

The efficacy of functional-analytic psychotherapy and acceptance and commitment therapy (FACT) for public employees

Juanjo Macías¹, Luis Valero-Aguayo¹, Frank W. Bond², and María J. Blanca¹

¹ Universidad de Málaga and ² London University, Goldsmiths

Abstract

Background: The literature is replete with evidence regarding the impact of psychological distress in the workplace. Traditionally, worksite interventions to enhance mental health have been carried out in groups. This study aimed to implement a brief individual program in the workplace through the combination of Functional Analytic Psychotherapy (FAP) and Acceptance and Commitment Therapy (ACT) for Public Administration employees. **Method:** One hundred and six public employees from a Spanish city council completed pretest measures and forty-three met the inclusion criteria. The participants' scores on distress, burnout, psychological flexibility, depression, anxiety and stress were examined in a pretest-posttest design with a waiting list control group and random assignment. Thirty-eight employees completed the intervention (FACT group= 19; Waiting list control group= 19). The intervention lasted three individual sessions using a protocol with the processes of FAP and ACT, resulting in a protocol named FACT. **Results:** The FACT group showed statistically significant improvements in distress, burnout, psychological flexibility and anxiety compared with the waiting list control group. **Conclusion:** These results provide a breakthrough and initial support for the inclusion of FAP in the workplace along with the integration with brief ACT in individual sessions to improve employees' mental health.

Keywords: Acceptance and commitment therapy, functional-analytic psychotherapy, brief, occupational health.

Resumen

La eficacia de la psicoterapia analítica-funcional y la terapia de aceptación y compromiso (FACT) para empleados públicos. Antecedentes: la literatura está repleta de evidencia sobre las repercusiones del malestar psicológico en el trabajo. Tradicionalmente, las intervenciones para mejorar la salud mental en el trabajo se han llevado a cabo en grupo. El objetivo de este estudio fue implementar un programa individual breve en el entorno laboral, a través de la combinación de la Psicoterapia Analítica Funcional (FAP) y la Terapia de Aceptación y Compromiso (ACT) para empleados de la Administración pública. **Método:** ciento seis funcionarios de un ayuntamiento español rellenaron las medidas pretest y cuarenta y tres cumplieron los criterios de inclusión. Las puntuaciones de los participantes en malestar, burnout, flexibilidad psicológica, depresión, ansiedad y estrés fueron analizadas en un diseño experimental pre-post con un grupo de control en lista de espera y asignación aleatoria. Treinta y ocho empleados completaron la intervención (grupo FACT= 19; grupo control en lista de espera= 19). **Resultados:** el grupo FACT tras tres sesiones mostró mejoras estadísticamente significativas en malestar, ansiedad, burnout y flexibilidad psicológica en comparación con el grupo de control en lista de espera. **Conclusión:** estos resultados proporcionan una innovación y apoyo inicial para la incorporación de FAP en el entorno laboral, además de su integración con ACT breve para mejorar la salud de los empleados.

Palabras clave: terapia de aceptación y compromiso, psicoterapia analítica funcional, breve, salud laboral.

The risk of psychological distress is seen in all spheres of life, particularly in the workplace. Psychological distress is increasing for employees in Public Administration (Awa, Plaumann, & Walter, 2010), reaching a prevalence of 40% (Stride, Wall, & Catley, 2007). Distress in the workplace can trigger burnout syndrome, which is a prolonged response to chronic emotional and interpersonal stressors on the job (Maslach, Schaufeli, & Leiter, 2001). Employees who experience distress and burnout often experience impaired emotional and physical health and

a diminished sense of mental health (Stalker & Harvey, 2002). Despite this evidence, only a small proportion of distressed employees receive psychological intervention (Hilton et al., 2008).

Functional Analytic Psychotherapy (FAP; Kohlenberg & Tsai, 1991) is conceived as an intervention to address complex clinical problems that occur in daily life. These problematic behaviors can be observed and evoked by the therapists, with the therapeutic alliance being essential for achieving positive clinical outcomes. The clinical targets when conducting FAP are: to observe and elicit clinically relevant behaviors (CRB1) and differentially and contingently reinforce a more adaptive behavior in-session (CRB2). The functional equivalence between what occurs inside and outside therapy is fundamental for the client's improvement (CRB3). The empirical evidence shows that FAP is an effective approach for achieving clinical improvements in different settings

and conditions (Aguayo, García, & Bermúdez, 2015; Kanter et al., 2017; Mangabeira, Kanter, & del Prette, 2012).

Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999, 2012; Wilson & Luciano, 2002) is the most representative of the third wave therapies focused on psychological flexibility, defined as the ability to persist in a behavior towards meaningful life in the presence of unpleasant thoughts, feelings, emotions and sensations (Bond, Flaxman, & Bunce, 2008). This approach represents a contextual and functional dimension to understand and treat psychopathology through acceptance and experiential change (Pérez-Álvarez, 2012). Evidence for the usefulness of ACT has recently grown, showing promising outcomes for numerous clinical conditions (e.g., A-Tjak et al., 2015; Butryn, Forman, Hoffman, Shaw, & Juarascio, 2011; Dimidjian et al., 2016; González-Fernández, Fernández-Rodríguez, Paz-Caballero, & Pérez-Álvarez, 2018; Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Kohtala, Lappalainen, Savonen, Timo, & Tolvanen, 2015). Additionally, for almost twenty years the efficacy of ACT has been demonstrated in the workplace, reducing distress and burnout and increasing psychological performance (Bond & Bunce, 2000; Flaxman & Bond, 2010; Flaxman, Bond, & Livheim, 2013; Lloyd, Bond, & Flaxman, 2013).

Strosahl, Robinson, and Gustavsson (2012) offered an abbreviated version of ACT based on the core processes designed within time-pressured primary care settings, with favorable results (Cattivelli, Musetti, & Perini, 2014; Glover et al., 2016; Strosahl, Robinson, & Gustavsson, 2012). This version is a brief intervention aimed at promoting a radical change in mental health.

The integration of ACT and FAP to address complex and daily clinical problems is conceptualized as Functional-Analytic Acceptance and Commitment Therapy (FACT; Callaghan, Gregg, Marx, Kohlenberg, & Gifford 2004; Gifford et al., 2011). FACT appears to be more successful than when using either therapy alone, and has been effective in treating a range of conditions (Callaghan et al., 2004; Gifford et al., 2011; Luciano, Valdivia-Salas, Gutiérrez-Martínez, Ruiz, & Páez, 2009; Tsai et al., 2009). However, to date, there is no evidence regarding the effectiveness of FACT with a brief version of ACT and FAP in the workplace.

To address this gap, this study aimed to test the efficacy of FACT to promote psychological mental health by addressing complex problems in a public administration setting. The current research focused to produce radical changes in a short period of time, in accordance with evidence that shows how two or more sessions can reduce symptoms and improve mental health (Bryan et al., 2012). In order to produce deeper changes in a short period of time, this protocol empowers participants and acts more as a resource rather than as a “therapist”. To date, this study represents the first attempt to combine brief periods of ACT and FAP individually within a Public Administration context. We anticipated that the FACT intervention would lead to a significant decrease in the participants’ distress, burnout depression, anxiety, stress, whilst increasing their psychological flexibility. To this end, the employees completed a battery of questionnaires, following a pretest-posttest design with a waiting list control group and random assignment.

Method

Participants

One hundred and six employees completed pretest measures. Participants were public employees in a Spanish city council

(Marbella, Málaga), who voluntarily participated in this program to promote their occupational health. Forty-three of the 106 participants met the inclusion criteria based on scores higher than or equal to 12 in the *General Health Questionnaire* (GHQ-12) and higher than or equal to 10 in the *Maslach Burnout Inventory General-Survey* (MBI-GS, exhaustion scale). The GHQ-12 was used as a screening tool and we considered a score equal to or greater than 12 as the cut-off for being at risk of mental illness (Hardy, Woods, & Wall, 2003). Likewise, scores over 10 indicate high levels of exhaustion, which is a factor used to indicate the presence of burnout (Maslach, Schaufeli, & Leiter, 2001). The participants were randomly assigned to the FACT group ($n=21$) or the waiting list control group ($n=21$). The employees were considered to have completed the intervention if they attended 100% of the sessions (3 out of the 3 sessions). The attrition rate (calculated using non-attendance or failure to return the repeated-measures) was 9.53 % of participants: waiting list control group (3) and FACT group (1). The final sample therefore consisted of 38 employees: FACT group ($n=19$) and waiting list control group ($n=19$). Of the participants, 59% were female and 41% were male with a mean age of 39.47 (SD = 11.76, range 23-64); 90% had completed a university degree and 10% secondary (high) school. Employees had belonged to their current working area for an average of 11.7 years (SD = 10.27), working an average of 40 hours per week. They worked with monotonous and repetitive tasks at the city council and were subjected to political and social pressures, which generate distress and burnout.

Instruments

General Health Questionnaire-12 (GHQ-12; Goldberg, 1992). Spanish version by Sánchez-López & Dresch (2008). This scale is a twelve-item self-report questionnaire used to measure general psychological distress (mental health). The items are scored using a four-point scale from “better than usual” to “much less than usual”. The Likert scoring method was used (0, 1, 2, 3). Higher scores on this 12-item questionnaire indicate greater levels of psychological distress. The Cronbach’s alpha coefficient of this scale was .76.

Maslach Burnout Inventory General-Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). Spanish version by Salanova, Schaufeli, Llorens, Peiró, & Grau (2000). This scale is a generic measure of the burnout syndrome and consists of 15 self-report items, distributed across three subscales: emotional exhaustion (feelings of emotional overburden at work), cynicism (detachment from work), and professional efficacy (feelings of achievement at work). The items are scoring a seven-point scale from 0 (never) to 6 (always). High scores on cynicism and exhaustion and lower scores on professional efficacy are indicative of burnout. The Cronbach’s alpha values were .84 (emotional exhaustion), .74 (cynicism), and .70 (professional efficacy).

Acceptance and Action Questionnaire II (AAQ-II; Bond et al., 2011). Spanish version by Ruiz, Herrera, Luciano, Cangas, & Beltrán, (2013). This scale is a 7-item, Likert-type self-report questionnaire created to measure psychological flexibility. This scale assesses experiential avoidance and psychological acceptance, which are key aspects of ACT. It has 7 items rated from 1 (never) to 7 (always). Higher scores indicate lower levels of psychological flexibility. The Cronbach’s alpha coefficient was .88.

Work-Related Acceptance and Action Questionnaire (WAAQ; Bond, Lloyd, & Guenole, 2013); Spanish version by Ruiz & Odriozola-González (2014). This scale is a 7-item, Likert-type questionnaire that measures psychological flexibility in relation to the workplace. The items measure the extent to which people can take goal-directed action in the presence of discomfort or unpleasant internal experience. The items are scored from 1 (never true) to (always true). Higher scores show higher levels of work-related psychological flexibility. The Cronbach's alpha coefficient was .83.

Depression, Anxiety and Stress Scale-21 (DASS-21; Lovibond & Lovibond, 1995a). Spanish version by Daza et al. (2000). This scale is a set of three self-report questionnaires designed to measure subjective emotional states within three subscales: depression, anxiety, and stress. The items are scored from 0 (did not apply to me) to 3 (applied to me very much or most of the time) and each scale contains 7 items. Higher scores on the subscales indicate the presence of depression, anxiety, or stress symptoms. Cronbach's alpha values were .81 (depression), .73 (anxiety), and .81 (stress).

Procedure

Employees of Marbella city council (Spain) were recruited to participate in this intervention to reduce distress and burnout and improve their general health. This study was conducted in the city council and was approved by the Experimental Ethics Committee of the University of Málaga. This research was conducted in accordance with the ethics of the American Psychological Association. The data were compiled using a pretest-posttest design with a waiting list control group and random assignment. The pretest measures and informed consent were completed for all of the volunteers (106) and posttest measures were completed by the final sample that had met the inclusion criteria (38). To introduce a new format of intervention and to work with individual-functional analysis, all sessions were completed individually. The purpose of this was to facilitate openness and adherence to the intervention to produce radical changes in brief periods. All participants in the FACT group attended three individual sessions. The first two were on consecutive weeks and the final session took place after an interval of ten days. This latency period was used to practice the skills learned in the first two sessions. Each individual session lasted 90 minutes and took place during the working day at the Public Administration Center. The intervention was spread over five weeks, and the posttest measures were completed one week after the last session.

The FACT protocol was delivered using an adaptation of the "two-plus-one" format (Barkham & Shapiro, 1990). The individual intervention was based on strategies developed in ACT by Wilson and Luciano (2002); a brief version of ACT originally designed within the field of primary care (Strosahl, Robinson, & Gustavsson, 2012); functional-analytic psychotherapy (FAP; Tsai et al., 2009); and acceptance and commitment therapy guidelines refined for worksite interventions (Flaxman, Bond, & Livheim, 2013).

The philosophy of the intervention consisted of treating every session as the last one, inducing radical changes (Table 1). The core processes were: unworkable results of avoidance, acceptance of private experiences, promoting awareness, and the commitment to a meaningful life connected with the presence of

distress. In the initial session we introduced the benefits of the program and what promotes culture. The control of the problem and experiential avoidance were described, along with individual functional analysis, clarification of values and commitment, creative hopelessness, and finally the self as context (acting with barriers). The second session focused on a brief summary of the previous session, including defusion exercises, encouraging awareness and willingness to deal with unpleasant private events (thoughts, sensations, feelings, and emotions), and perspective-taking through hierarchical self as context and distinction self as context. FAP was integrated into all exercises, with the purpose of: a) provoking CRB1; and b) reinforcing CRB2 and advancing CRB3. The final session aimed at promoting commitment to value-based living (meaningful life), prevention of relapse, and acceptance of distress. All individual sessions included home practice assignments related to the content of each session along with exercises and metaphors, with the purpose of producing functional generalization in their daily life. At the same time the waiting list control group were subsequently given another intervention after completing the posttest measures.

Data analysis

An analysis of covariance (ANCOVA) was conducted on the dependent variables: GHQ-12, MBI-GS (emotional exhaustion, cynicism and professional efficacy), AAQ-II, WAAQ, and DASS-21 (depression, anxiety, stress). The aim was to test the hypotheses that the FACT intervention would produce a significant decrease in distress, burnout, anxiety, and depression along with any significant changes in psychological flexibility. The FACT intervention was considered as an independent variable with two levels (experimental group and waiting list control group) with the respective pretest scores of each dependent variable as covariates. Thus, the differences between groups after treatment were estimated with the differences in pretest scores removed. A value of $p < .05$ was considered to be significant. Data analyses were conducted using SPSS 20.0 for Windows.

Table 1
The FACT protocol

<ol style="list-style-type: none"> 1. Program benefits to promote intervention adherence and motivate employees (EO). Building empathy, awareness, courage and love (ACL Model of FAP) 2. Emphasis on the therapeutic alliance, emotional validation, and positive reinforcement 3. Individual functional analysis 4. Evoke CRB1 and reinforce differentially target behaviors CRB2 5. Creative hopelessness. Metaphor: "Quicksands", "Welcome to all and the rude". Video: "The fly meditation" 6. Control as the problem. Exercises: "Pink Elephant", "Forget the numbers: 1,2,3" 7. Self as context. Metaphor: "Chessboard", "The radio", "Two pc's" and "Thank your mind" 8. Values clarification (meaningful life) and commitment. Metaphors: "Birth" and "Garden" 9. Brief recapitulation of the last session. Values clarification and act with barriers. Metaphor: "Demons on the boat" 10. Defusion. Exercises: I notice that I'm having the thought that; "Leaves on a stream"; "Repetition: Lemon", "Text messages on your mobile phone" 11. Perspective-Taking (hierarchical deictic relations and distinction). Acceptance exercise: "Physicalization" 12. Relapse prevention. Metaphor: "The rider"; "Japanese Bamboo" and "The mud" 13. Home practice assignments seeking functional generalization and CRB3. Act with barriers (thoughts, feelings) towards values. Awareness in daily life and physicalization <p><i>Note:</i> EO (Establishing operation): increases the current effectiveness of certain stimuli, objects, or events as reinforcement</p>

Results

The effect of FACT intervention in posttest, after adjustment for covariate in pretest, was statistically significant for GHQ-12, MBI-GS (emotional exhaustion and professional efficacy), AAQ-II, WAAQ and DASS-21 (anxiety and total score). No statistically significant differences were observed in depression, stress and cynicism subscales. The results are shown in Table 2.

The FACT group scored in posttest under the cut-off point in GHQ-12 and MBI-GS (emotional exhaustion) used as screening in pretest and inclusion criteria within this study. After FACT intervention the scores decreased from a statistical and clinical point of view in comparison with the waiting list control group who did not improve (see Figures 1 and 2).

Discussion

The aim of this study was to test the efficacy of FACT with a brief version of ACT and FAP within a Public Administration setting in order to address complex problems, promote mental health and reduce burnout. We expected that the FACT intervention would lead to significant decreases in distress, burnout, depression, anxiety, stress, and along with increases in

psychological flexibility. To examine the efficacy of the FACT protocol, the employees completed a battery of questionnaires and were randomly assigned following a pretest-posttest design with a waiting list control group.

The findings indicated that the FACT group showed a decrease in psychological distress as measured with the GHQ-12. This reduction led to a mean score equal to 8.11, which is below the cut-off point (Figure 1) of 12, which was the limit for presenting a risk of mental illness (Hardy et al., 2003). In contrast, the mean of the control group was equal to 15.79, which corresponds with scores above the cut-off point.

With respect to burnout, the FACT group showed statistically significant changes, with reduced emotional exhaustion and an increase in professional efficacy. Both of these are considered to be key aspects of burnout syndrome. Emotional exhaustion is a component of burnout and is linked with mental health (Maslach et al., 2001). Hence, the FACT intervention provides employees with skills to cope with distress and emotional exhaustion in order to diminish the scores above the cut-off point (Figure 2). FACT led to significant improvements in employees' emotional burnout and mental health, and increases in psychological flexibility that are consistent with both ACT theory (Hayes et al., 1999), and ACT worksite intervention research (Bond et al., 2008; Flaxman &

Table 2
Pretest means, adjusted posttest means, standard error (in parentheses), F statistic and effect size (eta-squared) as a function of treatment group

Variable	WL-CG (N=19)		FACT (N=19)		F	p	η ²
	Pretest	Posttest	Pretest	Posttest			
Mental health (GHQ-12)	15.42 (0.84)	15.79 (0.80)	15.73 (1.04)	8.11 (0.80)	45.70	< .01	.57
Exhaustion (MBI-GS)	12.31 (1.49)	12.24 (1.19)	14.10 (1.82)	8.51 (1.15)	5.05	.03	.13
Cynicism (MBI-GS)	12.15 (1.35)	9.48 (1.27)	7.26 (1.58)	8.26 (1.27)	0.42	.52	.01
Professional Efficacy (MBI-GS)	24.68 (1.70)	25.81 (1.00)	24.94 (1.54)	28.88 (1.00)	4.72	< .01	.12
Psychological Flexibility (AAQ-II)	20.26 (2.08)	21.10 (1.22)	20.73 (1.73)	17.42 (1.22)	4.53	.04	.12
Work Flexibility (WAAQ)	35.42 (1.34)	33.69 (1.05)	31.94 (1.50)	37.52 (1.05)	6.38	.02	.15
Depression (DASS-21)	6.78 (0.88)	3.17 (0.73)	4.10 (0.85)	3.05 (0.73)	0.01	.91	.01
Anxiety (DASS-21)	5.31 (1.02)	8.32 (0.95)	4.05 (0.74)	2.73 (0.95)	16.77	< .01	.32
Stress (DASS-21)	9.52 (0.96)	5.47 (0.78)	8.84 (1.04)	4.63 (0.78)	0.57	.45	.02
Total DASS-21	21.63 (2.46)	16.81 (2.00)	17 (2.34)	10.56 (2.00)	4.73	.04	.12

Note: WL-CG= Waiting list control group; FACT= Functional-Acceptance and Commitment Therapy; GHQ12=General Health Questionnaire; MBI-GS= Maslach Burnout Inventory-General Survey; AAQ-II= Acceptance and Action Questionnaire; WAAQ= Work-Related Action Questionnaire. DASS-21=Depression, Anxiety, Stress Scale

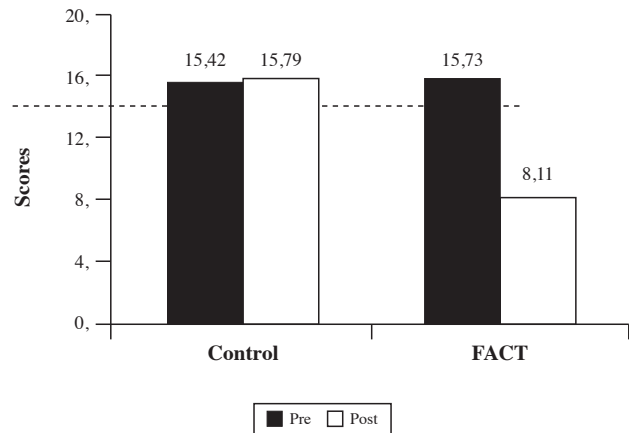


Figure 1. Mean of scores on GHQ-12 (General Health Questionnaire). Point line indicates the cut-off point of the questionnaire and presence of mental illness

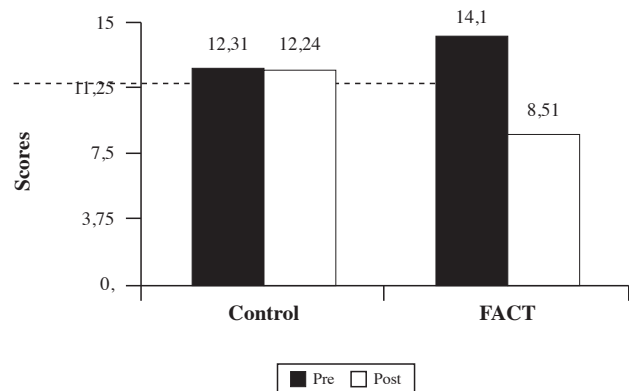


Figure 2. Mean of scores on MBI-GS (Exhaustion scale). Point line indicates the cut-off point of the questionnaire and presence of burnout exhaustion

Bond, 2010). In relation to psychological flexibility, these results indicated an enhancement in psychological flexibility (decrease in AAQ-II scores) and psychological flexibility at work (increase in WAAQ scores). In addition, the FACT group showed a decrease in anxiety, with a large effect size ($\eta^2 = .32$). Both results are in accord with our aims and are congruent with the findings reported in previous studies (Bond & Bunce, 2000; Glover et al., 2016; Lloyd et al., 2013). However, no differences were found in depression and stress. These results may be taken to indicate that the FACT protocol is particularly beneficial for reducing anxiety for brief periods although future research should focus on its effect on depression and stress, using, for instance, more specific measures of these problems. Moreover, it is also possible that the results in relation to depression and stress are due to the presence of inescapable factors associated with the inherent characteristics of public employee environments. Therefore a longer intervention or the mere passage of time may be needed in order to confirm any improvements. Indeed, some researchers have found a delayed pattern of improvements due to the acceptance of suffering (Luoma, Kohlenberg, Hayes, & Fletcher, 2012).

This study has several limitations that should be taken into account. Firstly, due to the inherent difficulties of Public Administration, it has not been possible to administer follow-up measures to assess long-term improvements. However, empirical evidence supports the notion that a rapid response in the form of brief interventions is associated with long term progress, and can improve symptoms and mental health (Bryan et al., 2010). Secondly, the experimental design included a waiting list control group for comparison with the experimental group, which was used to measure the effect of the treatment. In order to increase the internal validity of the study, future research should include

other groups with different psychological treatments for an active comparison with the experimental group. Finally, participants were recruited from a single Public Administration Center, thereby restricting the generalizability of the findings. Future research should therefore consider other workplaces to extend our knowledge about the efficacy of FACT.

Despite the limitations of this study, our results indicate that only three sessions of the FACT intervention were needed to produce radical changes to complex problems (A-Tjak et al., 2015) and a reduction in symptoms. Our results also support the effectiveness of ACT when used in brief periods (Butryn et al., 2011; Kohtala et al., 2015; Strosahl et al., 2012). This intervention provides preliminary evidence of the efficacy of brief interventions with FACT applied individually in the workplace. It also represents an attempt to adapt evidence-based treatment to the public services and their circumstances (high volume of users, monotonous/repetitive work, and high rates of distress and sick leave).

The novel protocol presented here was designed to highlight the effectiveness of FACT and suggest a convergence between models with common philosophical roots, such as “functional contextualism”. This study aims to lead into process-based therapy (PBT) centered on the underlying processes, instead of developing new approaches (Hayes & Hofmann, 2017).

Acknowledgments

This study has been supported by Marbella city council (Spain). The authors wish to give special thanks to all the participants for their cooperation and kindness in encouraging this project. Also, in memory of my grandfather who represents my natural source of awareness, courage and love.

References

- A-Tjak, J. G., Davis, M. L., Morina, N., Powers, M. B., Smits, J. A., & Emmelkamp, P. M. (2015). A meta-analysis of the efficacy of acceptance and commitment therapy for clinically relevant mental and physical health problems. *Psychotherapy and Psychosomatics, 84*, 30-36. doi: 10.1159/000365764
- Aguayo, L. V., García, R. F., & Bermúdez (2015). *Psicoterapia analítica funcional. El análisis funcional en la sesión clínica* [Functional analytic psychotherapy. Functional analysis in the clinic session]. Madrid: Síntesis.
- Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counseling, 78*, 184-190. doi: 10.1016/j.pec.2009.04.008
- Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology, 5*, 156-163.
- Bond, F. W., Flaxman, P. E., & Bunce, D. (2008). The influence of psychological flexibility on work redesign: Mediated moderation of a work reorganization intervention. *Journal of Applied Psychology, 93*, 645. doi: 10.1037/0021-9010.93.3.645
- Bond, F. W., Hayes, S. C., & Barnes-Holmes, D. (2006). Psychological flexibility, ACT, and organizational behavior. *Journal of Organizational Behavior Management, 26*, 25-54. doi: 10.1300/J075v26n01_02
- Bryan, C. J., Corso, M. L., Corso, K. A., Morrow, C. E., Kanzler, K. E., & Ray-Sannerud, B. (2012). Severity of mental health impairment and trajectories of improvement in an integrated primary care clinic. *Journal of Consulting and Clinical Psychology, 80*, 396. doi: 10.1037/a0027726
- Butryn, M. L., Forman, E., Hoffman, K., Shaw, J., & Juarascio, A. (2011). A pilot study of acceptance and commitment therapy for promotion of physical activity. *Journal of Physical Activity & Health, 8*, 516-522. doi: 10.1123/jpah.8.4.516
- Callaghan, G. M., Gregg, J. A., Marx, B. P., Kohlenberg, B. S., & Gifford, E. (2004). FACT: The utility of an integration of functional analytic psychotherapy and acceptance and commitment therapy to alleviate human suffering. *Psychotherapy: Theory, Research, Practice, Training, 41*, 195-207. doi: 10.1037/0033-3204.41.3.195
- Cattivelli, R., Musetti, A., & Perini, S. (2014). L'approccio ACT-FAP nella promozione delle abilità sociali in adolescenti e preadolescenti con difficoltà emotive [The ACT-FAP training of social skills in adolescents and preteens with emotional difficulties. Psychology of the education]. *Psicologia dell'educazione, 8*, 97-112. doi: 10.1037/0033-3204.41.3.195
- Daza, P., Novy, D. M., Stanley, M. A., & Averill, P. (2002). The depression anxiety stress scale-21: Spanish translation and validation with a Hispanic sample. *Journal of Psychopathology and Behavioral Assessment, 24*, 195-205. doi: 10.1023/A:1016014818163
- Dimidjian, S., Arch, J. J., Schneider, R. L., Desormeau, P., Felder, J. N., & Segal, Z. V. (2016). Considering meta-analysis, meaning, and metaphor: A systematic review and critical examination of “third wave” cognitive and behavioral therapies. *Behavior Therapy, 47*, 886-905. doi: 10.1016/j.beth.2016.07.002
- Flaxman, P., Bond, F., & Livheim, F. (2013). *The mindful and effective employee: An acceptance & commitment therapy training manual for improving well-being and performance*. Oakland: New Harbinger Publications.

- Flaxman, P. E., & Bond, F. W. (2010). A randomised worksite comparison of acceptance and commitment therapy and stress inoculation training. *Behaviour Research and Therapy*, *48*, 816-820. doi: 10.1037/a0020522
- Gifford, E. V., Kohlenberg, B. S., Hayes, S. C., Pierson, H. M., Piasecki, M. P., Antonuccio, D. O., & Palm, K. M. (2011). Does acceptance and relationship focused behavior therapy contribute to bupropion outcomes? A randomized controlled trial of functional analytic psychotherapy and acceptance and commitment therapy for smoking cessation. *Behavior Therapy*, *42*, 700-715. doi: 10.1016/j.beth.2011.03.002
- Glover, N. G., Sylvers, P. D., Shearer, E. M., Kane, M. C., Clasen, P. C., Epler, A. J., & Jakupcak, M. (2016). The efficacy of Focused Acceptance and Commitment Therapy in VA primary care. *Psychological Services*, *13*, 156. doi: 10.1037/ser0000062
- González-Fernández, S., Fernández-Rodríguez, C., Paz-Caballero, M. D., & Pérez-Álvarez, M. (2018). Treating anxiety and depression of cancer survivors: Behavioral activation versus acceptance and commitment therapy. *Psicothema*, *30*, 14-20. doi: 10.7334/psicothema2017.396
- Hardy, G. E., Woods, D., & Wall, T. D. (2003). The impact of psychological distress on absence from work. *Journal of Applied Psychology*, *88*, 306-314. doi: 10.1037/0021-9010.88.2.306
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy. An experiential approach to behavior change*. New York: Guilford Press.
- Hayes, S. C., & Hofmann, S. G. (2017). The third wave of cognitive behavioral therapy and the rise of process-based care. *World Psychiatry*, *16*, 245-246. doi: 10.1002/wps.20442
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York: Guilford Press.
- 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*, 1-25. doi: 10.1016/j.brat.2005.06.006
- Hilton, M. F., Whiteford, H. A., Sheridan, J. S., Cleary, C. M., Chant, D. C., Wang, P. S., & Kessler, R. C. (2008). The prevalence of psychological distress in employees and associated occupational risk factors. *Journal of Occupational & Environmental Medicine*, *50*, 746-757. doi: 10.1097/JOM.0b013e31817e9171
- Kanter, J. W., Manbeck, K., Kuczynski, A. M., Maitland, D. M., Villas-Bôas, A., & Reyes, M. (2017). A comprehensive review of research on functional analytic psychotherapy. *Clinical Psychology Review*, *58*, 141-156. doi: 10.1016/j.cpr.2017.09.010
- Kohlenberg, R. J., & Tsai, M. (1991). *Functional analytic psychotherapy: A guide for creating intense and curative therapeutic relationships*. Nueva York: Plenum.
- Kohtala, A., Lappalainen, R., Savonen, L., Timo, E., & Tolvanen, A. (2015). A four-session acceptance and commitment therapy-based intervention for depressive symptoms delivered by master's degree level psychology students: A preliminary study. *Behavioural and Cognitive Psychotherapy*, *43*, 360-373. doi: 10.1017/S1352465813000969
- Lloyd, J., Bond, F. W., & Flaxman, P. E. (2013). The value of psychological flexibility: Examining psychological mechanisms underpinning a cognitive behavioural therapy intervention for burnout. *Work & Stress*, *27*, 181-199. doi: 10.1080/02678373.2013.782157
- Luoma, J. B., Kohlenberg, B. S., Hayes, S. C., & Fletcher, L. (2012). Slow and steady wins the race: A randomized clinical trial of acceptance and commitment therapy targeting shame in substance use disorders. *Journal of Consulting and Clinical Psychology*, *80*, 43-53. doi: 10.1037/a0026070
- Mangabeira, V., Kanter, J., & del Prette, G. (2012). Functional analytic psychotherapy (FAP): A review of publications from 1990 to 2010. *International Journal of Behavioral Consultation and Therapy*, *7*, 78-89. doi: 10.1037/h0100941
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*(1), 397-422. doi: 10.1146/annurev.psych.52.1.397
- Luciano, M. C., Valdivia-Salas, S., Gutiérrez-Martínez, O., Ruiz, F., & Páez, M. (2009). Brief acceptance-based protocols applied to the work with adolescents. *International Journal of Psychology and Psychotherapy*, *9*(2), 237-257.
- Pérez-Álvarez, M. (2012). Third-Generation therapies: Achievements and challenges. *International Journal of Clinical and Health Psychology*, *12*, 291-310.
- Ruiz, F. J., Langer, A. I., Luciano, C., Cangas, A. J., & Beltrán, I. (2013). Measuring experiential avoidance and psychological inflexibility: The Spanish translation of the Acceptance and Action Questionnaire-II. *Psicothema*, *25*, 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*, 63-68. doi: 10.7334/psicothema2013.110
- Salanova, M., Schaufeli, W.B., Llorens, S., Peiró, J.M., & Grau, R. (2000). Desde el "burnout" al "engagement": ¿una nueva perspectiva? [From burnout to engagement: A new perspective]. *Revista de Psicología del Trabajo y las Organizaciones*, *16*, 117-134.
- Sánchez-López, M. P., & Dresch, V. (2008). The 12-Item General Health Questionnaire (GHQ-12): Reliability, external validity and factor structure in the Spanish population. *Psicothema*, *20*, 839-843. doi: 10.13140/RG.2.1.3240.4644
- Stalker, C., & Harvey, C. (2002). *Professional burnout: A review of theory, research, and prevention*. Canada: Wilfrid Laurier University.
- Stride, C., Wall, T. D., & Catley, N. (2007). *Measures of job satisfaction, organisational commitment, mental health and job-related well-being: A benchmarking manual*. Chichester: Wiley.
- Strosahl, K., Robinson, P., & Gustavsson, T. (2012). *Brief interventions for radical change: Principles & practice of focused acceptance & commitment therapy*. Oakland: New Harbinger Publications.
- Tsai, M., Kohlenberg, R. J., Kanter, J. W., Kohlenberg, B., Follette, W. C., & Callaghan, G. M. (2009). *A guide to functional analytic psychotherapy. Awareness, Courage, Love and Behaviorism*. New York: Springer. doi: 10.1007/978-0-387-09787-9
- Wilson, K. G., & Luciano, M. C. (2002). *Terapia de aceptación y compromiso (ACT). Un tratamiento conductual orientado a los valores* [Acceptance and commitment therapy (ACT). A behavioral treatment oriented to personal values]. Madrid: Pirámide.