Title	A report on the translation into Kiswahili, and subsequent validation, of three positive psychology scales
Authors	Murphy, Mike;Wango, Geoffrey;Kinanda, Jonas Jackson;O'Sullivan, David;Di Blasi, Zelda;Moret-Tatay, Carmen
Publication date	2022-10-23
Original Citation	Murphy, M., Wango, G., Kinanda, J.J., O'Sullivan, D., Blasi, Z.D. and Moret-Tatay, C. (2022) 'A report on the translation into kiswahili and subsequent validation, of three positive psychology scales', EAS Journal of Psychology and Behavioural Sciences, 4(5), pp. 124–133. https://doi.org/10.36349/easjpbs.2022.v04i05.002
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://doi.org/10.36349/easjpbs.2022.v04i05.002 - 10.36349/easjpbs.2022.v04i05.002
Rights	© 2022 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited. - https://creativecommons.org/licenses/by-nc/4.0/
Download date	2025-01-09 08:11:07
Item downloaded from	https://hdl.handle.net/10468/13799

OPEN ACCESS

Original Research Article

A Report on the Translation into Kiswahili and Subsequent Validation, of Three Positive Psychology Scales

Mike Murphy[1*], Geoffrey Wango[2], Jonas Jackson Kinanda[3], David O'Sullivan[1], Zelda Di Blasi[4], Carmen Moret-Tatay[5]

[1]School of Applied Psychology, University College Cork, Ireland
[2]Department of Psychology, Faculty of Arts, University of Nairobi, Kenya
[3]Unit of Psychology, Department of Sociology and Anthropology, College of Social Sciences, University of Dar es Salaam, Tanzania
[4]School of Applied Psychology, University College Cork, Ireland
[5]Faculty of Psychology, Universidad Católica de Valencia San Vicente Mártir, Valencia, Spain

Abstract: Whilst positive psychology has grown as a strand of the discipline internationally, very little positive psychology research has been conducted in East Africa. It is likely that one reason for this is the scarcity of relevant validated Kiswahili-language psychometric scales. This paper reports the process and outcomes of translation into Kiswahili, refinement, and validation of three commonly-used scales from the positive psychology domain – the Gratitude Questionnaire, Satisfaction With Life Scale, and Multidimensional Scale of Perceived Social Support – among students of the Universities of Nairobi and Dar es Salaam. Cronbach's alpha values, mean inter-item correlations, and correlations with one another and with related measures, all yielded acceptable results. The final versions – K-GQ5, K-SWLS and K-MSPSS – appear valid and reliable, and suitable for use in research. We recommend larger scale investigation of these translations, the translation of further scales, and the development of positive psychology research in East Africa.

Keywords: Translation; Positive Psychology; Validation; Scale; Gratitude Questionnaire; Multidimensional Scale of Perceived Social Support; Satisfaction With Life Scale; Kiswahili.

INTRODUCTION

Historically, the discipline of psychology has tended to focus on problems, on negative aspects of human experience. In the last two decades, however, there has been a turn towards investigating positive aspects of experience, understanding what makes life worth living, and identifying means to optimise functioning and improving wellbeing (e.g. Seligman, 2002). More specifically the positive aspects of human experiences are situated under the rubric of the discipline of psychology commonly known as positive psychology. Seligman and Csikszentmihalyi (2000) describe positive psychology as being based on three major levels; subjective, which involves subjective experiences in the past (wellbeing and satisfaction), present (flow and happiness) and future (hope and optimism); individual, which involves individual traits such as wisdom, forgiveness, love, courage, perseverance, originality and spirituality; and group, which involves social characteristics such as work

ethics, responsibility, tolerance, nurturance, altruism and politeness.

Since the inception of this positive psychology movement, a substantial quantity of research has been conducted. Systematic reviews and meta-analyses have identified some benefits of gratitude (e.g. Dickens, 2017), mindfulness (e.g. Querstret *et al*., 2020), resilience (e.g. Palacio *et al*., 2020) and self-compassion (e.g. Zessin *et al.*, 2015), among others. A number of psychometric scales have been developed in order to assess outcomes which are associated with positive psychology, such as the Satisfaction with Life Scale (Diener *et al*., 1985), Multidimensional Scale of Perceived Social Support (Zimet *et al*., 1988), Positive & Negative Affect Scale (Watson *et al.*, 1988), and the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999).

Positive psychology research has been conducted across many societies, with relevant scales

having been translated into, inter alia, Spanish, German, Chinese, Turkish, Hindi and Arabic (Arunachalam, 2019; Elias & Kazarian, 2017; Haktanir *et al.*, 2016; Huber *et al.*, 2017; López Ramos *et al.*, 2017; Lou *et al.*, 2015). Most psychology research has, however, been conducted with WEIRD (Western, educated, industrialized, rich, and democratic) populations (Rad *et al.*, 2018), although there has been an extension of research in the field into other regions (see Basurrah *et al.*, 2022 for a systematic review of work in the Arab world). Research in the area of positive psychology has not been as prominent in East Africa as it has been in other areas, with one reason for this being the lack of Kiswahili translations of relevant scales (Drescher *et al.*, 2018).

The current paper reports on the first phase of a programme of research seeking to develop and validate translations of a suite of psychometric scales which are relevant to positive psychology, and subsequently to examine the effects of positive psychology interventions in East African populations.

This project began with the generation of a list of positive psychology related variables, through a review of the literature in the area. Following this, commonly used psychometric scales for each of these variables were identified from the literature, and selected as appropriate targets for translation into Kiswahili.

For the purposes of this paper, the three scales to be translated were the six-item Gratitude Questionnaire (GQ6; McCullough *et al.*, 2002), Satisfaction With Life Scale (SWLS; Diener *et al.*, 1985), and Multidimensional Scale of Perceived Social Support (MSPSS; Zimet *et al.*, 1988).

The research consisted of three phases. To begin with (following the example of Chen *et al.*, 2009), the original English-language versions of the scales were translated into Kiswahili by a bilingual (Kiswahili & English) speaking psychologist (JJK), and back-translated into English by another bilingual psychologist (GW). These English language versions were then compared to one another for meaning, and the back-translated version was assessed for clarity and coherence by three English-speaking psychologists (MM, DO'S, ZDB). Discussions across the research team led to consensus.

In Phase 2, the agreed Kiswahili translations were then (as per Sousa & Rojjanasrirat, 2011) circulated to 10-40 Kiswahili speakers, to be assessed for clarity; any items with 20+% reporting a problem with clarity was re-evaluated.

Phase 3 involved the circulation of the finalised versions to University students in Kenya and Tanzania, along with previously-validated Kiswahili versions of the Beck Depression Inventory – 2nd edition (BDI-II; Abubakar *et al.*, 2016) and World Health Organisation Wellbeing Index (WHO5; Chongwo *et al.*, 2018). All three translated scales were correlated against one another, against the BDI-II and WHO5 and against self-reported fluency in English to establish convergent and divergent validity. Cronbach's alpha and mean inter-item correlations were calculated as measures of internal consistency.

Hypotheses arising from this phase included:
1. That the Kiswahili-language versions of the MSPSS, GQ-6 and SWLS would be significantly and positively correlated with one another;
2. That the Kiswahili-language versions of the MSPSS, GQ-6 and SWLS would be significantly and positively correlated with the Kiswahili WHO-5;
3. That the Kiswahili-language versions of the MSPSS, GQ-6 and SWLS would be significantly and negatively correlated with the Kiswahili BDI-II;
4. That the Kiswahili-language versions of the MSPSS, GQ-6 and SWLS would not be significantly correlated with self-reported fluency in English.

METHOD
Phase 1
As outlined in the introduction, and following the example of Chen *et al*, (2009), the GQ6, SWLS and MSPSS were translated from English to Kiswahili by JJK, and back-translated to English by GW. The resulting scale was then compared to the original English-language scale by each of MM, DOS and ZDB independently. Following this process of comparison between versions, views and comments were collated and discussed with JJK and GW. Alterations to the Kiswahili versions were made as deemed necessary, further backtranslation was carried out, and the revised versions were considered. Two iterations were required for consensus to be reached. These versions were considered ready for use in the next phase.

Phase 2
Participants
This phase of the research involved data from 13 students of the University of Nairobi, Kenya, and the University of Dar es Salaam, Tanzania. All participants confirmed being of age 18 or over, and speaking Kiswahili fluently. Recruitment took place over email.

Instruments
Kiswahili versions of the GQ6, SWLS and MSPSS were administered.

Gratitude Questionnaire (GQ6; McCullough *et al.*, 2002)

The GQ6 is a six-item questionnaire which measures trait gratitude. Sample items include "I have so much in life to be thankful for" and "I am grateful to a wide variety of people". Items are scores on a seven-point Likert scale, with total scores ranging from six to 42; higher scores indicate higher levels of gratitude. Construct validity for the scale was demonstrated through, inter alia, large correlation with the SWLS, and medium correlations with positive and negative affect and with a measure of depression. Cronbach's alpha was reported as .82 and .87 across two studies. Six-week test-retest reliability for a Dutch translation of the scale was reported as .85 (Jans-Bekin *et al.*, 2015).

The QG-6 has also been translated into several languages, and validated in numerous non-western societies, including Brazil (Gouveia *et al.*, 2021), Ecuador (Cabrera-Vélez *et al.*, 2019), Chile (Langer *et al.*, 2016), India (Dixit & Sinha, 2022), Philippines (Llenares & Almeda, 2021), Taiwan (Chen et al., 2009) and Vietnam (Tran *et al.*, 2022); among these, the majority found that a five-item version (omitting the sixth and final item) yielded a good model fit.

Satisfaction With Life Scale (SWLS; Diener *et al.*, 1985)

The SWLS is a five-item scale which assesses global life satisfaction. Sample items include "In most ways my life is close to my ideal" and "I am satisfied with my life". Items are scores on a five-point Likert scale, with total scores ranging from five to 35; higher scores imply greater life satisfaction. Pavot and Diener (1993) conducted a review of the scale's psychometric properties, in studies across a range of countries (mostly North American, none African) and populations. Validity was shown through large correlations with, among others, the Beck Depression Inventory, and with other measures of life satisfaction. Reported Cronbach's alphas ranged between .79 and .89; test-retest reliability ranged from .5 (10 weeks) to .84 (one month).

The SWLS has been validated in several non-WEIRD countries, including Angola (Sancho *et al.*, 2014), Brazil (Gouveia *et al.*, 2009), Chile (Vera-Villarroel *et al.*, 2012), Ghana (Appiah *et al.*, 2020), Malaysia (Swami & Chamorro-Premuzic, 2009) and Mexico (López-Ortega *et al.*, 2016).

Multidimensional Scale of Perceived Social Support (MSPSS; Zimet *et al.*, 1988)

This is a 12-item scale, measuring perceptions of social support from family, friends, and significant other. All items are scores on a seven-point scale, with total scores ranging from 12 to 84; higher scores indicate greater perceived social support. Sample items include "I can count on my friends when things go wrong", and "There is a special person in my life who cares about my feelings". Separate scores can also be calculated for the three subscales listed above. Validity was demonstrated through small-to-medium correlation with a measure of depression. Cronbach's alpha was reported as .88 for the full scale, and test-retest reliability across two-three months as .85.

The MSPSS has been validated in such non-WEIRD contexts and communities as Congolese (Kasujja *et al.*, 2021), Indonesian (Laksmita *et al.*, 2020), Nigerian (Ogunbajo *et al.,* 2020), Pakistani (Sharif et al., 2021), Tamil (Guan *et al.*, 2013) and Turkish (Eker *et al.*, 2000).

Procedure

The scales were added to the online platform, Qualtrics, and disseminated by email to potential participants. Participants were not required to respond using the standard Likert scale option – instead they were asked to report whether they found each item and response option clear; when they reported a lack of clarity, they were asked to offer comments or recommendations for changes,

Ethics

The study was conducted with regard to the British Psychological Society's (2021) Code of Human Research Ethics, and was approved by the relevant ethical review board.

Outcomes

While there were some reports of a lack of clarity on some items, none reached the threshold of 20% recommended by Sousa & Rojjanasrirat (2011), and therefore remedial action was not deemed necessary. Nonetheless, the comments were considered by the research team before the decision was taken to keep the versions which had been distributed for this phase of the study.

Phase 3
Participants

Participants consisted of 91 students of the University of Dar es Salaam and University of Nairobi. The mean age (sd) was 27.67 (8.35), and ages ranged from 20 to 60. Median and modal age were 24.5 and 24 respectively, with over 80% of respondents aged under 30. Fifty respondents were female, and 41 were male. All participants reported speaking Kiswahili fluently.

Design

A cross-sectional design using an electronic survey was employed.

Instruments

The Kiswahili translations of the GQ6, SWLS and MSPSS (hereafter the K-GQ, K-SWLS and K-MSPSS) were distributed, along with a demographic questionnaire which included items on age, gender and fluency in English. In addition, previously validated

Kiswahili versions of two psychometric scales were included.

The World Health Organisation Well-Being Index (WHO5; Chongwo *et al*., 2018)

The WHO5 is a five-item measure of mental wellbeing, and had been found to have good psychometric properties across a range of languages and populations (Topp *et al*., 2015). It has been translated into more than 30 languages. Each item is scored on a scale of zero to five; the scale is scored by adding the score for each item, and multiplying the result by four. Thus total scores range from zero to 100, with higher scores representing greater wellbeing, Chongwo *et al*., (2018) reported Cronbach's alpha values of between .86 and .88 in Kenyan populations. Construct validity was shown through a significant, small-to-medium correlation with a measure of depression. Factor analysis found a one-factor structure. Cronbach's α in the current study was .86.

The Beck Depression Inventory II (BDI-II; Abubakar *et al*., 2016)

This is a 21-item scale which measures depression. Total scores are generated by adding the scores for each item, and higher scores indicate higher levels of depression. Cronbach's alpha for the scale was reported as .89, and factor analysis suggested a single-factor structure was the best fit. Validity was demonstrated through higher scores being identified for carers of adolescents with HIV than for members of the general population. Cronbach's α in the current study was .91.

Procedure

The items were uploaded to the Qualtrics platform and administered through email.

Analysis

Cronbach's alpha and mean inter-item correlations were used as measures of internal consistency. Correlations between the scales, and with self-reported fluency in English, were employed as measure of validity. All analysis was conducted with IBM SPSS v28 for Windows.

Ethics

The study was conducted in conformity with Code of Human Research Ethics of the British Psychological Society (2021), and approval was granted by the local ethics committee.

RESULTS

The first step in analysis was investigation of internal consistency of each scale. For all scales, both Cronbach's alpha and mean inter-item correlation (MIIC) were calculated. Results are presented in Table 1. In each case, Cronbach's alpha was also calculated for each scale with each of its items removed in turn. This yielded only one noteworthy change – the final items of the GQ6 was found to correlate very poorly with the overall scale, and its removal substantially increased the internal consistency of the Kiswahili version. We provide, therefore, the alpha and MIIC for both the six-item Kiswahili version, and for a five-item version with the final item removed.

Table 1: Measures of internal consistency

Scale	N	Cronbach's Alpha	MIIC
K-GQ6	91	.40	.20
K-GQ5	91	.68	.35
K-SWLS	83	.65	.26
K-MSPSS	91	.88	.39
BDI-II	48	.91	.31
WHO5	91	.86	.55

Descriptive statistics for each of the variables were generated, and are presented in Table 2.

Table 2: Descriptive Statistics

Variable	N	Mean	Median	SD	Range	Min	Max	Q1	Q3
K-GQ6	88	34.13	35.00	4.15	24.00	18.00	42.00	32.00	37.00
K-GQ5	90	30.86	32.00	3.88	18.00	17.00	35.00	30.00	34.00
K-SWLS	83	22.98	24.00	5.31	25.00	10.00	35.00	20.00	27.00
K-MSPSS	78	58.56	58.00	12.20	59.00	25.00	84.00	49.00	69.75
BDI-II	43	9.09	8.00	5.97	20.00	.00	20.00	4.00	14.00
WHO5	76	56.16	60.00	23.56	92.00	.00	92.00	36.00	76.00

Finally, scores for each scale were correlated with one another, and with self-reported fluency in English, in order to establish validity of the translated measures. Results are presented in Table 3.

Table 3: Correlations between scale translations and other validation measures

Variable	K-GQ6	K-GQ5	K-SWLS	K-MSPSS	BDI-II	WHO5	English fluency
K-GQ6	1.00	.86[**]	.25[*]	.26[*]	-.34[*]	-.13	-.14
K-GQ5	.86[**]	1.00	.24[*]	.22	-.56[**]	-.14	-.04
K-SWLS	.25[*]	.24[*]	1.00	.23[*]	-.34[*]	-.47[**]	.05
K-MSPSS	.26[*]	.22	.23[*]	1.00	-.30[*]	-.24[*]	-.16
BDI-II	-.34[*]	-.56[**]	-.34[*]	-.30[*]	1.00	.55[**]	-.01
WHO5	.13	.14	.47[**]	.24[*]	-.55[**]	1.00	-.09
English fluency	-.14	-.04	.05	-.16	-.01	.09	1.00

** p<.001; * p<.05

As can be seen in Table 3, there are a number of significant correlations across variables.

The Kiswahili versions of the Gratitude Questionnaire correlate strongly with one another. Both correlate at low-to-medium levels with the K-SWLS and K-MSPSS, although the K-GQ5 fails to correlate significantly with the latter. The K-GQ5 does, however, correlate strongly with the BDI-II, whereas the K-GQ6 correlates moderately with this measure.

The K-SWLS has a small significant correlation with the K-MSPSS, a medium correlation with the BDI-II, and a medium-to-large correlation with the WHO5.

The K-MSPSS correlates moderately with the BDI-II, and has a small but significant correlation with the WHO5.

None of the scales correlates significantly with self-reported fluency in English.

DISCUSSION

The purpose of the current research was to translate three psychometric scales – the GQ-6, the SWLS, and the MSPSS – from English to Kiswahili, to assess these translations for coherence, and to validate the resulting scales for use in research with Kiswahili-speaking populations.

The translation of the scales was carried through in accordance with the work of Chen *et al*., (2009), yielding versions which were considered satisfactory by the researchers. When circulated to a Kiswahili-speaking sample (as per Sousa & Rojjanasrirat, 2011), all items were considered coherent and comprehensible.

Validation involved generation of measures of internal consistency, and correlation of scales with one another, and with previously validated Kiswahili-language psychometric scales. Hypotheses were partly supported.

H1: While the K-SWLS did correlate significantly with both K-GQ5 and K-MSPSS, the latter two did not correlate significantly. The correlation strength was, however, very similar to those of the K-SWLS with both K-GQ5 and K-MSPSS, and approached significance (p=.053).

H2: The WHO-5 correlated significantly with both the K-MSPSS and K-SWLS, but not with the K-GQ5. This may indicate issues with the scale (either with the translation, or with the yielding of the concept for use in an East African context), or that gratitude is not an important predictor of wellbeing in East Africa.

H3 & H4: Each of the translations correlated significantly with the BDI-II, and did not correlate at all with self-reported English fluency.

The final versions of the scales are presented in Tables 4-6.

Results for each of the three translations are discussed in order.

Gratitude Questionnaire

Internal consistency for the full six item GQ was poor. Cronbach's α of 0.4 and MIIC of 0.2 were not at adequate levels, and indicated that this version of the scale was not internally consistent. Omitting the final item ("Long amounts of time can go by before I feel grateful to something or someone") however led to a considerable improvement; the five-item version had a Cronbach's α of 0.68 and MIIC of 0.35. For a scale of this length, α of 0.6 is considered adequate (Pallant, 2001), while a MIIC of .3 or above is considered adequate (Mitchell & Jolley, 2012). We therefore felt that this five-item version (the K-GQ5) was internally consistent. This finding echoes those of Chen *et al*., (2009), Dixit & Sinha (2021), Langer *et al*., (2016), Cabrera-Vélez *et al*., (2019) and Tran *et al*., (2022); all found that a five-item version of the scale, without the final item, yielded a good model fit and an acceptable α value. This may indicate that there are important cultural issues with this particular item, and that it is necessary to consider its appropriateness for use in different populations - including different English-speaking populations. Using this five-item version, Cronbach's α values ranged from .69 (Tran *et al.,*) to .93 (Cabrera-Vélez *et al*., 2019) - ours is fractionally lower but remains acceptable.

In terms of validation, the K-GQ5 was found to have a large negative correlation with the BDI-II, and

to have a small-to-medium positive correlation with the K-SWLS. it was not found to have significant correlations with either the K-MSPSS or the WHO5.The initial validation paper of McCullough *et al*., (2002) found somewhat comparable outcomes for the GQ-6 – a medium correlation with a measure of depression, and a large correlation with the SWLS. Compared to the non-Western validation papers listed here, our findings are also quite consistent: Langer *et al*., (2016) found the Spanish-language version to correlate at medium and large levels respectively with depression scores in two Chilean samples, while Dixit and Sinha (2022) reported a medium correlation in an Indian sample; Dixit and Sinha found a medium correlation with the SWLS, while Tran *et al*., (2022) identified a medium correlation in a Vietnamese sample.

Overall, the K-GQ5 seems to be valid and reliable as a research tool in East Africa, though its relationship to the WHO-5 may be worthy of further research. Its internal consistency is lower than that reported in most related research.

K-SWLS
Internal consistency for the K-SWLS was broadly acceptable. A Cronbach's alpha of above .6 is considered adequate; the MIIC was a little below the level of 0.3 however.

Pavot and Diener (1993), in a review of the literature, reported Cronbach's alpha values ranging between .79 and .89. Among published validations of the SWLS in non-WEIRD settings, internal consistency scores ranged from .74 (López-Ortega *et al*., 2016) to .92 (Sancho *et al*., 2014). Again, our version scores rather lower.

Pavot and Diener (1993) reported finding large correlations of the SWLS with measures of depression, and medium correlation with negative affect, which is somewhat consistent with our findings. López-Ortega *et al*., (2016) found a medium correlation with depression in a Mexican sample, while Gouveia *et al*., (2009) found a small-to-medium correlation with negative affect in Brazil. Vera-Villarroel *et al*., (2012) reported a medium-to-large correlation with wellbeing in a Chilean study. López-Ortega *et al*., and Sancho *et al*., (2014) reported small and medium correlation with social support and with emotional support respectively. These are also consistent with our findings with the K-SWLS.

On the basis of this information, the K-SWLS does seem a valid measure of the construct of satisfaction with life in East Africa. Its internal consistency, whilst acceptable, is on the low side; this may indicate a need to develop a new scale for use in the area.

K-MSPSS
The internal consistency of the K-MSPSS was excellent, with both Cronbach's alpha and MIIC comfortably exceeding the recommended cutoffs. Zimet *et al*., (1988) reported an alpha of .88 in the original validation paper, while validation papers for translated versions in non-WEIRD settings have ranged between .74 (Laksmita *et al*., 2020) and .93 (Sharif *et al*., 2021). The K-MSPSS value of .88 is towards the top of this range.

Regarding validation, Zimet *et al.,* (1988) found a small-to-medium correlation with depression scores, as did Ogunbajo *et al*., (2020), while Sharif *et al*., (2021) reported a medium-to-large correlation and Guan *et al*., (2013) found a small correlation. Our finding that the K-MSPSS had a medium correlation with BDI-II scores is consistent with these results.

On this basis, we feel the K-MSPSS appears a valid and reliable measure of social support in the East African context.

The availability of these measures makes research into positive psychology and wellbeing in East Africa more feasible, and we recommend that work be done on identifying predictors and correlates of wellbeing, in order to provide empirical bases for interventions. In addition, we feel that well-established positive psychology interventions can and should now be implemented and assessed for utility in these societies. It is the case, however, that the reliabilities of two of the measures (K-GQ5 and K-SWLS) are not as high as one might wish, and so investigation of the underlying constructs in East Africa – possibly leading to the development of more culturally-appropriate measures – is indicated. Finally, translation and validation of further positive psychology scales is desirable.

It remains the case, in addition, that psychology research generally is limited in non-WEIRD settings; we hope that advances in positive psychology research in East Africa can be a feature of a wider expansion of research in the region and beyond.

The study is not without limitations. All participants were students of Universities in the capital cities of their respective countries, and so cannot be expected to be representative. The bulk of participants were aged 18-30, and again this may compromise generalisability. In addition, the sample size is quite small, which may also compromise the results. We recommend larger-scale validation on these measures.

Table 4
K-GQ5
Kwa kutumia viwango vya majibu kwenye kiboksi hapo chini kama mwongozo, andika nambari

kando ya kila maelezo yanazofuata hapo chini ili kuonyesha ni kiasi gani unakubaliana na maelezo hayo.

> Machaguo ya majibu
> 1 = sikubaliani kabisa
> 2 = sikubaliani
> 3 = sikubaliani kiasi
> 4 = siko upande wowote
> 5 = nakubali kidogo
> 6 = nakubali
> 7 = nakubali sana

1. Nina mengi sana maishani ya kushukuru. _____

2. Ikiwa ningelazimika kuorodhesha kila kitu ambacho nilihisi kushukuru, itakuwa
 orodha ndefu sana. _____

3. Ninapoangalia ulimwengu, sioni mengi ya kushukuru. *_____

4. Kwa kiwango kikubwa ninashukuru watu wengi tofauti tofauti. _____

5. Kadri umri unavyozidikwenda najikuta nina uwezo mkubwa sana wa kushukuru watu, matukio, na hali ambazo zimekuwa sehemu ya historia ya maisha yangu. _____

Table 5
K-SWLS

Yafuatayo hapo chini ni maelezo matano ambayo unaweza kukubaliana au kutokubaliana nayo. Kwa kutumia kiwango cha 1 hadi 7 hapo chini kwenye boksi, onyesha makubaliano yako katika kila jambo kwa kuweka nambari inayofaa kwenye mstari unaotangulia jambo hilo. Tafadhali kuwa muwazi na mwaminifu katika kujibu kwako.

> Machaguo ya majibu:
> 7 - Nakubali sana
> 6 - Nakubaliana
> 5 - Nakubali kidogo
> 4 – Nipo kati ya kukubaliani na kutokubaliana
> 3 - Sikubaliani kidogo
> 2 -Sikubaliani
> 1 - Sikubaliani kabisa

1. Kwa namna nyingi maisha yangu yako karibu na fikra zangu _____
2. Hali ya maisha yangu ni nzuri sana _____
3. Nimeridhika na maisha yangu _____
4. Hadi sasa nimepata vitu muhimu ninavyohitaji maishani _____
5. Ikiwa ningeweza kuishi maisha yangu upya, nisingebadilisha chochote _____

Table 6
K-MSPSS

Tunavutiwa na maoni yako juu ya jinsi unavyoguswa kuhusiana na kauli zifuatazo. Soma kila kauli kwa uangalifu, kisha chakua majibu hapo chini kwenye boksi ili kuonyesha ni kwa jinsi gani unavyoguswa kuhusiana na kila kauli.

1. Kuna mtu maalumu wa kuwa karibu yangu pindi niwapo na uhitaji. _____
2. Kuna mtu maalumu wa karibu ninayeweza kushiriki naye katika shida na raha. _____
3. Kwa hakika familia yangu huwa inajitahidi sana kunisaidia._ _____
4. Ninapata msaada wa kihisia na usaidizi ninaohitaji kutoka kwa familia yangu. _____
5. Nina mtu maalumu ambaye ni chanzo halisi cha faraja yangu. _____
6. Marafiki zangu wanajitahidi sana kunisaidia. _____
7. Ninaweza kuwategemea marafiki zangu pindi mambo yanapokwenda vibaya. _____

8. Ninaweza kuzungumza kuhusu shida zangu na familia yangu. _____
9. Nina marafiki ambao naweza kuwashrikisha shida na raha zangu. _____
10. Kuna mtu maalumu maishani mwangu anayejali hisia zangu. _____
11. Familia yangu iko tayari kunisaidia kufanya maamuzi. _____
12. Ninaweza kuzungumza na marafiki zangu kuhusu matatizo yangu. _____

> Machaguo ya majibu:
> 1 - sikubaliani sana kabisa
> 2 - sikubaliana kabisa
> 3 - sikubaliana kiasi
> 4 -nipo kati
> 5 - nakubaliana kiasi
> 6 – nakubaliana kabisa
> 7 - nakubaliana sana kabisa

CONCLUSION

To our knowledge this is the first study to validate the three commonly-used scales from the positive psychology domain – the Gratitude Questionnaire, Satisfaction With Life Scale- and Multidimensional Scale of Perceived Social Support in East African Communities. The resultant translations appear to have acceptable psychometric properties, and can be used to make the first steps in positive psychology research in East Africa. Whilst the psychometrics are adequate, however, the internal consistencies of two of the scales are lower than has been reported elsewhere; further research into

measurement of these constructs in East Africa is warranted.

REFERENCES

- Abubakar, A., Kalu, R. B., Katana, K., Kabunda, B., Hassan, A. S., Newton, C. R., & Van de Vijver, F. (2016). Adaptation and Latent Structure of the Swahili Version of Beck Depression Inventory-II in a Low Literacy Population in the Context of HIV. *PloS one*, *11*(6), e0151030. https://doi.org/10.1371/journal.pone.0151030

- Appiah, R., Schutte, L., Fadiji, A. W., Wissing, M. P., & Cromhout, A. (2020). Factorial validity of the Twi versions of five measures of mental health and well-being in Ghana. *PLoS ONE, 15*(8), Article e0236707. https://doi.org/10.1371/journal.pone.0236707

- Arunachalam, T. (2019). An Investigation on the Factor Structure of Hindi Version of Oxford Happiness Questionnaire (OHQ). *Universitas Psychologica*, *18*(1). http://doi.org/10.11144/Javeriana.upsy18-1.ifsh

- Basurrah, A. A., Di Blasi, Z., Lambert, L., Murphy, M., Warren, M. A., Setti, A., Al-Haj Baddar, M., & Shrestha, T. (2022). The effects of positive psychology interventions in Arab countries: A systematic review. *Applied Psychology. Health and Well-Being*, 10.1111/aphw.12391

- British Psychological Society (2021). *Code of human research ethics.* BPS.

- Cabrera-Vélez, M., Lima-Castro, S., Peña Contreras, E. K., Aguilar-Sizer, M. E., Bueno-Pacheco, A., & Arias Medina, P. (2019). Adaptation and Validation of the Gratitude Questionnaire GQ-6 for the Ecuadorian Context. *Avaliação Psicológica*, *18*(2). Recuperado de https://submission-pepsic.scielo.br/index.php/avp/article/view/15689

- Chen, L. H., Chen, M.-Y., Kee, Y. H., & Tsai, Y.-M. (2009). Validation of the Gratitude Questionnaire (GQ) in Taiwanese undergraduate students. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, 10*(6), 655–664. https://doi.org/10.1007/s10902-008-9112-7

- Chongwo, E., Ssewanyana, D., Nasambu, C., Mwangala, P. N., Mwangi, P. M., Nyongesa, M. K., Newton, C. R., & Abubakar, A. (2018). Validation of a Swahili version of the World Health Organization 5-item well-being index among adults living with HIV and epilepsy in rural coastal Kenya. *Global Health Research and Policy*, *3*, 26. https://doi.org/10.1186/s41256-018-0081-z

- Dickens, L. R. (2017). Using gratitude to promote positive change: A series of meta-analyses investigating the effectiveness of gratitude interventions. *Basic and Applied Social Psychology, 39*(4), 193–208. https://doi.org/10.1080/01973533.2017.1323638

- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

- Dixit, S. K., & Sinha, J. (2021). Adaptation and validation of the gratitude questionnaire (gq-6) for the Indian context. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*. https://doi.org/10.1007/s12144-021-02143-2

- Drescher, C. F., Johnson, L. R., Kurz, A. S., Scales, P. C., & Kiliho, R. P. (2018). A developmental assets approach in East Africa: Can Swahili measures capture adolescent strengths and supports? *Child & Youth Care Forum, 47*(1), 23–43. https://doi.org/10.1007/s10566-017-9415-0

- Eker, D., Arkar, H., & Yaldiz, H. (2000). *Multidimensional Scale of Perceived Social Support--Revised--Turkish Version (MSPSS-R-T)*. https://doi.org/10.1037/t06536-000

- Elias, R.R. & Kazarian, S. (2017). A validation study of a new Arabic version of the Adult Dispositional Hope Scale in a sample of Lebanese college youth. *Arab Journal of Psychiatry, 28*(1), 83-91.

- Gouveia, V.V., Milfont, T.L., da Fonseca, P.N. & Coelho, J.A.P.M. (2009). Life satisfaction in Brazil: Testing the psychometric properties of the Satisfaction With Life Scale (SWLS) in five Brazilian samples. *Social Indicators Research, 90*, 267–277). https://doi.org/10.1007/s11205-008-9257-0

- Gouveia, V. V., Ribeiro, M. G. C., de Aquino, T. A. A., Loureto, G. D. L., Nascimento, B. S., & Rezende, A. T. (2021). Gratitude Questionnaire (GQ-6): Evidence of construct validity in Brazil. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues, 40*(5), 2481–2489. https://doi.org/10.1007/s12144-019-00197-x

- Guan, N. C., Sulaiman, A. R., Seng, L. H., Ann, A. Y., Wahab, S., & Pillai, S. K. (2013). Factorial validity and reliability of the Tamil version of Multidimensional Scale of Perceived Social Support among a group of participants in University Malaya Medical Centre, Malaysia. *Indian Journal of Psychological Medicine*, *35*(4), 385–388. https://doi.org/10.4103/0253-7176.122234

- Haktanir, A., Lenz, A. S., Can, N., & Watson, J. C. (2016). Development and evaluation of Turkish language versions of three positive psychology assessments. *International Journal for the Advancement of Counselling, 38*(4), 286–297. https://doi.org/10.1007/s10447-016-9272-9

- Huber, A., Webb, D., & Höfer, S. (2017). The German version of the Strengths Use Scale: The relation of using individual strengths and well-being. *Frontiers in Psychology*, 8, 637. https://doi.org/10.3389/fpsyg.2017.00637
- Jans-Beken, L., Lataster, J., Leontjevas, R., & Jacobs, N. (2015). Measuring gratitude: A comparative validation of the Dutch Gratitude Questionnaire (GQ6) and Short Gratitude, Resentment, and Appreciation Test (SGRAT). *Psychologica Belgica, 55*(1), 19–31. https://doi.org/10.5334/pb.bd
- Kasujja, R., Bangirana, P., Chiumento, A., Hasan, T., Jansen, S., Kagabo, D.M., Popa, M., Ventevogel, P. & White, R.G. (2022). Translating, contextually adapting, and pilot testing of psychosocial and mental health assessment instruments for Congolese refugees in Rwanda and Uganda. *Conflict and Health, 16*, 17. https://doi.org/10.1186/s13031-022-00447-z
- Laksmita, O.D., Chung, M., Liao, Y., & Chang, P. (2020). Multidimensional Scale of Perceived Social Support in Indonesian adolescent disaster survivors: A psychometric evaluation. *PLoS ONE, 15*. https://doi.org/10.1371/journal.pone.0229958
- Langer, Á. I., Ulloa, V. G., Aguilar-Parra, J. M., Araya-Véliz, C., & Brito, G. (2016). Validation of a Spanish translation of the Gratitude Questionnaire (GQ-6) with a Chilean sample of adults and high schoolers. *Health and Quality of Life Outcomes, 14,* Article 53. https://doi.org/10.1186/s12955-016-0450-6
- Llenares, I. & Almeda, C. (2021). Psychometric property of the Gratitude Questionnaire in Filipino college students. *Behavioral Psychology / Psicología Conductual, 29*(3), 667-680. https://doi.org/10.51668/bp.8321309n
- López-Ortega, M., Torres-Castro, S. & Rosas-Carrasco, O. (2016). Psychometric properties of the Satisfaction with Life Scale (SWLS): Secondary analysis of the Mexican Health and Aging Study. *Health and Quality of Life Outcomes, 14*, 170. https://doi.org/10.1186/s12955-016-0573-9
- López Ramos, Y., Fernández Muñoz, J. J., Navarro-Pardo, E., & Murphy, M. (2017). Confirmatory factor analysis for the multidimensional scale of perceived social support in a sample of early retirees enrolled in university programs. *Clinical Gerontologist: The Journal of Aging and Mental Health, 40*(4), 241–248. https://doi.org/10.1080/07317115.2016.1199077
- Lou, V. W., Lau, B. H., & Cheung, K. S. (2015). Positive aspects of caregiving (PAC): scale validation among Chinese dementia caregivers (CG). *Archives of gerontology and geriatrics*, 60(2), 299–306. https://doi.org/10.1016/j.archger.2014.10.019
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*(2), 137-155. https://doi.org/10.1023/A:1006824100041
- McCullough, M. E., Emmons, R. A., & Tsang, J.-A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*(1), 112–127. https://doi.org/10.1037/0022-3514.82.1.112
- Mitchell, M. L., & Jolley, J. M. (2012). *Research design explained*. Cengage Learning.
- Ogunbajo, A., Iwuagwu, S., Williams, R., Biello, K. B., Kahler, C. W., Sandfort, T., & Mimiaga, M. J. (2020). Validation of depressive symptoms, social support, and minority stress scales among gay, bisexual, and other men who have with men (GBMSM) in Nigeria, Africa: A mixed methods approach. *BMC Public Health*, 20(1), 1023. https://doi.org/10.1186/s12889-020-09127-0
- Palacio G, C., Krikorian, A., Gómez-Romero, M. J., & Limonero, J. T. (2020). Resilience in caregivers: A systematic review. *The American Journal of Hospice & Palliative care*, 37(8), 648–658. https://doi.org/10.1177/1049909119893977
- Pallant, J. (2001). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows version 10*. Open University Press.
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale. *Psychological Assessment, 5*(2), 164–172. https://doi.org/10.1037/1040-3590.5.2.164
- Querstret, D., Morison, L., Dickinson, S., Cropley, M., & John, M. (2020). Mindfulness-based stress reduction and mindfulness-based cognitive therapy for psychological health and well-being in nonclinical samples: A systematic review and meta-analysis. *International Journal of Stress Management, 27*(4), 394–411. https://doi.org/10.1037/str0000165
- Rad, M. S., Martingano, A. J., & Ginges, J. (2018). Toward a psychology of Homo sapiens: Making psychological science more representative of the human population. *PNAS Proceedings of the National Academy of Sciences of the United States of America, 115*(45), 11401–11405. https://doi.org/10.1073/pnas.1721165115
- Sancho, P., Galiana, L., Gutierrez, M., Francisco, E.-H., & Tomás, J.M. (2014). Validating the Portuguese version of the Satisfaction With Life Scale in an elderly sample. *Social Indicators Research, 115*, 457–466. https://doi.org/10.1007/s11205-012-9994-y
- Seligman, M. E. P. (2002). Positive psychology, positive prevention, and positive therapy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 3–9). Oxford University Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction.

American Psychologist, *55*(1), 5–14. https://doi.org/10.1037/0003-066X.55.1.5.

- Sharif, M., Zaidi, A., Waqas, A., Malik, A., Hagaman, A., Maselko, J., LeMasters, K., Liaqat, R., Bilal, S., Bibi, T., Ahmad, I., Sikander, S., & Rahman, A. (2021). Psychometric validation of the Multidimensional Scale of Perceived Social Support during pregnancy in rural Pakistan. *Frontiers in Psychology*, *12*, 601563. https://doi.org/10.3389/fpsyg.2021.601563

- Sousa, V. D., & Rojjanasrirat, W. (2011). Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: a clear and user-friendly guideline. *Journal of Evaluation in Clinical Practice*, *17*(2), 268–274. https://doi.org/10.1111/j.1365-2753.2010.01434.x

- Swami, V., & Chamorro-Premuzic, T. (2009). Psychometric evaluation of the Malay Satisfaction With Life Scale. *Social Indicators Research, 92*(1), 25–33. https://doi.org/10.1007/s11205-008-9295-7

- Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: A systematic review of the literature. *Psychotherapy and Psychosomatics*, *84*(3), 167–176. https://doi.org/10.1159/000376585

- Tran, T.A.T., Nguyen Phuoc, C.T., Dinh, H.V.T. & Nguyen, V.T. (2022), The Vietnamese version of the Gratitude Questionnaire (GQ) and the Revised Short Gratitude, Resentment, and Appreciation Test (S-GRAT): Psychometric properties among adolescents. *Japanese Psychological Research, 64,* 295-307. https://doi.org/10.1111/jpr.12321

- Vera-Villarroel, P., Urzúa M., A., Pavez, P., Celis-Atenas, K., & Silva, J. (2012). Evaluation of subjective well-being: Analysis of the Satisfaction with Life Scale in Chilean population. *Universitas Psychologica, 11*(3), 719–727.

- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063–1070. https://doi.org/10.1037/0022-3514.54.6.1063

- Zessin, U., Dickhäuser, O., & Garbade, S. (2015). The relationship between self-compassion and well-being: A meta-analysis. *Applied Psychology: Health and Well-Being*, *7*(3), 340–364. https://doi.org/10.1111/aphw.12051

- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2