VALIDATION OF THE WORK-RELATED ACCEPTANCE AND ACTION QUESTIONNAIRE (WAAQ) WITH UNIVERSITY STUDENTS

María C. Ponce and Esperanza Villar
University of Gerona (Spain)

Abstract

The objective of this study was to adapt and validate the Work-Related Acceptance and Action Questionnaire (WAAQ, Bond et al., 2013) so it can be used to measure psychological flexibility in the academic environment of a university of Ecuador. The study sample comprised 6,230 students. The instrument demonstrated high internal consistency (α= .90, ω= .91). The analysis of the main components showed a single factor, which explained 62.3% of the variance. The confirmatory factor analysis showed a satisfactory fit of the model. The correlations between WAAQ and the Acceptance and Action-II Questionnaire (AAQ-II, Bond et al., 2011) and Wallston's Personal Competence Scale (Wallston, 1992) suggest that the questionnaires evaluate different constructs. Based on these results, it was concluded that the WAAQ is a valid and reliable instrument for measuring psychological flexibility in the Ecuadorian university academic environment.
KEY WORDS: *psychological flexibility, university students, WAAQ, acceptance and commitment therapy, assessment.*

Resumen

El objetivo de este estudio fue adaptar y validar el "Cuestionario de aceptación y acción laboral" (WAAQ; Bond *et al*., 2013) para que pueda ser utilizado para medir la flexibilidad psicológica en el ámbito académico de una universidad del Ecuador. La muestra de estudio estuvo compuesta por 6.230 estudiantes. El instrumento demostró una alta consistencia interna (α= 0,90; ω= 0,91). El análisis de los componentes principales mostró un solo factor, lo que explica el 62,3% de la varianza. El análisis factorial confirmatorio mostró un ajuste satisfactorio del modelo. Las correlaciones entre el WAAQ y el "Cuestionario de aceptación y acción-II" (AAQ-II, Bond *et al.,* 2011) y la "Escala de competencia personal de Wallston" (Wallston, 1992) sugieren que los cuestionarios evalúan diferentes constructos. Se concluyó que el WAAQ es un instrumento válido y fiable para medir la flexibilidad psicológica en el ámbito académico universitario ecuatoriano.

Introduction

Around 29% of young people gain access to university in Ecuador and although the majority of volunteers in psychological research are actually university students, it is only recently that attention has begun to focus on the study of their own health and well-being.

Students enter university seeking to achieve goals and objectives associated with their personal and professional projects. Achieving these goals means they need to respond to a set of academic demands and activities which, on occasion, can disrupt their psychological well-being which, in turn, can lead to stress (González-Cabanach et al*.*, 2018; Hj Ramli et al*.*, 2018). Academic stress is a factor that can provoke deterioration in physical and mental health (Ribeiro et al*.,* 2018). In addition, higher rates of depression have been found among university students than among the general population (Alsubaie et al*.,* 2019; Ibrahim et al*.,* 2013), and this depression is often associated with problems *regarding* social relationships, or their living and financial conditions (Saeed et al., 2017; Xian-Yang et al*.,* 2016).

In this context, psychological flexibility plays an important role in the management of thoughts and emotions. It is defined as "contacting the present moment as a conscious human being, fully and without needless defense - as it is and not as what it says it is - and persisting with or changing a behavior in the service of chosen values" (Hayes et al*.,* 2015, p. 96).

Psychological *in*flexibility, on the other hand, interferes negatively in the adaptive functioning of the individual (Bond et al*.,* 2011; Glick & Orsillo, 2015; Rueda & Valls, 2020). It is associated with stress, worry, generalized anxiety, and somatization (Tavakoli et al*.,* 2019). In academic environments, the individual is exposed to situations that can potentially generate discomfort (Taylor & Baker, 2019); consequently, there is the possibility of developing psychological distress (Sharp & Theiler, 2018), mood and anxiety disorders (Duffy et al*.,* 2019). Such discomfort can be resolved in two ways: either by accepting it or by avoiding involvement in the experience. Psychological inflexibility, however, as a habitual response to academic stress can produce negative emotional states and procrastination which only leads to their studies going on for longer (Eisenbeck et al*.,* 2019). In these cases, therapeutic interventions aimed at improving levels of psychological flexibility are crucial and, for this reason, suitable evaluation instruments are needed.

To meet this need, various instruments have been designed to assess psychological flexibility (or inflexibility) in a number of different populations. The first version of the Acceptance and Action Questionnaire (AAQ) was created by Hayes et al. in 2004. Subsequently, based on their development of that questionnaire, Bond et al. (2011) created a new version: the AAQ-II. Both tools examine acceptance, defusion and action; they also evaluate psychological inflexibility in a broad way (Hayes et al*.,* 2006).

Subsequently, other instruments were developed for evaluating psychological flexibility in specific contexts: in the workplace (Bond et al*.,* 2013; Ruiz et al*.,* 2014); among people with terminal illnesses (Shari et al*.,* 2019); and among people with specific psychological disorders such as anxiety disorder (Soltani et al*.,* 2016), or obsessive-compulsive disorder and related disorders (Jacoby et al*.,* 2018).

Previous studies have shown that the AAQ-II can yield null results in evaluations of intervention programs aimed at developing psychological flexibility in a university academic context (Glick & Orsillo, 2015; Levin et al*.,* 2017; Levin et al*.,* 2014). On the other hand, Levin, Krafft, Pistorello and Seeley (2018) consider that obtaining negative results in interventions among university students could well be due to the fact that the measurement instruments used in these studies, such as the AAQ-II, are not specific enough, rather than it being due to a failure of the theoretical mechanisms of change. This study sought to develop and validate a domain-specific measure of psychological inflexibility for university students, the acceptance and action questionnaire for university students (AAQ-US). In the present work, our aim is to adapt another existing instrument, the *Work-related Acceptance and Action Questionnaire* (WAAQ, Bond et al*.,* 2013; and the Spanish version by Ruiz & Odriozola-González, 2014) to a university population. Among other advantages of this strategy, adapting an existing instrument designed for the workplace makes it possible to carry out longitudinal evaluations and comparative studies of psychological flexibility. Evaluations using this instrument can begin in the academic context and continue in the work context.

It should be noted that the design of instruments for evaluating psychological flexibility is still in the early stages of research, especially in university contexts. We hope to enrich this line of study, and contribute to the higher education system in Ecuador, in this work which aims to adapt and validate a specific tool that assesses psychological flexibility, in Spanish, among the Ecuadorian university population.

Method

Participants

This research involved the participation of 6230 undergraduate students from an Ecuadorian university (64.3% of the 9689 students enrolled). The inclusion criterion required all participants to be students enrolled in Semesters 1 to 10 during the academic period March - August 2018. Within the whole sample, 1,604 people (25.7%) identified themselves as students at the Faculty of Administrative and Economic Sciences; 818 (13.1%) from the Faculty of Health Sciences; 1426 (22.9%), from the Faculty of Education, Science and Technology; 1,525 (24.5%), from the Faculty of Engineering in Applied Sciences and 857 (13.8%) belonged to the Faculty of Engineering in Agricultural and Environmental Sciences. The age range of the participants was from 17 to 59 years (*M*= 22.44, *SD*= 3.94). Women made up 52.3% of the sample. With regard to employment status, at the time of the study 58.6% of the participants were students only; 23.2% said they worked occasionally; 5.6% had regular work of less than 15 hours a week and 12.6% said they had regular work of more than 15 hours a week.

Instruments

a) *Work-related Acceptance and Action Questionnaire* (WAAQ; Bond et al., 2013), Spanish version adapted by Ruiz and Odriozola-González (2014). The WAAQ consists of a Likert-type scale of seven elements that assesses psychological flexibility in the workplace. This questionnaire was adapted to the university population, by replacing references to *work* or *working* with *study* or *studying*. The seven response options range from 1 (never true) to 7 (always true). The items reflect people's willingness to take action in pursuit of an objective while experiencing moments in their private lives that generate discomfort (e.g., "I can study effectively, even when I'm nervous for some reason"; "My concerns do not stand in the way of my success"). The Spanish version showed a single-factor structure and internal consistency (Cronbach's alpha) of .92, while in the present study, this value was .90.

b) *Acceptance and Action Questionnaire-II* (AAQ-II, Bond et al., 2011), Spanish version adapted by Ruiz et al. (2013). The AAQ-II consists of seven elements designed to assess factors associated with psychological inflexibility. It identifies difficulties in experiencing unwanted emotions or thoughts and helps detect the inability to deal with uncomfortable situations. The instrument addresses the unwillingness to experience unwanted emotions and thoughts (e.g., "I worry about not being able to control my worries and feelings") and the inability to behave in the present moment according to values-driven actions when experiencing unwanted psychological events (e.g., "My emotions get in the way of how I want to live my life"). The answers are evaluated using a Likert-type scale with seven response options ranging from 1 (never true) to 7 (always true). The internal consistency of the questionnaire (Cronbach's alpha) was .88 in the study by Ruiz et al. (2013) and .92 for the present study.

c) Wallston's Perceived Personal Competence Scale (PCS; Wallston, 1992), Spanish version adapted by Fernández-Castro et al. (1998). The PCS comprises eight elements designed to assess the subjective perception of control over one's life circumstances and the ability to cope successfully with them. The questionnaire groups together two expectations: self-efficacy (e.g., "I can do things as well as others") and result (e.g., "No matter how hard I try, things don't turn out the way I would like"). The questionnaire has a Likert-type scale of six response options, ranging from 1 (totally disagree) to 6 (totally agree). The internal consistency of the scale (Cronbach's alpha) was .80 in studies using the original Spanish adaptation (Fernández-Castro et al., 1998) and .79 for the present study.

Procedure

Prior to its application, a group of six professionals from the fields of psychology and communication carried out a linguistic and semantic validation of the instrument for its use in the Ecuadorian population. Subsequently, in order to identify any possible comprehension difficulties, the WAAQ questionnaire was applied to a pilot group of 27 undergraduate students at the university in which the

study took place. The questionnaire was then applied to the population under study during the months of June, July and August of 2018, by means of the institution's own virtual platform. Following the guidelines published by the International Testing Commission (ICT, 2017; Muñiz et al., 2015), authorization was obtained from the authors of the English and Spanish version of the WAAQ questionnaire, prior to its modification. In the case of the Spanish version, authorization was also obtained from the copyright owner.

Before gathering the data, official approval for the study had already been granted by the highest academic authority of the institution. The students participated voluntarily and anonymously, which meant only passive consent from the participants was required.

Data analysis

The database was validated using SAS v9.4 software. The statistical analysis was also supported with this program, complimented by SPSS software and the R Core Team software (2017). A significance level of 0.05 was used for all statistical decisions.

The sample of 6,230 students was divided into two groups: the first group (3,113 students) was used to conduct the exploratory factor analysis (EFA) and the second (3,117 students) for the confirmatory factor analysis (CFA).

However, before performing the EFA, we checked the sample adequacy using the Kaiser-Meyer-Olkin (KMO) test and Bartlett's sphericity test (Dziuban & Shirkey, 1974). The sample is considered adequate and the data is considered suitable - for EFA - if the values in the KMO test are close to 1, and those of the Bartlett's test are less than 0.05.

For the EFA the factors were extracted using oblique rotation (Brown, 2015). The correlations between items and principal factor were calculated. Internal consistency was validated using Cronbach's alpha coefficient (Crutzen & Peters, 2015). The CFA was performed by fitting a structural equations model (Kline, 2015).

The goodness of fit of a model is usually evaluated by the Chi Square test; however, this test is sensitive to sample size and almost always rejects the model when large samples are used (Bentler & Bonnet, 1980; Jöreskog & Sörbom, 1993).

Based on the recommendations of Hooper, Coughlan and Mullen (2008) and Kline (2015), the following goodness-of-fit indices were considered for the overall evaluation of the model: comparative fit index (CFI); Tucker Lewis index (TLI); standardized root mean square residual (SRMR) and root mean square error of approximation (RMSEA). The values for these indices range between 0 and 1. A good fit of the model is indicated by values above 0.95 in CFI and above 0.90 in TLI; but lower than 0.05 in SRMR and lower than 0.08 in RMSEA (Hooper et al., 2008; Hu & Bentler, 1999).

On the other hand, internal consistency was validated using the Omega coefficient (Crutzen & Peters, 2015); with an internal consistency estimator based on factor loadings that indicate the proportion of variance attributed to the total common variance (McDonald, 1999; Ventura-León, 2018); and direct impact on precision and measurement error (Martínez et al., 2014, Ventura-León, 2018).

Results

Descriptive data

Table 1 shows the mean score and standard deviation for each item of the WAAQ, in the cases corresponding to sample 1 (n_1= 3113) and sample 2 (n_2= 3117). In Sample N1, the lowest mean score was 4.87 (SD= 1.52) for item 7 and the highest was 5.30 (SD= 1.31) for item 2. The mean scores for Sample N2 ranged from between 4.53 (SD= 1.43) for item 3 to 5.32 (SD= 1.26) for item 2.

Table 1
Mean, Standard deviation and range of scores given for each item of the WAAQ

Item	Sample 1 (n_1= 3113) M (SD)	Sample 2 (n_2= 3117) M (SD)	Range
1	4.87 (1.42)	4.85 (1.42)	1 - 7
2	5.30 (1.31)	5.32 (1.26)	1 - 7
3	4.59 (1.38)	4.53 (1.43)	1 - 7
4	4.87 (1.50)	4.84 (1.53)	1 - 7
5	5.16 (1.40)	5.17 (1.40)	1 - 7
6	4.89 (1.42)	4.87 (1.44)	1 - 7
7	4.87 (1.52)	4.85 (1.52)	1 - 7

Exploratory factorial analysis

The Bartlett test (*p-value*< .001) and Kaiser-Meyer-Olkin test (KMO= 0.91) validated the goodness-of-fit of the data with regard to performing the EFA.

The results of the EFA indicate there was a single principal factor, in accordance with the Kaiser criterion, which explains 62.3% of the total variability observed.

Table 2 shows the proportion of common variance explained for each variable (Communality) and the factor loads of each item in the single factor obtained. All the communalities are within a range of between .57 and .67, which suggests an excellent relationship between all items that make up the questionnaire. The factor loads of each item ranged from .76 to .82, which, together with an internal consistency index (Cronbach's alpha) of .90, supports the single-factor solution of the questionnaire.

Confirmatory factor analysis

In order to confirm the single-factor structure obtained in the EFA, a CFA was performed using the data from the second group of the sample (n_2= 3117). The goodness-of-fit results of the model were as follows: χ^2= 1068.27 (df= 14, p< .001); CFI= .97; TLI= .96; RMSEA= .16, 90% CI [.15, .16]; and SRMR= .03. The omega coefficient was .91.

Table 2

Variance explained by item and by factor for WAAQ

Items	Communality	Factor
1. I am able to study effectively even if I have personal concerns	.64	.80
2. I can admit my mistakes in my studies and still be successful	.57	.76
3. I can study effectively, even when I'm nervous for some reason	.67	.82
4. My concerns do not stand in the way of my success	.63	.79
5. I am able to behave according to the needs of the situation, without being affected by how I feel	.63	.79
6. I can study effectively, even when I doubt myself	.63	.79
7. My thoughts and feelings do not get in the way of what I need to do in my studies	.60	.77

Pearson correlation with other instruments

The WAAQ adapted to the academic environment showed a low - although statistically significant - negative correlation with the AAQ-II ($r= -.18$, $p= .01$). On the other hand, the correlation with Wallston's Personal Competence Scale was positive and moderate ($r= .51$, $p= .01$).

Discussion

The exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) confirmed the single-factor structure of the WAAQ- as modified for university population - in line with previous studies carried out in a workplace setting (Bond et al., 2013; Ruiz & Odriozola-González, 2014). They also verified the suitability of all the items to be part of the instrument. The results of the CFA reflected a reasonable fit to the single-factor model; this was supported by the results of the CFI, TLI and SRMR indices which yielded satisfactory scores. In contrast, the RMSEA index score was higher than expected. In line with previous studies, the reliability tests performed with the alpha coefficients of Cronbach and omega also showed a high internal consistency, similar to the results of Ruiz and Odriozola-González (2014) and Bond et al. (2013) in samples of working people.

On the other hand, the correlation between the modified WAAQ and the AAQ-II was small and negative, because the first instrument evaluates psychological flexibility while the second evaluates psychological *in*flexibility. In line with previous studies by Levin et al. (2018), the WAAQ adapted to the academic context assesses specific aspects in the university academic environment; therefore, correlation with the AAQ-II - which is more general in nature - is low. Correlation between the WAAQ and Wallston's Personal Competence Scale was moderate.

With regard to the limitations of the study, it must be noted that the sample was taken at only one educational institution; future investigations could obtain new samples and, in this way, the results can be compared and generalized. Furthermore, the questionnaire was applied virtually, online, which may have led to some bias

regarding the characteristics of the participants. Finally, the instrument was correlated only with the AAQ-II and Wallston's Personal Competence Scale, both of which are tools that have yet to receive formal validation in Ecuadorian samples; be that as it may, their internal consistencies were adequate.

From this study, we conclude that the WAAQ, in the Spanish version by Ruiz and Odriozola-González (2014) - adapted to the university population - has been shown to be a reliable and valid instrument for measuring psychological flexibility in the Ecuadorian academic settings. It is recommended that future research assesses the usefulness of the instrument in different contexts, among different types of students and in different university institutions.

References

Alsubaie, M. M., Stain, H. J., Webster, L. A., & Wadman, R. (2019). The role of sources of social support on depression and quality of life for university students. *International Journal of Adolescence and Youth*, *24*(4), 484-496. doi: 10.1080/02673843.2019.1568887

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, *88*(3), 588. doi: 10.1037/0033-2909.88.3.588

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., & Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire - II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy, 42*(4), 676-688. doi: 10.1016/j.beth.2011.03.007

Bond, F. W., Lloyd, J., & Guenole, N. (2013). The Work-related Acceptance and Action Questionnaire (WAAQ): Initial psychometric findings and their implications for measuring psychological flexibility in specific contexts. *Journal of Occupational and Organizational Psychology, 86*(3), 331-347. doi: 10.1111/joop.12001

Brown, T. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). New York, NY: Guilford.

Crutzen, R., & Peters, G.-J. (2015). Scale quality: Alpha is an inadequate estimate and factor-analytic evidence is needed first of all. *Health Psychology Review*, *11*(3), 242-247. doi: 10.1080/17437199.2015.1124240

Duffy, M. E., Twenge, J. M. & Joiner, T. E. (2019). *Trends in mood and anxiety symptoms and suicide-related outcomes among U.S. undergraduates, 2007-2018: Evidence From Two National Surveys. Journal of Adolescent Health, 65*(5), 590-598. doi: 10.1016/j.jadohealth.2019.04.033

Dziuban, C. D., & Shirkey, E. C. (1974). When is a correlation matrix appropriate for factor analysis? Some decision rules. *Psychological Bulletin*, *81*(6), 358-361. doi: 10.1037/h0036316

Eisenbeck, N., Carreno, D. F., & Uclés-Juárez, R. (2019). *From psychological distress to academic procrastination: Exploring the role of psychological inflexibility. Journal of Contextual Behavioral Science, 13,* 103-108. doi: 10.1016/j.jcbs.2019.07.007

Fernández-Castro, J., Álvarez, M., Blasco, T., Doval, E., & Sanz, A. (1998). *Validación de la Escala de competencia personal de Wallston: Implicaciones para el estudio del estrés* [Validation of the Wallston's Personal Competence Scale and its implication for research into stress]. *Ansiedad y Estrés*, *4*(1), 31 - 41.

Glick, D. M. & Orsillo, S. M. (2015). An investigation of the efficacy of acceptance-based behavioral therapy for academic procrastination. *Journal of Experimental Psychology: General, 144*(2), 400-409. doi: 10.1037/xge0000050

González- Cabanach, R., Souto-Gestal, A., González-Doniz, L., & Franco Taboada, V. (2018). Perfiles de afrontamiento y estrés académico en estudiantes universitarios [Profiles of coping and academic stress among university students]. *Revista de Investigación Educativa*, *36*(2), 421-433. doi: 10.6018/rie.36.2.290901

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour Research and Therapy, 44*(1), 1- 25. doi: 10.1016/j.brat.2005.06.006

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2015). *Acceptance and commitment therapy. The process and practice of mindful change.* New York, NY: Guilford.

Hayes, S. C., Strosahl, K. D., Wilson, K. G., Bissett, R. T., Pistorello, J., Toarmino, D., Polusny, M., A., Dykstra, T. A., Batten, S. V., Bergan, J., Stewart, S. H., Zvolensky, M. J., Eifert, G. H., Bond, F. W., Forsyth J. P., Karekla, M., & McCurry, S. M. (2004). Measuring experiential avoidance: A preliminary test of a working model. *The Psychological Record, 54*(4), 553-578. doi: 10.1007/BF03395492

Hj Ramli, N., Alavi, M., Mehrinezhad, S., & Ahmadi, A. (2018). Academic stress and self-regulation among university students in Malaysia: mediator role of mindfulness. *Behavioral Sciences, 8*(1), 12. doi: 10.3390/bs8010012

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods*, *6*(1), 53-60. doi: 10.21427/D7CF7R

Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55. doi: 10.1080/10705519909540118

Ibrahim, A. K., Kelly S. J., Adams C. E., Glazebrook C. (2013). A systematic review of studies of depression prevalence in university students. *Journal of Psychiatric Research, 47*(3), 391-400. doi: 10.1016/j.jpsychires.2012.11.015

Jacoby, R., Abramowitz, J., Buchholz, J., Reuman, L., & Blakey, S. (2018). Experiential avoidance in the context of obsessions: Development and validation of the Acceptance and Action Questionnaire for Obsessions and Compulsions. *Journal of Obsessive-Compulsive and Related Disorders, 19*, 34-43. doi: 10.1016/j.jocrd.2018.07.003

Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language.* Scientific Software International.

Kline, R. (2015). *Principles and practice of structural equation modeling* (4th ed.). New York, NY: Guilford.

Levin, M. E., Pistorello, J., Hayes, S. C., & Seeley, J. (2014). Feasibility of a prototype web-based acceptance and commitment therapy prevention program for college students. *Journal of American College Health, 62*(1), 20-30. doi: 10.1080/07448481.2013.843533

Levin, M. E., Haeger, J., Pierce, B., & Twohig, M. P. (2017). Web-based acceptance and commitment therapy for mental health problems in college students: A randomized controlled trial. *Behavior Modification, 41*(1), 141-162. doi: 10.1177/0145445516659645

Levin, M. E., Krafft, J., Pistorello, J., & Seeley, J. R. (2018). Assessing psychological inflexibility in university students: Development and validation of the acceptance and action

questionnaire for university students (AAQ-US). *Journal of Contextual Behavioral Science, 12*, 199-206. doi: 10.1016/j.jcbs.2018.03.004

Martínez, A. R., Hernández, J. y Hernández, V. (2014). *Psicometría.* Madrid, Spain: Alianza.

McDonald, R. P. (1999). *Test theory. A unified treatment.* Mahwah, NJ: Lawrence Erlbaum Associates.

Muñiz, J., Hernández, A., & Ponsoda, V. (2015). New guidelines for test use: Research, quality control and security of tests. *Papeles del Psicólogo*, *36*(3), 161-173.

Ribeiro, I. J., Pereira, R., Freire, I. V., de Oliveira, B. G., Casotti, C. A., & Boery, E. N. (2018). Stress and quality of life among university students: A systematic literature review. *Health Professions Education*, *4*(2), 70-77. doi: 10.1016/j.hpe.2017.03.002

Rueda, B., & Valls, E. (2020). Is the effect of psychological inflexibility on symptoms and quality of life mediated by coping strategies in patients with mental disorders? *International Journal of Cognitive Therapy*, *13*(2), 112-126. doi: 10.1007/s41811-020-00069-4

Ruiz, F. J., Langer, A. I., Luciano, C., Cangas, A. J., & Beltrán, I. (2013). Measuring experiential avoidance and psychological inflexibility: The Spanish version of the Acceptance and Action Questionnaire-II. *Psicothema*, *25*(1), 123-129. doi: 10.7334/psicothema2011.239

Ruiz, F. J., & Odriozola-González, P. (2014). The Spanish version of the Work-related Acceptance and Action Questionnaire (WAAQ). *Psicothema, 26*(1), 63-68. doi: 10.7334/psicothema2013.110

Saeed, H., Saleem, Z., Ashraf, M., Razzaq, N., Akhtar, K., Maryam, A., & Rasool, F. (2017). Determinants of anxiety and depression among university students of Lahore. *International Journal of Mental Health and Addiction*, *16*(5), 1283-1298. doi: 10.1007/s11469-017-9859-3

Sharp, J., & Theiler, S. (2018). A review of psychological distress among university students: Pervasiveness, implications and potential points of intervention. *International Journal for the Advancement of Counselling*, *40*(3), 193-212. doi: 10.1007/s10447-018-9321-7

Shari, N. I., Zainal, N. Z., Guan, N. C., Ahmad Sabki, Z., & Yahaya, N. A. (2019). Psychometric properties of the Acceptance and Action Questionnaire (AAQ II) Malay version in cancer patients. *PloS one*, *14*, 2. doi: 10.1371/journal.pone.0212788

Soltani, E., Abdolmajid Bahrainian, S., Masjedi Arani, A., Farhoudian, A., & Gachkar, L. (2016). Psychometric properties of the Persian version of the Social Anxiety - Acceptance and Action Questionnaire. *Iranian Journal of Psychiatry and Behavioral Sciences, 10*(2). doi: 10.17795/ijpbs.3753

Tavakoli, N., Broyles, A., Reid, E. K., Sandoval, J. R., & Correa-Fernández, V. (2019). Psychological inflexibility as it relates to stress, worry, generalized anxiety, and somatization in an ethnically diverse sample of college students. *Journal of Contextual Behavioral Science*, *11*, 1-5. doi: 10.1016/j.jcbs.2018.11.001

Taylor, K. B., & Baker, A. R. (2019). *Examining the role of discomfort in collegiate learning and development. Journal of College Student Development, 60(2), 173-188.* doi: 10.1353/csd.2019.0017

Ventura-León, J. (2018). Intervalos de confianza para coeficiente Omega: Propuesta para el cálculo [Confidence Intervals for Omega Coefficient: Proposal for Calculus]. *Adicciones*, *30* (1), 77-78. doi: 10.20882/adicciones.962

Wallston, K. A. (1992). Hocus-Pocus, the focus isn't strictly on locus: Rotter's social learning theory modified for health. *Cognitive Therapy and Research, 16*(2), 183-199. doi: 10.1007/BF01173488

Xian-Yang, L., La-Mei, X., Ya-Nan, L., & Ya-Min, L. (2016). Prevalence of depression among chinese university students: A meta-analysis. *PLoS One*, *11*(4). doi: 10.1371/journal.pone.0153454