Propiedades psicométricas de la escala de intensificación de demandas del trabajo a partir de una muestra colombiana

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Resumen

La aceleración del ritmo de gestión organizacional plantea nuevos desafíos para las empresas, que pueden reflejarse en la intensificación de las demandas del trabajo y en que las personas expresen un aumento tanto en los niveles de intensidad en el desarrollo de sus tareas como en la sensación de una mayor presión del tiempo en su contexto laboral. Teniendo esto en cuenta, el objetivo del presente estudio fue examinar en una muestra de trabajadores colombianos las evidencias de validez de constructo y confiabilidad de la versión en español de la escala *Intensification of Job Demands Scale (IDS)*, desarrollada por Kubicek et al. en 2015 para evaluar cinco demandas del trabajo sujetas a la intensificación —la muestra estuvo compuesta por 420 profesionales del sector de servicios de la salud en Bogotá, Colombia—. Para esto, se establecieron los estadísticos descriptivos, así como los índices de discriminación de los ítems, la estructura interna del instrumento mediante análisis factorial exploratorio y confirmatorio, y las evidencias de validez de constructo. Como resultado, se mantiene la estructura original de cinco factores de la prueba, que explican el 47.12 % de la varianza total; y, por medio de la utilización de modelos de ecuaciones estructurales, se evidencia un adecuado ajuste y parsimonia del modelo en congruencia con la propuesta teórica de la escala. Se concluye que esta versión en español de la *IDS* posee propiedades psicométricas adecuadas y que puede contribuir a la investigación en la región sobre la intensificación del trabajo como una demanda asociada al deterioro en la salud y al bienestar en los trabajadores.

Palabras clave: condiciones de trabajo, propiedades psicométricas, análisis factorial, ecuaciones de modelos estructurales (SEM).

Psychometric Properties of the Intensification of Job Demands Scale based on a sample of Colombian workers

Abstract

The acceleration of the pace of organizational management poses new challenges that can be expressed as an intensification of job demands, and people express it as an increase in the intensity levels of their task development, and a feeling of

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a greater time pressure in their work context. The objective of this study was to examine, in a sample of Colombian workers, the evidence of construct validity and reliability of the Spanish version of the *Intensification of Job Demands Scale (IDS)* developed by Kubicek, Paškvan and Korunka in 2015, which evaluates five job demands subject to intensification.

The sample consisted of 420 healthcare professionals located in Bogotá, Colombia. Descriptive statistics, item discrimination indexes, internal structure through exploratory and confirmatory factor analysis, and evidence of construct validity were established. The original five-factor structure of the test was maintained explaining 47.12% of the total variance. By using Structural Equation Models (SEM), an adequate adjustment and parsimony of the model in congruence with the theoretical proposal of the scale is evidenced. This Spanish version of the IDS has adequate psychometric properties and it can contribute to research in the country, on the intensification of work as a demand that is associated with the impairment of workers' health and well-being.

Keywords: working conditions; psychometric properties; factor analysis; structural equation models (SEM).

Introduction

For managers and professionals who are responsible for managing people in organizations it is of great interest to know the effects that working conditions and characteristics produce in workforce. Understanding, explaining, and even predicting well-being, motivation, and performance levels of an organization's employees has always been an ideal for the disciplines of management, and organizational and work psychology (Paškvan & Kubicek, 2017).

There is enough evidence (Bakker, Demerouti, & Schaufeli, 2003; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Hakanen, Bakker, & Schaufeli, 2006) to show how the characteristics of a task have a profound impact on a worker's well-being. These impacts such as learning, motivation, and commitment to the task and to the organization can be positive; however, some of the characteristics seen as requirements or demands, also produce negative effects on the person such as burnout,

emotional stress, and health problems (Franke, 2015; Krause, Scherzer, & Rugulies, 2005; Kubicek, Korunka, & Ulferts, 2013; Lesener, Gusy, & Wolter, 2019).

The world has been facing socio-economic changes, multiple technological advances and a progressive increase in competitiveness among companies; these are factors that inevitably end up both influencing organizational contexts and challenging managers and workers (Kubicek & Kubicek, 2017, p. 28). Figure 1 presents various changes at the organizational and individual levels that have occurred as a result of changes described at a global level.

The shift towards a service-based economy, the transition from closed national economies to global economies, and organizational structures made more flexible - encouraging new management practices, are all representative phenomena of the way the world of work has been since the 1970s. Likewise, it is possible to recognize a key indicator in the process of change: the acceleration of the pace that has been occurring in recent years.

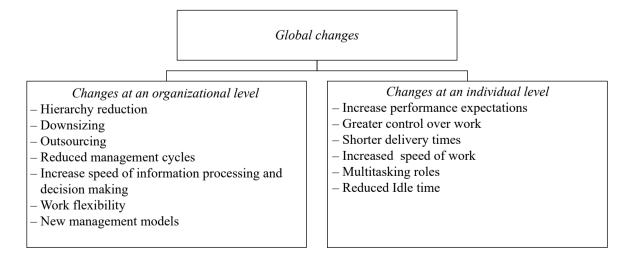


Figure 1. Changes in the world of work (adapted from Paškvan & Kubicek, 2017).

Rosa (2003, 2013) considers that acceleration is one of the consequences of the development of capitalism, and proposes that this is a phenomenon that can be analyzed from a three-dimensional structure: technological acceleration, social acceleration and acceleration of the pace of life. As mentioned previously, the perspective of acceleration of a societal change has effects on people's working life (Flecker, Fibich, & Kraemer, 2017), and especially on their working conditions; therefore adjustments in regards to organizational management cycles, and changes in ways of working have an impact on the demands for carrying out tasks. These aspects require study (Bakker & Demerouti, 2014).

Based on the *Job Demands - Resource Model* (Bakker & Demerouti, 2007), Franke (2015) proposes that the phenomena associated with acceleration of organizational management rhythms can be contemplated as an intensification of job demands, expressed in higher intensity levels of task development and feelings of having greater time pressure in work contexts; also, Paškvan and Kubicek (2017) define intensification of work as "a multifaceted construct that is characterized by the need to work at increasing speed, for having to cope with shorter response time, to reduce idle time or to perform several tasks simultaneously" (p. 26).

On this matter, searching for increased organizational efficiency presents new ways of working that boost the speed of management cycles, extend the workday, and increase control over performance (Neirotti, 2018). Thus, the intensification of work is operationalized as the increase in physical and cognitive efforts that the individual must progressively expend to perform his or her work (Bathini & Kandathil, 2019) and is reflected in their work pace, pressure to make quicker decisions and the feeling that the workday does not end (Granter, Wankhade, McCann, Hassard, & Hyde, 2019).

As a result of researchers' growing interest in studying this phenomenon, Kubicek, Paškvan and Korunka (2015, pp. 889-900) propose a model for measuring job demands that are subject to intensification. Each of their five proposed conceptual dimensions is detailed below:

Intensification of demands of work effort refers to the increased amount of effort that employees need to invest to do their work. It is the additional pressure that managers put on employees in an attempt to gain a competitive advantage, to shorten management cycles and to increase the decision and production processes speed. Time pressure is positively related to new ways of working implying that work never stops (cf. Kelliher & Anderson, 2008).

Intensification of demands of planning and autonomy at work refers to new organizational logics, by which direct control is reduced and the requirements of autonomous

planning and decision making become greater. Due to accelerated changes in management practices, companies have reacted by increasing the speed of decision making and implementing more flexible organizational structures. This generates a new logic of control over people where direct control of managers is reduced and autonomy is increased at all levels (cf., Wood, 2011).

Intensification of demands of career planning is characterized by the increase of the employee's responsibility to take charge of his or her career plan toward the inside and outside of his or her current organization. With hasty changes surrounding them, people are increasingly forced to be key agents of value generation for their organizations and to increase their future employability. In addition, an individual need to work harder to remain attractive to the labor market. This demand is characterized by forcing employees to keep networks updated, and to be open to career opportunities (cf., Briscoe & Hall, 2006).

Intensification of demands for acquiring new learning refers to the increasing pressure to bring employees up to date and to acquire new knowledge related to the world of work. As knowledge represents a key resource in the organizational success and is the basis for competitiveness in a complex world, people are required to update their knowledge more quickly due to technological innovations (cf., Obschonka, Silbereisen, & Wasilewski, 2012).

Finally, *Intensification of demands for developing new skills* is characterized by an increasing need to develop new skills for handling equipment, applications, processes, methodologies, and also work team management. Learning is not only oriented to knowledge, it has become more demanding and requires people to develop new abilities to do their job well as well as keeping a high level of competences. (cf., Loon & Casimir, 2008).

The increasing acceleration of economic, societal and technological changes that the world of work has been facing causes experiences of task intensification; thereby Kubicek, Paškvan Korunka et al. (2015) construct and validate the *Intensification of Job Demands Scale (IDS)* to measure the way in which individuals perceive these experiences. According to its authors, the instrument allows direct capture of intensification through the respondent's assessment of whether or not he or she is experiencing an increase in his or her task-related demands, which makes the scale a useful tool for studying the effects of job intensification on workers' health and well-being in their organizational context.

Reviewing specialized literature, there are no other conceptual models or instruments that would evaluate the construct of intensification of demands. As mentioned by Riskin et al. (2015), due to a lack of tools for measuring the phenomenon, data from surveys on working conditions should be used e.g. European Working Conditions Survey (EWCS). There are some instruments that allow evaluation of aspects related to demands or working conditions. Among them are the Job Content Questionnaire (JCQ) by Karaseck (1998), the Effort - Reward Imbalance Questionnaire (ERI) by Siegrist (2004), and the Maslach Burnout Inventory (MBI) by Maslach, Jackson and Leiter (1997). Nevertheless, the *Intensification of Job Demands Scale (IDS)* is, so far, the only instrument that allows the intensity of change in job demands to be measured.

The scale was originally developed in German and English, and has been used in studies with European populations (Mauno, Kubicek, Minkkinen, & Korunka, 2019; Paškvan, Kubicek, Prem, & Korunka, 2016; Prem, Kubicek, Diestel, & Korunka, 2016; Prem, Ohly, Kubicek, & Korunka, 2017), but so far there is not yet a Spanish version that would allow academics and professionals to apply it in Spanish-speaking organizational contexts.

Therefore, the main objective of this study is to examine the evidence of factor validity and reliability of the instrument from a sample of Colombian workers in order to contribute to the development of research in the area on this relevant topic.

Method

Type of study

The present research was framed as a study of an instrumental type (Montero & León, 2007).

Participants

420 health service members of a private organization, from two different branches participated in the city of Bogotá. Previous research in the sector (Etzion, Eden, & Lapidot, 1998; Moreno-Jiménez & Gálvez Herrer, 2013; Moreno-Jiménez et al., 2009; Sanz-Vergel, Demerouti, Bakker, & Moreno-Jiménez, 2011) has been able to establish negative effects from various factors associated to task and work-related stress demands on people working in this type of organization, so it was found to be appropriate, for the purpose of the research, to use this population framework.

Once the study was approved by the organization's Ethics Committee, a simple random sampling was made to select participants from a total census of 1420 people who had permanent, direct and full-time contracts with the organization. The minimum number required for random sampling was 336, in order to ensure a 95% confidence

interval and 5% error level; a final participation of 29.6% was obtained in the two locations.

Participants were between the ages of 18 and 65 (mean = 35.65; SD = 8.88), distributed among 316 women and 104 men (75.2% and 24.8% respectively); work experience varies between 1 and 43 years (mean = 13.74; SD = 8.2); also with various seniority levels ranging from 'new to the job' to 37 years' tenure (mean = 6.36; SD = 5.94). 53.1% of participants reported having leadership over other staff. For administrative positions the profession of the participants was mostly in economic and administrative sciences, and for assistant positions nursing, medicine, and physical therapy.

Table 1 denotes information on the type of role and type of the position.

Table 1
Participants by role and position

	1	
Type of role		
	Frequency	Percentage
Coordinator	49	11,67
Manager	28	6,67
Supervisor	65	15,47
Professional	126	30,00
Line Manager	5	1,19
Technician	147	35,00
Type of position		

	Frequency	Percentage
Administrative	284	67,63
Assistant	93	22,14
Director	24	5,71
Operational	19	4,52

It should be mentioned that for exploratory factor analysis, a random sample of 200 participants was taken; the remainder of the sample for confirmatory analysis, and the entire sample for reliability analyses.

Instrument

The Intensification of Job Demands Scale (IDS) designed by Kubicek, Paškvan & Korunka (2015), is an instrument that comprises 19 items in a five-point Likert type scale that is set from 'totally disagree' (1) to 'totally agree' (5); it assembles the items in five factors: intensification of work effort (5 items and α =0.91), intensification of planning and autonomy at work (5 items and α =0.90), intensification of career planning (3 items and α =0.82), intensification for acquiring new learning (3 items and α =0.90), and intensification for developing new skills (3 items and α =0.87). The instrument examines the person's assessment of the changes in the demands of his or her work rather than the individual's willingness to adapt him or herself to them.

It should be highlighted that in the original study the penta-factorial structure was found through confirmatory factor analysis, with analysis of rival models and by means of methods of maximum accuracy and authenticity (five-factor model with best goodness-of-fit), obtaining appropriate comparative adjustment indexes (.92 and .96), Tucker-Lewis indexes (.95 and .93), and quadratic error indexes (RMSEA of .067 and .081), factorial invariance analysis with German and Austrian samples (no significant changes in chi-square values for the samples), and reliability analyses with Cronbach's alphas (values between .79 and .94), convergent validity analysis with correlations to scales measuring similar constructs (significant correlations ranging between .43 and .89), discriminant validity with comparisons between groups, and incremental validity with multiple regression analysis.

The English version was selected for the present study, and pertinent analyses were conducted. The Spanish final version of the scale is presented in Appendix A.

Procedure

The research starts, as suggested by Brislin (1970), with a procedure of reverse translation: the items were translated into Spanish and afterwards a group session was held with six experienced Psychology professionals specializing in the field of human resources, who helped review the factors associated with the language and extension of the items. All the items were approved and only small changes in the writing and grammar of the items were suggested to improve the syntactic order and the use of prepositions. Finally, the adapted instrument was translated into English and in order to complete the back-translation process, the equivalence between the versions was proved.

It is important to highlight that, in the interest of maintaining the assessment criterion of intensity of change in the job demands, rather than personal disposition as stated in the original scale, nominal syntagmas (e.g., "increase") were included in each of the items that denote the progression in the change of working conditions.

Endorsements from the Ethics Commissions of both the organization and the academic institution were obtained before the applications. An online format was used for the application of the instrument. A link with the presentation of the study (objectives, participation and ethical conditions), the informed consent and the final adapted scale were sent out by an institutional e-mail.

Data analysis

Once the application with participants was completed, the obtained data were calculated and statistical analyses were carried out, guaranteeing in the first place the conditions and assumptions for the factor analyses proposed by Pérez & Medrano (2010) (elimination of atypical cases with the Mahalanobis extreme distance test, the normality of the variables by revision of the asymmetry and kurtosis of which values had to be less than ± 1.5 , linearity and interrelations with correlation analyses greater than 0.3 between pairs of items in each subscale; additionally, the Kaiser-Meyer-Olkin test (expected values greater than .7), and the Bartlett's test of sphericity (significance less than .05), and lastly collinearity ensuring that correlations are not greater than .90); and then reviewing construct validity by exploratory factor analysis (performed to observe itemfree clustering and not linked to an already pre-designed structure, since there was no factorial evidence in Colombia) with a maximum likelihood in extraction method (chosen because it contains 5 response options and meets the conditions of normality for all the variables to be factored) and an oblique rotation with the Oblimin method (due to factor interrelationship) (Lloret-Segura, Ferreres-Traver, Hernández-Baeza, & Tomás-Marco, 2014), followed by confirmatory factor analysis by structural equation models (SEM) taking into account the following goodness-of-fit indicators: $\chi 2/gl < 3$, GFI > .9, AGFI > .9, CFI > .9, TLI > .9, RMSEA < .05 (Brown, 2006). At last, a reliability analysis with general and subscale Cronbach alphas, element-element correlations, total-element correlations, and reliability analysis if each item is hypothetically removed. The R statistical package was used to perform the parallel analysis of Horn, the SPSS version 24 software for exploratory factor and reliability analyses, and the AMOS application for confirmatory factor analysis.

Results

Initially the Kaiser-Meyer-Olkin test and the Bartlett's test of sphericity were used to determine the suitability of the items and their interrelationships for factor analysis. Data shows a KMO of 0.801 and sphericity significance of 0.000, which indicates viability of items and their correlations to support factor analysis. Subsequently, extraction and communalities analysis were conducted for each item. See results in Table 2.

The data shown in Table 2 indicate extraction values greater than 0.3 for all the items, with the exception of item 8; this item is kept for the remainder of factor analysis in order to reveal its viability or eventually deciding to eliminate it. Subsequently, factor analysis was performed, taking into account the criterion of Kaiser's auto-values greater than 1, Horn's parallel analysis, and the original

Table 2
Extraction Indexes of each item

	Initial	Extraction
Item 1	.401	.441
Item 2	.505	.689
Item 3	.306	.316
Item 4	.347	.395
Item 5	.372	.429
Item 6	.358	.400
Item 7	.384	.526
Item 8	.098	.116
Item 9	.303	.425
Item 10	.276	.304
Item 11	.319	.383
Item 12	.464	.647
Item 13	.441	.567
Item 14	.463	.568
Item 15	.285	.351
Item 16	.454	.557
Item 17	.521	.560
Item 18	.542	.965
Item 19	.402	.425

theoretical position of the scale (Lloret-Segura, Ferreres-Traver, Hernández-Baeza, & Tomás-Marco, 2014). Five factors explaining 47.124% of the total variance were found. The items pertinent to each subscale are shown in Table 3.

As shown in Table 3, distribution of the items displays a unique load of each item at a single factor with loads clearly constituted (greater than 0.4) with the exception of item 8; its load, although at a single factor, is less than the expected minimum.

In order to verify the appositeness of the theoretically proposed model in comparison with alternative models, coefficients of the obtained model are shown in table 4, as well as the analysis of rival models with the same model without item 8; along with its similar one with four factors and the elimination of the same item.

As it can be seen, the model with the best fit indicators is the five-factor model, but with the elimination of item 8 - shown in Figure 2.

Regarding internal consistency, a general standardized Cronbach's alpha of 0.808 and 0.818 without items 8 was found; also positive and higher than 0.3 correlations between the items belonging to each factor, and again, except for item 8. Table 5 shows the Cronbach's Alpha obtained for each subscale, correlations between each item and total. The Alpha if the item is hypothetically eliminated; it shows positive correlations greater than 0.4 between each item, and total. Alphas affected by the elimination of the items, with the exception of item 8, which rectifies the need for its elimination. From a theoretical perspective, we consider that by eliminating this item, the instrument doesn't lose the ability to measure the intensification of the level of

Table 3
Pattern matrix obtained

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Average	SD
Item 2	0.883					3.567	1.1572
Item 1	0.661					3.23	1.122
Item 4	0.580					3.676	1.1478
Item 5	0.576					3.836	1.0008
Item 3	0.532					3.598	.9435
Item 7		0.686				3.819	.9272
Item 9		0.661				3.145	1.0947
Item 6		0.490				3.712	.9141
Item 10		0.482				3.493	.9928
Item 8		0.263				3.386	1.1092
Item 12			0.758			4.240	.6817
Item 13			0.685			4.110	.7327
Item 11			0.568			3.950	.9243
Item 16				0.656		3.886	.8211
Item 14				0.638		4.055	.8112
Item 15				0.447		3.448	1.0081
Item 18					0.995	3.826	.8606
Item 17					0.463	3.893	.7940
Item 19					0.444	3.733	.9245

Table 4
Coefficients of obtained and rival models, in the structural equation analysis

	X^2	G.L.	$X^2/G.L.$	GFI	AGFI	TLI	CFI	RMSEA
Five factors (original proposal) all items	228.943	138	1.659	.900	.862	.925	.939	.055
Five factors (original proposal) without item 8	182.636	121	1.509	.916	.881	.947	.958	.048
Four factors all items	243.003	136	1.787	.895	.853	.910	.929	.060
Four factors without item 8	196.575	119	1.652	.911	.872	.932	.947	.055

Note: X^2 = Chi-squared; DF = Degrees of freedom; GFI = goodness-of-fit indicator; AGFI = Adjusted goodness-of-fit index; TLI = Tucker-Lewis index; CFI = comparative fit index; RMSEA = Root mean square error of approximation.

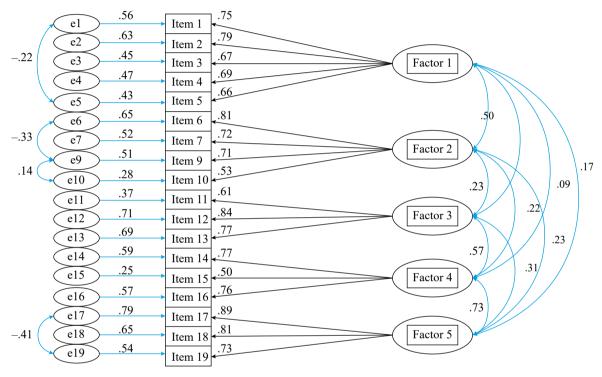


Figure 2 Factorial model with best fit indices.

autonomy in task performance since the other four items of the factor allow for capturing the experience of the individual in the evaluated dimension.

Additionally, with the purpose of evaluating the internal consistency of each of the scale components, Fornell and Larcker (1981) put forward the calculation of the Reliability Composite Score (RCS) for each factor, which takes into account the interrelation between the items, allowing greater consistency and a better reliability measurement. As shown in table 5, Reliability Composite Score (RCS) values exceed 0.70, the limit recommended by literature (Hair, Anderson, Tatham, & Black, 1999).

Discussion

Recent studies have proved that the intensification of demands and requirements in the world of work are becoming ever greater, so it is necessary to manage the effect of the demands on workers and organizations. Therefore, it is important to have optimal, valid and reliable evaluation and measurement instruments for an adequate diagnosis and subsequent intervention in the organizational contexts.

The results of this study showed that the Spanish version of the scale presents a five-factor model which clearly explains 47.124% of the total variance, with a grouping

Table 5
Reliability statistics, for each factor

	Factor Alpha	Items	Correlation Item-total	Alpha if element is eliminated	Reliability composite RCS
	0.787	Item 1	0.578	0.744	0.832
T		Item 2	0.678	0.708	
Intensification of demands of work effort		Item 3	0.503	0.768	
work enort		Item 4	0.547	0.755	
		Item 5	0.526	0.76	
	0.654	Item 6	0.438	0.57	0.797
T		Item 7	0.557	0.514	
Intensification of demands of planning and autonomy at work		Item 8	0.149	0.713	
planning and autonomy at work		Item 9	0.485	0.54	
		Item 10	0.407	0.582	
Intensification of demands of career planning	0.754	Item 11	0.516	0.743	0.748
		Item 12	0.613	0.611	
		Item 13	0.594	0.62	
Intensification of demands for acquiring new learning	0.702	Item 14	0.533	0.479	0.74
		Item 15	0.559	0.433	
		Item 16	0.536	0.473	
I	0.797	Item 17	0.628	0.731	0.749
Intensification of demands for developing new skills		Item 18	0.704	0.645	
developing new skills		Item 19	0.587	0.779	

of items similar to the original theoretical proposal with high consistency and reliability coefficients; however, for this version of the instrument the elimination of item 8 is recommended.

These findings are similar to those found in the study of the scale design (Kubicek et al., 2015); they also find the same penta-factorial structure with the same distribution of items, goodness-of-fit index and similar reliability indicators that reaffirms the equivalence of the construct, and gives additional evidence to demonstrate that the scale is a valid and reliable measure; in view of the above, measurement of task and work intensification of demands is evaluated in Spanish-speaking business contexts. The literature is nevertheless, limited for comparing these findings due to the newness of the scale and the construct existence at the present time.

It is worth noting that although the sample size was sufficient to support the statistical analyses, the present study has some limitations. Among them, it is established that the study does not represent the population unit as a whole because the sample belongs to a single organization, and it is mainly composed of women (75.2%); therefore it is recommended to replicate the search with larger samples and greater population diversity. Likewise, the sample was obtained from only one economic sector, so it is suggested to replicate the search with samples from other business sectors. Lastly, it is difficult to compare the results because

to date no other studies have been carried out in the region to analyze their psychometric properties, so replication in other contexts and countries is suggested as a future line of research.

In conclusion, it is confirmed that the Spanish version of the *Intensification of Job Demands Scale (IDS)* is a valid, consistent and reliable scale to directly evaluate the construct, so utilizing it is recommended to measure new demands that might emerge in the world of work due to social acceleration; also to evaluate the perception of change in working conditions of a particular context and to study the effects associated with the acceleration of management rhythms on the workers' health and well-being in an organizational context.

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Appendix

Spanish version of Intensification of Job Demands Scale – IDS

Intensificación de demandas del esfuerzo laboral

En esta organización...

- 1. Es cada vez más difícil para mí tener suficiente tiempo para las tareas de trabajo.
- 2. Me es cada vez más difícil tomar tiempo para los descansos.
- 3. Cada vez es menor el tiempo entre las fases de mayor intensidad en el trabajo.
- 4. Cada vez es más frecuente hacer dos o tres cosas a la vez (p. ej.: almorzar, escribir correos y hablar por teléfono).
- 5. Cada vez hay más trabajo y menos personas para realizarlo.

Intensificación de demandas de la planeación y de autonomía en el trabajo

En esta organización...

- 6. Cada vez más requiero planificar mis actividades de trabajo de manera autónoma.
- 7. Cada vez más defino por mí mismo la forma en que hago el trabajo.
- 9. Cada día más tomo las decisiones de mi puesto sin estar consultando a los jefes.
- 10. Cada vez más debo comprobar por mí mismo si he alcanzado los objetivos del trabajo.

Intensificación de demandas de la planeación de la carrera

En esta organización...

- 11. Cada vez tengo mayor exigencia para mantenerme atractivo para el mercado laboral (p. ej.: educación avanzada, obtener certificaciones, pertenecer a redes).
- 12. Mi propio desarrollo profesional requiere cada vez más estar al tanto de nuevas oportunidades de actualización.
- 13. Cada vez más debo planear mi carrera profesional por mí mismo.

Intensificación de demandas por adquirir nuevos aprendizajes

En esta organización...

- 14. Debo adquirir nuevos conocimientos para mi trabajo más a menudo.
- 15. Recibo cada vez más nuevos conocimientos para realizar las tareas de mi trabajo.
- 16. Debo actualizar mis niveles de conocimiento con mayor frecuencia.

Intensificación de demandas por desarrollar nuevas habilidades

En esta organización...

- 17. Cada vez más existen nuevos temas en el trabajo con los que debo familiarizarme.
- 18. Cada vez más debo aprender nuevos procesos y flujos de trabajo.
- 19. Debo usar nuevas herramientas de trabajo más a menudo (p. ej.: programas, equipos, aplicativos, etc.).