



Journal of Work and Organizational Psychology

<https://journals.copmadrid.org/jwop>



Coping with Burnout Symptoms through Task Significance in Professionals Working with Individuals with Intellectual Disability

Vicente Martínez-Tur, Yolanda Estreder, Inés Tomás, Esther Gracia, and Carolina Moliner

IDOCAL, University of Valencia, Spain

ARTICLE INFO

Article history:

Received 4 May 2020
Accepted 16 December 2020
Available online 22 January 2021

Keywords:

Task significance
Burnout
Teams
Intellectual disability
Professionals

Palabras clave:

Significado de la tarea
Burnout
Equipos
Discapacidad intelectual
Profesionales

ABSTRACT

This study examined an intervention that links task significance (one's job has a positive impact on other people) to burnout symptoms of professionals working in organizations for individuals with intellectual disability. Professionals assigned to the experimental condition participated in teams designed to enhance the positive impact of their work on others (task significance). To do so, teams focused on a task to improve the quality of life of individuals with intellectual disability. Professionals assigned to the control condition did not participate in these teams, and they continued with their usual work. All the participating professionals answered a questionnaire about burnout before and after the intervention. Mixed ANOVA indicated that professionals who participated in teams reduced their exhaustion symptoms (comparing pre vs. post intervention scores) and kept their cynicism levels stable. Professionals assigned to the control condition increased their cynicism symptoms. We conclude with a discussion of theoretical and practical implications.

El afrontamiento de los síntomas de *burnout* a través del significado de la tarea en profesionales que trabajan con personas con discapacidad intelectual

RESUMEN

Este estudio puso a prueba una intervención que vincula el significado de la tarea (el trabajo de uno tiene un impacto positivo en otras personas) con los síntomas de *burnout* de los profesionales que trabajan en organizaciones para personas con discapacidad intelectual. Los profesionales asignados a la condición experimental participaron en equipos diseñados para mejorar el impacto positivo de su trabajo en los demás (significado de la tarea). Para ello, los equipos se centraron en una tarea para mejorar la calidad de vida de las personas con discapacidad intelectual. Los profesionales asignados a la condición control no participaron en estos equipos y continuaron con su trabajo habitual. Todos los profesionales que participaron respondieron un cuestionario sobre *burnout* antes y después de la intervención. Los ANOVA mixtos indicaron que los profesionales que participaron en los equipos redujeron sus síntomas de agotamiento (comparando las puntuaciones pre y post intervención) y mantuvieron estables sus niveles de cinismo. Los profesionales asignados a la condición de control aumentaron sus síntomas de cinismo. Se concluye comentando las implicaciones teóricas y prácticas.

Meta-analyses have reported that about 1% of the global population have an intellectual disability (Maulik et al., 2011; McKenzie et al., 2016). Prevalence is higher in studies with children and adolescents than in studies focusing on adults. Higher rates also exist in low-middle income countries, which can create obstacles to accessing resources (Maulik et al., 2011). To respond to the needs and hopes of individuals with intellectual disability, modern societies organize specialized services. These service organizations try to evolve towards more innovative and transformative efforts, inclusive settings, and complex support systems, where improving the quality of life of the person with intellectual disability is the main goal (Harbour & Maulik, 2010; Schalock et al., 2019; Verdugo, 2018). To provide the

service, the role of contact professionals (who have daily interactions with individuals with intellectual disability) is crucial. Professionals are the visible face of organizations and are responsible for ensuring adequate service (Vassos et al., 2017). Based on the terminology of Price et al. (1995), social interaction between professionals and individuals with intellectual disability could be considered a highly emotional relationship because it requires spatial proximity and is characterized by a long duration and strong emotional bonds.

Despite the importance of professionals in this type of services, labor conditions are not very positive. Professionals in services for individuals with intellectual disability are usually underpaid and work in poorly supported labor contexts (Hastings, 2010; Vassos et

Cite this article as: Martínez-Tur, V., Estreder, Y., Tomás, I., Gracia, E., & Moliner, C. (2021). Coping with burnout symptoms through task significance in professionals working with individuals with intellectual disability. *Journal of Work and Organizational Psychology*, 37(1), 50-57 <https://doi.org/10.5093/jwop2021a2>

Funding: This study was supported by the Spanish Research Agency (AEI) under agreement PSI2016-78158-R, and FEDER.

Correspondence: vicente.martinez-tur@uv.es (V. Martínez-Tur).

ISSN: 1576-5962/© 2021 Colegio Oficial de la Psicología de Madrid. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

al., 2017). A significant number of professionals also report high levels of stress (Hatton et al., 1999a, 1999b; Robertson et al., 2005), which could produce burnout (Devereux et al., 2009). Additionally, burnout, defined as a “psychological syndrome that involves a prolonged response to stressors in the workplace” (Maslach, 2003, p. 189), is especially negative in this sector because it deteriorates the social interaction between professionals and individuals with intellectual disability (e.g., Rose et al., 1998). In the present research study, we concentrated on the “core” of burnout (Schaufeli et al., 2002), which includes two dimensions: exhaustion (feelings of being overextended in one’s personal resources) and cynicism (a distant attitude towards the job). Although exhaustion is the central dimension of burnout (Zhao et al., 2019), we also considered cynicism (also called depersonalization) because it is a very negative reaction in labor contexts where a positive interaction with service users is necessary (e.g., Bang & Reio, 2017). We did not include lack of professional efficacy as the third dimension of burnout because it was defined as a personality trait (Shirom, 2003). Two types of empirical evidence support the exclusion of lack of efficacy as a genuine dimension of burnout (see González-Romá et al., 2006). On the one hand, there is a low correlation between lack of efficacy and the other two dimensions of burnout (Lee & Ashforth, 1996). On the other hand, exhaustion and cynicism are connected through the burnout process, whereas lack of efficacy functions independently (Leiter, 1993).

Despite the existence of different coping strategies (Martínez Ramon, 2015), we propose that a relevant way to deal with burnout symptoms in services for individuals with intellectual disability is by improving the task significance of professionals. Based on the job characteristics model (Hackman & Oldham, 1976), task significance is defined as “the degree to which the job has a substantial impact on the lives or work of other people” (p. 257) in a positive way (Grant, 2008). Although there can be some overlap with other concepts, such as prosocial behaviors (human actions intended to benefit other people) or altruism (as a motivational concept) (Batson & Powell, 2003), task significance is specifically based on job characteristics and design. Therefore, one way to enhance task significance is to change the tasks by organizing work in teams oriented towards helping others.

Helping others leads to positive effects not only for recipients but also for helpers (e.g., positive emotions) (Nelson et al., 2016). This is especially evident among professionals working with individuals with intellectual disability. Task significance, as the positive impact of a professional’s work on others, could be enhanced through the efforts to improve quality of life of service users. With this in mind, the current research study contributes to the knowledge by testing the effects of a task significance intervention on burnout of professionals working with individuals with intellectual disability. Although task significance (a professional’s job has a positive impact on other people) is quite relevant in this context, there is a lack of empirical studies. We follow a contextualist theory of knowledge. Although general laws can exist, science also makes progress in acquiring knowledge by examining which phenomena are important in particular contexts (McGuire, 1983), including organizations (see Campbell, 1990; Johns, 2006). Task significance is especially relevant in understanding professionals’ burnout in the context of organizations for individuals with intellectual disability because the central goal is to help others (i.e., individuals with intellectual disability). Professionals’ task significance (positive effects on service users) involves positive feelings and meaning in the work that could prevent burnout.

In addition to the contribution to knowledge, two aspects of our research study provide added value and rigor. First, we test the intervention considering a pre vs. post design and comparing experimental vs. control conditions. This allows us to solidly examine the degree to which task significance has an effect on burnout. Second, the study is carried out in real organizational contexts. The combination of real contexts and intervention facilitates the transfer

of research to real life in organizations. In fact, the intervention is based on professionals’ participation in teams (along with family members and individuals with intellectual disability), where they have the opportunity to contribute to the quality of life of service users.

Linking Task Significance Intervention to Burnout

In their qualitative study, Hensel et al. (2015) found that one of the most frequently mentioned positive facets of jobs in explaining the motivation and permanence of professionals who deliver services to individuals with intellectual disability is the opportunity to “make a difference” in the lives of service users. Feelings of personal accomplishment are associated with providing care and changing the lives of vulnerable people (Hensel et al., 2015). However, it is not easy to achieve this task significance associated with positive effects on service users. Institutions and organizations dedicated to taking care of and supporting vulnerable people have become increasingly professionalized (Carey et al., 2009). This process has had positive effects (e.g., the consideration of professional knowledge in the service delivery), but it usually produces a bureaucratization process that makes it difficult to do a job that places the service user at the center of activities (Alexander et al., 1999; Grant, 2008). In other words, resources are more oriented toward following regulations and management and administration (e.g., documenting, writing reports, etc.), and less oriented toward designing and delivering innovative services to help vulnerable people (e.g., individuals with intellectual disability).

This context, with high bureaucracy and obstacles to achieving task significance, does not seem appropriate for preventing and reducing burnout symptoms. By contrast, it is possible to expect that professionals who positively impact others (i.e., individuals with intellectual disability) will have fewer burnout symptoms. Indirect evidence supports this argument. From an evolutionary point of view, helping behaviors have been necessary to achieve large-scale cooperation and the subsequent survival of humans around the world (e.g., Henrich & Henrich, 2006; Kelly, 2005). Accordingly, helping behavior is a rewarding and well-established mechanism among humans, present in some areas of the brain involved in reward experiences (Harbaugh et al., 2007). In fact, Nelson et al. (2016) found that helping others increases positive affect and decreases negative affect over time, whereas this improvement is not observed when individuals display self-focused behaviors (prioritizing their own needs). Nelson et al. (2016) argued that helping others provides an opportunity to experience positive emotions (e.g., pride) that emerge less in self-focused behaviors.

This rationale could be transferred to the effect of task significance on burnout in professionals working with individuals with intellectual disability. Because helping and supporting behaviors provide the opportunity to positively impact others, they should be rewarding for professionals. Therefore, task significance could prevent burnout in helping professions. Some indirect findings support this idea. For example, nurses and physicians typically associate their burnout symptoms with difficulties in properly caring for patients and lack of task significance (Kompanje, 2018; Swensen et al., 2016). Professionals who deliver services to individuals with intellectual disability should have similar experiences. “Making a difference” in the lives of individuals with intellectual disability is a meaningful activity that fills a professional with energy, in contrast to experiencing exhaustion. In addition, a meaningful interaction with individuals with intellectual disability that produces a positive impact on their lives seems to be incompatible with cynicism. Task significance refers to purpose or meaning in the workplace that can reduce cynicism (Holbeche & Springett, 2004). Thus, we can argue that having a positive impact on individuals with intellectual

disability (task significance) can satisfy professionals' need for life purpose and meaning in the workplace, thus avoiding attitudes of distance towards work (cynicism) (Cartwright & Holmes, 2006).

Some empirical evidence has shown negative correlations between task significance and burnout (see Humphrey et al., 2007; Parker, 2014). However, there is a lack of research on the effects of task significance interventions on burnout. This is quite surprising because testing interventions provides solid information on specific actions to implement in organizations and services. More specifically, we propose that participation of professionals in teams mitigates their burnout symptoms because these teams are oriented to achieve a positive effect on others. Specifically, it is about autonomous teams where professionals cooperate with families with the aim of deciding and implementing a project to improve the quality of life of individuals with intellectual disabilities. Therefore, we hypothesize as follows:

Hypothesis 1: A task significance intervention, based on participation in teams, mitigates exhaustion symptoms in professionals working with individuals with intellectual disability.

Hypothesis 2: A task significance intervention, based on participation in teams, mitigates cynicism symptoms in professionals working with individuals with intellectual disability.

Method

Participants

A total of 58 small organizations (centers) participated in this research study. They were affiliated with *Plena Inclusión*, a non-governmental organization dedicated to improving the social inclusion and quality of life of individuals with intellectual disability in Spain. The main objective of these centers is to achieve self-determination (individuals with intellectual disability as primary agents in their own lives) and social inclusion. After removing missing data, 323 professionals (social workers, psychologists, occupational therapists, physiotherapists, etc.) were considered for statistical analyses. Of them, 130 participated in teams to develop projects along with family members and individuals with intellectual disability (experimental condition), whereas 193 professionals were assigned to the control condition. The average age of professionals was 39.8 ($SD = 9.24$) years, and 245 (76%) of them were women. There were no significant differences between professionals assigned to the experimental vs. control conditions in mean age, $t(317) = 0.5$, $p > .05$, or sex distribution, $\chi^2(1) = 0.33$, $p > .05$, indicating lack of biases.

Procedure

This research study received the approval of the Ethical Committee of the University of the corresponding author. In each participating center, at least one team was specifically created (experimental condition) for the present research study. Each team was composed of two professionals and two families. One individual with intellectual disability and one of her/his relatives (the one who had a more constant relationship with the center) represented each family. A group of additional professionals in each center filled in the questionnaire about burnout, but they did not participate in the teams (control condition). Selection and distribution (experimental vs. control conditions) of participants were carried out randomly within each center. Participation of professionals, individuals with intellectual disability, and family members was confidential and voluntary. The research team trained one professional per center to organize the process and collect the data. This professional did not participate in the experimental condition or the control condition. The sampling plan resulted in a high response rate, higher than 90%.

In each center, one member of the research team gave an initial standardized half-hour speech to team members. Immediately after the speech, each team met for two hours to design a project that had to be implemented during an eight-week period. Only participants in the experimental condition (teams) attended the speech and designed the project. During the speech, the researcher explained the logic behind the process and the teams' main objectives. More specifically, two clear messages were transmitted. First: "the main goal is to design a project to improve self-determination and social inclusion of individuals with intellectual disability in each team". The focus was on improving self-determination and social inclusion, due to their relevance in understanding quality of life in the disability sector (e.g., Mumbardó-Adam et al., 2018). This makes it possible to achieve relevant task significance (one's job has a positive impact on other people) as a positive impact of professionals' participation in teams on individuals with intellectual disability. Second: "team members are autonomous in deciding on the project and designing a work plan to implement". Accordingly, professionals, together with individuals with intellectual disability and family members, were directly responsible for the effort to improve self-determination and social inclusion. Teams' autonomy is necessary so that professionals can be directly involved in helping individuals with intellectual disability (task significance). Professionals assigned to the experimental and control conditions answered a questionnaire on burnout twice, in parallel. In the second measurement time (T2), professionals assigned to the experimental condition also expressed their level of satisfaction with the specific work done in relation to the team's objective: improving self-determination and social inclusion. This ad hoc measure allowed us to have an indicator of the degree to which professionals perceived that the team's work had positive consequences for individuals with intellectual disability and, consequently, to check whether the activity (experimental condition) helps to stimulate task significance.

Manipulation Check

Although our measure of satisfaction referred to positive effects on service users (self-determination and social inclusion), it provided indirect evidence that only applied to professionals in the experimental condition. For this reason, we carried out an independent manipulation check. To evaluate the degree to which the manipulation was successful, 22 additional professionals (82% were women, 43.67 years old on average, $SD = 5.18$) working in the sector of organizations for individuals with intellectual disability were recruited as a convenience sample. They answered a short questionnaire with three parts: a) definition of "task significance"; b) description of the two conditions (participation in teams as described in the above procedure vs. usual work performed by professionals in these organizations for individuals with intellectual disability); and c) two items scored on a 10-point rating scale ranging from 1 to 10, where participants evaluated the degree to which each condition enhances professionals' task significance. Higher scores indicated greater task significance. Task significance attributed to the experimental condition ($M = 8.23$, $SD = 1.66$) was significantly higher, $t_{(21)} = 6.96$, $p < .01$, than the significance attributed to the usual work of professionals in organizations for individuals with intellectual disability ($M = 4.14$, $SD = 1.58$). This result indicates that the manipulation was successful.

Instruments

We measured "core of burnout" (Schaufeli et al., 2002), which is composed of its two central dimensions: "exhaustion" and "cynicism". To do so, we used the Spanish validated version of the Maslach Burnout Inventory General Survey (see Schaufeli et al.,

2002). The exhaustion measure (5 items, e.g., “I feel emotionally drained by my job”; alpha coefficients for the overall sample, T1 = .89 and T2 = .90) assesses the degree to which a professional has symptoms of exhaustion, whereas the cynicism measure (5 items, e.g., “I have become more cynical about my work”; alpha coefficients for the overall sample, T1 = .84 and T2 = .86) assesses the extent to which professionals express cynicism or distant attitudes towards the job. All items were scored on a 7-point frequency rating scale ranging from 0 (*never*) to 6 (*always*). High scores were indicative of exhaustion and cynicism.

As mentioned above, we also measured “satisfaction” of professionals assigned to the experimental condition with the work done in relation to the team’s objective. The research team designed an ad hoc scale. Professionals were asked to think about the team’s objective (improving self-determination and social inclusion of individuals with intellectual disability) and then answer two items (alpha coefficient = .69): “In general, I am satisfied with the work done” and “The team has done a very good job”. Both items were scored on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). High scores were indicative of satisfaction with the work done in relation to the objectives of the team, reflecting a positive impact on individuals with intellectual disability (in terms of self-determination and social inclusion) as indicator of task significance.

Data Analysis

Prior to testing the effects of the intervention, confirmatory factor analyses (CFA) were conducted, with robust maximum likelihood (MLR) as the estimation method using MPlus (Muthén & Muthén, 1998-2010), to test the distinctiveness of the two dimensions of burnout (exhaustion and cynicism). We compared the proposed two-factor model with a nested one-factor model (with all items loading on a single general factor) to test whether the data supported differentiation between exhaustion and cynicism. We also computed descriptive results for the satisfaction of the professionals assigned to the experimental condition with the work done in relation to the team’s objective, in order to test whether these professionals felt that their teams were able to produce a positive impact on individuals with intellectual disability (task significance).

Two-way mixed analyses of variance (ANOVA), considering one within-group factor (time - 2 levels: pre-intervention and post-intervention) and one between-group factor (condition - 2 levels: control and experimental), were computed to test the effects of the intervention on burnout. When significant interaction effects were identified, simple effects were calculated and profile plots for the interaction were obtained. Because professionals pertained to different centers, we carried out additional analyses to control for center membership in examining the effects of intervention. Centers may vary in the degree to which they stimulate task significance, impacting our results. For this reason, we also computed mixed-effect regression models with random intercepts to test the difference in the rate of change in the exhaustion and cynicism scores over time between the experimental and control

conditions, controlling for center membership. Analyses were carried out with SPSS version 24.

Results

Preliminary Analyses

CFA results showed that all fit indices for the one-factor model were below cut-off. By contrast, fit indices of the two-factor model were satisfactory, with RMSEA very close to cut-off (.080) (see Table 1). When comparing two- and one- factor models, chi-square difference was statistically significant ($\Delta\chi^2$ Satorra-Bentler = 44.83, $\Delta df = 1$, $p < .01$), supporting exhaustion and cynicism as two different constructs. In addition, satisfaction of professionals assigned to the experimental condition with the work done in relation to the team objective was high ($M = 6.20$, $SD = 0.72$). In addition to manipulation check, this was indicative of the existence of task significance among those professionals who participated in the teams (experimental condition). They felt that the team had a positive impact on an individual with intellectual disability in critical elements of quality of life such as self-determination and social inclusion. We also checked the possible existence of significant differences in burnout between experimental and control groups in T1 (pre-intervention phase). Simple effect results indicated no significant differences in mean values for either exhaustion, $M_{(experimental)} = 1.94$, $SD = 1.17$; $M_{(control)} = 2.18$, $SD = 1.23$; $p > .05$, or cynicism, $M_{(experimental)} = 0.78$, $SD = 0.96$; $M_{(control)} = 0.87$, $SD = 1.03$; $p > .05$, when comparing the control vs. experimental conditions in the pre-intervention phase.

Table 1. Goodness of Fit Indices of the CFA Models for Burnout

	χ^2	p	df	RMSEA	CFI	TLI
Single-factor model	217.192	.000	34	.129	.863	.819
Two-factors model	119.852	.000	33	.090	.935	.912
Cut-offs	-	-	-	< .080	> .900	> .900

Tables 2 and 3 show descriptive statistics, correlations among study variables, and reliability for control and experimental conditions, respectively. There were positive significant correlations among variables. In addition, all alpha coefficients were satisfactory, with scores higher than .70.

Hypothesis Testing: Effects of the intervention

Results of the mixed ANOVA for emotional exhaustion revealed a significant main effect of time, $F_{(1, 321)} = 17.07$, $p < .01$, $h^2 = .050$, indicating that the mean value for emotional exhaustion significantly differed across the two times. The mean value was significantly greater in the pre-intervention phase ($M = 2.06$, $SD = .07$) than in the post-intervention phase ($M = 1.88$, $SD = .07$). There was also a significant main effect of condition, $F_{(1, 321)} = 6.84$, $p < .01$, $h^2 = .021$, indicating that the average value reported for exhaustion was significantly greater in the control condition ($M = 2.14$, $SD = .08$) than in the experimental condition ($M = 1.80$, $SD = .10$). Furthermore,

Table 2. Descriptive Statistics and Correlations for the Control Condition

	Range	Mean	SD	Control condition			
				1	2	3	4
1. Emotional exhaustion pre-intervention	0-6	2.18	1.23	(.89)			
2. Emotional exhaustion post-intervention	0-6	2.10	1.30	.77**	(.90)		
3. Cynicism pre-intervention	0-6	0.87	1.03	.59**	.58**	(.83)	
4. Cynicism post-intervention	0-6	1.01	1.13	.51**	.68**	.75**	(.87)

Note. Cronbach’s alpha coefficients are in brackets on the diagonal.
** $p < .01$.

Table 3. Descriptive Statistics and Correlations for Experimental Condition

	Range	Mean	SD	Experimental condition			
				1	2	3	4
1. Emotional exhaustion pre-intervention	0-6	1.94	1.17	(.88)			
2. Emotional exhaustion post-intervention	0-6	1.65	1.12	.83**	(.88)		
3. Cynicism pre-intervention	0-6	0.78	0.96	.62**	.55**	(.84)	
4. Cynicism post-intervention	0-6	0.75	0.91	.63**	.61**	.88**	(.81)

Note. Cronbach's alpha coefficients are in brackets on the diagonal.

** $p < .01$.

there was a significant time x condition interaction effect, $F_{(1, 321)} = 5.43$, $p < .05$, $h^2 = .017$, confirming *H1*. Specifically, results of simple effects indicated statistically significant differences ($p < .001$) in the experimental condition between the pre- ($M = 1.94$, $SD = 1.17$) and post-intervention ($M = 1.65$, $SD = 1.12$) mean values for exhaustion. By contrast, there were no significant differences ($p > .05$) in the control condition between pre- ($M = 2.18$, $SD = 1.23$) and post-intervention ($M = 2.10$, $SD = 1.30$) mean values (see [Figure 1](#)). As mentioned above, there were no significant differences in mean values for exhaustion comparing the control vs. experimental conditions in the pre-intervention phase. However, statistically significant differences ($p < .01$) were detected between control ($M = 2.10$, $SD = 1.30$) vs. experimental ($M = 1.65$, $SD = 1.12$) conditions in the post-intervention phase. After the intervention, exhaustion symptoms were significantly lesser in the experimental condition than in the control one, as expected.

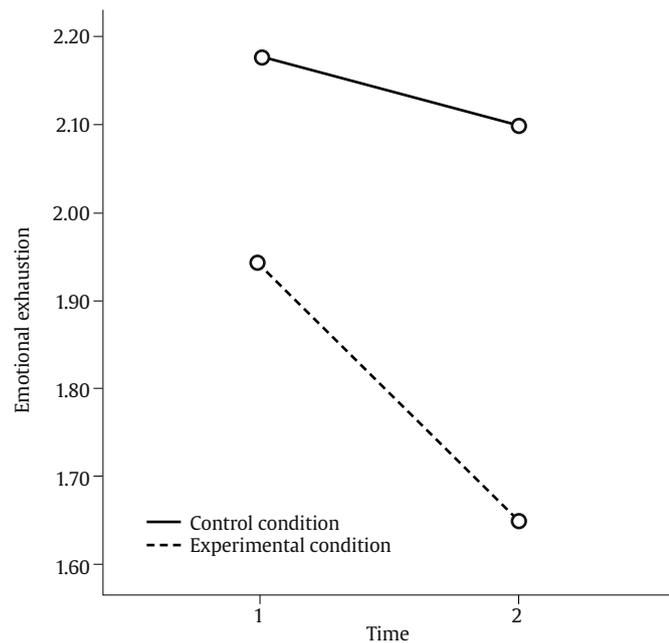


Figure 1. Profile Plot for the Interaction Effect of Time x Condition on Emotional Exhaustion.

Results of the mixed ANOVA for cynicism indicated no significant main effects of time, $F_{(1, 321)} = 1.72$, $p > .05$, $\eta^2 = .005$, or condition, $F_{(1, 321)} = 2.51$, $p > .05$, $\eta^2 = .008$. However, there was a significant time x condition interaction effect, $F_{(1, 321)} = 4.64$, $p < .05$, $\eta^2 = .014$. The pattern of results was partially different from that expected in *H2*, despite the fact that the symptoms of cynicism, after the intervention, were higher for the control condition than for the experimental one. Simple effect results indicated statistically significant differences ($p < .01$) in the control condition between the

pre- ($M = 0.87$, $SD = 1.03$) and post-intervention ($M = 1.01$, $SD = 1.13$) mean values for cynicism. By contrast, there were no significant differences ($p > .05$) in the experimental condition between the pre- ($M = 0.78$, $SD = .96$) and post-intervention ($M = 0.75$, $SD = .91$) mean values (see [Figure 2](#)). As mentioned above, there were no significant differences in the mean cynicism values between control vs. experimental conditions in the pre-intervention phase. However, statistically significant differences ($p < .05$) were detected between the control ($M = 1.01$, $SD = 1.13$) and experimental ($M = 0.75$, $SD = .91$) conditions in the post-intervention phase. After the intervention, cynicism was significantly higher in the control condition than in the experimental one.

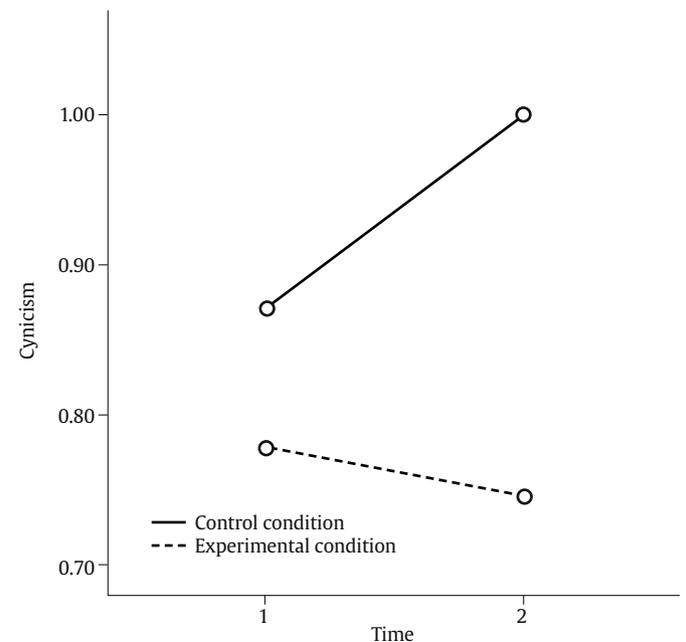


Figure 2. Profile Plot for the Interaction Effect of Time x Condition on Cynicism.

Additional Analyses

We conducted additional analyses to control for center membership. Results of the mixed-effect regression model with random intercepts confirmed that the rate of change in the exhaustion scores was not the same from pre-intervention to post-intervention when comparing the experimental vs. control conditions ($\gamma_{11} = -.21$, $p < .05$), after controlling for center membership. In sum, our findings showed that, according to *H1*, participation in teams reduced exhaustion symptoms, whereas exhaustion scores remained stable in professionals assigned to the control condition.

Results of the mixed-effect regression model with random intercepts also corroborated our finding for cynicism. The rate of change in cynicism scores was not the same from pre-intervention to post-intervention when comparing the experimental vs. control conditions ($\gamma_{11} = -.16, p < .05$), after controlling for center membership. Regarding *H2*, our results indicated that cynicism remained stable in professionals who participated in teams, whereas cynicism increased in professionals assigned to the control condition.

Discussion

This research study was carried out in centers for individuals with intellectual disability. In this context, we aimed to test the effect of an intervention designed to reduce professionals' burnout symptoms (exhaustion and cynicism) through task significance. To do so, professionals assigned to the experimental condition participated in teams dedicated to designing and implementing projects to improve the self-determination and social inclusion of individuals with intellectual disability. To stimulate task significance (positive impact on others), teams ensured autonomy and direct participation of both professionals and service recipients (families). Professionals participating in teams reported high satisfaction with the work done by teams in relation to the objective (self-determination and social inclusion), which is considered an indicator of task significance. Our findings confirmed that participation in teams helped to reduce exhaustion symptoms. However, the results for cynicism were quite different. Participation in teams only served to keep cynicism levels stable, whereas professionals assigned to the control condition increased their cynicism significantly from T1 (pre-intervention) to T2 (post-intervention). Implications of our findings are discussed below.

The positive effect of participating in teams (task significance) on professionals' exhaustion symptoms is congruent with the literature proposing that different types of helping and supporting behaviors are good not only for receivers, but also for givers (e.g., Aknin et al., 2013; Harbaugh et al., 2007; Nelson et al., 2016; Warneken & Tomasello, 2006). According to Nelson et al. (2016), providing help and support to others allows individuals to feel positive emotions (e.g., pride) that underlie well-being. We transferred this idea to the context of centers for individuals with intellectual disability, considering lack of exhaustion to be a relevant indicator of well-being in the workplace. Previous qualitative evidence in this specific context reported that "making a difference" in the lives of individuals with intellectual disability is a precursor of motivation and personal accomplishment (Hensel et al., 2015). This attitude in the workplace does not seem to be compatible with exhaustion. Our research contributes to previous knowledge by confirming this proposal through an intervention where professionals had the opportunity to have a positive impact on individuals with intellectual disability.

Results for cynicism were surprising. Of course, there was a positive aspect of professionals' participation in teams: symptoms of cynicism were not significantly reduced, but at least they remained stable. This result was probably due to the very low level of cynicism in our study (see Tables 2 and 3). In fact, average values indicated that the experience of cynicism is very rare. It is likely that, in this sector, high cynicism is not compatible with daily attention to individuals with intellectual disability. Therefore, there is probably no room for improvement, even when professionals participate in teams. Our findings for professionals assigned to the control condition were also intriguing because there was a significant and unexpected increase in the level of cynicism, although there was a high correlation between levels of pre vs. post-intervention cynicism (.75). A tentative explanation could be related to the evolution of cynicism in the workplace in the sector of organizations for individuals with

intellectual disability. The sector is now subject to changes for different reasons, such as designing innovative and transformative ways of providing services (Harbour & Maulik, 2010; Schalock et al., 2019; Verdugo, 2018) in a context with a recurrent lack of resources and sub-optimal working conditions (Hastings, 2010; Vassos et al., 2017). It is well-known that cynicism is a typical negative reaction to organizational changes (Stanley et al., 2005). Thus, it is possible that the sector is experiencing an evolution towards higher levels of cynicism, even though the current level is very low. In any case, this question should be addressed in future studies.

Our findings also have implications for practice. Organizations oriented toward helping vulnerable people (e.g., individuals with intellectual disability) have become increasingly professionalized (Carey et al., 2009). Despite the positive aspects of this process (e.g., use of evidence-based and expert knowledge), bureaucratization associated with professionalization could impede innovative initiatives directed to service users. Efforts tend to concentrate more on administrative issues (e.g., preparation of reports) (Alexander et al., 1999; Grant, 2008). Organizations should be aware that professionalization has to be combined with initiatives that force a professional to interact with service users in a creative way, producing positive changes in their lives. For example, it is possible to create physical and temporary conditions, as in the autonomous teams in this study, that encourage professionals' interactions with family members and individuals with intellectual disability.

The present study has limitations that could be considered in future efforts. First, as mentioned above, a better understanding of cynicism is needed in services for individuals with intellectual disability. Although it was not our objective, the change in cynicism that we observed in professionals assigned to the control condition should be analyzed more in-depth in order to confirm its existence and diagnose the causes. For example, questions that could be addressed are: Is there really a tendency towards higher levels of cynicism? Do organizational changes (and/or labor conditions) explain possible changes in cynicism over time? Second, the present research study considered self-report measures of burnout. Therefore, another area for future research is related to considering alternative measures of well-being at work. Burnout is a critical facet of well-being, but it would be interesting to examine the extent to which the intervention we tested also influences physiological measures and measures that assess the positive side of well-being at work (e.g., engagement). Investigating these issues will provide a richer portrait of the way interventions based on task significance impact well-being. Third, some instruments could be used in further research to more directly measure task significance. For example, a solid alternative is the instrument designed by the meaning of work (MOW) research team (e.g., Gracia et al., 2001; Salanova et al., 1991). Fourth, the mere grouping of professionals in teams could have had some effect, similar to the so-called "Hawthorne effect" (Moldaschl & Weber, 1998). Therefore, future studies should create another control condition where participants are also organized in teams. Fifth, although our focus in this research study was on professionals' burnout, future efforts could consider the possible reactions, in terms of well-being, of other participants, such as individuals with intellectual disability and their family members.

Despite these limitations, the current research study contributes to knowledge about interventions that help to cope with exhaustion symptoms in organizations for individuals with intellectual disability. It is especially noteworthy that exhaustion experiences are reduced because employees have the opportunity to perform a significant task designed to help service users by interacting with families in teams.

Conflict of Interest

The authors of this article declare no conflict of interest.

Acknowledgements

The authors would like to thank *Plena Inclusión* and associated centers that participated in the studies.

References

- Aknin, L. B., Barrington-Leigh, C. P., Dunn, E.W., Helliwell, J. F., Burns, J., Biswas-Diener, R., Kimelda, I., Nyende, P., Ashton-James, C. E., & Norton, M.I. (2013). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology, 104*(4), 635-652. <https://doi.org/10.1037/a0031578>
- Alexander, J., Nank, R., & Stivers, C. (1999). Implications of welfare reform: Do nonprofit survival strategies threaten civil society? *Nonprofit and Voluntary Sector Quarterly, 28*(4), 452-475. <https://doi.org/10.1177/0899764099284005>
- Bang, H., & Reio, T. G., Jr. (2017). Examining the role of cynicism in the relationships between burnout and employee behavior. *Journal of Work and Organizational Psychology, 33*(3), 217-227. <https://doi.org/10.1016/j.rpto.2017.07.002>
- Batson, C. D., & Powell, A. A. (2003). Altruism and prosocial behavior. In T. Millon & M. J. Lerner (Eds.), *Handbook of psychology: Personality and social psychology* (Vol. 5, pp. 463-484). John Wiley & Sons, Inc. <https://doi.org/10.1002/0471264385.wei0519>
- Campbell, J. P. (1990). The role of theory in industrial and organizational psychology. In N. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 1). Consulting Psychologists Press.
- Carey, G., Braunack-Mayer, A., & Barraket, J. (2009). Spaces of care in the third sector: Understanding the effects of professionalization. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine, 13*(6), 629-646. <https://doi.org/10.1177/1363459308341866>
- Cartwright, S., & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and reducing cynicism. *Human Resource Management Review, 16*(2), 199-208. <https://doi.org/10.1016/j.hrmr.2006.03.012>
- Devereux, J., Hastings, R., & Noone, S. (2009). Staff stress and burnout in intellectual disability services: Work stress theory and its application. *Journal of Applied Research in Intellectual Disabilities, 22*(6), 561-573. <https://doi.org/10.1111/j.1468-3148.2009.00509.x>
- González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior, 68*(1), 165-174. <https://doi.org/10.1016/j.jvb.2005.01.003>
- Gracia, F. J., Martín, P., Rodríguez, I., & Peiró, J. M. (2001). Cambios en los componentes del significado del trabajo durante los primeros años de empleo: Un análisis longitudinal. *Anales de Psicología, 17*(2), 201-217.
- Grant, A. M. (2008). Employees without a cause: The motivational effects of prosocial impact in public service. *International Public Management Journal, 11*(1), 48-66. <https://doi.org/10.1080/10967490801887905>
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Journal of Applied Psychology, 16*(2), 250-279. [https://doi.org/10.1016/0030-5073\(76\)90016-7](https://doi.org/10.1016/0030-5073(76)90016-7)
- Harbaugh, W. T., Mayr, U., & Burghart, D. R. (2007). Neural responses to taxation and voluntary giving reveal motives for charitable donations. *Science, 316*(5831), 1622-1625. <https://doi.org/10.1126/science.1140738>
- Harbour, C., & Maulik, P. (2010). History of intellectual disability. In J. H. Stone & M. Blouin (Eds.), *International encyclopedia of rehabilitation*. CIRRIE.
- Hastings, R. P. (2010). Support staff working in intellectual disability services. The importance of relationships and positive experiences. *Journal of Intellectual & Developmental Disability, 35*(3), 207-210. <https://doi.org/10.3109/13668250.2010.492710>
- Hatton, C., Emerson E., Rivers M., Mason L., Swarbrick R., Kiernan C., Reeves D., & Alborz A. (1999a). Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *Journal of Intellectual Disability Research, 43*(4), 253-267. <https://doi.org/10.1046/j.1365-2788.1999.00208.x>
- Hatton, C., Rivers, M., Mason, H., Mason, L., Emerson, E., Kiernan, C., Reeves, D., & Alborz, A. (1999b). Organisational culture and staff outcomes in services for people with intellectual disabilities. *Journal of Intellectual Disability Research, 43*(3), 206-218. <https://doi.org/10.1046/j.1365-2788.1999.00190.x>
- Henrich, J., & Henrich, N. (2006). Culture, evolution and the puzzle of human cooperation. *Cognitive Systems Research, 7*, 220-245. <https://doi.org/10.1016/j.cogsys.2005.11.001>
- Hensel, J. M., Hensel, R. A., & Dewa, C. S. (2015). What motivates direct support providers to do the work they do? *Journal of Intellectual and Developmental Disability, 40*(3), 297-303. <https://doi.org/10.3109/13668250.2015.1048430>
- Holbeche, L., & Springett, N. (2004). *In search of meaning in the workplace*. Roffey Park Institute.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology, 92*(5), 1332-1356. <https://doi.org/10.1037/0021-9010.92.5.1332>
- Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review, 31*(2), 386-408. <https://doi.org/10.5465/amr.2006.20208687>
- Kelly, R. C. (2005). The evolution of lethal intergroup violence. *Proceedings of the National Academy of Sciences of the United States of America, 102*, 15294-15298. <https://doi.org/10.1073/pnas.0505955102>
- Kompanje, E. J. O. (2018). Burnout, boreout and compassion fatigue on the ICU: It is not about work stress, but about lack of existential significance and professional performance. *Intensive Care Medicine, 44*, 690-691. <https://doi.org/10.1007/s00134-018-5083-2>
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*(2), 123-133. <https://doi.org/10.1037/0021-9010.81.2.123>
- Leiter, M. P. (1993). Burnout as a developmental process: Consideration of models. In B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 237-250). Taylor & Francis.
- Martínez Ramon, J. P. (2015). How secondary school teachers protect themselves from stress: Burnout and coping strategies. *Journal of Work and Organizational Psychology, 31*(1), 1-9. <https://doi.org/10.1016/j.rpto.2015.02.001>
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *American Psychological Society, 12*(5), 189-192. <https://doi.org/10.1111/1467-8721.01258>
- Maulik, P. K., Mascarenhas, M. N., Mathers, C. D., Dua, T., & Saxena, S. (2011). Prevalence of intellectual disability: A meta-analysis of population-based studies. *Research in Developmental Disabilities, 32*(2), 419-436. <https://doi.org/10.1016/j.ridd.2010.12.018>
- McGuire, W. J. (1983). A contextualist theory of knowledge: Its implications for innovation and reforms in psychological research. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 1-47). Academic Press.
- McKenzie, K., Milton, M., Smith, G., & Ouellette-Kuntz, H. (2016). Systematic review of the prevalence and incidence of intellectual disabilities: Current trends and issues. *Current Developmental Disorders Reports, 3*, 104-115. <https://doi.org/10.1007/s40474-016-0085-7>
- Moldaschl, M., & Weber, W. G. (1998). The „three waves“ of industrial group work: Historical reflections on current research on group work. *Human Relations, 51*(3), 347-388. <https://doi.org/10.1177/001872679805100307>
- Mumbardó-Adam, C., Guàrdia-Olmos, J., & Giné, C. (2018). Assessing self-determination in youth with and without disabilities: The Spanish version of the AIR self-determination scale. *Psicothema, 30*(2), 238-243. <https://doi.org/10.7334/psicothema2017.349>
- Muthén, L. K., & Muthén, B. O. (1998-2010). *Mplus user's guide*. Muthén & Muthén.
- Nelson, S. K., Layous, K., Cole, S.W., & Lyubomirsky, S. (2016). Do into others or treat yourself? The effects of prosocial and self-focused behavior on psychological flourishing. *Emotion, 16*(6), 850-861. <https://doi.org/10.1037/emo0000178>
- Parker, S.K. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology, 65*, 661-691. <https://doi.org/10.1146/annurev-psych-010213-115208>
- Price, L. L., Arnold, E. J., & Tierney, P. (1995). Going to extremes: Managing service encounters and assessing provider performance. *Journal of Marketing, 59*(2), 83-97. <https://doi.org/10.1177/002224299505900207>
- Robertson, J., Hatton C., Felce D., Meeke A., Carr D., Knapp M., Hallam A., Emerson E., Pinkey L., Caesar E., & Lowe K. (2005). Staff stress and morale in community based settings for people with intellectual disabilities and challenging behaviour: A brief report. *Journal of Applied Research in Intellectual Disabilities, 18*(3), 271-277. <https://doi.org/10.1111/j.1468-3148.2005.00233.x>
- Rose, J., Jones, F., & Fletcher, B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research, 42*(2), 163-172. <https://doi.org/10.1046/j.1365-2788.1998.00115.x>
- Salanova, M., Osca, A., Peiró, J. M., Prieto, F., & Sancerni, M. D. (1991). Significado del trabajo en los jóvenes en la transición e incorporación al mercado laboral. *Revista de Psicología General y Aplicada, 44*(1), 113-125.
- Schallock, R. L., Luckasson, R., & Tasse, M. J. (2019). The contemporary view of intellectual and developmental disabilities: Implications for psychologists. *Psicothema, 31*(3), 223-228. <https://doi.org/10.7334/psicothema2019.119>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample

- confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92. <https://doi.org/10.1037/t07164-000>
- Shirom, A. (2003). Job-related burnout: A review. In J. C. Quick & L. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 245-264). American Psychological Association.
- Stanley, D. J., Meyer, J. P., & Topolnytsky, L. (2005). Employee cynicism and resistance to organizational change. *Journal of Business and Psychology*, 19, 429-459. <https://doi.org/10.1007/s10869-005-4518-2>
- Swensen, S., Kabacene, A., & Shanafelt, T. (2016). Physician-organization collaboration reduces physician burnout and promotes engagement: The Mayo Clinic experience. *Journal of Healthcare Management*, 61(2), 105-127. <https://doi.org/10.1097/00115514-201603000-00008>
- Vassos, M., Nankervis, K., Skerry, T., & Lante, K. (2017). Can the job demand-control-(support) model predict disability support worker burnout and work engagement? *Journal of Intellectual & Developmental Disability*, 44(2), 139-149. <https://doi.org/10.3109/13668250.2017.1310818>
- Verdugo, M. A. (2018). Conceptos clave que explican los cambios en las discapacidades intelectuales y del desarrollo en España. *Siglo 0*, 49(1), 35-52. <https://doi.org/10.14201/scero20184913552>
- Warneken, F., & Tomasello, M. (2006). Altruistic helping in human infants and young chimpanzees. *Science*, 311(5765), 1301-1303. <https://doi.org/10.1126/science.1121448>
- Zhao, J. L., Li, X. H., & Shields, J. (2019). Managing job burnout: The effects of emotion-regulation ability, emotional labor, and positive and negative affect at work. *International Journal of Stress Management*, 26(3), 315-320. <https://doi.org/10.1037/str0000101>