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RESEARCH PAPER

Translation and Validation of Finding Meaning in Suffering Scale (FMIS) in Urdu Language

¹Anam Naeem and ²Iffat Batool

- 1. Ph.D. Scholar, Department of Psychology, Government College University, Lahore, Punjab,
- 2. Associate Professor, Department of Psychology, Government College University, Lahore, Punjab, Pakistan

*Corresponding Author Naeem.anamm@gmail.com

ABSTRACT

The present study aimed at translation and validation of FMIS in Urdu language. FMIS is designed to evaluate how individuals derive meaning from suffering as it plays a crucial role in coping with trauma, chronic illness, and existential crises, making a validated version of FMIS essential for cross-cultural research and clinical application. The translation process includes forward-backward translation by bi-lingual experts, reconciliation of differences, and expert review of content validity A pilot test was conducted on a sample of 30 participants, both Urdu and English version of scale were administered for feedback and to check the reliabilities of both versions. The Urdu version of FMIS was administered on a sample of 460 participants age ranged from 18-34 years (224 Men and 236 women) selected through convenience sampling. The data was analyzed through SPSS and AMOS. Descriptive, reliability, CFA, convergent and discriminant validation analyses were conducted. The results of pilot test showed reliabilities of English version ($\alpha = 0.71$) and Urdu version ($\alpha = 0.81$; See Table 1) and significant correlation (r = .70**; See Table 2) showed similarity of both versions. The results of CFA demonstrated a good fit model with χ^2 = 270.16; (*df*= 118; *N* = 460); *p*<.001; RMESA=.05; TLI=.90; GFI=.94; AGFI=.92; and PCLOSE=.26. The value of chi-square (χ^2 = 270.16) is significant (p<.001) due to greater degree of freedom (CMID/df=2.29). CFA model supported one factor structure (See Figure 1), 17-items were retained for meeting .30 criteria (.30 to .58; See Table 4), 5-items (i.e., 2, 6, 11, 18, and 21) were discarded for not meeting this .30 factor loading criteria resulted in improvement of reliability of scale (α = 0.85). Urdu versions of EFI-30 (Enright et al, 2022; α = 0.90) and CAS (Snell, 1995; α = 0.83) were administered for validation. The correlation between FMIS and Forgiveness (r=.187, p < .01) provided evidence for convergent validity and the correlation between anger and FMIS (r=-0.325, p < .01) provided an evidence for discriminant validity. The present research resulted in a reliable and valid Urdu version of FMIS scale. The implication of present research is for therapists, educationists, personality psychologists and for health practitioners, especially for those dealing with chronic illness.

KEYWORDS

Enright Forgiveness Inventory-30, Clinical Anger Scale, Confirmatory factor analysis, Validation

Introduction

Suffering is a universal aspect of the human condition, affecting all individuals, regardless of background or circumstance. However, without finding meaning in suffering, it can become an overwhelming force that leaves individuals feeling powerless and without hope. One of the central insights of existential philosophy, as discussed by Reed (1998), is that suffering does not have to be a source of despair; instead, it can be a transformative experience if one can find meaning in it. Reed argues that meaning-making in the face of suffering provides individuals with the strength to endure life's challenges and continue their journey, even when circumstances seem dire. This resonates with existentialist thinkers such as Viktor Frankl, who contends that life's difficulties and suffering can be bearable only when they are seen as part of a broader, meaningful narrative (Frankl, 1962).

Segal (2015) explains, existentialism emphasizes that the search for meaning, particularly in suffering, is essential to human survival. Suffering, while unavoidable, can serve as a catalyst for self-discovery and personal growth. When individuals confront their pain and search for meaning in it, they often uncover profound insights about themselves, their values, and their relationship with the world. This is a central tenet of Reed's (1998) perspective, which suggests that suffering, when reframed as a meaningful experience, can strengthen resilience and increase emotional well-being. Reed highlights that by choosing how to interpret suffering — whether through spiritual, relational, or philosophical lenses — individuals can transcend the pain and use it as a tool for greater understanding and connection.

Frankl (1962) further supports this idea, asserting that individuals who find purpose in their suffering are better able to withstand hardships. In his own experience as a concentration camp survivor, Frankl observed that those who could attach meaning to their suffering, whether through relationships, work, or personal beliefs, were more likely to survive the horrors they faced. This existential perspective underscores that suffering is not just a passive experience but an active one that can shape an individual's identity and life path. Reed and Enright (2006) also notes that meaning-making in suffering is not merely about enduring pain, but about transforming it into something that enhances personal growth and deepens one's connection with others.

The "Finding Meaning in Suffering Scale" (FMIS) by Gayle Reed is a validated instrument designed to measure the score of individuals who can find meaning in their suffering. The scale has been used in various studies to explore the relationship between meaning-making and mental health outcomes. Reed and Enright (2006) used the FMIS to examine forgiveness to find meaning in suffering, revealing significant positive correlations with psychological well-being. Moreover, Davis, Nolen-Hoeksema, and Larson (1998) found that individuals who engaged in meaning-making processes reported fewer symptoms of depression and anxiety following loss or trauma.

Literature Review

Finding meaning in Suffering is linked to various positive psychological outcomes: Steger, Frazier, Oishi, and Kaler (2006) found that individuals who reported higher levels of meaning in life suffering experienced greater life satisfaction, happiness, and lower levels of depression. A study on cancer patients revealed that those who engaged in meaning-making activities reported better psychological adjustment and quality of life (Lee, Cohen, Edgar, Laizner, & Gagnon, 2006). Tedeschi and Calhoun (2004) identified meaning-making as a central component of post-traumatic growth, wherein individuals experiencing trauma were able to develop a higher level of functioning and well-being through the process of finding meaning in their experiences.

Finding meaning in suffering involves attributing significance to challenges and setbacks, which can aid in personal growth and resilience. Individuals who perceive suffering as meaningful are more likely to experience post-traumatic growth, characterized by enhanced psychological strengths and a deeper sense of purpose in life (Park, 2010). The

ability to forgive is closely linked to finding meaning in suffering, as forgiveness allows individuals to reframe their experiences and extract lessons that contribute to personal and spiritual growth (Toussaint & Webb, 2005). The relationship between forgiveness and finding meaning in suffering is symbiotic, with each process reinforcing the other. Forgiveness enables individuals to release emotional burdens associated with suffering, creating space for reflection and introspection (Enright & Fitzgibbons, 2015). In turn, finding meaning in suffering fosters a sense of acceptance and resilience, facilitating the forgiveness process by promoting understanding and empathy towards oneself and others (Park, 2010).

The benefits of integrating forgiveness and finding meaning in suffering into therapeutic interventions aimed at promoting psychological well-being. Worthington (2006) and Park (2010) suggests that these processes can mitigate the negative effects of trauma and adversity, leading to improved mental health outcomes and greater life satisfaction. By cultivating forgiveness and fostering a sense of meaning, individuals are better equipped to navigate challenges, experience growth, and cultivate resilience in the face of suffering.

Suffering often triggers anger, particularly when individuals perceive their distress as unjust or uncontrollable (Lazarus, 1991). However, psychological research suggests that meaning-making can transform anger into a constructive force for resilience and growth (Frankl, 1985). According to existential psychology, particularly Frankl's logotherapy, finding meaning in suffering helps individuals endure hardships by reframing distress in a purposeful way. Cognitive appraisal theories further explain that anger arises from perceived violations of expectations, but meaning-making strategies, such as cognitive reappraisal and spiritual coping, can mitigate its negative effects (Smith & Lazarus, 1993; Wong, 2012). Empirical studies have shown that individuals who engage in meaningmaking report lower levels of chronic anger and greater emotional well-being (Tedeschi & Calhoun, 2004; Park & Ai, 2006). Additionally, interventions like Acceptance and Commitment Therapy (ACT) and mindfulness-based cognitive therapy emphasize meaning-centered coping to regulate anger and promote resilience (Hayes et al., 2006; Neff & Germer, 2013). Understanding this relationship has significant clinical implications, as fostering meaning-making can help individuals process suffering and reduce maladaptive anger responses.

In conclusion, while suffering is an unavoidable part of life, existential thinkers like Reed (2018) and Segal (2015) argue that it does not have to be a destructive force. By finding meaning in suffering, individuals can transform their pain into a source of resilience, empowerment, and deeper understanding. This process of meaning-making allows individuals to confront life's challenges with greater strength and a renewed sense of purpose, making suffering not only bearable but potentially transformative. The FMIS developed by Gayle Reed is a valuable tool for assessing an individual's ability to find meaning in adverse experiences. While extensively validated in Western contexts, there is a critical need to adapt and validate this scale for diverse cultural settings due to significant cultural differences in perceiving and deriving meaning from suffering (Markus & Kitayama, 1991; Triandis, 1995). This process involves rigorous psychometric evaluation, including forward and backward translation, expert reviews, pilot testing, and statistical analyses, to ensure reliability and validity (Beaton et al., 2000). A culturally validated FMSS would enhance research and clinical practice by enabling accurate assessment and effective therapeutic interventions across different populations (Breslin, 1970). Moreover, it addresses global mental health disparities by providing culturally appropriate tools, as emphasized by the World Health Organization. This study aims to fill the gap of validated instruments in non-Western cultures, facilitating cross-cultural research and contributing to universal theories and practices in psychology.

Material and Methods

Translation of FMIS

Five bilingual experts with full command on both languages (English and Urdu) were approached. Three Psychology students of M.Phil. and two Ph.Ds were given the questionnaires for translation. All bilinguals were instructed to use simple language, try to maximize the content similarity between original and target language and to translate the test without substituting and eliminating any item. The five translations were presented before a committee of three subject specialists and researchers to finalize and improve the translation. The committee members were well versed with translation procedures. Items were finalized by the experts by focusing on content equivalence between English and Urdu version. Another bilingual expert back-translated the Urdu translated version of FMIS into English to recognize equivalence points and differences between the original and translated versions. Instruments with double translation procedures showed greater reliabilities as compare to single procedural translations (Berkanovic, 1980). Linguistic and conceptual comparison between backward translation of Urdu version and original version was also analyzed by the same committee. The committee checked the back translated version has shown an equivalence with the original version. But some words were changed by the committee. This improved the Urdu version. Ultimately, Urdu version was finalized by the committee.

Pilot Study

A pilot study was conducted to refine the scale by eliminating ambiguous, double barreled, and unclear items, and to ensure comprehensibility and psychometric cleansing for the scale. A sample of 30 young adults (Male= 15 and female=15;18-34 years) was selected from Islamia College Cooper Road and Dyal Singh College, Lahore. Social sciences literature (Issac & Micheal, 1995; Hill, 1998; Van Balle, 2002) suggested 30 participants as sufficient and considered it due to the advantage of simplicity. It's easy to analyze and test the problem statement with an appropriate sample (Mooney & Duval, 1993). Convenience sampling was used for data collection. Participants were approached at their places and were briefed about the study purpose. After taking consent, questionnaires were filled up at the spot. Participants were also asked about the clarity and comprehensibility of the items. Participants reported that some items are unclear in both Urdu and English versions of the scale. Pilot study helps in assessing the practicability of the scale and to finalize the items for factor analysis. The Result showed the descriptive properties, reliability and correlation between the translated and original versions of the Finding meaning in suffering scale.

Table 1
Descriptive and Reliability of Finding Meaning in Suffering (Urdu and English Version)

| Scale | М | SD | Range | | 1. | Chronbach's α |
|--------------|-------|------|-------|------|-----|---------------|
| Scale | M | 3D | UL | LL | - к | Chronbach s u |
| FMIS Urdu | 78.53 | 9.20 | 4.389 | 1.33 | 22 | .81 |
| FMIS English | 80.57 | 7.88 | 3.471 | 1.59 | 22 | .71 |

Note FMIS= Finding Meaning in Suffering Scale; M= Mean; SD= Standard Deviation; k=number of items, UL= Upper Limit; LL= Lower Limit; (N=30)

Pearson-Product moment correlation was conducted to see the relationship between Urdu and English Versions of Finding Meaning in Suffering Scale.

> Table 2 Relationship between Urdu and English versions of FMIS scale.

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|--------------|--------------------------------------------------------------|--------------|--|--|--|--|--|--|
| Scales | FMIS Urdu | FMIS English | | | | | | |
| FMIS Urdu | | .70** | | | | | | |
| FMIS English | | | | | | | | |

Note FMIS= Finding Meaning in Suffering Scale; p=0.01; (N=30)

The result showed high significant correlation between both versions of the scales.

Validation

The translated scale was administered on a sample of 460 participants, age ranged 18-34 years (224 Men and 236 women) through convenience sampling. The participants were approached at their places and participated voluntarily.

Analyses

Descriptive, reliability and confirmatory factor analysis was conducted to validate the scale.

Results and Discussion

Fit Indices

Confirmatory factor analysis

IBM- AMOS (21st version) was used to developed path diagram and analyze the chisquare values estimates. Different psychometric estimates such as chi-square (Jörekskog & Sörbom, 1990/1993), Tucker-Lewis Index (TLI), Goodness-of-Fit Index (Tucker-Lewis Index (TLI) GFI; Bentler and Bonett, 1980), Normed-fit Index (NFI), Comparative Fit Index (CFI; Bentler, 1990) and RMSEA with lower and higher limits of the 90% confidence interval. It was suggested that the value of RMSEA should be less than .06 and the CFI and TLI values should be above .90 (Hu & Bentler, 1999) for a psychometrically fit model.

The CFA model of the Finding meaning in suffering also supported the one-factor structure of the FMIS and item loading. The factor loadings were above .30 and ranged from .32 to .58 (see Table 4) for 17 items. Additionally, 5 items (i.e., 2, 6, 11, 18, and 21) with the low factor loading were removed from the model to improve the fit indices (see Table 3).

Table 3 Confirmatory Model Fit Indices for the Finding Meaning in Suffering Scale (FMIS) CMID/df

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|---|-----------------|--------------|------------|-----------|-----|---------------|----------|----------|----------|------|
| | Model | 2.29 | 270.16 | .053 | | .94 | .90 | .91 | .26 | |
| | Note. $N = 460$ | . FMIS = | Finding | Meaning | in | Suffering | Scale; | χ2=chi | square; | *p= |
| | RMSEA<.055; df | = degree of | f freedom; | GFI= good | dne | ss of fit ind | ex; TLI | =Tucker- | Lewis In | dex; |
| (| CFI=comparativ | e fit index; | RMSEA= | root mean | sq1 | uare error o | of appro | oximatio | n; | |

The results showed a good model fit for the standardized statistical parameters for the Confirmatory factor analysis.

The findings demonstrated that the model was a good fit for the standardized statistics parameters of the CFA model, with χ 2=270.16; (df=118; N = 460); p<.001; RMESA=.05; GFI=.94; AGFI=.92; TLI=.90; CFI=.91 and PCLOSE=.26. Moreover, it is suggested that the value of Chi-square (χ2=270.16) is significant (p<.001) due to a greater degree of freedom (CMID/df = 2.29) (Awang et al., 2016; Awang, 2012; Hair et al., 2010; Forza & Filippini, 1998; Greenspoon & Saklofske, 1998; see Table 3). One-factor structure of FMIS scale was also supported by CFA loadings. The factor loadings were above .30 and ranged from .32 to .58 (see Table 4). Additionally, 5 items (i.e., 2, 6, 11, 18, and 21) of the FMIS were removed from the CFA structure because these items had low (less than .30) factor loadings. After removing these items, the factor structure of the FMIS was statistically significant and well-fitted according to the statistical parameters. In addition, modification indices have been computed between item number 10 and 12 for model fitting.

Table 4
Factor Loading of the Finding Meaning in Suffering Scale (FMIS) through
Confirmatory factor analysis model

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|---------|----------------------------------|-----------------------------|--|--|--|--|
| Sr. No. | Item No | Standardized Factor Loading | | | | |
| Sr. No. | nem No. | FMIS | | | | |
| 1 | FMIS -1 | .40 | | | | |
| 2 | FMIS -3 | .40 | | | | |
| 3 | FMIS -4 | 32 | | | | |
| 4 | FMIS -5 | .53 | | | | |
| 5 | FMIS -7 | .46 | | | | |
| 6 | FMIS -9 | .55 | | | | |
| 7 | FMIS -10 | .60 | | | | |
| 8 | FMIS -12 | .54 | | | | |
| 9 | FMIS -14 | .58 | | | | |
| 10 | FMIS -16 | .53 | | | | |
| 11 | FMIS -17 | .53 | | | | |
| 12 | FMIS -19 | .55 | | | | |
| 13 | FMIS -20 | .52 | | | | |
| 14 | FMIS -23 | .54 | | | | |
| 15 | FMIS -24 | .57 | | | | |
| 16 | FMIS -25 | .55 | | | | |
| 17 | FMIS -27 | .50 | | | | |

Note. N = 460. *FMIS* = Finding Meaning in Suffering Scale. All factor loadings are significant ($\lambda \le .30$; p < .05).

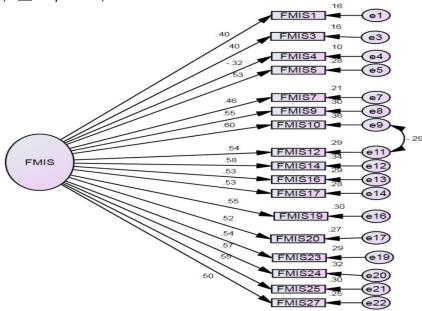


Figure 1 Model fit structure of the FMIS with standardized factor loading obtained through Confirmatory Factor Analysis (CFA)

Note. N = 460. FMIS = Finding Meaning in Suffering Scale. All model correlations and factor loadings are significant (p < .05).

Evaluation of convergent and discriminant Validity of FMIS scale

Convergent validity and discriminant validity are the most commonly used methods to validate a measure (Campbell & Fiske, 1959). Enright Forgiveness Inventory (EFI-30, Enright et al, 2022) Urdu version was used to assess the convergent validity of the scale. And the Clinical Anger Scale (CAS; Snell et. al, 1995) Urdu version of the scale was to assess discriminant validity of the FMIS scale.

Table 5Descriptive and Reliability of Study variables

| Scale | M | SD | Range | | k | Chronbach's a | |
|--------|--------|-------|-------|-------|----|---------------|--|
| | | | UL | LL | _ | | |
| FMIS | 78.53 | 9.20 | 4.389 | 1.33 | 17 | .85 | |
| CAS | 18.82 | 10.11 | 1.043 | 0.707 | 21 | .83 | |
| EFI-30 | 104.45 | 26.93 | 4.461 | 2.783 | 30 | .90 | |

Note: FMIS= Finding Meaning in Suffering; CAS= Clinical Anger Scale; EFI-30; M= Mean; SD= Standard Deviation; k=number of items, UL= Upper Limit; LL= Lower Limit; (N=460)

To investigate the relationship between two measures of FMIS, Pearson product moment correlation was computed.

Convergent Validity

Pearson-Product moment correlation was conducted to explore the convergent validity of FMIS scale with EFI-30. The literature (Toussaint & Webb, 2005; Enright & Fitzgibbons, 2015; Worthington, 2006; and Park, 2010) Suggested that there would be significant positive correlation between the Forgiveness and FMIS.

Table 6
Relationship between FMIS scale and Enright Forgiveness Inventory-30

| Scales | FMIS | EFI-30 |
|-----------|---------------|----------------|
| FMIS Urdu | | .187** |
| EFI-30 | | |
| M (SD) | 48.95 (11.37) | 104.45 (26.93) |
| | | |

Note FMIS= Finding Meaning in Suffering Scale; p=0.01; (N=460)

The result showed high significant positive correlation between FMIS scale and EFI-30 provides an evidence for convergent validity.

Discriminant Validity

Pearson-Product moment correlation was conducted to explore the discriminant validity of FMIS scale with CAS. Literature (Lazarus, 1991; Frankl, 1985; Smith & Lazarus, 1993; Wong, 2012; Tedeschi & Calhoun, 2004; Park & Ai, 2006; Hayes et al., 2006; Neff & Germer, 2013) suggested that there would be significant negative correlation between Anger and FMIS.

Table 7
Relationship between FMIS scale and Clinical Anger Scale

| Scales | FMIS | CAS |
|-----------|---------------|---------------|
| FMIS Urdu | | 235** |
| CAS | | |
| M (SD) | 48.95 (11.37) | 18.82 (10.10) |

Note FMIS= Finding Meaning in Suffering Scale; CAS= Clinical Anger Scale; **p=0.01; (N=460)

The result showed high significant negative correlation between FMIS scale and CAS provides an evidence for discriminant validity.

Discussion

The current study was aimed at translating and validating the FMIS scale in Urdu Language. The scale demonstrated some redundant and ambiguous statements which were eliminated from the final version of Urdu translation. The critical evaluation, feedback and psychometric properties of the five eliminated items is as follows: the items no 2. "I do not believe this experience was difficult enough to have a significant impact on my life". The feedback of this item provided following reasons, this item is more focused on perceived severity of the experience rather than its emotional or psychological impact of the sufferer. The respondents said that if the experience was not difficult this may also affect the responses on other items of the scale. Poor psychometrics was another reason to drop this item. The item 6 phrased as "I find that I have learnt nothing important from this experience" was also dropped from the final version due to poor psychometric properties. By qualitatively analyzing the item it was reported that strong negative wording confuses the respondent and leads to response bias. The inconsistency in responses arises due to subjective perception about growth and learning. Item 11, "I feel less capable of facing difficulties in future because of this experience" the respondent reported that this statement feels like self-doubt and impact your self-efficacy. The word less capable is unclear about its impact whether long or short term. Low psychometrics was another reason of dropping this item from final version of the scale. Item 18, I find that I feel confused about principles of right and wrong because of what happened". The term principles of right and wrong is too abstract, leading to inconsistent interpretations. The ethical confusion can arise even without experiencing any suffering as its learned. Low factor loading on CFA was another reason to eliminate this item. Last eliminated item 21, "I find that I am withdrawing from others because of the difficulties that the experience has caused me". The respondents reported that this item again focused at the severity and the difficulties rather than experience itself. Moreover, social withdrawal can be a personal preference without going through any such experience. This item also resulted as poor factor loading. By eliminating these items, overall validity, reliability and coherence of the scale increases. To conclude this 17-item scale serve the purpose of addressing the meaning in Suffering.

Conclusion

The present research successfully developed a reliable and valid Urdu version of the *Finding Meaning in Suffering (FMIS) Scale*, ensuring its applicability for assessing meaning-making in suffering within Urdu-speaking populations. This validated scale contributes to psychological research by offering a culturally relevant tool for understanding how individuals process suffering and derive meaning from it. The findings have significant implications for educationists, personality psychologists, and health practitioners, particularly those working with individuals experiencing chronic illness, trauma, or psychological distress. By incorporating this scale into counseling, psychotherapy, and educational interventions, professionals can better assess individuals' coping mechanisms and tailor interventions to enhance psychological resilience and wellbeing. Furthermore, the scale can be instrumental in clinical settings, helping healthcare providers understand patients' emotional responses to suffering and design holistic treatment plans that promote mental health and adaptive coping strategies.

Recommendations

- Cross-Cultural Validation Future studies should validate the Urdu FMIS scale across
 diverse cultural and socio-economic groups to ensure its generalizability.
- Longitudinal Research Conducting longitudinal studies can assess the scale's effectiveness in measuring meaning-making over time and its impact on mental health outcomes.
- Clinical and Therapeutic Applications Researchers should explore how integrating the scale into therapeutic interventions can improve emotional regulation, resilience, and overall well-being.
- Use in Medical and Palliative Care The scale should be utilized in healthcare settings, especially in palliative care, to help patients and caregivers navigate suffering and endof-life challenges.
- Educational and Training Programs Integrating the scale into psychology and medical training programs can equip professionals with better tools for understanding and addressing suffering-related emotions.
- Further Psychometric Testing Additional studies should explore alternative models
 of meaning-making and validate the scale's factor structure through advanced
 statistical methods such as confirmatory factor analysis (CFA).
- **Development of Intervention Strategies -** Based on the findings, intervention programs focusing on enhancing meaning-making in suffering should be developed for individuals facing chronic illness, grief, or trauma.

References

- Awang, Z. (2012). A Handbook on SEM: Structural Equation Modeling. Centre for Graduate Studies, Universiti Teknologi MARA Kelantan.
- Awang, Z., Afthanorhan, A., & Asri, M. A. M. (2016). Parametric and Non-Parametric Approaches in Structural Equation Modeling (SEM): The Application of Bootstrapping. *Modern Applied Science*, 10(3), 58–67.
- Bentler, P. M. (1990). Comparative fit indices in structural models. *Psychological Bulletin*, 107, 238-246.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Berkanovic, E., (1980). The effect of inadequate language translation on Hispanics' responses to health surveys. *American journal of Public Health, 70,* 1273-1276.
- Brislin, R. W. (1970). Back translation for the cross-cultural research. *Journal of Cross Cultural Research*, 1 (3), 185-216.
- Brislin, R.W. (1976). *Introduction. In: R.W. Brislin (ed.), Translation: Applications and Research.* 1-43 New York: Gardner.
- Brislin, R.W. (1980). Translation and Content Analysis of Oral and Written Material. In: H.C. Triandis and J.W. Berry (eds.), *Handbook of Cross-Cultural Psychology*, 2, 389-444. Boston: Allyn & Bacon.
- Brislin, R.W. (1986). The Wording of Translation of Research Instruments. In: W.J. Lonner and J.W. Berry (eds.), *Field Methods in Cross-Cultural Research* (Eds.), 137-164. Beverly Hills: Sage.
- Butcher, J. N. & Panchari, P., (1976). *A handbook of Cross-national MMPI research*. University of Minnesota Press, Minnesota.
- Davis, C. G., Nolen-Hoeksema, S., & Larson, J. (1998). Making Sense of Loss and Benefiting from the Experience: Two Construals of Meaning. *Journal of Personality and Social Psychology*, 75, 561-574. https://doi.org/10.1037/0022-3514.75.2.561
- Enright, R. D., & Fitzgibbons, R. P. (2015). Forgiveness therapy: An empirical guide for resolving anger and restoring hope. American Psychological Association. https://doi.org/10.1037/14526-000
- Enright, R., Rique, J., Lustosa, R., Song, J. Y., Komoski, M. C., Batool, I., Bolt, D., Sung, H., Huang, S. T. T., Park, Y., Leer-Salvesen, P. E., Andrade, T., Naeem, A., Viray, J., & Costuna, E. (2022). Validating the Enright Forgiveness Inventory 30 (EFI-30): International studies. *European Journal of Psychological Assessment*, 38(2), 113–123. https://doi.org/10.1027/1015-5759/a000649
- Forza, C., & Filippini, R. (1998). TQM impact on quality conformance and customer satisfaction: A causal model. *International Journal of Production Economics*, 55(1), 1–20.
- Frankl, V. E. (1962). Man's Search for Meaning: An Introduction to Logotherapy. Beacon Press.

- Frankl, V. E. (1985). Man's search for meaning (Rev. ed.). Washington Square Press.
- Greenspoon, P. J., & Saklofske, D. H. (1998). Confirmatory factor analysis of the multidimensional students' life satisfaction scale. *Personality and Individual Differences*, 25(5), 965–971.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Pearson Education International.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2006). *Acceptance and commitment therapy: The process and practice of mindful change* (2nd ed.). Guilford Press.
- Hill, R. (1998). What sample size is "enough" in internet survey research? Interpersonal Computing and Technology: *An Electronic Journal for the 21st Century, 6(3-4)*. Retrieved from http://www.emoderators.com/ipct-j/1998/n3-4/hill.html
- Isaac, S., & Michael, W. B. (1995). *Handbook in Research and Evaluation*. San Diego, CA: Educational & Industrial Testing Services.
- Jöreskog, K. G. & Sörbom, D. (1993): New Features in LISREL 8. Chicago: Scientific Software International.
- Jöreskog, K.G., Sörbom, D., du Toit, S., & du Toit, M. (1999): LISREL 8: New Statistical Features. Chicago: Scientific Software International University
- Lazarus, R. S. (1991). Emotion and adaptation. Oxford University Press.
- Lee, V., Cohen, S. R., Edgar, L., Laizner, A. M., & Gagnon, A. J. (2006). Meaning-making intervention during breast or colorectal cancer treatment improves self-esteem, optimism, and self-efficacy. *Social Science & Medicine*, 62(12), 3133–3145. https://doi.org/10.1016/j.socscimed.2005.11.041
- Mooney, C. Z., & Duval, R. D. (1993). *Bootstrapping: A nonparametric approach to statistical inference*. Newbury Park, CA: Sage.
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 69(1), 28–44. https://doi.org/10.1002/jclp.21923
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, 136(2), 257–301. https://doi.org/10.1037/a0018301
- Park, C. L., & Ai, A. L. (2006). Meaning making and growth: New directions for research on survivors of trauma. *Journal of Loss and Trauma*, 11(5), 389–407. https://doi.org/10.1080/15325020600685295
- Reed, G. & Enright, R. (2006). The Effects of Forgiveness Therapy on Depression, Anxiety, and Posttraumatic Stress for Women After Spousal Emotional Abuse. *Journal of Consulting and Clinical Psychology*.74 (5), DOI: 10.1037/0022-006X.74.5.920
- Reed, G. (1998). Forgiveness as a function of moral agency in the context of divorce and infidelity. Unpublished master's thesis, University of Wisconsin—Madison.

- Reed, P. G. (1991). Toward a nursing theory of self-transcendence: Developmental and contextual considerations. *Advances in Nursing Science*, 13(4), 1–14.
- Segal, S. (2015). Management practice and creative destruction: existential skills for inquiring managers, researchers and educators. (Gower applied research). Gower Publishing.
- Smith, C. A., & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition & Emotion*, 7(3-4), 233–269. https://doi.org/10.1080/02699939308409189
- Snell, W. Gum, S. Shuck, R. & Mosley, J.A. & Hite, T. (1995). The Clinical Anger Scale: Preliminary reliability and validity. *Journal of clinical psychology*. 51. 215-26. 10.1002/1097-4679(199503)51:2<215:AID-JCLP2270510211>3.0.CO;2-Z.
- Steger, Michael & Frazier, Patricia & Oishi, Shigehiro & Kaler, Matthew. (2006). The Meaning in Life Questionnaire: Assessing the Presence of and Search for Meaning in Life. *Journal of Counseling Psychology*. 53. 10.1037/0022-0167.53.1.80.
- Tedeschi, R. G., & Calhoun, L. G. (2004). A Clinical Approach to Posttraumatic Growth. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice*. 405–419, John Wiley & Sons, Inc.. https://doi.org/10.1002/9780470939338.ch25
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18. https://doi.org/10.1207/s15327965pli1501_01
- Van Belle, G. (2002). *Statistical rules of thumb*. New York: John Wiley.
- Wong, P. T. P. (2012). Toward a dual-systems model of what makes life worth living. In P. T. P. Wong (Ed.), *The human quest for meaning: Theories, research, and applications* (2nd ed.), 3–22. Routledge.