

Flourishing: Re-validity Structure for Egyptian Adults.

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In Egypt, few studies are interested in studying well-being and/or flourishing for different samples, more specifically for adults (Salama-Younes, 2017; Salama-Younes & Hashim, 2017). In order to compare the different samples, the specific goals of the present research are to (i) re-test the validity and reliability of 2 scales measuring the flourishing state, and (ii) explore the effect of gender on both assessments for Egyptian adults. For that, the Arabic version of both the Mental Health Continuum-Short Form (MHC-SF) and the Flourishing Scale (FS) were used with an adult sample (n = 333). The 2 scales showed good structure validity, reliability, and gender has an effect on only the Flourishing Scale.

Keywords: Egyptian Adults; Well-being; Flourishing; Validity; Reliability.

**الرفاهية: إعادة فحص صدق المقياس لدى عينة من الراشدين المصريين.
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ملخص

هناك عدد قليل من الدراسات في مصر تهتم بدراسة الرفاهية أو الازدهار على عينات مختلفة، وبشكل أكثر تحديداً على البالغين (Salama-Younes, 2017; Salama-Younes & Hashim, 2017). وسعيًا وراء مقارنة النتائج بين عينات مختلفة، تتحدد أهداف البحث الحالي في: (1) إعادة فحص صدق وثبات مقياسيين يقيسا حالة الازدهار، (2) واستعراض أثر الجنس على المقياسيين على البالغين. لذا تم استخدام النسخة العربية لكل من النسخة المختصرة لمتصل الصحة النفسية ومقياس الازدهار على عينة من البالغين (ن = 333). وأظهرت النتائج تحقق صدق بنية المقياسيين وثباتهما ووجود أثر للجنس على مقياس الازدهار فقط.

الكلمات المفتاحية: الراشدون المصريون؛ الرفاهية؛ الازدهار؛ الصحة؛ الموثوقية.

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Introduction

Flourishing is the ultimate end-state in psychology and a key-concept in the field of positive psychology research. Flourishers are those individuals with both high levels of hedonic well-being and eudaimonic well-being. Although many researchers have focused on one or another of these domains, only a few have investigated the comprehensive state of flourishing (Schotanus-Dijkstra et al., 2016). It has been defined as a state in which a person does well psychologically and socially (Huppert & So, 2013) and it refers to doing and living well rather than merely feeling good (Seligman, 2012). Many components and concepts contribute to the overall concept of flourishing and the benefits of a life that can be characterized as flourishing (Huppert & So, 2013). It is considered as a measure of overall life well-being and it is viewed as important to the idea of happiness, as well (Fredrickson & Losada, 2005). It is also considered as a state of optimal human functioning.

For evaluating the flourishing state, there are four different operationalisations: i) Keyes (2005), ii) Diener et al. (2010), iii) Huppert, Seligman et al., (2011), and iv) Huppert and So (2013) models (Hone, Jarden, Schofield, & Duncan, 2014). In the present research, we adopted the models of Keyes (2005) and Diener, et al., (2010).

Flourishing based on Keyes's concept

Keyes and Annas (2009) argue that mental health does not indicate an absenteeism of mental illness. Rather, mental health is a separate aspect of positive feelings and functioning. (Keyes, 2002) has declared many of the symptoms of positive feelings and positive functioning in life by going through the factors and measures of subjective well-being to develop the definition of flourishing. To evaluate the flourishing aspect, the Mental Health Continuum-Long Form (MHC-LF), consisting of 40 items evaluating 14 facets of well-being, has been developed. The Short Form (MHC-SF), of the same scale, consists of the 14 items that have been chosen as the most prototypical items representing the 14 facets. One item from each facet has been chosen. Three items were chosen (happy, interested in life, and satisfied) to represent emotional well-being; five items were chosen to represent the social well-being (social integration, social acceptance, social contribution, social coherence and social actualization); and six items were chosen to represent the psychological well-being (self-acceptance, autonomy, positive relationships, environmental mastery, life purpose and personal growth). MHC-SF has been used in many cultures (Ismail & Salama-Younes, 2011; Keyes et al., 2008; Lamers, Westerhof, Bohlmeijer, ten Klooster, & Keyes, 2011; Petrillo, Capone, Caso, & Keyes, 2015).

Flourishing based on Diener's concept

According to Diener et al. (2010), flourishing is the conceptualization of positive relationships, engagement, purpose and meaning, self-acceptance, self-esteem, competence, optimism and social contribution. It has been based on recent theories of psychological and social well-being. The same authors have published an easily useable questionnaire to assess flourishing composed of 8 items. The Flourishing Scale (FS) is designed to measure social psychological prosperity and to complement existing measures of subjective well-being (Diener & Ryan, 2009). The measure has good psychometric properties and strongly associates with other psychological well-being scales (Diener, Scollon, & Lucas, 2009). It has been translated and used in different cultures (L. Hone, A. Jarden, & G. Schofield, 2014; Silva & Caetano, 2013; Tang, Duan, Wang, & Liu, 2016; Villieux, Sovet, Jung, & Guilbert, 2016). Previous studies reported good internal consistency and the unidimensional structure of the FS (Diener et al., 2010; Silva & Caetano, 2013; Tang et al., 2016). However, its validity to the Arabic culture still needs more review.

Problem of research

Using data on 500,000 randomly sampled Americans and West Europeans, the psychological well-being is U-shaped through life. Separate well-being regression equations in 72 developed and developing nations were found (Blanchflower & Oswald, 2008). The evidence is provided for the existence of a similar U-shape through the life-course in East European, Latin American and Asian nations in middle age. In addition, a U-shape in age is found in separate well-being regression equations in 72 developed and developing nations (Blanchflower & Oswald, 2008). In order to compare, in this research, the assumption by which the existence of a similar U-shape through the life-course between youth and adults is held, we have firstly to retest the psychometric qualities for both assessments measuring the flourishing state on the adult sample. The flourishing assessments were only used with Egyptian college students (Salama-Younes, 2017; Salama-Younes & Hashim, 2017). For that, our objectives of this study are to i) re-examine the validity and reliability on the new sample to make sure the scales are performing well on the new sample, and (ii) explore the effect of gender on the two flourishing assessments.

Method

Participants and Procedure

For both the MHC-SF and FS, we used the Arabic version which has previously been used for college students (Salama-Younes, 2017; Salama-Younes & Hashim, 2017). For the present research, participants were Egyptian adults (n= 333).

They were from Cairo and Giza cities. They aged from 55 to 64 years (M= 58, 97; SD= 3, 82). They were 194 men and 139 women and they completed the 2 assessments immediately before beginning their training session.

Researchers informed the participants about the purpose of the study and they could withdraw at any time, as participation was voluntary. Oral and written instructions were given that there were no rights or wrong answers to the questions. Confidentiality of responses was assured to the participants. SPSS 21.00 was used to perform the internal consistency (Cronbach alpha α). LISREL 8.7 was used to test the confirmatory factor analyses (Byrne, 2013).

Measures

The Mental Health Continuum-Short Form (MHC-SF) (Keyes, 2005) consists of 14 items and assesses the degree of the emotional well-being, as mentioned above.

The Flourishing Scale (FS) (Diener et al., 2010) is a brief 8-item summary measure of the respondent's self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism. The scale provides a single psychological well-being score. A 7-point Likert scale was used ranging from “strongly disagree” (1) to “strongly agree” (7).

Results

We used confirmatory factor analyses (CFA) to assess the two instruments' structure. The intention was to indicate if the model fits the data well. There are varying suggestions in the literature about the number, type and cut-off values for goodness-of-fit required to be reported for confirmatory factor analyses. The goodness of fit indexes for the 2 assessments was acceptable in terms of χ^2/df ratio, GFI, RMR, and RMSEA. According to different suggestions, results were accepted for both scales. For MHC-SF, 1-factor, 2-factor and 3-factor models were examined and the set of indicators highlights that the 3-factor model is the best fit for data (table 1). Finally, the correlations among the total score of the 2 instruments were positive 0.51 and significant at $p < .01$.

Table1. Goodness-of-fit of the confirmatory factor analysis models and T. test between men's and women's sample (n = 333).

Scales	χ^2	df	GFI	NFI	RMR	RMSEA	χ^2 / df	Alpha
FS	0.00	0.00	1.00	1.00	1.00	0.00	0.00	0.86
MHC-SF (1 factor)	555.95	77	0.81	0.85	0.11	0.12	7.22*	0.73
MHC-SF (2 factor)	308.41	76	0.90	0.89	0.07	0.08	4.06**	0.73
MHC-SF	259.87	74	0.94	0.94	0.05	0.06	3.51**	0.73

(3 factor)								
Scale	N	Sample 2	n	M	SD	t	df	Sig. (2-tailed)
FS	333	Men	194	5.75	1.22	2.54	255.94	0.01**
		Women	139	5.35	1.52			
MHC-SF	333	Men	194	4.71	1.63	1.23	276.45	0.21
		Women	139	4.47	1.82			

Note: GFI = Goodness of Fit Index, NFI = Normed Fit Index, RMR = Root Mean Square Residual, RMSEA = Root Mean Square Error of Approximation. * $p < .05$; ** $p < .01$.

The internal consistency of the scores reliability was assessed by calculating Cronbach’s α coefficient. The values of 0.70 or greater were considered satisfactory. In the present research, reliability is satisfactory for the 2 scales. They were 0.73 and 0.86 for the MHC-SF and FS respectively.

Independent-samples t-test comparisons were conducted to compare the men’s and women’s samples on the two scales. There was a significant difference on the FS scores between men ($M=5.75$, $SD=1.22$) and women ($M=5.35$, $SD=1.52$); $t(255.94) = 2.01$, $p < 0.01$. However, there was no significant difference on the MHC-SF.

Discussion and Conclusion

There are relatively few studies interested in flourishing on Egyptian samples. There are several reasons for limited existing literature on the topic. One essential contributor is that we have probably translated assessments into Arabic language but we do not have valid and reliable questionnaires measuring flourishing state for adults.

As in the present research, the set of indicators highlights that the 3-factor model is the best fit for the MHC-SF data. For the FS, indicators show that it is a unidimensional scale. The structure validity of the two scales is the same as in the previous studies (Salama-Younes, 2017; Salama-Younes & Hashim, 2017). In addition, the relation between the two constructs was positive and significant ($r = 0.51$, $p < 0.01$). According to Hone, A. Jarden, and G. Schofield (2014), the Spearman’s correlations for Keyes and Diener et al., operationalizations of flourishing are similar to the present study results ($r = 0.52$).

Therefore, the internal consistency was acceptable and the factor structure was confirmed for both MHC-SF and FS. The 2 scales assessed many aspects of well-being and it was expected to be positively correlated. Men are more flourishing than women according to the total score of FS. However, there was no gender difference for the total score of emotional, social and psychological aspects. It would be possible to explain that, by the two-factor model, constructs are not

similar. For example, the FS is composed from many aspects like self-acceptance and self-esteem, optimism, competence. On the contrary, the MHC-SF is composed of three different factors.

This study represents the early steps in a project aimed at evaluating and promoting positive development among Egyptian adults. In order to compare the evidence of the existence of a similar U-shape through the life-course, the two assessments are now ready to be used in the general Egyptian culture. The proposed next steps are to further investigate the comparison between college students and adults on the 2 flourishing models and to investigate which socio-demographical factors could best predict the well-being of both groups.

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