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# The SLE-specific functioning support outlook: Scale development and psychometric evaluation of a new instrument

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**Abstract--Background:** The indispensable influence of social support is not commonly considered in most instruments for measuring daily functioning. There is a gap in self-report measures on the perceived impact of social support on daily functioning. **Objectives:** This study aimed to develop and psychometrically evaluate the Functioning Support Outlook Scale, a new instrument designed to assess the perceived or anticipated impact of social support on daily functioning. **Design:** Methodological design. **Methods:** Involves three phases: (1) *conceptualization and item generation*, (2) *preliminary item evaluation*, and (3) *field testing of the instrument*. **Results:** A 13-item instrument emerged with two subscales, namely, Perceived Enhancing Vitality and Perceived Fighting Endurance, which explained 81.48% of the total variance. The Cronbach's alpha of the final version is 0.967, while that of the subscale Perceived Enhancing Vitality is 0.954, with 5 items, and that of the subscale Perceived Fighting Endurance, with 8 items, is 0.957. **Conclusion:** The newly developed instrument is valid and reliable, has high content validity and acceptable Cronbach's alpha coefficient and can be used to assess the daily functioning of individuals with alterations in functioning.

**Keywords**---fatigue; instrument; social support; daily functioning; pain; SLE

## 1. Introduction

Individuals with SLE are at risk of experiencing multiple concurrent symptoms, primarily fatigue. In fact, fatigue is considered the most prevalent and most troublesome symptom experienced by individuals with SLE, is present even in individuals with mild and inactive disease (Elefante et al., 2020) and is negatively associated with all measures of functioning (Tench et al., 2000). Functioning is a general term for body functions and body structures or the ability to perform or

participate in activities (Center for Disease Control, 2001). The interplay between social support, daily functioning and concurrent symptoms of fatigue was qualitatively investigated by Tabudlo and Tejero (2023) and resulted in the development of the concept of the functioning support outlook, which is defined as the general attitude toward one's own daily functioning as one makes sense of one's condition and social interactions.

With respect to the current instrument for measuring social support, no instrument has been developed to measure the perceived impact of social support on daily functioning. Although physical or mental functioning tests provide indicators of actual physical performance, perceptions of how an individual performs daily functions in relation to social support are not commonly addressed. Therefore, the purpose of this study was to develop a scale and test the functioning support outlook, which was designed to assess the perceived impact of social support on daily functioning. This instrument will be of great use for clinicians and nurses since there are social support needs affecting daily functioning.

SLE is a chronic autoimmune disease that causes widespread inflammation resulting in physical and mental symptoms. With currently no known cure, enhancing quality of life can potentially mitigate mortality from SLE (Barber et al., 2021). The literature shows the positive impact of social support on quality of life and symptom relief among individuals with SLE. Social support contributes to health-related quality of life (HRQoL) (physical and mental components) (Mizukami et al., 2023) and contributes negatively to the variance in SLE symptoms, such as fatigue scores (Jump et al., 2005a). Currently, the exact mechanism by which social support affects daily functioning is not well understood. There are various tests that measure functioning or physical activity using observed indicators; however, there is a lack of self-reported measures that assess the perceived impact of social support on daily functioning. These perceptions are usually unexpressed and affect the ability to carry out daily activities. At the same time, there are social support interactions or needs that influence the ability or motivation to carry out daily activities. Thus, the functioning support outlook addresses how an individual makes sense of social interactions/support to daily functioning. Measuring the functioning support outlook will determine whether various methods for providing social support translate to or correlate with improvements in HRQoL, daily functioning and symptom relief among individuals with SLE. Studies stemming from the use of this instrument will further clarify the interplay between social support and daily functioning.

## **2. Methods**

### **2.1. Research Design and Setting**

#### **2.1.1. Research Design**

The author used the methodological design of Polit and Beck (2012). It consists of three phases: (1) *conceptualization and item generation* employing in-depth qualitative descriptive interviews supplemented with focused literature reviews; (2) *preliminary item evaluation* through internal review, pretesting to the intended

population and expert content validation; and (3) *field testing of the instrument* through reliability testing and exploratory factor analysis.

#### *2.1.1.1. Conceptualization and Item Generation*

A prior grounded theory study provided insight into the definition of the concept of a functioning support outlook. The derived definition was used to develop the qualitative descriptive exploration and interview questions.

Preliminary items were generated through qualitative descriptive exploration and focused literature reviews. The qualitative exploration of individuals with SLE who experienced concurrent symptoms for the past week (with fatigue as the main symptom to be eligible to participate) was performed. The qualitative transcripts were analyzed descriptively, and three themes emerged. The themes are consequently used as dimensions for the preliminary version of the questionnaire, as reported in the results section. In the focused literature review, the results of the identified articles were read where the statements were created. A total of four articles in which 8 items were created were identified.

The functioning support outlook is a classical test theory (CTT)-based affective instrument that follows a seven-point Likert-type degree of agreement scale ranging from strongly disagree, rated as 1, to strongly agree, rated as 7. CTT has been utilized in developing multi-item health-related questionnaires (Polit & Beck, 2012) and is a traditional summated rating scale where multiple indicators of the construct converge on the true score and balance out errors.

#### *2.1.1.2. Preliminary Item Evaluation Phase: Internal Review, Pretesting and Content Validation*

##### *2.1.1.2.1. Internal Review*

The preliminary pool of items (composed of 31 items) was internally reviewed for grammar and readability. The ease and clarity of the questions are essential components of a questionnaire. The Flesch–Kincaid and Flesch Reading Ease features of Microsoft Word were used to measure the grade level readability and the ease of reading, respectively. The English version of the Functioning Support Outlook was forward-translated to Filipino, the national language of the Philippines, by the Sentro ng Wikang Filipino located at the University of the Philippines Manila. The Filipino translated version was back-translated by a bilingual expert with a master's degree in the English language who had not seen and read the prior English version.

##### *2.1.1.2.2. Pretesting*

The researcher employed a conventional method for pretesting a new instrument where the intended sample was invited to complete the actual questionnaire. The main purpose of the pretest was to gain insights from the target sample in terms of which items had high nonresponse, fence-sitting (neutral) response and variability of responses needing revision or rewording.

##### *2.1.1.2.3. Content Validation of the Functioning Support Outlook*

From the previous version, one item was excluded for content validation; thus, a 30-item revised version of the instrument was sent to experts. Three experts validated the 30-item instrument. Lynn advised a minimum of three experts for

content validation (Lynn, 1986). Content experts used the degree of relevance to validate the items of the instrument, which included 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant or 4 = highly relevant. With five or fewer experts, Lynn (1986) recommended an I-CVI of 1.00 to retain the item, which was also used in this study. An S-CVI of 0.90 was used to evaluate the overall questionnaire by Polit and Beck (2012). Thus, some of the items were revised, reworded, and retained, resulting in 26 items.

#### *2.1.1.3. Field Testing*

The content-validated instrument (26 items) was tested in the field in the intended population for reliability and exploratory factor analysis to quantitatively assess each item and the structure of the instrument. Social media support groups created for individuals with SLE in the Philippines were the platforms where the data were collected. The data were collected from January 2022 to November 2023.

#### *2.1.2. Study Setting*

The one-on-one in-depth qualitative interviews were conducted using videoconferencing platforms or telephone. The settings for these qualitative interviews were naturalistic, which means that the participants were in their own environments. The questionnaires for pretesting and field testing were administered to social media support groups dedicated to individuals with SLE. The respondents completed the online questionnaire without a time limit and in any setting. Content validators were invited via electronic mail and sent their responses and comments via a content validation form.

## **2.2. Population and Sampling Technique**

### *2.2.1. Population*

The following uniform eligibility criteria were used for the entire phase of this study: (1) self-reported clinical diagnosis of SLE for at least six months by a qualified physician; (2) at least 18 years of age; (3) experience of concurrent symptoms with fatigue as the primary symptom for the past week; 4) ability to respond to interview questions and answer the questionnaire; and 5) ability to give consent. Respondents were excluded if they (1) had severe sensory impairments, (2) were very ill to be interviewed, (3) were hospitalized for reasons related to surgery or complications, or (4) had psychosocial concerns. Participants were recruited from online social media support groups dedicated to individuals with SLE. Prospective participants reached out to the researcher in the qualitative exploration. On the other hand, online questionnaires posted through various channels were used to access participants.

### *2.2.2. Sampling Technique*

Nonprobability purposive sampling was used in the descriptive qualitative exploration. Quota sampling was employed in the pretest and field tests to obtain 20-40 respondents per Polit and Beck (2012), respectively, and at least 50 respondents were used for factor analysis in reliability testing per Barrett and Kline (Barrett & Kline, 1981).

### *2.2.3. Composition of the Content Validators*

The suggestions of Grant and Davis (1997) guided the selection of content validators. The profiles of the content validators are as follows: (1) registered nurse with a doctorate degree who developed, validated and published a questionnaire; (2) a PhD candidate who is also a registered guidance counsellor, psychometrician, and clinical psychologist; and (3) a medical doctor specializing in rheumatology who has extensive research and publication focusing on individuals with SLE and holds various positions in societies/organizations focusing on the population of interest of this study.

### **2.3. Data collection procedure**

#### *2.3.1. Qualitative Descriptive Exploration and Literature Review*

The researcher served as the main data gathering instrument in the qualitative exploration. A semistructured interview guide was developed and used during the one-on-one telephone/virtual interviews. Responses were recorded and transcribed verbatim by the researcher. The interviews aimed to explore the meaning of the support they received from their social support system. The interview used an open-ended question and started each interview with “Tell me about your experience of fatigue along with other symptoms.” The opening question was followed up with questions such as “Would you like to explain the support you received from the people around you?” and “Tell me about your perspective about the support you receive.”

Moreover, a literature review accompanied qualitative item generation to ensure construct validity. Four articles were considered to have been gathered from citation searches (Baker & Pope, 2009; S. Booth et al., 2018; Sara Booth et al., 2021; Dunlop-Thomas et al., 2014).

#### *2.3.2. Preliminary Item Evaluation and Content Validation*

To evaluate the questionnaire, an online version was used to collect the data. The online questionnaire included eligibility, consent, and sociodemographic profile questions.

A Filipino and English version of the instrument was sent for content validation. A cover letter accompanied the invitation to review the questionnaire, its dimensions, its items, the type of scale used, how the items were generated and their responsibilities as expert content validators. A content validation form was also used where content validators evaluated each item based on whether the item was 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant or 4 = highly relevant. Validators commented and suggested several revisions to improve the clarity of some items.

#### *2.3.3. Field Testing*

A revised online questionnaire consisting of 26 items was used for reliability testing and construct validation. An online invitation was posted in selected online support/advocacy groups dedicated to SLE in the Philippines.

### **2.4. Data Analysis**

#### *2.4.1. Qualitative Exploration*

The data were transcribed verbatim in a file where each participant was assigned a pseudonym. The transcripts were read and reread to obtain qualitative data. Qualitative data were coded and grouped. Three themes emerged and were

consequently used as dimensions for the questionnaire. Statements that were grouped qualitative data were used as items in the questionnaire.

#### *2.4.2. Pretesting*

Data from the pretested questionnaire were analyzed and revealed high rates of nonresponse and items with numerous midpoint responses (fence-sitting). Using SPSS, Cronbach's alpha was computed to determine which item, if deleted, improved the initial Cronbach's alpha for each of the three dimensions and overall questionnaire. Items with high fence sitting and no response were reviewed if they were candidates for deletion or revision. Additionally, items that, if deleted, increase variability were also candidates for deletion or revision. Only one item had a high fence sitting response, and deletion of one item significantly increased the Cronbach's alpha.

#### *2.4.3. Content Validation*

To assess the content validity, an item content validity index (I-CVI) of 1.00 was used to retain the item. The I-CVI was computed by looking at the number of agreements (if they rated an item 3 = quite relevant OR 4 = highly relevant) among experts for an item divided by the total number of experts. A scale content validity index (S-CVI) of 0.90 was used to evaluate the content validity as proposed by Polit and Beck (2012), which can be computed by averaging all I-CVIs divided by the total number of items.

#### *2.4.4. Reliability Testing and Validation*

Basic item analysis was conducted prior to factor analysis. An inter-item correlation of not less than 0.30 with a confidence interval of 95% and an alpha value of 0.05 was used to retain an item. An exploratory factor analysis using principal component analysis and varimax rotation was used. As established by many researchers, an eigenvalue greater than 1.00 was used to identify components or factors. Factor loadings with an absolute value of .70 or higher were used as cutoff values. For internal consistency, a Cronbach's alpha with a cutoff value of 0.70 was used to evaluate the final instrument.

### **2.5. Ethical Approval**

This study received ethical approval from the University of the Manila Ethics Review Board with approval number UPMREB 2021-0611-01 issued on November 9, 2021. Informed consent, complete confidentiality, privacy and all measures to protect participants' data were obtained during the study.

## **3. Results**

### **3.1. Phase 1: Conceptualization and Item Generation**

A qualitative descriptive exploration was used to generate items and to identify the dimensions of the concept. The 8 items lifted from the literature reviews were also assigned to a dimension accordingly. The participants were (female 10/10) aged 18-48 (mean age 38.9), were married (5/10), had no children (6/10), were unemployed (7/10) and 10/10 experienced pain concurrently with fatigue. Table 1 shows the remaining sample characteristics from phases 1 to 3.

**Table 1**  
*Sample Characteristics*

	<b>Phase 1</b>	<b>Phase 2</b>			<b>Phase 3</b>		
<b>Characteristic</b>	<b>Participants (n=10)</b>	<b>Respondents (n=30)</b>			<b>Respondents (n=58)</b>		
		% (n)	Mean	Standard Deviation	% (n)	Mean	Standard Deviation
<i>Age in years</i>	18-48 (mean age 38.9)		35.37	8.802		34.52	9.001
<i>Sex</i>							
<i>Female</i>	10/10	96.7 (29)			96.6 (56)		
<i>Male</i>		3.3 (1)			3.4 (2)		
<i>Civil Status</i>							
<i>Married</i>	5/10	43.3 (13)			48.3 (28)		
<i>Separated</i>		6.7 (2)			5.2 (3)		
<i>Live-in partner</i>		16.7 (5)			19.0 (11)		
<i>Single</i>		33.3 (10)			27.6 (16)		
<i>Employment</i>							
<i>Unemployed</i>	7/10	57 (17)			65.5 (38)		
<i>Employed (with employer)</i>		36.7 (11)			25.9 (15)		
<i>Self-employed</i>		6.7 (2)			8.6 (5)		

Three main themes emerged: *Theme 1: Enduring Gratefulness*, *Theme 2: Fighting Motivation* and *Theme 3: Enhanced Vitality*. *Enduring Gratefulness* refers to the appreciation that transforms into a positive outlook on functioning (Participant 8, “I feel happy. I am touched that they are understanding.”). *Fighting motivation* refers to the motivation drawn from people, gestures or the environment that enables a positive outlook on their functioning (Participant 3 “It makes it easier having those kind of support system”). *Enhanced vitality* refers to the perceived strength, emotions, or outcomes because of good support, which promotes a positive outlook on functioning (Participant 4 “Sometimes my stress is lessened, and I feel lighter”). There were 23 items from the qualitative descriptive exploration, while eight items were created from the literature reviews.

### 3.2. Phase 2 Preliminary Item Evaluation Phase

Readability tests revealed that the Flesch–Kincaid Grade Level was 2.2, which indicates that instruments can be understood by students from the 1<sup>st</sup> to 5<sup>th</sup> grades and that words/sentences are very easy to read. With 100 as the highest readability score, the Flesch Reading Ease score is 93.3%. After the readability tests, the items were forward-translated in English to Filipino and back-translated to English by a bilingual speaker.

Pretest data showed that the majority of the participants in the pretest were female (96.7%), married (43.3%) and unemployed (57%). Pain in varying locations was the most frequently reported (90% or 27/30) symptom that cooccurred with fatigue based on a multiple response symptom question.

Pretest data showed that all 31 items had a 100% response rate; only one item had a 3.3% (1) nonresponse, and one item had a 16.7% (5) fence-sitting response requiring further item review. To measure the variability, a statistical analysis of Cronbach's alpha was performed. The overall Cronbach's alpha for the 31 items was 0.966, indicating excellent internal consistency. Table 2 shows each of the three constructs, which also had good to excellent internal consistency. Looking closely at the item with the highest fence sitting response, the item is only applicable to those who are currently working. Cronbach's alpha also increased when the item was deleted under the Fighting Motivation construct. Therefore, the decision is to delete the item.

**Table 2**  
*Construct Reliability Statistics*

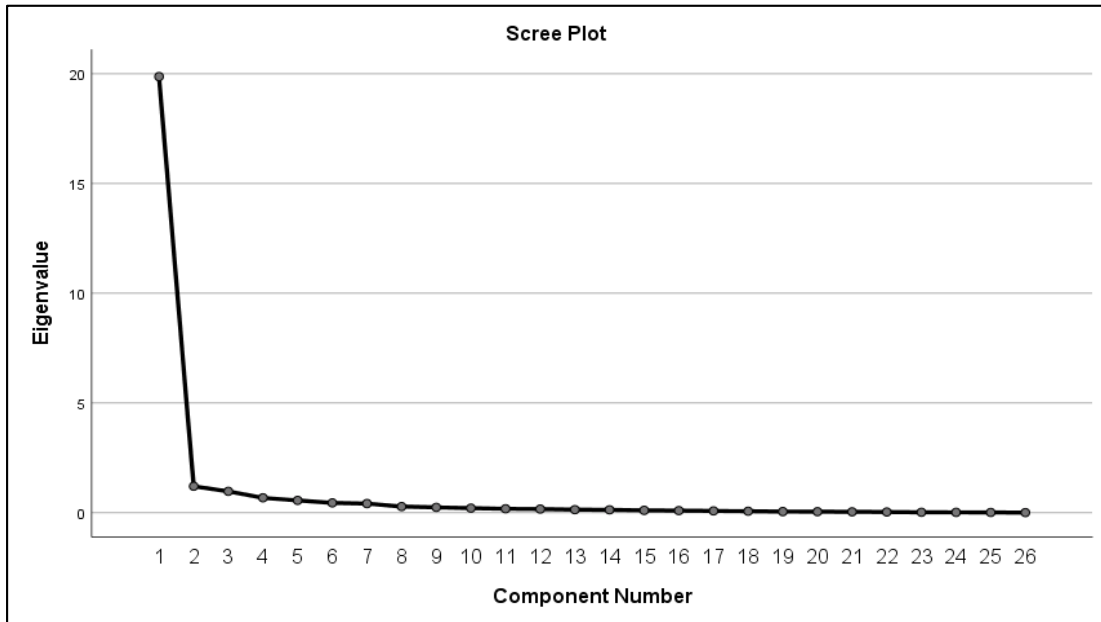
Reliability Statistics		
<b>Construct/Dimension</b>	<b>N of Items (31)</b>	<b>Cronbach's Alpha</b>
<i>Enduring Gratefulness</i>	12	.889
<i>Fighting Motivation</i>	8	.899
<i>Enhanced Vitality</i>	11	.951

Three experts evaluated the 30-item version of the questionnaire in terms of its comprehensiveness, relevance and clarity. The computed S-CVI Ave was 0.956. Polit and Beck (2012) suggested an S-CVI of 0.90 or higher as the standard for evaluating scales. Of the 30 items, 4 did not achieve an I-CVI of 1.00. Items that did not achieve an I-CVI of 1.00 were dropped from the revised version of the instrument, which now consists of 26 items. The experts' comments and recommendations in terms of wording and clarity were also provided.

### 3.3. Phase 3 Field Testing of the Instrument

In field testing the instrument, the majority of the respondents were female (96.6%), and the majority (70.69%, 41/58) had experienced pain concurrently with fatigue for the past week. Initial reliability testing of the 26-item questionnaire showed excellent internal consistency at 0.987. The Kaiser–Meyer–Olkin measure of sampling adequacy (0.877) and Bartlett's test of sphericity were highly significant at 2525.240, *df* 325 ( $p < 0.00$ ), indicating its suitability for factor

analysis. An interitem correlation was also performed, and to retain an item, it should not reach a value of 0.30 or less. Based on the summary item statistics, inter-item correlations among and between items ranged from 0.365 to 0.958. The communality of the scale was set at over 0.50. The communalities of all 26 items were greater than 0.50. Analysis of the scree plot in Figure 1 shows the presence of two components above 1.00. After exploratory factor analysis using principal component analysis with varimax rotation, the 26-item questionnaire was reduced to 16 items with no cross loadings. The factor loading was set at 0.70 for the sample size in this study (Hair et al., pg. 112).



**Figure 1.** Scree Plot of the 26-item Questionnaire

PCA with varimax rotation (factor loading of 0.70) was rerun on the 16 items and produced two components with 15 items. However, the Cronbach's alpha coefficient of the 15 items representing the final items is 0.974 which can indicate redundancy of the items. While that of component one, which has seven items, is 0.967, and that of component two, which has 8 items, is 0.960.

A further analysis was conducted to identify item redundancies. Four items were closely identical and whichever had the higher factor loading were retained which resulted to 13 items. PCA with varimax rotation (0.70 factor loading) of the 13 items remained at two component solution. The first component has an eigenvalue of 9.48, which explains 72.96% of the variance, while the second component has an eigenvalue of 1.11, which explains 8.52% of the variance. When combined, they have a cumulative 81.48% of the variance. Table 3 shows the rotated component matrix and their individual loadings. The Cronbach's alpha coefficient of the 13 items representing the final items is 0.967. Component one, which has five items, is 0.954, and that of component two, which has 8 items, is 0.957 both are within the accepted reliability values (Tavakol & Dennick,

2011). Appendix A submitted as supplementary file shows the final English and Filipino version of the instrument.

**Table 3**  
*Rotated Component Matrix*

<b>Rotated Component Matrix<sup>a</sup></b>		
	Component	
	1	2
1. Nararamdam ko na mas lumalakas ang loob ko para harapin ang mga pangangailangang medical ( <i>I feel that I am becoming braver to face medical treatments</i> ).		.764
2. Madali kong naaasikaso ang aking mga sintomas dahil sa tulong na aking natatanggap ( <i>I can easily attend to my symptoms because of the assistance that I am receiving</i> ).		.852
3. Nararamdaman ko na kaya kong gumawa nang mas maraming bagay dahil sa tulong na aking natatanggap ( <i>I feel that I can do a lot of things because of the assistance that I am receiving</i> ).		.907
4. Nararamdaman ko ang dagdag na ginhawa sa tulong na aking natatanggap ( <i>I feel more relieved because of the assistance that I am receiving</i> ).		.842
5. Nagkaroon ako ng lakas sa mga tulong na aking natatanggap ( <i>I gained strength from the assistance that I am receiving</i> ).		.827
6. Napagtanto ko na may pag-asa pa rin ( <i>I realized that there is still hope</i> ).	.709	
7. Nararamdaman ko ang kalakasan sa paglilibot-libot ( <i>I feel energized whenever I stroll around</i> ).	.821	
8. Nagpapasalamat ako na may kalayaan akong gawin ang mga kaya ko lamang ( <i>I am thankful that I have the freedom to do only the things that I can</i> ).	.727	
9. Hindi ako sumusuko kaagad ( <i>I do not easily give up</i> ).	.818	
10. Isinasaisip ko na magiging matagumpay sa aking mga aktibidad ( <i>I keep in mind that my activities will succeed</i> ).	.814	
11. Nararamdaman ko na may nagmamahal sa akin kapag tinutulungan ako ng pamilya ko ( <i>I feel the love whenever my family helps me</i> ).	.708	
12. Handa akong gumawa ng mga bagay kapag sinusuportahan ako ( <i>I am ready to do things when someone supports me</i> ).	.720	

13. Mas nakakayanan ko dahil sa tulong na aking natatanggap ( <i>I can cope up easily because of the assistance that I am receiving</i> ).	.761	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. <sup>a</sup>		
a. Rotation converged in 3 iterations.		

#### 4. Discussion

The results of this study revealed the reliability and validity of the functioning support outlook designed to assess the perceived impact of social support on daily functioning. The Functioning Support Outlook is a self-reported measure that can be answered using a 7-point Likert scale.

The sample characteristics showed that the majority of the participants throughout the study were female. There is evidence of the predominance of female sample with SLE in most studies involving the same population group. The results also showed that pain was the most frequently co-occurring symptom with fatigue. In various studies, pain, including depression, was shown to be a positive predictor of fatigue in patients with SLE (Jump et al., 2005b). Fatigue is also associated with pain and other symptoms, such as sleep, depression and anxiety (Ahn & Ramsey-Goldman, 2012).

To date, no instrument is grounded in the interplay between social support, daily functioning and the experience of multiple symptoms, primarily fatigue. The concept of the functioning support outlook was supported by a grounded theory study and was further explored through descriptive qualitative exploration. Although a theoretical basis does not exist for the functioning support outlook, studies show that social support has a positive impact on daily functioning. However, the exact mechanism by which an individual perceives social support he/she receives and relates it to daily functioning is still unclear. This newly developed instrument can be used to assess the influence of social support on daily functioning without needing to use other instruments to assess social support. Derived from its qualitative themes, the developed instrument has two subscales: (1) Perceived Enhancing Vitality, with 5 items, and (2) Perceived Fighting Endurance, with 8 items. The Perceived Enhancing Vitality subscale covers indicators on what further enhances or boosts strength, energy to face medical treatments, and attendance to symptoms and sources of strength. Perhaps the closest concept of the Perceived Enhancing Vitality subscale is the Vitality subscale of the SF-36 (Ware et al., 1994), a quality of life instrument. The items in the vitality subscale of the SF-36 include questions about being full about life, having energy, being worn out, and being tired. Therefore, the two subscales of the two different instruments measure two different concepts and are not comparable. The former covers what enhances vitality in relation to social support and daily functioning, while the latter relates to questions on vitality as an indicator of quality of life.

Moreover, in the subscale Perceived Fighting Endurance, items include reasons for keeping oneself strong, being hopeful, having continued strength, not easily giving up, being able to carry out tasks and being influenced by the social

environment. Perhaps one of the closest instruments to the subscale Perceived Fighting Endurance is the Connor–Davidson Resilience Scale (CD-RISC) (Campbell-Sills & Stein, 2007). However, items in the CD-RISC cover questions on coping and adaptation. The subscale Perceived Fighting Endurance relates to questions about hope, appreciation, feelings of being loved and endurance. In other words, the instrument and the subscale measure two distinct constructs or concepts. At the conceptual level, the functioning support outlook and resilience are different; the former concerns the perceived impact of social support on daily functioning, while the latter concerns protective activities/factors employed to return to a previous level of health status.

The highly cited 12-item Multidimensional Scale of Perceived Social Support (MSPSS), which measures perceived social support, has three subscales: family, friends and significant others (Zimet et al., 1988). The items of the MSPSS focused on the presence of family, friends or significant others to provide emotional support and help. On the other hand, the newly developed Functioning Support Outlook Scale focused on the influence of social support to carry out daily activities, symptom relief, face medical treatments, sources of hope and others. In other words, the other Functioning Support Outlook Scale provides comprehensive indicators that are relevant to how receptive an individual is to social support and its influence on daily functioning. It will operationalize this particular concept not present in any instrument. Although it has been tested in individuals with SLE, the instrument and its subscales can also be useful for other chronic conditions. The value of this self-report measure will help explain unobserved individual behavior affecting social support and daily functioning.

### **Limitations**

Limitations of this study should be considered. The sample is limited to individuals with access to the internet, although online data collection was used to mitigate exposure to COVID-19; therefore, the findings cannot be generalized to geographically isolated individuals without access to internet services. Since the majority of the participants in phases 1-3 were female, generalization to male individuals with SLE is limited. Other reliability and validity tests were not used; therefore, there is an opportunity for future studies.

### **5. Conclusions**

The 13-item final version of the questionnaire is valid and reliable, with high content validity and excellent Cronbach's alpha coefficient. Studies stemming from the use of this instrument can be used to devise interventions for individuals experiencing multiple symptoms, primarily fatigue, alterations in functioning, inpatients staying in hospitals longer than expected and postoperative surgical patients. The subscales (1) Perceived Enhancing Vitality and (2) Perceived Fighting Endurance have relevant indicators for further understanding why an individual can recover at a slower or faster pace. The use of this instrument can shed light on how social support influences daily functioning and how individuals interpret it.

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### Conflict of interest

The author declares no conflict of interest.

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## Appendix A.

*Functioning Support Outlook Questionnaire (Filipino and English Version)*

Checklist: Using the scale\*, to what extent do you agree on each of the following statements? Tick your answer on the space provided.

\*Scale: 1-Strongly disagree, 2-disagree, 3-somewhat disagree, 4-Neither agree nor disagree, 5-somewhat agree, 6-agree, 7-strongly agree

Items	Rating
<b>Perceived Enhancing Vitality</b>	
1. Nararamdam ko na mas lumalakas ang loob ko para harapin ang mga pangangailangang medical. <i>I feel that I am becoming braver to face medical treatments.</i>	
2. Madali kong naaasikaso ang aking mga sintomas dahil sa tulong na aking natatanggap. <i>I can easily attend to my symptoms because of the assistance that I am receiving.</i>	
3. Nararamdaman ko na kaya kong gumawa nang mas maraming bagay dahil sa tulong na aking natatanggap. <i>I feel that I can do a lot of things because of the assistance that I am receiving.</i>	
4. Nararamdaman ko ang dagdag na ginhawa sa tulong na aking natatanggap. <i>I feel more relieved because of the assistance that I am receiving.</i>	
5. Nagkaroon ako ng lakas sa mga tulong na aking natatanggap. <i>I gained strength from the assistance that I am receiving.</i>	
<b>Perceived Fighting Endurance</b>	
1. Napagtanto ko na may pag-asa pa rin <i>I realized that there is still hope.</i>	
2. Nararamdaman ko ang kalakasan sa paglilibot-libot. <i>I feel energized whenever I stroll around.</i>	
3. Nagpapasalamat ako na may kalayaan akong gawin ang mga kaya ko lamang. <i>I am thankful that I have the freedom to do only the things that I can.</i>	
4. Hindi ako sumusuko kaagad, <i>I do not easily give up.</i>	
5. Isinasaisip ko na magiging matagumpay sa aking mga aktibidad. <i>I keep in mind that my activities will succeed.</i>	
6. Nararamdaman ko na may nagmamahal sa akin kapag tinutulungan ako ng pamilya ko. <i>I feel the love whenever my family helps me.</i>	
7. Handa akong gumawa ng mga bagay kapag sinusupportahan ako. <i>I am ready to do things when someone supports me.</i>	
8. Mas nakakayanan ko dahil sa tulong na aking natatanggap. <i>I can cope up easily because of the assistance that I am receiving.</i>	