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Self-efficacy at Workplace: Validation of Spanish Versions of Occupational Emotional, Social, and Task Self-efficacy scales

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Original Article

Abstract

Self-efficacy is one of the most important resources in the workplace. We adapted "Occupational Emotional, Social, and Task Self-efficacy at Work scales" to Argentinian employees providing new validity evidence of the cross-cultural equivalence. 771 Argentine employees participated of both genders (58% women), aged between 18-76 years (*M* = 31.18; *SD* = 10.95), and 55% of the participants had an incomplete university education level. Data were collected using a "Spanish version self-efficacy at work scales" and "Professional Self-Efficacy Questionnaire". Exploratory Factor Analysis have found a three-factor structure explaining the 38% of the variance of self-efficacy at workplace. However, confirmatory factor analyses have demonstrated that the four-factor solution presents a better fit (CFI = .986; RMSEA = .028; SRMR = 0.057). The Spanish version of the self-efficacy scale maintains the same original structure and demonstrate adequate reliability and validity for Argentinian workers. Implications for future organizational research and practice are discussed.

Keywords:
self-efficacy at work, validation, occupational task self-efficacy, emotional self-efficacy, social self-efficacy.

Resumen

Autoeficacia en el Trabajo: Validación de las Versiones en Español de las Escalas de Autoeficacia Ocupacional Emocional, Social y en la Tarea. La autoeficacia es uno de los recursos más importantes en el trabajo. El objetivo fue adaptar las escalas "Occupational Emotional, Social, and Task Self-efficacy at Work". Participaron 771 empleados argentinos, 58% fueron mujeres, de edades entre 18-76 años (*M*= 31.18; *DE*= 10.95) y 55% nivel universitario incompleto. Se administraron la versión traducida al español de las escalas de autoeficacia en el trabajo y el "Cuestionario de Autoeficacia Profesional". Los resultados del AFE muestran tres factores que explican el 38% de la varianza de la autoeficacia laboral. Sin embargo, según el AFC el modelo de cuatro factores (autoeficacia en la tarea, social, emocional orientada hacia uno mismo y emocional orientada a otros) presenta mejor ajuste a los datos (CFI= .986; RMSEA= .028; SRMR= 0.057). Esta versión presenta una adecuada confiabilidad y validez en población trabajadora de Argentina. Se discuten las implicaciones para la investigación y evaluación en el ámbito organizacional.

Palabras clave:
autoeficacia en el trabajo, autoeficacia en la tarea, autoeficacia emocional, autoeficacia social.

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Introduction

Self-efficacy refers to a person's perceived ability to perform tasks and achieve goals that result in favorable outcomes as job performance (Ferrari, Nunes, & Marín, 2018; Roman, 2017; Wang, Chang, Yao, & Liang, 2016). Self-efficacy impacts thinking, feelings, effort, and motivational behavior contributing significantly to the attainment of achievements in different areas of life such as work, family, social interactions, thus people with high self-efficacy believe in their own abilities to mobilize

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the motivation, cognitive resources and the necessary course of action, to exert control over the events of their lives (Ferrari et al., 2018; Pereyra Girardi et al., 2018). According to Bandura (1997) the efficacy beliefs system is not a global trait but a diverse set of specific beliefs according to different functioning areas. Self-efficacy impacts on the choice and selection of reactions, as well as on the effort and perseverance of people when coping adverse situations (Llorens, García-Renedo, & Salanova, 2005; Vancouver, More, & Yoder, 2008). Specifically, within the professional work context, self-efficacy is one of the most important psychological resources (Heuven, Bakker, Schaufeli, & Huisman, 2006; Judge & Bono, 2001; Loeb, Stempel, & Isaksson, 2016; Rigotti, Schyns & Mohr, 2008; Sadri & Robertson, 1993; Stajkovic & Luthans, 1998) impacting on the type of coping strategy used to deal with labour demands (Salanova, Grau, & Martínez, 2006), on the motivation, work engagement and work satisfaction (Bargsted, Ramírez-Vielma, & Yeves, 2019; Llorens, Schaufeli, Bakker, & Salanova 2007; Salanova, Llorens, & Schaufeli, 2011; Spontón et al., 2018).

Given the crucial role of self-efficacy beliefs on the health, well-being and performance at workplace, the use of reliable and valid measures of this construct is required, taking into account not only the recent changes in the labor market but also the cultural diversity (Loeb, 2016; Rigotti et al., 2008). On one hand, more diverse skills are required involving not only generalized cognitive abilities but also emotional and relational skills (Pepe, Farnese, Avalone & Vecchione, 2010). On the other hand, globalization and migration movements between close Latin-countries demands validation of integrative measures which should take into account all these aspects. In addition, a previous study demonstrated that self-efficacy beliefs are differentiated as the professional acquires better skills and as he/she is able to distinguish between abilities demanded by the task and those required in the interaction with others (Dominguez-Lara, Fernández-Arata, Merino-Soto, Navarro-Loli, & Calderón-De la Cruz, 2019). Although some self-efficacy measures have been adapted in Argentinian population to be applied in specific jobs or areas (e.g. “Brief version of the Questionnaire Labor Self-efficacy”: Maffei, Spontón, Spontón, & Medrano, 2010; “Professional self-efficacy”: Maffei, Spontón, Spontón, Castellano, & Medrano, 2012; “Teacher Self-Efficacy Scale”: Menghi, Oros, & Abreu Marinho, 2015), they don't analyze the occupational task, social and emotional dimensionality of self-efficacy at work at the same time. Therefore, the purpose of the present study was to translate and validate the three Occupational scales of Loeb et al. (2016): Emotional, Social and Task Self-efficacy scales in a sample of Argentinean employees.

Original scales were developed for Loeb et al. (2016) as brief measures for a wide range of workplaces. The authors included items to measure occupational task (Rigotti et al., 2008), and they developed items to address social, and emotional self-efficacy. Loeb et al. (2016) found social and emotional self-efficacy to be well differentiated from the cognitive task-oriented self-efficacy scale. The confirmatory factor analysis results have found four correlated self-efficacy dimensions at work: (1) occupational task, (2) social, (3) self-oriented emotional and (4) other-oriented emotional. Subsequently, two-group comparisons of invariance between the Swedish (n = 226) and German (n = 591) language versions were carried out to check for differences in measurement. On one hand, predictive validity was found for the social sub-scale predicting team climate over and above the occupational Task scale. On the other hand, self-oriented emotional self-efficacy showed a unique significant contribution of the variance in emotional irritation and emotional exhaustion beyond occupational self-efficacy (Loeb et al., 2016). Criterion validity was analyzed considering country and gender differences: women score greater than men in the other-oriented emotional self-efficacy scale but only in German employees. The same factorial structure and reliability were demonstrated for both Swedish and German language versions. Therefore, according to the specific domain of self-efficacy, there are three occupational dimensions: Task self-efficacy, social self-efficacy, and emotional self-efficacy.

Occupational Task Self-efficacy

This concept refers to the belief and confidence in the own abilities to perform tasks involved in his or her job (Schyns & von Collani, 2002; Rigotti et al., 2008). People with high occupational task self-efficacy believe in their ability to move their cognitive resources and the course of action necessary to take control over the events of their lives (Bandura, 1977). They feel capable of

performing tasks and perform them better. People with high occupational task efficacy persist in it, even in adversity, and they tend to interpret the problems more as challenges than threats. They increase their effort in the face of possible failures, and in case this happens they quickly recover their sense of effectiveness. Likewise, they face threats with the assurance that they can control those (Martínez & Salanova, 2006).

Occupational Social Self-efficacy

This factor involves "employee's confidence in his/her ability to engage in the social interactional tasks necessary to initiate, maintain and develop interpersonal relationships at work" (Smith & Betz, 2000, p. 286). Employees with high social self-efficacy can complete effective social tasks at the workplace, as well as develop and maintain good relationships with others in the organization. They are probably going to like their co-workers and get help from them (Fan et al., 2013). In addition, social self-efficacy can be essential for building a team climate (Loeb et al., 2016)

Occupational Emotional Self-efficacy

Bandura (1997) defines emotional self-efficacy as an employee's confidence in his or her ability to perceive, understand, regulate and use emotional information at work. Emotional self-efficacy includes a network of beliefs regarding one's ability to achieve results at different levels of specificity of emotional functioning (Schutte, 2018). Thus, these employees are able to recognize emotions and help to modify the emotions of others (Kirk, Schutte, & Hine, 2008, 2011). However, several studies have shown the importance of differentiating two dimensions: self- and other-oriented emotional self-efficacy (Choi, Kluemper, & Sauley, 2013; Dacre Pool & Qualter, 2012; Eklund, Loeb, Hansen, & Andersson-Wallin, 2012; Loeb et al., 2016). Self-oriented dimension focuses on personal development, and the other-oriented dimension aims to the relationships, interaction, and group dynamics (Loeb et al., 2016). Self-oriented emotional self-efficacy may be relevant for reducing emotional irritation and exhaustion (Fan et al., 2013; Loeb et al., 2016). Other-oriented emotional self-efficacy could be more relevant for leaders because they have to care and understand their staff (Deschênes, Dussault, & Fernet, 2016; Loeb, 2016; Loeb et al., 2016).

Professional self-efficacy

According to Cherniss (1993), professional self-efficacy is defined as people's beliefs in the ability to correctly fulfil their professional role. This construct involves workers' beliefs about their own abilities to carry out successfully activities related to their profession (Maffei et al., 2012). These beliefs affect the choice and development of new activities. People tend to avoid activities that they think exceed their capabilities and perform those they consider capable of mastering. It has been observed that the beliefs of professional self-efficacy determine the amount of time that workers spend solving problems (Salanova, Bresó, & Schaufeli, 2005). Based on this concept we expect:

Hypothesis 1. Self-efficacy at work will be positive correlated with professional self-efficacy.

Gender differences

Several studies suggest that gender roles can affect self-efficacy scores. In terms of occupational self-efficacy, previous research shows that men report higher occupational self-efficacy than women (Abele & Spurk, 2009; Deschênes et al., 2016; Loeb et al., 2016; Williams & Betz, 1994). However, these differences vary according to the work domain: men have high scores in business and logical skills while women reported high self-efficacy in social and artistic domains (Feehan & Johnston, 1999; Koumoundourou, 2004; Lucas, Wanberg, & Zytowski, 1997).

Although the role of the female gender is associated with a social nature and it is expected that women report greater social self-efficacy than men (Eagly & Wood, 2011), Loeb et al. (2016) report no differences in gender for social self-efficacy. For emotional self-efficacy, previous research indicates that women are generally perceived to be better identifying and dealing with emotions of others, and understanding their own emotions (Deschênes et al., 2016; Loeb et al., 2016). Based on these previous studies, it is hypothesized that:

Hypothesis 2a. Men will report higher task self-efficacy than women.

Hypothesis 2b. Women will report a higher social self-efficacy than men.

Hypothesis 2c. Women will report higher self-oriented and other-oriented emotional self-efficacy than men.

People in charge

Previous research has found that managers that have higher task self-efficacy are considered

more reliable in their ability to complete work demands (Locke, Frederick, Lee, & Bobko, 1984). In addition, solidarity behavior leadership and positive feedback are effective to the development of other's self-efficacy (Bandura, 1997,1999; Gist & Mitchell, 1992). Loeb et al. (2016) have found that social self-efficacy is an important predictor of team climate over and above occupational task self-efficacy. Luthans and Peterson (2002) reported positive correlations between self-efficacy and managers' engagement with their work and ratings of managerial effectiveness. Furthermore, high self-efficacy has been found to relate to successful task leadership, higher levels of motivation, and the application of greater effort (Schyns & Sanders, 2005). Based on previous studies we hypothesized:

Hypothesis 3. Employees with people in charge will report higher self-efficacy, social and emotional self-efficacy than employees without people in charge.

Method

Participants

A non-probabilistic sample of 771 employees was selected. 58% of the participants were female and 42% were male. Subjects ranged in age from 18 and 76 (*M* = 31.79; *SD* = 11.09). Regarding the level of education, 55% of the participants had an incomplete university education level, 24.8% had a complete university education level, 13.1% postgraduate level and 7.1% complete high school education level.

Employee's affiliation institution was from private (*n* = 619) and public (*n* =152) organizations. Participants' average experience in their current job was 5.28 years (*SD* = 6.78) and the overall job experience was 10.92 years (*SD* = 10.09). 65.2 % (*n* = 503) of employees reported no people in charge, the 23.1 % (*n* = 178) have between one and five, and 11.07% six or more people in charge.

Measures

A translated Spanish version of the Self-efficacy at work scale.

Occupational Emotional, Social, and Task Self-efficacy scales (Loeb et al., 2016) were administered in order to analyze the psychometric properties of this scale in Argentinian employees. The original scales (Loeb et al., 2016) includes 19 items that measure 4 factors: occupational task self-efficacy (items 1 to 6; α= 0.79) oriented to cognitive tasks in the workplace (e.g. item 2: *"When I am confronted with a problem in my job, I can usually find several solutions"*), occupational social self-efficacy (items 7 to 11; α = 0.87) (e.g. item 10 "*...cooperate with people at work who see things differently than you"*), occupational self-oriented emotional self-efficacy (items 12 to 15; α = 0.71) (e.g. item 13 *"...know what causes you to feel a negative emotion at work"*) and other-oriented emotional self-efficacy (items 16 to 19; α = 0.86) (e.g. item 19 *"... help other people at work get into the mood that best suit the situation"*). It consists of two parts. Part 1) occupational task self-efficacy 1-6 items and were rated on a scale ranging from 1 (strongly disagree) to 5 (strongly agree), and part 2) items 7-19, participants were asked to evaluate how capable they felt in carrying out the described action or behavior on a Likert scale, from 1 (Not well at all) to 5 (Very well).

Professional Self-efficacy (Maffei et al., 2012).

It was used an Argentinian version of AU-10 scale (Maffei et al., 2012) adapted from the original Spanish AU-10 scale (Salanova, 2004). AU-10 is a 10-items self-report measure addressing the workers' beliefs about their own abilities to successfully carry out activities associated with their profession (for example, *"I am sure that I will be able to reach my goals at work"*). Participants were asked to rate how often each situation occurred using a 7-points scale, from 0 (never or never) to 6 (always or every day). In this sample the reliability as internal consistency was adequate (α = .93) similar values reported by Maffei et al., (2012) (α = .81).

Additionally, the participants complete a Sociodemographic questionnaire**.** It includes questions about age, sex, educational level, job position and if they have people in charge or not, tenure in their current job position and overall job tenure, public or private organization.

Procedure and analyses

Firstly, the English version was translated into Spanish. It was used a back-translation method by three independent translators taking into account the guidelines of the International Test Commission (ITC). The translators were bilingual in both English and Spanish languages, with experience in the content of the test, and with knowledge of assessment principles. Two self-efficacy experts evaluated the relevance, conceptual, and cultural equivalence of each item's content using a three-option graduated scale (acceptable, not clear, not

relevant). Subsequently, a pilot study was carried out whereby the selected items were administered to 10 workers of the Metropolitan Area of Buenos Aires (Argentina) over the age of 18.

Second, the employees were invited to participate in the research through social networks. Those interested in participating were contacted individually via email so that they could contact the experimenter if they wished. Each participant was informed of the objective of the investigation, the process and the commitment to confidentiality and anonymity of their participation. Participants recorded their voluntary participation agreement in an informed consent form, which also included the information that they could withdraw from the study at any point. The questionnaires were completed from February to September 2018. The instruments were administered online via Google Forms platform and the session lasted 20 to 30 minutes. There was no missing data because online forms used forced response options. The datasets analyses during the current study are available from the corresponding author on reasonable request.

The following descriptive measures were calculated for each item: mean, standard deviation, asymmetry, and kurtosis. The compliance with the statistical assumptions of univariate normality, linearity of the relationships, and absence of multicollinearity, were evaluated. An Exploratory Factor Analysis (EFA) was carried out with a subsample of 198 employees in order to explore the factor structure of the self-efficacy construct. Confirmatory Factor Analyses with a new sample (n = 470) were also carried out to test the model. Data analysis was performed using JASP-Stats 14.01 (The JASP Team, 2020). The goodness of fit was evaluated using the Chi-square, Standardized Root Mean Square Residual (SRMR), the Root Mean Square Error of Approximation (RMSEA) and the Comparative Fit Index (CFI). Total reliability and reliability of each factor as internal consistency was estimated using Cronbach's alpha coefficient.

Finally, Pearson correlations (n = 103) were calculated between factors of Self-efficacy at work scales and Professional Self-efficacy to provide evidence of convergent validity of the first scales. In addition, to analyze the concurrent validity, t-student tests (n = 771) were conducted for sociodemographic characteristics (gender: two categories; people in charge: two categories) and self-efficacy scales.

Ethical concerns

The study has been carried out considering the ethical principles of the Declaration of Helsinki (World Medical Association, 2013) and following the professional guidelines produced by American Psychological Association (APA, 2022). One of the principal concerns on online research is maintaining the anonymous and confidential information, protecting the vulnerability of participants. Therefore, the authors are reliant on participants' understanding and using privacy settings informed in the consent to prevent unintended sharing of personal information and research involvement. The consent was obtained electronically due to the risks for the subjects were low.

Results

Descriptive analyses

No atypical cases were identified. The analysis of multicollinearity shows that there were no inter-item correlations equal to or greater than .90 (Tabachnick & Fidell, 2001). In addition, all the asymmetry and kurtosis values are less than ± 2, within the normality parameters based on the criteria reported by George and Mallery (2019). However, Shapiro-Wilk Tests show non-normal distributions (p < .001).

Exploratory factor analyses

The distributions Kaiser Meyer-Olkin (KMO) Measure of Sampling Adequacy was .79 indicating that the data were appropriate for EFA (Kaiser, 1974). Bartlett's Test of Sphericity was significant (X^2 = 1206.649, p < .001). Based on these results, the matrix data were considered suitable for a factor analysis (EFA). Following the recommendations of Lloret-Segura, Ferreres-Traver, Hernández-Baeza and Tómas-Marco (2014), Weighted Least Square estimation method was used taking into account the ordinal data, non-normality distribution of the data, and the input for each analysis was the covariance matrix of the items. Parallel analysis was used as extraction method, suggesting a three-factor solution that explained the 38% of the variance of Self-efficacy at work. We adopted an oblique rotation method because there was a substantial theoretical basis to expect correlation among common factors (Fabrigar & Wegener, 2012; Tabachnick & Fidell, 2001). Three items loading under cut-off point .40 (Lloret-Segura et al., 2014) were removed due to the cross-loading criteria (items 4, 8, 15). Table 1 shows the matrix of factor

loadings for the solution of factors. Based on the content of the items and the original dimensions, we decided to name the three factors as it follows: 1) Social Self-efficacy, 2) Occupational task Self-efficacy, and 3) Self-oriented Emotional Self-efficacy (See Table 1).

Table 1.
Factor Loadings of Occupational Social, Task, and Emotional Self-efficacy scales.

	Social Self-efficacy	Task Self-efficacy	Emotional Self-orient Self-efficacy
1 I can remain calm when facing difficulties in my job because I can 1 rely on my abilities *(Puedo mantener la calma cuando enfrento dificultades en mi trabajo porque puedo confiar en mis habilidades)*	-0.11	**0.61**	0.13
2 When I am confronted with a problem in my job, I can usually find several solutions *(Al enfrentar un problema en mi trabajo, usualmente puedo encontrar varias soluciones)*	0.06	**0.60**	0.10
3 Whatever comes my way in my job, I can usually handle it *(Por lo general puedo manejar cualquier situación en el trabajo)*	0.12	**0.50**	0.07
4 My past experiences in my job have prepared me well for my occupational future *(Mis experiencias anteriores en el trabajo me han preparado bien para mi futuro laboral)**	-0.11	0.33	0.06
5 I meet the goals that I set for myself in my job *(Cumplo/Alcanzo con los objetivos que me he fijado en mi trabajo)*	0.00	**0.65**	-0.02
6 I feel prepared for most of the demands in my job *(Me siento preparado para la mayoría de las demandas en mi trabajo)*	0.01	**0.66**	0.02
7 ... start a conversation at work with someone you don't know very well *(…comenzar una conversación en el trabajo con alguien que no conozco muy bien)* *	**0.46**	0.13	0.02
8 ... ask someone at work for help when you need it *(...pedir ayuda a alguien en el trabajo cuando lo necesito)**	0.32	0.27	-0.25
9 ... get people in your work group to listen to your opinion *(...hacer que la gente de mi grupo de trabajo escuche mi opinión).*	**0.52**	0.25	-0.22
10 ...cooperate with people at work who see things differently than you *(...cooperar con las personas en el trabajo con opiniones distintas a las mías).*	**0.51**	0.18	-0.04
11 ...manage a conflict situation with people at work *(...manejar situaciones conflictivas con personas en el trabajo)**	**0.49**	0.19	0.03
12 ... correctly identify your own negative emotions at work *(... identificar correctamente mis emociones negativas en el trabajo).*	0.08	-0.03	**0.69**
13 ... know what causes you to feel a negative emotion at work *(... saber lo que me hace sentir una emoción negativa en el trabajo)*	0.01	0.06	**0.67**
14 ... tackle your negative emotions at work *(... afrontar mis emociones negativas en el trabajo)*	-0.02	0.17	**0.69**
15 ... get into the mood that best suits the situation at work *(...cambiar mi estado de ánimo al que mejor se adapte a la situación en el trabajo)**	0.22	0.26	0.28
16 ... correctly identify when other people are feeling negative emotions at work *(... identificar correctamente cuando otras personas están sintiendo emociones negativas en el trabajo)**	**0.46**	-0.11	0.31
17 ... realize what causes other people to feel negative emotions at work *(…darme cuenta de lo que causa que otras personas sientan emociones negativas en el trabajo)**	**0.41**	-0.05	0.34
18 ... help other people at work tackle their negative emotions *(... ayudar a otras personas en el trabajo a afrontar sus emociones negativas).*	**0.72**	-0.07	0.01
19 ... help other people at work get into the mood that best suit the situation *(... ayudar a otras personas en el trabajo a adoptar el estado de ánimo que mejor se adapte a la situación).*	**0.72**	-0.09	0.09
38% Variance	*15%*	*13%*	*11%*

Note. Extraction method is Weighted Least Square Mean. Applied rotation method is oblimin. *Item load under .40

Confirmatory factor analyses

Factorial Confirmatory Analyses (CFA) were conducted to test two different factor solutions (A) the original structure (four-factor solution) using all 19 items, and (B) three-factor solution without items 4, 8, 15, (version of 16 items). In all models' solutions, the factors were allowed to correlate with one another and were analyzed using the estimator Diagonally Weighted Least Squares, Robust Method (Li, 2016). All fit statistics listed in Table 2.

Indicative criteria of very good fit as the Standardized Root Mean Square Residual (SRMR), the Root Mean Square Error of Approximation (RMSEA; with a confidence interval of 90%, and adequate values < .07), and the comparative fit index (CFI > .90) were used to analyze model fit and for comparison of the models (Hu & Bentler, 1999). In the table 2, the fit indices revealed that both models have shown good fit index. Therefore, the four-factors of the original scale with 19 items solution have shown a better fit to the observed data compared with the three-factor solution (Model B, 16 items). The four-factors model involved the following dimensions: 1) Occupational task Self-efficacy (6 items), 2) Social Self-efficacy (5 items), 3) Self-oriented Emotional Self-efficacy (4 items) and 4) Other-oriented Emotional Self-efficacy (See Figure 1).

Reliability analyses

The results indicate an appropriate internal consistency for overall self-efficacy at work (α = .85) and for each factor (Occupational task Self-efficacy α = .73; Social Self-efficacy α = .71; Self-oriented Emotional Self-efficacy α = .75; Other-oriented Emotional Self-efficacy α = .79).

Table 2.
Fit Indices for the two models of the Self-Efficacy at work Scale

	Factor	# *items*	X^2	Df	x/df	SRMS	RMSEA	CFI
A	**4**	**19**	**198.572**	**146**	**1.36**	**.057**	**.028**	**.986**
B	3	16	207.857	101	2.05	.070	.047	.962

Note. RMSEA = Root mean square error of approximation; CFI = Comparative fit index Values higher than 0.90 for CFI and RMSEA below 0.08 indicate good fit. The best fit model is in bold. Estimator: DWLS method Robust.

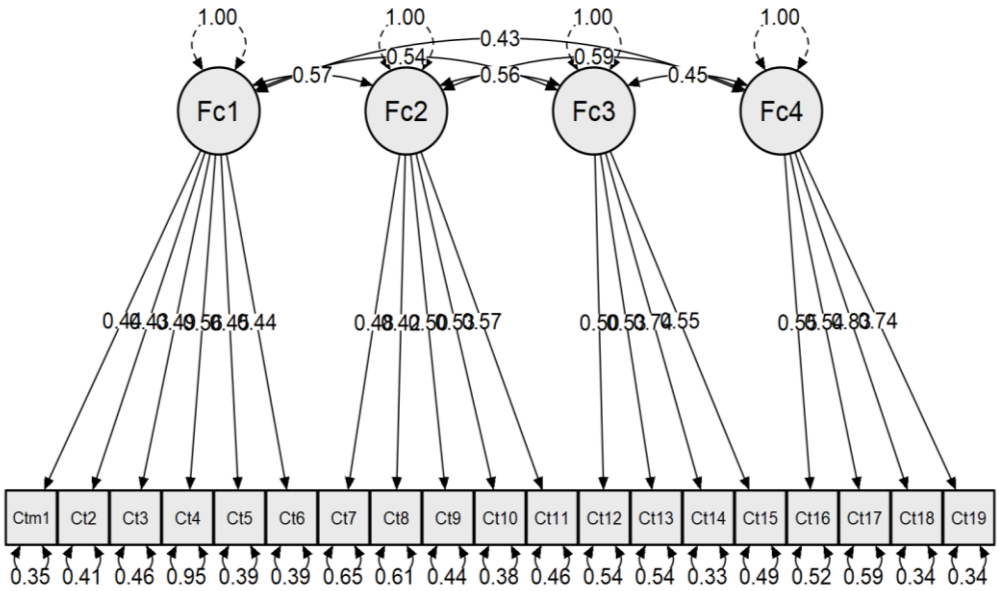

Figure 1. *SEM Model C Standardized Solution.* Note. Fc1) Task Self-efficacy; Fc2) Social Self-efficacy; Fc3) Self-oriented Emotional Self-efficacy; Fc4) Other-oriented Emotional Self-efficacy.

Convergent validity

Convergence studies consist of evaluating the extent to which correlations are observed between the scores of instruments that evaluate theoretically related or similar constructs. The scores obtained on the Self-efficacy at work scale were correlated with those obtained in the AU-10 questionnaire. As expected, all three dimensions were positively associated with professional self-efficacy. A strong correlation between "Total self-efficacy at work score" and "professional self-efficacy" was observed (r = .648; p < .001), which suggests that both instruments measure similar constructs. In addition, positive correlations were found between professional self-efficacy score and each dimension: Occupational task Self-efficacy (r = .607; p < .001), Social Self-efficacy (r = .423; p < .001), Self-orient Emotional Self-efficacy (r = .565; p < .001) and Other-oriented Emotional Self-efficacy (r = .358; p < .001) (See Table 3).

Table 3.
Pearson Correlation between Self-efficacy at work and Professional Self-efficacy

	Professional Self-efficacy
Total Self-Efficacy at work	.648**
Task Self-efficacy	.607**
Social Self-efficacy	.423**
Self-oriented Emotional Self-efficacy	.565**
Other-oriented Emotional Self-efficacy	.358**

Note. ** correlation is significant at .01 level (2 tailed)

Sociodemographic differences

Analysis of *t*-student tests was conducted for occupational task, social, and emotional self-efficacy. There were differences of gender on task self-efficacy men reported higher task self-efficacy (M = 4.19; SD = .56) than women (M = 4.08; SD = .60). There were no gender differences for social self-efficacy ($t_{(769)}$ = -1.30; p = .195; *Cohen's d* = -.096) and self-oriented emotional self-efficacy ($t_{(769)}$ = .260; p = .795; *Cohen's d* =.019). However, there is differences of gender on task self-efficacy ($t_{(769)}$ = 2.258; p = .024; *Cohen's d* =.165): women reported higher Other-oriented emotional self-efficacy (M = 3.94; SD = .74) than men (M = 3.82; SD = .75).

Results indicated differences between employees with/without people in charge. Employees with people in charge have more occupational task self-efficacy (M = 4.19; SD = .60) than employees without people in charge (M = 4.09; SD = .58; $t_{(769)}$ = -2.196; p = .028; *Cohen's d* = -.166). For social self-efficacy there was significant difference ($t_{(769)}$ = -2.284; p = .023; *Cohen's d* = -.173): employees with people in charge (M = 4.15; SD = .59) reported higher social self-efficacy than employees without people in charge (M = 4.05; SD = .62). No differences for self-oriented and other-oriented emotional self-efficacy dimensions were found.

Discussion

The main purpose of the present study was to validate the three Occupational scales of Loeb et al. (2016): Emotional, Social and Task Self-efficacy scales in a sample of Argentinean employees. Exploratory and confirmatory factor analyses have shown that the validated Spanish version has the same original structure, and it measures four dimensions of self-efficacy at workplace. Thus, this version is a reliable and valid measure for Argentinian workers. Although the exploratory factor analysis suggested a different model of three factors (with three excluded items due to their factorial load below >.40), and this model fit to the data, the original four-factor structure has a better fit index.

These four dimensions are related to self-efficacy to perform in an efficacious way in the work context, to manage interpersonal relationships, to perceive, use, understand, and regulate emotions and to achieve assigned goals. These results support the idea that self-efficacy is a highly contextualized construct, and it can be defined as the degree of employees' confidence in their ability to reach a specified level of achievement in a particular context (Bandura, 2001). According to Bandura, self-efficacy plays a significant role facilitating desirable behaviors and overcoming adversities, and it helps individuals of any culture to achieve their personal goals (Bandura, 2000; Scholz, Doña, Sud, & Schwarzer, 2002). Previous research supports the use of specific measures of efficacy beliefs in specific domains. These specific measures allow more robust results, and they have greater predictive power than general measures of self-efficacy (e.g., Grau, Salanova, & Peiró, 2012; Lindley & Borgen, 2002; Pepe et al., 2010; Salanova, Peiró, & Schaufeli, 2002).

Findings of the present study confirm our hypothesis that self-efficacy at work has a positive

and significant correlation with professional self-efficacy, providing convergent validity to the Spanish version scale. A Moderate correlation between both total scores (self-efficacy at work scale and AU-10 questionnaire) suggests that the construct examined by both instruments is similar, but not the same. Specifically, task self-efficacy factor has the strongest correlation with professional self-efficacy, indicating that this dimension focuses on workers' beliefs about their effectiveness on the task. However, the Spanish self-efficacy at work scale adds other non-cognitive dimensions that were less correlated with AU-10 questionnaire, such as emotional and social factors.

Results show a significant difference by gender in occupational task self-efficacy: men have higher scores than women. These results may be due to gender roles in the work context, consistently with previous studies (Abele & Spurk, 2009; Loeb et al., 2016; Williams & Betz, 1994). However, our hypothesis that women would report greater social self-efficacy have not found evidence. In this regard, Loeb et al. (2016) state that interactions in the work context are not exclusive to women. Finally, emotional self-efficacy results show that there are no gender differences in the confidence to recognize and manage one's own emotions. However, there are differences in the “other-oriented emotional self-efficacy”. These results are consistent with Deschênes et al. (2016) study, where women were able to identify the emotions of others. Scholz et al. (2002) state that men and women respond similarly, although there may be slight differences in average scores that do not imply a particular psychological significance.

The findings of the present study indicated differences in self-efficacy among employees who have and do not have personnel in charge. People with staff have more occupational task self-efficacy and social self-efficacy than employees without staff in charge, supporting partially our Hypothesis 4a. These results are consistent with previous studies where the beliefs about own social skills influence on team climate (Loeb et al., 2016). A role of leader demands not only occupational task self-efficacy but also certain confidence to manage, in a good mood, problematic social interactions at work. This finding provides evidence of discriminant validity to the scale between different demands of the task. However, no differences were found in emotional self-efficacy as we expected. Further studies should be carried out to analyze if these emotional dimensions are more relevant for leaders performing a specific type of tasks or professional roles which were not included in the present study.

Fan et al. (2013) state that self-efficacy is a dynamic and malleable resource depending on external influences such as training and coaching. Therefore, understanding self-efficacy at work can be essential for building a team climate and especially self-oriented emotional. In addition, this resource could be useful for reducing emotional irritation and exhaustion (Loeb et al., 2016). Thus, self-efficacy is a key factor to facilitate optimal human working within labor organizations (Maffei et al., 2012; Salanova et al., 2005; Spontón et al., 2018).

Limitations.

One of the limitations is that a non-probabilistic sampling could produce some bias effects in the data set. Therefore, future studies should try to obtain a stratified random sample. In addition, self-efficacy is a construct that varies with age and experience; given that it ranges in age from 18 to 76 years old, these characteristics could have influenced the present results. Therefore, future research could consider a balanced age and experience group ratio.

Conclusion

The Spanish version of Self-efficacy at work Scales has adequate psychometric properties. Results demonstrated that this version has an adequate internal consistency, construct, and convergent validity to use in Argentinian employees. In addition, this adapted version maintains the original internal structure for Argentinian workers (four-factor model). Future studies should analyze the predictive validity of this instrument on job performance in different tasks according to their cognitive/personality demands. In addition, it could be interesting to study similar and different constructs related to outcomes at workplace for different professions. One promising area for future research is the integration of individual differences into existing models of performance. We agree with Judge, Jackson, Shaw, Scott and Rich (2007) that future research should analyze the joint effect of self-efficacy at work with personality traits on work behaviors.

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