

Research report

Editora:

Ana Paula Porto Noronha

Conflict of interest:

The authors declare that there are no conflicts of interest.

Received: 18/09/2022

Final version: 17/07/2023

Approved: 20/10/2023

<https://doi.org/10.1590/1413-8271202429e269673>

The Effects of a Psychological Flexibility Intervention on Well-Being at Work

*Angela Santos de Oliveira¹**Luciana Mourão^{1, 2}**Leonardo Fernandes Martins³*¹*Universidade Salgado de Oliveira (UNIVERSO), Niterói, Rio de Janeiro, Brasil*²*Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro, Brasil*³*Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio), Rio de Janeiro, Rio de Janeiro, Brasil***Abstract**

Psychological flexibility is considered a relevant resource for dealing with change processes. This study aimed to investigate the effects of a psychological flexibility intervention on well-being at work, with groups of workers in contexts of organizational change. Initially, a pilot study ($n=16$) was performed to fine-tune the protocol. Then, the intervention was conducted with a different group ($n=10$), with three face-to-face sessions and an external observer. We applied the Affective Organizational Commitment Scale and the Work Engagement Scale, considered components of well-being. To analyze the effectiveness of the intervention, we used the Jacobson and Truax Method, which compares the participants' scores before and after the intervention. The results showed that the intervention increased the perception of well-being at work. The study highlights promising psychological flexibility interventions in environments of organizational change, especially for increasing the involvement and commitment of workers.

Keywords: psychological flexibility; organizational change; well-being.

Os Efeitos de uma Intervenção em Flexibilidade Psicológica no Bem-Estar no Trabalho**Resumo**

Flexibilidade psicológica é considerada como relevante recurso para lidar com processos de mudanças. O objetivo deste estudo foi investigar os efeitos sobre o bem-estar no trabalho, advindos de uma intervenção de flexibilidade psicológica, com grupos de trabalhadores em contextos de mudanças organizacionais. Realizou-se um estudo piloto ($n = 16$), para ajustes no protocolo. Posteriormente, a intervenção foi conduzida com outro grupo ($n = 10$), contando com três sessões presenciais e uma observadora externa. Aplicou-se a Escala de Comprometimento Organizacional Afetivo e a Escala de Envolvimento com o Trabalho, consideradas como componentes do bem-estar. Para análise da efetividade da intervenção, utilizou-se o Método Jacobson e Truax, que compara os escores dos participantes antes e depois da intervenção. Os resultados mostraram que a intervenção ampliou a percepção de bem-estar no trabalho. O estudo permite apontar como promissoras intervenções de flexibilidade psicológica em ambientes de mudanças organizacionais, sobretudo para ampliar o envolvimento e o comprometimento dos trabalhadores.

Palavras-chave: flexibilidade psicológica; mudança organizacional; bem-estar.

Los Efectos de una Intervención de Flexibilidad Psicológica sobre el Bienestar Laboral**Resumen**

La flexibilidad psicológica es un recurso relevante para afrontar cambios organizacionales. Este estudio investigó los efectos de una intervención de flexibilidad psicológica en el bienestar laboral de trabajadores en cambios organizacionales. Se realizó un estudio piloto ($n=16$) para ajustar el protocolo. Luego, se realizó la intervención con otro grupo ($n=10$), constando de tres sesiones presenciales y un observador externo. Se aplicaron la Escala de Compromiso Organizacional y la Escala de Participación en el Trabajo, componentes del bienestar. Para analizar la eficacia de la intervención, usamos el método de Jacobson y Truax, comparando puntuaciones de los participantes antes y después. Los resultados mostraron que la intervención aumentó la percepción de bienestar en el trabajo. El estudio señala las intervenciones de flexibilidad psicológica en cambios organizacionales como prometedoras, especialmente para aumentar la implicación y compromiso de los trabajadores.

Palabras clave: flexibilidad psicológica; cambio organizacional; bienestar.

The socio-historical transformations resulting from advances in technologies, competitiveness, and globalization occurring in contemporary societies have been causing significant changes in the world of organizations (Stouten et al., 2018). Among such changes, those

resulting from organizational mergers, geographical dispersion, and the balance between policies and the autonomy of business units can be mentioned (Van de Ven et al., 2011). In this context, organizations have begun to require management of these changes as a way to adapt to the turbulence in their business environments (Grimolizzi-Jensen, 2018).

However, workers often do not possess the necessary personal resources to deal with these changes, including psychological flexibility. This flexibility can be described as the ability to contact the present moment, thoughts, and feelings without unnecessary defense and, depending on the situation, to persist or change behavior in pursuit of goals based on values (Hayes et al., 2006).

In this logic, psychological flexibility is conceptualized as a process through which individuals adapt to fluctuating situational demands, reconfiguring their mental resources and shifting perspectives, conflicting desires, and needs, with the aim of behaving consistently with their values and goals (Kashdan & Rottenberg, 2010). Individuals with this resource demonstrate openness to challenging experiences, seeking a more meaningful life with positive and healthy outcomes, such as improved mental health and reduced levels of anxiety (Pinto et al., 2015).

Acceptance and Commitment Therapy (ACT), developed in the field of contextual behavioral sciences, provides the basis for understanding psychological flexibility (Hayes et al., 2006). The acronym of this theory is “ACT,” referring its meaning to the verb “to act,” in reference to a therapeutic approach aimed at providing individuals with resources to act towards a meaningful life guided by personal values. Therefore, ACT, in addition to explaining, aims to provide means to influence individual attitudes and behaviors. Part of this process involves the conscious acceptance and assimilation of unpleasant events that arise when seeking to live a valued life, such as unwanted feelings and thoughts. This perspective is useful since the pursuit of a valued life often involves being frequently in contact with unpleasant events (Hayes et al., 1999).

Drawing on various positive experiences beyond the clinical context, including the application of some of its principles in the organizational context, the focus of ACT-based interventions is experiential training, based on an approach that uses verbal strategies and metaphors for the development of psychological flexibility (Flaxman et al., 2013). Psychological flexibility functions to mitigate the automatism of

behaviors. The construct involves six dimensions, namely: (i) mindfulness, concerning contact with the present moment; (ii) committed action, comprising the ability to be open to flexibility toward personal values; (iii) acceptance, comprising the individuals’ ability to exhibit appropriate behavior in the presence of aversive conditions; (iv) self-as-context, referring to the ability to construct different perspectives of the individual regarding who they are and how they describe themselves; (v) defusion, comprising individuals’ observation of their own verbal behaviors (thoughts) without seeking to govern them; (vi) values, focusing on the ability to explore the meaningful purpose of one’s own life and choices (Flaxman et al., 2013; Moran & Ming, 2020).

There is a growing body of research pointing to significant relationships between psychological flexibility and individual and organizational variables (Flaxman et al., 2013), such as mental health and job performance (Bond & Bunce, 2003). Bond and Bunce (2000) published the first evaluation of ACT as a workplace training program. The results of the intervention with 90 volunteers in a media organization showed the benefits of using ACT, through increased psychological flexibility, resulting in improvements in mental health and job satisfaction.

In the context of work, psychological flexibility concerns the individual’s ability to emit behaviors consistent with the achievement of their work goals and values, even in the presence of internally difficult-to-accept experiences (such as fear of taking initiative), without unnecessary defenses or evasions (Bond et al., 2013). There is evidence that psychological flexibility is positively related to different constructs.

From this perspective, an important longitudinal study conducted among call center workers in the UK ($N = 448$) presented evidence that respectively, job control, psychological flexibility, and the synergistic interaction between them, predicted individuals’ ability to learn a new computer software program ($\beta_{\text{control}} = .40$; $p < .001$, $\beta_{\text{flexibility}} = .17$; $p < .001$, $\beta_{\text{interaction}} = .11$; $p < .001$), protect themselves from worse mental health ($\beta_{\text{control}} = .31$; $p < .001$, $\beta_{\text{flexibility}} = .42$; $p < .001$, $\beta_{\text{interaction}} = -.49$; $p < .001$), and improve their job performance ($\beta_{\text{control}} = .40$; $p < .001$; $\beta_{\text{flexibility}} = .23$; $p < .001$, $\beta_{\text{interaction}} = .22$; $p < .001$) (Bond & Flaxman, 2006). In a correlation study with 583 Brazilian workers, a positive relationship was identified between flexibility and openness to experience ($r = .15$; $p < .001$), engagement with work

($r = .30$; $p < .001$), and overall health ($r = .28$; $p < .001$) (Pinto et al., 2015).

Psychological flexibility enables greater openness to change processes, preventing barriers generated by the fear of these changes from negatively impacting workers' well-being (Tement et al., 2020). Accordingly, psychological flexibility would optimize psychological resources, contributing to meeting the demands and challenges of daily life through adaptation to situations, with actions that allow the achievement of goals (Kashdan & Rottenberg, 2010).

The development of flexibility can facilitate adaptation to changes, allowing workers to transform how they deal with fear, perceiving it as an emotion that indicates that something important is happening and is not something to be avoided. This can generate interest in new opportunities when dealing positively with transitional moments. Therefore, individuals with more psychological flexibility have a greater capacity to perceive existing opportunities in the work environment and respond to them, increasing their levels of well-being (Bond et al., 2008).

Well-being at work is a multidimensional psychological construct, integrated by positive affective ties with work (work engagement) and with the organization (affective organizational commitment), to the extent that they encompass pleasurable and meaningful connections in the work context (Siqueira et al., 2014). In this context, interventions guided by the cognitive-behavioral approach, such as ACT, which incorporate mindfulness and orientation to a valued life as one of their pillars, have been shown to be effective in reducing emotional exhaustion and increasing job satisfaction and work-life balance (Michel et al., 2014; Wolever et al., 2012).

Specifically, intervention studies comparing control and experimental groups and using ACT as a basis in the work context have shown a significant improvement in psychological flexibility and a reduction of anxiety in the work environment (Deval et al., 2017; Khoramnia et al., 2020; Pang et al., 2022). Other interventions based on ACT indicate significant improvements in workers' emotional exhaustion and mental health (Macías et al., 2019; Wersebe et al., 2018), as well as a reduction in depression and an increase in pain acceptance (Ghorbani et al., 2021).

Given the revisited literature and the growing concern for workers' psychological health (Flaxman et al., 2013; Macías et al., 2019; Pinto et al., 2015; Wersebe et al., 2018), this study is of importance for

organizations, especially professionals in the human resource management area, who can make use of interventions based on ACT. The proposal is to evaluate to what extent the psychological flexibility training adopted as an intervention in this study, following the ACT protocol (Flaxman et al., 2013), is effective in increasing well-being at work, measured through two of its components: work engagement and organizational commitment (Siqueira et al., 2014).

Additionally, the study may also favor the development of national research aimed at evaluating the impact of interventions aimed at environments of organizational change. Given these considerations, the present study aimed to investigate the effects on well-being at work resulting from a psychological flexibility intervention, with groups of workers in contexts of organizational change (e.g., changes in the way of working, implementation of technological systems, transition to remote work, and changes in leadership, among others). Therefore, the two hypotheses established for the study were: H1 – The intervention will increase participants' organizational commitment; H2 – The intervention will increase participants' work engagement. The detailed method and how the intervention was conducted are presented in the next section.

Method

Design

This was an intervention-based study conducted in two stages. The first stage, carried out to evaluate the protocol, involved a sample referred to as the pilot group (PG), and the second stage involved an intervention group (IG), in a pre-experimental design where the protocol analyzed in the previous stage was applied and evaluated (Campbell, 1966). Accordingly, there was no control group, however, an assessment was performed before and after the intervention, both in the PG - which allowed the protocol to be tested and refined - and in the IG, which allowed the effect of the intervention to be evaluated.

Description of the Intervention

The ACT training was proposed by Flaxman et al. (2013) in a protocol organized as a practical guide, which understands psychological flexibility as resulting from six mutually related skills. To develop these skills, the intervention consists of three sessions of approximately 150 minutes each, conducted in a face-to-face format. Following its recommendations, the first session focused on mindfulness and committed action,

representing the behavioral facet of the training. Based on the protocol mentioned, a strategy of six metaphors was used to develop the activities.

In the first session, in addition to the experiential introduction to the skills of mindfulness and committed action, participant socialization was also carried out. We sought to establish a connection with and among the group, fostering a friendly and safe atmosphere. Techniques such as conscious breathing, definition of values, and application of values to specific actions began to be worked on in this initial session.

In the second session, a brief review of the contents covered in the first meeting was conducted, as well as experiential metaphor exercises directed towards different ACT processes, with a special focus on cognitive defusion and acceptance. New techniques related to contact with the present moment, clarification of values, and committed action were also introduced.

The third and final session was essentially practical and aimed to consolidate mindfulness and committed action skills, as well as to serve as reinforcement. Participants were encouraged to practice what was taught in the previous sessions. This session also represented an opportunity for participants to reconnect with ACT principles through the practice of some key exercises. It should be noted that at the end of each of the previous sessions, there was an indication of individual activities related to the content that should be developed as practical exercises between sessions. Table 1 details how we conducted the intervention.

Participants

Both the PG and the IG samples consisted of Psychology undergraduates, studying in the same semester at a private university in Rio de Janeiro. We established four inclusion criteria for the study, namely: (i) being at least 18 years of age; (ii) having been working for at least one year in an organization; (iii) experiencing organizational changes in their work context (which was assessed through two questions about their experience with these changes and the type of changes experienced); and (iv) agreeing to participate in the study and signing the consent form.

Only participants who attended all three sessions were included in the study. The PG started with 49 participants, of which 16 (32.7%) remained in the study. After completing the PG and the definition of adjustments in the intervention protocol, another 24 participants were recruited for the IG, comprising a new independent sample, of which 10 remained until

the end (41.7%). In both groups, the majority were female (81.0% and 90.0%, respectively). The mean age was 33.5 years (standard deviation of 12.4) for the PG and 35.6 years (standard deviation of 11.9) for the IG. The participants had various occupations such as salespersons, administrative assistants, nursing technicians, teachers, business administrators, and cashiers, among others.

Instruments

To measure well-being at work, we chose to investigate two variables that are considered to be its components: work engagement and organizational commitment (Siqueira et al., 2014). The Affective Organizational Commitment Scale (*Escala de Comprometimento Organizacional* - ECOA) by Bastos et al. (2008), was applied in its reduced version of 5 items, answered using a Likert-type scale from 1 – strongly disagree to 5 – strongly agree. Example item: “I am happy with the company where I work.” The reliability coefficient (Cronbach’s alpha) of the ECOA in the original study was .93.

The Work Engagement Scale (*Escala de Envolvimento com o Trabalho* – EET), by Siqueira (2008), was also applied in its reduced version of 5 items, answered using a Likert-type scale from 1 – strongly disagree to 5 – strongly agree. Example item: “The greatest satisfactions of my life come from my work.” The reliability coefficient (Cronbach’s alpha) in the original study was .78.

Although there are measures of psychological flexibility, we chose not to use any instrument with psychometric properties for this measurement, since there are criticisms in the literature regarding the quantitative and collective measurement of this construct, with an idiographic approach that is more focused on its processual evaluation being advised (Hayes et al., 2022). This is because ACT focuses on the development of specific skills, with changes that may manifest uniquely or particularly in individuals. Accordingly, in the present study, at the beginning of Session 2 and Session 3, we encouraged participants to share experiences they had between sessions and possible changes they had noticed in their behaviors. These manifestations were recorded by the two psychologists (the conductor and the observer) after the sessions, as a way to monitor the development of flexibility in a processual manner. Sociodemographic data were also included in the questionnaire for sample characterization, including gender, age, marital status, education, salary range,

Table 1.
Description of the three intervention sessions

	Sessions and their stages	Techniques and activities developed
S1	Welcome and introduction; Overview of the training. Introduction to mindfulness; Introduction to committed action. Presentation of the central concept of the training; Homework exercises.	Introductory mindfulness exercise; presentation of the two-skills diagram. Exercise on contacting the present moment; Body and breath awareness exercise; Values cards; Compass metaphor; Defining a value and translating it into specific actions for the next week. Two sheets of paper technique; Homework activities; Visual reminders.
S2	Introduction to mindfulness exercises; Review of homework exercises; Presentation of the training. Untying internal barriers to committed action; Mindfulness of mood states. Setting goals and action plan; Homework exercises.	Conscious breathing, awareness of flexible internal events; Pair and group discussion; Bus passengers metaphor. Self-reflection on uncomfortable internal events; cartoon character voices technique; physical demonstration of fusion/defusion; thoughts on a screen exercise; Physicalization exercise. Building goals for the upcoming weeks and action plan; Homework activities; Visual reminders; Public commitment to a goal.
S3	Welcome; Mindfulness practice; Review of homework exercises; Accessing valued consistency. Mindfulness of thoughts and emotions. Setting goals and committed actions; Recommendations for ongoing practice; Final personal reflections on the training.	Two-skills diagram; Conscious breathing; Pair and group discussion; Self-reflection on actions consistent with values in the past weeks. Thoughts in clouds exercise; Physicalization exercise; Activity for developing the resilient perspective of the “observer.” Goal-setting exercise based on short, medium, and long-term values; Committed actions map; Practice at home; Tips for building a valued life; Conclusion.

Note. S1 - First Session; S2 - Second Session; S3 - Third Session.

profession, organization sector they work in, and current and total work time.

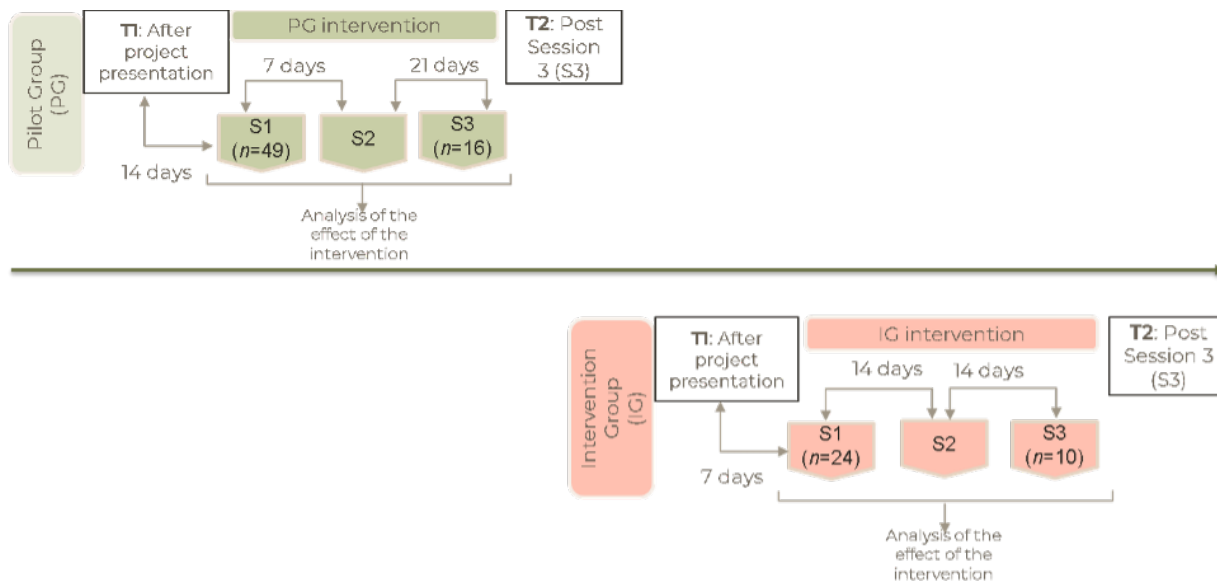
Procedures and Ethical Considerations

This study was previously approved by a Research Ethics Committee, and all ethical principles expected of research involving human subjects were respected, including providing information about the study's objectives and characteristics, maintaining confidentiality of individual information, ensuring the right to voluntary participation, and the option to withdraw from the study. For both groups, the invitation was extended through an online presentation to promote

the intervention, and the pre-intervention questionnaire was sent to all who agreed to participate in the study.

The intervention was conducted by a psychologist and was externally observed by another psychologist, both familiar with the intervention's content. The observer attended the sessions in person and provided feedback between sessions, which was important for redesigning the intervention between the PG and the IG.

As depicted in Figure 1, the interval between sessions was modified after the PG, with a reduction in the time between the intervention promotion lecture, establishing equal intervals for the subsequent sessions (S1-S2 and S2-S3). This alteration was made due to the



Note. Online Presentation Session = presenting intervention procedures, S1=Session 1 (mindfulness and committed action), S2=Session 2 (acceptance and cognitive defusion), S3=Session 3 (reinforcement)

Figure 1. Flowchart of the Intervention Sessions and Data Collection

participants presenting disengagement when the session interval was too long. Another lesson learned from the pilot study was the group size. It was identified that a group composed of 49 people made it difficult to provide a more individualized exploration of experiences.

The intervention with the IG was only initiated after the completion of the PG, with participants from both groups responding to the same research instruments. Figure 1 graphically presents the intervention design and the data collection moments.

Data Analysis

The evaluation of the intervention for the IG was performed by comparing the scores of the well-being at work components (work engagement and organizational commitment) obtained in the pre- and post-intervention situations, with the latter immediately after its completion. For this comparison, we used the Jacobson and Truax Method (JT), comparing each participant with themselves before and after the intervention. The method calculates a Reliable Change Index (RCI) based on the z -score, indicating whether the scores obtained after the intervention (T2) are significantly better than the scores obtained before the intervention (T1). Based on the standard error of the difference derived from the means and standard deviations and the precision of the scale used in the

measurement, the JT Method provides information about the range in which a statistically reliable change can be considered. Therefore, for each study participant, an evaluation is made between the pre-intervention and post-intervention scores, indicating whether there was a reliable positive change (RPC), no change (NC), or a reliable negative change (RNC) (Del Prette & Del Prette, 2008; Jacobson & Truax, 1991).

The interpretation of the RCI is that participants present a clinically relevant change in situations where the post-intervention assessment is at least two standard deviations (95% confidence interval) above the score obtained in the pre-intervention measure (Del Prette & Del Prette, 2008). Therefore, in the JT method, the changes that occurred are evaluated, and possible individual outcomes are identified. The technique is indicated for ACT interventions, as it is based on the central pillars of Cognitive-Behavioral Theory.

Results

Results of the Pilot Group

The results of the pilot group served to generate improvements in the intervention, which was retested for the intervention group. The first result concerns the rate of participant withdrawal from the intervention, as only 33% of the 49 individuals who participated

in session 1 completed session 3. Furthermore, the comparison of scores at T1 and T2 did not show very favorable results. While 8 out of 16 participants showed reliable positive changes in organizational commitment scores, only one participant showed improvements in work engagement.

This result indicated the need for improvements in the intervention design. The first change was to reduce the maximum number of places from 50 to 25, aiming to provide more individualized attention for each participant. The second change was to reduce the time between the online presentation session and the first session, so that the interval, which was two weeks, was reduced to one week. This change aimed to ensure the initial level of interest of the participants. The third and final change was the standardization of the interval between the three sessions, which became two weeks. In the pilot group, these intervals were seven days between session 1 and session 2 and 21 days between session 2 and session 3. The establishment of regular intervals aimed to create a faster pace in adherence and completion of homework tasks, as well as to avoid too much time lapse between the initial two sessions and the maintenance session. The changes made resulted in improvements in the intervention results, as will be presented in the next section.

Results of the Intervention Group and Testing of the Hypotheses

The results of the investigated variables suggest that Hypothesis 1 (the intervention would increase

participants' organizational commitment) was partially confirmed, as 4 out of 10 participants showed reliable positive changes in the comparison of the initial (T1) and final (T2) organizational commitment scores. Hypothesis 2 (the intervention would increase participants' work engagement so that it would be higher at the end of the intervention) presented a very favorable result, as 7 out of the 10 participants (comparing T1-T2) obtained reliable positive changes. These results support the confirmation of this second hypothesis.

Table 2 presents the results of the intervention group at the two data collection times. The information regarding the RCI allows the evaluation of the possible changes that occurred in each of the participants in the variables of Organizational Commitment and Work Engagement.

In addition to the results measured by the scales that were applied, there were several participant reports indicating advances in terms of increased awareness of their thoughts, greater ability to manage feelings, and more commitment to actions based on personal values. These results align with what is predicted in ACT and the theories that support it, indicating the development of psychological flexibility in a procedural manner (Hayes et al., 1999). Some examples of reports indicating gains in terms of psychological flexibility and well-being in the workplace were classified as follows: flexibility and tolerance for facing adverse situations; reduction of procrastination behaviors and improvement in managing daily work

Table 2.

Pre- and post-intervention results obtained with the Intervention Group

IG	Organizational Commitment			Work Engagement		
	T1	T2	Result	T1	T2	Result
1	3.20	4.80	RPC	3.75	4.50	RPC
2	3.00	3.00	NC	3.00	3.00	NC
3	1.40	1.00	NC	1.50	2.25	RPC
4	3.00	3.00	NC	2.25	3.00	RPC
5	4.80	5.00	NC	2.75	2.75	NC
6	3.00	4.60	RPC	2.75	3.50	RPC
7	1.20	3.00	RPC	1.50	3.25	RPC
8	4.20	4.60	NC	2.50	3.50	RPC
9	3.80	3.60	NC	2.75	3.00	NC
10	1.20	3.00	RPC	2.25	3.00	RPC

Note. IG = Intervention Group; RPC = Reliable Positive Change; NC = No Change; T1 = Score before intervention; T2 = Score after intervention.

routines; and the ability to reframe frustrating experiences in the workplace.

Discussion

The present study aimed to investigate the effects of an ACT-based psychological flexibility intervention on workplace well-being in groups of workers experiencing organizational changes. When analyzing the intervention results together, we observed positive effects on workplace well-being, particularly in work engagement, which clearly depends on workers' attitudes. The results were higher in work engagement than in work commitment. This may have occurred because the intervention was conducted with psychology students working in positions and careers that were not connected to their career goals at that time but were directed towards personal support and funding their higher education.

Therefore, the results in participants' scores before and after the intervention corroborate previous findings demonstrating the benefits of ACT for improving job satisfaction (Bond & Bunce, 2000), reducing workplace anxiety (Deval et al., 2017; Khoramnia et al., 2020; Pang et al., 2022), and significantly improving emotional exhaustion and mental health of workers (Macías et al., 2019; Wersebe et al., 2018). The results observed in the intervention group may indicate that the changes made to the intervention after the pilot group had favorable effects. The reduction in the number of participants may have also contributed positively as it allowed for more individualized treatment and facilitated the creation of trust within the group for the disclosure of personal situations (Flaxman et al., 2013).

Another point of reflection is that the intervention was conducted post-COVID-19 pandemic and the end of social isolation. Despite this context, it is noteworthy that the scores for both work commitment and work engagement were high at the beginning of the intervention and remained high or improved throughout the process, as no person's scores decreased, which is often observed over time among individuals exposed to organizational change contexts (Stouten et al., 2018).

The development of psychological flexibility was addressed through various practical activities and metaphors throughout the sessions. The ACT-based protocol aimed to develop knowledge, skills, and attitudes focused on proactive self-awareness and adaptation skills for the rapid changes required in the current work context.

The evaluation indicates that the promotion of greater well-being at work was successful as awareness of a more meaningful life based on values was expanded, enabling better management of unwanted thoughts, fears, and insecurities generated by the organizational changes (Bond & Flaxman, 2006). The positive effect of the intervention in this study corroborates evidence for the effectiveness of interventions based on ACT (Flaxman et al., 2013; Hayes et al., 2006). The results seem to indicate that the intervention enabled a change in participants' attitudes through conscious acceptance of unpleasant events while keeping their values in perspective (Hayes et al., 1999). Accordingly, by increasing awareness and attention to experiences of the present moment, the individuals adopted skills of adaptation to situations in their lives, especially in the workplace (Althammer et al., 2021; Dinesh et al., 2022; Tement et al., 2020).

This study therefore corroborates previous studies that have indicated favorable results in developing psychological flexibility skills to improve the adaptation to new experiences (Pinto et al., 2015), as well as higher levels of learning new skills and worker well-being (Bond & Flaxman, 2006; Hayes et al., 2006). The performance of this intervention study allowed the proposal of a causal relationship between psychological flexibility skills and well-being at work in change contexts. This aligns with studies indicating that psychological flexibility enables greater openness to change processes, avoiding the barriers generated by fear of these changes negatively impacting worker well-being (Tement et al., 2020). In other words, psychologically flexible individuals have a greater ability to perceive opportunities in the workplace and respond to them, increasing their levels of well-being (Bond et al., 2008). This would explain the significant growth in work engagement scores that the intervention participants presented.

However, the results related to work commitment may have been influenced by the precariousness of the work environments and job insecurity. Additionally, the global context at the time of the intervention, shortly after the end of social isolation caused by the COVID-19 pandemic, could have influenced the results. Another factor that may have affected the results is the participants' education level (high school), which typically involves jobs with lower autonomy and reduced flexibility in performing tasks.

In addition to the well-being scores measured before and after the intervention, participants reported

personal changes associated with the activities developed in the sessions. Examples of these reports include: “I came in as one person and I’m leaving as another person”; “I can better organize my time and achieve my goals”; “I feel better at work and deal with unpleasant situations”. These reports demonstrate an expansion of self-awareness, as well as changes in the workers’ attitudes. Through verbal strategies and metaphors, ACT-based intervention allows individuals’ behavioral repertoire to expand, which also contributes to understanding the positive results obtained in terms of organizational behavior variables.

Considering that relatively few organizations adopt a broader perspective to deal with workers’ well-being, the intervention presented here can be associated with organizational practices that may contribute to different outcome variables in the workplace context. Greater awareness of attention focused on worker health and well-being has the potential to strengthen and enhance the quality of workplace relationships (Lam et al., 2019). Workplace well-being intervention approaches tend to be associated with other positive variables in the workplace context, favoring more natural processes of change and the construction of inherently healthier workplaces (Karanika-Murray & Weyman, 2013).

As a central contribution to researchers and professionals working in people management and change processes, this study indicates the studied intervention as promising in producing improvements in terms of work engagement and the organizational commitment of workers. The absence of a control group with random allocation of participants into two study arms is an important limitation that needs to be addressed in future studies. Despite this, it is possible to associate the results obtained with the intervention considering there was a set of verbal feedback from participants regarding the effects they perceived in their lives. Therefore, the proposed design of a face-to-face intervention, based on the ACT protocol, with regular intervals of two weeks between sessions and with groups with a maximum of 24 participants has a high potential for replication in future studies.

The fact that the intervention was conducted in a group favored the exchange process, as participants had other interlocutors who could listen to their stories, expanding the possibilities for reflection on the responses. This would be expected since group interventions increase the frequency of shared activities

among workers, which can improve their workplace well-being (Daniels et al., 2017).

The design of the intervention anchored in ACT (Flaxman et al., 2013) provided solidity to the practices developed and the possibility of discussing the results based on this theoretical framework. Therefore, the skills that make up psychological flexibility (mindfulness, committed action, self-as-context, acceptance, defusion, and values) were stimulated (Flaxman et al., 2013; Moran & Ming, 2020), and the results indicate positive effects for both participants and the organizations to which they were linked, as significant gains were obtained in organizational commitment and work engagement.

From this perspective, the results obtained in the study encourage further studies that adopt ACT as a base theory and consider the three sessions as part of the classic application protocol. Researchers and professionals working with organizational change management have another resource to use in research and practice, with the advantage of having been specifically tested in contexts of change.

Another practical implication is in the testing of the intervention with workers from different professions and age groups. Accordingly, the favorable results obtained in the study indicate that people managers can develop face-to-face and group interventions with heterogeneous audiences, with smaller groups being more advisable. Operating in groups with low homogeneity can be one of the advantages of this methodology, as it expands the possibilities of its application in different contexts.

As a limitation, despite the data collection encompassing different professions and age groups, it is necessary to consider that the study involved a small number of workers. It is also necessary to consider that the measurement of results occurred after a conceptual lecture on psychological flexibility and ACT. Additionally, the instruments used at all data collection times were the same, which may have resulted in an experience of responding to the same questions at different times. In this sense, we suggest intervention studies with larger samples, subdivided into different experimental groups, as well as initial data collection before the conceptual explanations of ACT.

Finally, we suggest studies that adopt other indicators of intervention effectiveness, such as workers’ openness to change processes and less resistance to organizational changes. We also suggest testing interventions with even smaller groups and individual follow-up

through interviews and/or diary records, aiming to assess specific evolutions and redirection of actions.

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Acknowledgments:

We would like to thank the research participants, the Núcleo de Estudos em Trajetória e Desenvolvimento Profissional - APRIMORA, for all contributions, as well as the institutions that funded the authors' research: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – CAPES (Code 001); Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro - FAPERJ (E-26/202.913/2018); and Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq (311162/2021-5).

Research Ethics Committee Approval: CAAE 56385922.4.0000.5289.

About the authors:

Angela Santos de Oliveira is a Psychologist, Master's holder, and doctoral candidate in Psychology from the Graduate Program at Salgado de Oliveira University (UNIVERSO, Niterói, Brazil). Manager of information technology projects. ORCID: <https://orcid.org/0000-0002-0347-6325>
E-mail: angelacoliveira3@gmail.com

Luciana Mourão is a Psychologist, Master's in Administration and PhD in Psychology from the University of Brasília. Currently a Professor in the Psychology Graduate Program at Salgado de Oliveira University (UNIVERSO, Niterói, Brazil) and Visiting Professor at the State University of Rio de Janeiro (UERJ, Rio de Janeiro, Brazil). ORCID: <https://orcid.org/0000-0002-8230-3763>
E-mail: mourao.luciana@gmail.com

Leonardo Fernandes Martins is a Psychologist, Master's and PhD in Psychology from the Federal University of Juiz de Fora. Currently a Professor in the Psychology Graduate Program at the Pontifical Catholic University (PUC-Rio, Rio de Janeiro, Brazil). ORCID: <https://orcid.org/0000-0002-0941-6294>
E-mail: leomartinsjf@gmail.com

Contact:

Angela Santos de Oliveira
Rua Comandante Ituriel, 1.612, Bloco 85, Unidade 05, Fluminense
São Pedro D'Aldeia-RJ, Brasil
CEP: 28941-348
Telefone: (22) 9.8858-2802