Psychometric validity and measurement invariance of the caring for Bliss Scale in the Philippines and the United States

Jesus Alfonso D. Datu, Frank Fincham and Jet U. Buenconsejo

ABSTRACT
The Caring for Bliss Scale (CBS) is a new measure that assesses an individual's capacity to cultivate inner joy and happiness. Developed in the United States, its generalizability remains unknown in non-Western contexts. This research explored the scale's cross-national invariance among college students in the Philippines (n = 546) and the United States (n = 643). A multi-group confirmatory factor analysis using maximum likelihood estimation showed that the unidimensional model of caring for bliss exhibited configural, metric, scalar, and residual invariance across the Filipino and U.S. samples. This scale also had good internal consistency estimates in both settings. In both contexts, caring for bliss was positively correlated with well-being and negatively correlated with different negative quality of life indicators (i.e., stress, anxiety, and depression). This study offered preliminary evidence regarding the cross-national applicability of the CBS in different cultural settings during the COVID-19 pandemic.

Achieving sustainable happiness is a common goal for many people in various societies. Well-being researchers have mainly conceptualized happiness using two perspectives: hedonic and eudaimonic well-being. On one hand, the hedonic approach focuses on happiness achieved through the attainment of stimulus-driven pleasures and the avoidance of pain. On the other hand, the eudaimonic approach views happiness as the actualization of one's daimon or true self that is fully functioning. It has been argued, however, that the former alone only leads to fluctuating happiness while the latter, with its independence from external circumstances of pain and pleasure, is said to lead to enduring happiness. Although general models of well-being have already been proposed in studying happiness, the need to examine their cultural generalizability is evident as most of these frameworks were developed and validated in Western contexts.

Research has documented distinctions in how individuals from Western (i.e., European-American) and non-Western (i.e., East-Asian) contexts construe happiness. For example, have conceptualized happiness among European-American countries in terms of high-arousal positive emotional states such as excitement and a sense of personal achievement. Happiness in these contexts also tends to be predicted by individual achievements and increased self-esteem or self-efficacy. In contrast, happiness in East-Asian and collectivist countries encompasses experiencing both positive and negative emotional states of low arousal such as calmness, interpersonal harmony, and peace. Happiness in these societies is usually predicted by harmonious interpersonal relationships and social support. Because individualistic societies tend to highlight self-sufficiency and uniqueness, happiness is typically pursued through personal achievement and autonomy. On the other hand, since collectivist societies tend to value harmonious interpersonal relationships and group cohesion, happiness is usually pursued by balancing personal goals with interpersonal ones. Evidence on the distinct meanings of happiness in individualistic and collectivistic cultures points to the need to explore culturally nuanced models of pursuing happiness.

In the Buddhist tradition enduring happiness or bliss is called sukha. Sukha goes beyond the fluctuations of one's emotions aroused by external stimuli and stems from a balanced and well-trained mind. Also called authentic happiness or flourishing, bliss is an enduring trait that transcends emotional states and tends to be independent of external circumstances of comfort, pleasure, or suffering. Bliss may also be thought of as being more related to eudaimonic well-being rather than hedonic well-being because of its emphasis on finding genuine happiness in the here and now, independent of one's experience of pain or pleasure. Active practices and behaviors to cultivate this inner joy or genuine happiness is called caring for bliss. More specifically, caring for bliss is one's capacity to generate inner joy or genuine happiness in the present moment based on a peaceful state of mind and a compassionate heart. Tracing its roots from the writings of Thich Nhat Hanh...
and the Buddhist conceptualization of happiness, caring for bliss offers an alternative conceptualization of engagement in happiness-increasing behaviors. Rudaz et al. have proposed that caring for bliss is done by (a) actively generating feelings of happiness in the present moment, (b) searching for lasting happiness within oneself, (c) appreciating what one has, and (d) following the deepest desires of one's heart.

Preliminary evidence shows how caring for bliss overlaps with yet differs from theoretically related constructs such as mindfulness and self-compassion. Unlike mindfulness, which refers to the regulation of one's attention toward immediate experiences in the present moment characterized by openness, curiosity, and acceptance, caring for bliss involves active practices that aim to generate genuine happiness beyond the regulation of one's attention to the present moment. On the other hand, whereas self-compassion is a way of treating oneself with care and kindness amidst personal inadequacies, mistakes, and other painful experiences, caring for bliss encompasses not only kindness to oneself in difficult times but also appreciating what one has in the present moment and getting attuned to one's deepest desires. Yet, both mindfulness and self-compassion can serve as potential catalysts of bliss.

An initial psychometric investigation of the Caring for Bliss Scale (CBS) among two samples of young adults in the US indicates that the scores from the unidimensional factor structure of the caring for bliss construct were valid, reliable, and selectively invariant (i.e., configural and metric) across sample and time. This study also showed that caring for bliss was positively correlated with mindfulness, self-compassion, well-being, life satisfaction, happiness, flourishing, and the strength of one's religious or spiritual beliefs. There is also evidence supporting the discriminant validity of the caring for bliss construct. Further, controlling for the influence of mindfulness and self-compassion, greater caring for bliss has been found to predict higher levels of subjective and psychological well-being, thereby providing evidence for its incremental validity. In addition, recent studies have demonstrated that students with higher caring for bliss tend to benefit highly from self-compassion and are less likely to experience burnout when they espouse higher mindfulness.

Despite evidence showing the psychometric validity, reliability, and measurement invariance of the CBS, this measure has only been explored psychometrically among two samples of US college students from two state universities, so findings have limited generalizability to students in non-Western cultural contexts. Further, although caring for bliss has been associated with higher levels of mindfulness, self-compassion, and other well-being outcomes, how this construct relates to maladaptive psychological outcomes (e.g., depression and anxiety) is less well known. Exploring the relationships of caring for bliss to stress, depression, and anxiety is an essential step to generate insights regarding the CBS’ discriminant validity.

Despite the surge of studies in positive psychology over the last two decades, scholars have criticized the predominance of well-being studies and interventions in Western, industrialized, educated, rich, and democratic (WEIRD) contexts. Approximately 94.5% of publications in positive psychology come from Western countries, mostly from the US, and only 5.5% come from non-Western countries. This yields an incomplete view of how well-being and happiness-increasing behaviors might be conceptualized and experienced by the majority of the world's population. Examining pursuit of happiness in various cultures is important because there tends to be greater cultural variations in positive emotions than negative ones. Therefore, it is important to assess the extent to which engagement in happiness-increasing behaviors relate to psychological outcomes in various cultural contexts.

The present investigation addressed this task by examining the psychometric properties and cross-cultural invariance of the CBS among undergraduate students in the United States and the Philippines. Specifically, we explored the structural validity, cross-cultural invariance, criterion-related, and discriminant validity of the CBS in both contexts during the COVID-19 pandemic outbreak. Structural validity was assessed by conducting confirmatory factor analysis to assess whether the unidimensional model of caring for bliss construct might be valid among American and Filipino undergraduate students. Convergent validity was investigated by calculating the Average Variance Extracted (AVE) and Composite Reliability (CR). Criterion-related validity was assessed through examining the correlation of the caring for bliss construct with the WHO-5 well-being index score, a short measure of mental health that has been found to have good structural and construct validity. As evidence about the criterion-related and incremental validity of the CBS reflects relationships with positive dimensions of well-being (e.g., life satisfaction, mindfulness, and flourishing), the present study also explored associations with negative indicators of well-being (depression, anxiety, and stress).

**Methods**

**Participants**

The sample was composed of 1,189 undergraduate students from one public university in the United States (n = 643) and two universities in the Philippines (n = 546). Participants were recruited via convenience sampling, which involved inviting students who were available during the time of survey administration in both settings. The majority of the Filipino (81.10%) and American (89.60%) participants were female. The age distribution of participants in the U.S. (M = 19.84; SD = 1.36) and the Philippines (M = 19.99; SD = 3.03) were similar. This study was part of a larger project, which examined longitudinal correlates of mental health in the United States and cross-sectional correlates of well-being in the Philippines during the COVID-19 pandemic from September to November 2020.
Measures

Caring for bliss

The 4-item Caring for Bliss Scale\(^\text{16}\) was used to assess the participants' perceived capacity to foster inner joy and happiness. Items were rated on a 5-point Likert Scale (1 = Never; 5 = Regularly). Sample items include: "I can generate a feeling of happiness in the here and now" and "I listen deeply to my heart". Overall score on caring for bliss was calculated by calculating the mean score of all items of this scale.

Well-being

The 5-item World Health Organization Well-Being Scale (WHO-5\(^\text{28}\)) was used to assess the participants' overall levels of well-being. Items were marked on a 6-point Likert scale (0 = None of the time; 5 = All of the time). Sample items include: "I have felt cheerful in good spirits." and "I have felt active and vigorous." Cronbach’s alpha was .92 in both the Philippines and United States samples. Overall score on caring for bliss was calculated by calculating the mean score of all items of this scale.

Depression, anxiety, and stress

The 21-item Depression, Anxiety, and Stress Scale\(^\text{29}\) was used to measure participants’ perceived feeling of anxiety, stress, and depression. Items were marked on a 4-point Likert scale (0 = Did not apply to me at all; 3 = Applied to me very much or most of the time). Sample items include: "I was aware of dryness of my mouth" and "I experienced trembling (e.g., in the hands)" (anxiety); "I tended to over-react to situations" and "I found it hard to wind down" (stress); as well as "I couldn't seem to experience any positive feeling at all" and "I felt that I had nothing to look forward to" (depression). Final score on stress, depression, and anxiety were computed via adding all items in each subscale and multiplying the sum by 2. Cronbach’s alpha coefficients in the United States sample were: \(\alpha_{\text{stress}} = .85\), \(\alpha_{\text{anxiety}} = .84\), and \(\alpha_{\text{depression}} = .89\). Alpha coefficients in the Philippines sample were: \(\alpha_{\text{stress}} = .82\), \(\alpha_{\text{anxiety}} = .80\), and \(\alpha_{\text{depression}} = .89\).

In both contexts, the English version of the scales were used as English serves as an official medium of instruction in Philippine higher education institutions.

Procedures

First, both the first and second authors secured approval from the research ethics committee of the universities in which they were currently affiliated. Second, the research assistants of these authors distributed email invitations to potential participating classes in one university in Florida, United States and two universities in the Philippines. Third, the research assistants with the support from course instructors sent the online active consent forms and survey to participating classes. These students voluntarily agreed to participate in this investigation.

Data analyses

Missing data analyses (e.g., percentage of missing responses and Little’s\(^\text{30}\) Missing Completely at Random or MCAR test) were conducted to analyze the pattern of missing responses in the current dataset. Then, an appropriate data imputation approach was chosen to effectively manage the dataset’s missing responses. Descriptive statistics such as mean, standard deviation, skewness, and kurtoses values were computed. Independent sample t-tests were also conducted to assess possible differences in well-being, stress, anxiety, and depression among students in the United States and the Philippines. Confirmatory factor analysis (CFA) was carried out to assess whether the unidimensional model of caring for bliss construct would be appropriate in the current sample. In evaluating the fit indices of the measurement models, this study relied on the recommended cutoff values of Hair et al.\(^\text{31}\) a) Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) higher than .90 and b) Standardized Mean Square Residual (SRMR) and Root Mean Square Error of Approximation (RMSEA) lower than .08. To generate evidence about the convergent validity of the CBS, the Average Variance Extracted (AVE) and Composite Reliability (CR) in both settings were calculated. Consistent with methodological guidelines,\(^\text{33}\) the acceptable values for AVE should be .50 and above while the reasonable value for CR should be higher than .70.

Multi-group CFA was performed to examine whether the meaning of the caring for bliss construct was comparable across samples from the United States and the Philippines. Specifically, this research explored the configural (equivalence in the number of factors and pattern loading across group), metric (equivalence in the magnitude of factor loadings across groups assuming that the condition on configural invariance was met), scalar (equivalence in item intercepts across groups assuming that the condition on metric invariance was met), and residual variance (equivalence in items' errors or residuals assuming that the condition on scalar invariance was met) invariances of the CBS. Given that research\(^\text{32}\) has emphasized the importance of depending on multiple criteria in judging measurement invariance, this study concluded that invariance in a specific level of measurement was met if the changes in CFI and RMSEA between two levels of invariance are lower than .01 and .015, respectively, as recommended by Chen.\(^\text{33}\) Pearson-r correlational analyses were computed to provide evidence on the criterion and discriminant validity of the caring for bliss measure in this study.

Results

Missing value analyses conducted via SPSS v26 indicated that there were 1.40% to 5.80% missing responses in the existing dataset. Results of Little’s MCAR test showed that these missing data were not missing completely at random: \(\chi^2 = 132.55, df = 76, p < .001\). Consistent with conventional methodological guidelines,\(^\text{34}\) the expectation-maximization imputation algorithm was used to manage these missing responses. Then, the imputed dataset was used in conducting
subsequent analyses to provide evidence about the Caring for Bliss Scale’s structural and criterion-related validity.

As there was no evidence of severe violations of normality based on the skewness and kurtoses values of all CBS’ items, CFA via maximum likelihood estimation was implemented using AMOS 26v to evaluate the structural validity of this scale in each setting. Results of the CFA showed that the scores were valid among undergraduate students in the United States and the Philippines (see Table 1). The factor loadings of all items in both contexts were also relatively high, indicating that these items were correlated with the latent caring for bliss construct that they were intended to assess (see Table 2). In the United States and the Philippines, the AVEs of this scale was .50, which means that the variance assessed by the caring for bliss construct against the change contributed by measurement errors is acceptable.

### Table 1. CFAs of the caring for bliss scale in the United States and the Philippines.

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
<th>RMSEA</th>
<th>90% CI RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFA in the U.S.</td>
<td>2.97</td>
<td>2</td>
<td>.23</td>
<td>.80***</td>
<td>.90***</td>
<td>.067</td>
<td>.000</td>
<td>.088</td>
</tr>
<tr>
<td>CFA in the Philippines</td>
<td>8.41</td>
<td>2</td>
<td>.02</td>
<td>.80***</td>
<td>.90***</td>
<td>.077</td>
<td>.029</td>
<td>.133</td>
</tr>
</tbody>
</table>

### Table 2. Factor loadings of CBS’s items in the United States and the Philippines.

<table>
<thead>
<tr>
<th>Item</th>
<th>Standardized factor loadings in the United States</th>
<th>Standardized factor loadings in the Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I can generate a feeling of happiness in the here and now.</td>
<td>.67***</td>
<td>.68***</td>
</tr>
<tr>
<td>2 I search for lasting happiness inside myself, rather than outside of myself.</td>
<td>.60***</td>
<td>.66***</td>
</tr>
<tr>
<td>3 I take time to acknowledge the things for which I am grateful.</td>
<td>.80***</td>
<td>.79***</td>
</tr>
<tr>
<td>4 I listen deeply to my heart.</td>
<td>.75***</td>
<td>.69***</td>
</tr>
</tbody>
</table>

### Table 3. Measurement invariance of the hypothesized measurement model.

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
<th>CFI</th>
<th>ΔCFI</th>
<th>RMSEA</th>
<th>90% CI RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 Configural invariance</td>
<td>11.38</td>
<td>4</td>
<td>.02</td>
<td>.95</td>
<td>–</td>
<td>.039</td>
<td>.013</td>
</tr>
<tr>
<td>Model 2 Metric invariance</td>
<td>15.64</td>
<td>7</td>
<td>.03</td>
<td>.94</td>
<td>.01</td>
<td>.032</td>
<td>.010</td>
</tr>
<tr>
<td>Model 3 Scalar invariance</td>
<td>15.91</td>
<td>8</td>
<td>.04</td>
<td>.94</td>
<td>.00</td>
<td>.029</td>
<td>.005</td>
</tr>
<tr>
<td>Model 4 Strict invariance</td>
<td>28.45</td>
<td>12</td>
<td>.01</td>
<td>.98</td>
<td>.06</td>
<td>.034</td>
<td>.018</td>
</tr>
</tbody>
</table>

### Table 4. Descriptive statistics and cronbach’s alpha coefficients for caring for bliss, well-being, depression, anxiety, and stress in the Philippines and the United States.

<table>
<thead>
<tr>
<th>Cronbach’s alpha coefficients, Mean, and Standard deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines (n = 546)</td>
</tr>
<tr>
<td>α</td>
</tr>
<tr>
<td>1. Caring for bliss</td>
</tr>
<tr>
<td>2. Well-being</td>
</tr>
<tr>
<td>3. Stress</td>
</tr>
<tr>
<td>4. Anxiety</td>
</tr>
<tr>
<td>5. Depression</td>
</tr>
<tr>
<td>Possible Range</td>
</tr>
<tr>
<td>Caring for bliss</td>
</tr>
<tr>
<td>Well-being</td>
</tr>
<tr>
<td>Stress, depression, and anxiety</td>
</tr>
</tbody>
</table>
Table 5. Correlations among caring for bliss, well-being, depression, anxiety, and stress in the Philippines and the United States.

<table>
<thead>
<tr>
<th></th>
<th>United States (upper)</th>
<th>Philippines (lower)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Caring for bliss</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Well-being</td>
<td>.59***</td>
<td>-</td>
</tr>
<tr>
<td>3. Stress</td>
<td>-.23***</td>
<td>-.41***</td>
</tr>
<tr>
<td>4. Anxiety</td>
<td>-.15***</td>
<td>-.30***</td>
</tr>
<tr>
<td>5. Depression</td>
<td>-.34***</td>
<td>-.46***</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001.

To provide evidence about the criterion-related validity of the scale, this study explored the correlation of the CBS score with the well-being score. In both settings, the caring for bliss construct had relatively high positive correlations with the WHO-5 well-being score. Further, discriminant validity of the CBS was evaluated by exploring its links to depression, anxiety, and stress. As expected, the caring for bliss scale had negative correlations with depression, anxiety, and stress in the Philippines and the United States. The results of the bivariate correlational analyses are shown in Table 5.

Discussion and conclusions

There is evidence supporting the psychometric validity of the CBS using samples in the United States. However, the psychometric properties of this scale remain unexplored in non-Western cultural contexts. The present study addressed this gap by examining the structural, convergent, criterion-related, and discriminant validity of the CBS in the Philippines and the United States.

Confirming prior research,16 it was shown that scores from the unidimensional model of the caring for bliss construct were valid and reliable among undergraduate students in the United States and the Philippines. Whereas Rudaz et al16 showed that the scale exhibited configural and metric invariance in two different American samples, the current investigation revealed evidence of full measurement invariance across American and Filipino samples indicating that this construct had similar meanings in these contexts. Indeed, this is the first study of its kind to generate insights on the cross-cultural comparability of the caring for bliss construct. A review of the AVE and CR coefficients also indicates that there is evidence showcasing the convergent validity of the CBS in both settings.

This research also showed that the caring for bliss construct had relatively higher correlations with the WHO-5 well-being scores in the Philippines and the United States. The sizes of the correlational coefficients found in this investigation were comparable with the magnitude of relationships between caring for bliss and different well-being dimensions (e.g., life satisfaction and flourishing) in past studies.16,21 These findings contribute to extant evidence regarding the criterion-related validity of the CBS in Western and non-Western settings. To date, this is the only research that has explored the association of the caring for bliss construct with WHO-5 well-being in the Philippine context.

The present study provided preliminary evidence regarding the discriminant validity of the CBS. Whereas previous research16 only explored the structural and convergent validity of this scale, this investigation showed that caring for bliss had small to moderate correlations with depression, anxiety, and stress. This study aligns with prior research showing the negative correlation of caring for bliss with maladaptive psychological outcomes such as burnout.22 These results imply that having higher levels of perceived capability to boost inner joy was associated with lower maladaptive emotions. Because caring for bliss involves actively finding ways to be happier16 and motivation to achieve happiness relates to succeeding positive emotions,35 it is likely that this construct was linked to a lower possibility of experiencing negative emotions. To date, this is the first study to provide data on the association of caring for bliss with theoretically unrelated constructs, which has implications for advancing literature on the construct validity of the CBS.

Furthermore, there was no significant difference on overall CBS scores across American and Filipino samples. These results indicate that the perceptions of caring for bliss may not vary among undergraduate students in the United States and the Philippines. This study therefore raises the possibility that a desire to cultivate intrinsic happiness might operate similarly in Western and collectivist contexts. However, this possibility was not formally evaluated in the present study pointing to the need for future research to explore whether the identified non-significant difference might be observed between the United States and other non-Western societies.

The results reported should be interpreted with caution, however, as there are some methodological shortcomings that might have affected the findings of this validation study. Because the samples in the study were undergraduate students from the Philippines and the United States, results may not be generalizable to students from other cultural contexts. Further, the cross-sectional nature of this research precludes any interpretation regarding the psychometric validity of the caring for bliss construct over time. This limitation can be addressed through adopting longitudinal designs to assess the extent to which the caring for bliss construct might have comparable meanings across multiple timepoints. Further, as this study only explored the correlations of caring for bliss with the WHO-5 well-being score to generate insights about the criterion-related validity of the CBS, future research might profitably examine the extent to which this construct relates to other dimensions of well-being such as psychological well-being, resilience, social connectedness, and meaning in life to provide additional documentation of the construct validity of this scale across cultures. Given that it is plausible that religious beliefs or orientations might affect people's caring for bliss, future investigations may also explore how religious beliefs might affect caring for bliss in various cultural settings.

The present study has notable implications for research and practice. In terms of research, this study provides preliminary evidence regarding the structural and convergent validity of
the CBS in the United States and the Philippines. Further, this study also provides initial evidence on the discriminant validity of the CBS through demonstrating that caring for bliss was associated with lower levels of perceived depression, anxiety, and stress during the COVID-19 pandemic. This is the first study to demonstrate the cross-cultural invariance of the unidimensional model of the caring for bliss construct in the United States and the Philippines. These findings indicate that the CBS can be used as a methodologically acceptable tool to assess individuals' active desire and capacity to increase an intrinsic sense of happiness in different cultural contexts. Turning to practice, the evidence presented regarding the structural and construct validity of the CBS suggests that mental health professionals such as clinical psychologists, counselors, social workers, and school psychologists can consider integrating the CBS as an additional tool to measure clients' capacity to engage in happiness-increasing actions.

In summary, the current research contributes to extant assessment literature through offering evidence about the structural validity and construct validity of the CBS. Given that prior research has argued that engagement in happiness-increasing behaviors vary in individualistic and collectivist settings,\textsuperscript{6,9,10} the study's findings on the cross-cultural invariance of the CBS can serve as a stimulus for effectively assessing pursuit of happiness in diverse cultural societies. It is hoped that this investigation can stimulate on-going scholarly discourse on the mental health rewards associated with proactively caring for happiness.

**Ethical approval**

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was also obtained from all participants.

**Conflict of interest**

There is no conflict of interest in the present study.

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**Permission to reproduce material from other sources**

There were no materials reproduced from other sources.

**Data availability statement**

Data are available from the corresponding author upon request.

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