instruments (18 items) for measuring a PIL of participants (AshaRani et al., 2022; Hill & Turiano, 2014; Kim et al., 2013; Nilchantuk, 2020; Reker, 1977). The study that used the PIL test (4 items), PWB (120 items), and the SAGA instruments were not found in adults. The PIL (20 items) emerged as the most frequently used and cited instrument, likely due to its alignment with the PIL concept, appropriate number of questions, good validity, and excellent reliability.

The PWB instrument (120 items) was not utilized in adults, possibly due to its excessive number of questions, which may be inconvenient compared to the PWB (18 items). Similarly, the SAGA was not implemented, possibly due to the lack of reliability measurement. Therefore, the PIL (20 items) stands out as the most suitable measurement instrument for assessing PIL in adulthood.

### Implications of the Study for Nursing

Assessment of PIL can be linked to nursing care. Nurses can assess PIL scores and promote PIL to patients. Hedberg et al. (2011) studied 'Purpose in life over five years: a longitudinal study in a very old population.' The PIL of older adults in Sweden was assessed over five years using the PIL instrument. The result found that the PIL of these individuals was lower, especially in depressed women, at a significant level of 0.01. Pearson et al. (2013) studied 'Normative data and longitudinal invariance of the Life Engagement Test in a community sample of older adults.' The PIL was assessed by the LET. The result found that older adults in the community have a high PIL, but it changes over time due to significant life events. Kim et al. (2013) studied 'Purpose in life and reduced incidence of stroke in older adults: The health and retirement study.' The PIL of stroke patients was assessed in older adults using the Ryff and Keyes' Scales of PWB. The result showed that PIL was related to the chance of having a stroke at a significant level of 0.01. Hill and Turiano (2014) studied 'Purpose in life as a predictor of mortality across adulthood,' which used the PWB instrument to measure PIL among 7,108 adults. In a follow-up study after 14 years, the adults in the previous research who died within the 14-year follow-up timeframe had lower scores for PIL than adult persons who were still alive in the follow-up period. Tkatch et al. (2021) studied 'Reducing loneliness and improving well-being among older adults with animatronic pets.' The PIL of older adults was assessed using the NIH Tuberculosis Meaning and Purpose Scale Age 18+. The result found that the PIL improved and loneliness decreased.

Therefore, assessing the PIL in adulthood is important for nurses because nurses can use the results from the PIL assessment to promote PIL for adulthood, which leads to well-being (Pearson et al., 2013) and prevent loneliness (Tkatch et al., 2021), depression (Hedberg et al., 2011), and stroke (Kim et al., 2013). Moreover, having a PIL results in a longer lifespan (Hill & Turiano, 2014).

### Strengths and Limitations of the Study

The strength of this study was the scoping review process. This is based on the framework of Arksey and O'Malley (2005), 'PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation' (Tricco et al., 2018) and the 'COSMIN methodology for systematic reviews of Patient-Reported Outcome Measures (PROMs)' published by Mokkink et al. (2018) which affects credibility. Results are reported with psychometric properties. In addition, this scoping review focused on the PIL of an adult person, which targets a specific population. The limitation of this scoping review is that studies on the PIL concept are not yet widespread. Moreover, specific research on measurement PIL instruments has few studies.

### Conclusion

There are five instruments for measuring the PIL of an adult person with adequate psychometric properties. However, if PIL measurement instruments are used in research, they should be checked for validity and reliability before being used to test the quality of the instrument. Measuring PIL affects clinical implications. Nurses might consider using an appropriate instrument to assess the PIL of adult populations

to provide individualized support to adults with spiritual health issues

### **Declaration of Conflicting Interest**

The authors declare no conflict of interest.

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### Authors' Contributions

The authors [S.A and K.B] have contributed substantially to the conception, design of the work, and acquisition. All authors [S.A, K.B, J.M.L] contributed to the analysis and interpretation of data. The first author [S.A] drafted the work. The second and third authors [K.B and J.M.L] reviewed it critically for important intellectual content. All authors [S.A, K.B, J.M.L] approved the final version to be published. All authors [S.A, K.B, J.M.L] agreed to be accountable for all aspects of the work to ensure that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

### Authors' Biographies

**Somrudee Arunjit, RN, MScN** is a Ph.D student at the Faculty of Nursing, Prince of Songkla University, Songkhla, Thailand.

Karnsunaphat Balthip, RN, MScN, Ph.D is an Associate Professor at the Faculty of Nursing, Prince of Songkla University, Songkhla, Thailand. Jos M. Latour, RN, MScN, Ph.D is a Professor in Clinical Nursing at the

Faculty of Health, University of Plymouth, Plymouth, United Kingdom.

### **Data Availability**

All data generated or analyzed during this study are included in this published article (and its supplementary files).

### Declaration of Use of AI in Scientific Writing

The authors have declared that no generative Al and Al-assisted technologies are used in writing.

### **Ethical Consideration**

Not applicable.

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