Examining Work Ethic Across Latam Populations: Differences Between Ecuadorian and Chilean Workers.

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Examinando la ética del trabajo en poblaciones latam: diferencias entre trabajadores ecuatorianos y chilenos.
Examinando a ética do trabalho nas populações da américa latina: diferenças entre trabalhadores equatorianos e chilenos.

As the volume of trade within South America increases, understanding the cultural differences between countries will become increasingly important for managers to develop good human resource practices. An important issue that has been little studied to date is the variation in beliefs and work ethic values across borders. The objectives of this study were: to analyze the differences in the Protestant Work Ethic (PWE) values between Ecuador and Chile; and evidence the dimensionality and factorial invariance of a short version of the most used scale to measure the work ethics construct "Multidimensional Profile of Work Ethics" in two South American populations. The original 65-item scale was applied to 530 people (N Ecuadorians = 402; N Chileans =128). Reliability was good and we conclude that there is configural invariance, metric invariance, and partial scalar invariance for the MWEP values. In addition, it was observed that it is possible to reduce the original scale to a scale with only 28 items, keeping the seven dimensions of the original scale. Regarding the differences in PWE, it was found that Ecuadorians and Chileans workers differ in self-reliance, leisure, delayed gratification and wasted time.

A medida que el volumen de comercio aumenta en América del Sur, comprender las diferencias culturales entre países será cada vez más importante para que los gerentes desarrollen buenas prácticas de recursos humanos. Un tema trascendental que ha sido poco estudiado hasta la fecha es la variación en las creencias y los valores de la ética laboral a través de las fronteras. Los objetivos de este estudio fueron: analizar las diferencias en los valores de la Ética Protestante del Trabajo (PWE) entre Ecuador y Chile; y evidenciar la dimensionalidad y la invariancia factorial de una versión corta de la escala más utilizada para medir el constructo de ética del trabajo "Perfil Multidimensional de la Ética del Trabajo" en dos poblaciones sudamericanas. La escala original de 65 ítems se aplicó a 530 personas (N ecuatorianos = 402; N chilenos = 128). Se observó que es posible reducir la escala original a una escala de 28 ítems con una confiabilidad buena y, manteniendo las siete dimensiones de la escala original. Concluimos que existe invariancia configuracional, invariancia métrica e invariancia escalar parcial para los valores de MWEP. En cuanto a las diferencias en PWE, se encontró que los trabajadores ecuatorianos y chilenos difieren en autosuficiencia, ocio, retraso de la gratificación y tiempo perdido.

À medida que o volume de comércio na América do Sul incrementa-se, torna-se cada vez mais importante para os administradores entender as diferenças culturais entre os países para desenvolver boas práticas de recursos humanos. Uma questão importante que tem sido pouco estudada até o momento é a variação de crenças e valores éticos de trabalho além das fronteiras. Os objetivos deste estudo são analisar as diferenças nos valores da Ética do Trabalho Protestante (ETP) entre Equador e Chile e evidenciar a dimensionalidade e invariância fatorial de uma nova versão baseada na escala mais utilizada para dimensionar o construto de ética do trabalho (Perfil Multidimensional de Ética do Trabalho – PMET) nesses dois países sul-americanos. Foi aplicada a escala original de 65 itens em 530 sujeitos (N de equatorianos = 402; N de chilenos = 128). A confiabilidade foi boa e concluímos que existe invariância configural, invariância métrica e invariância escalar parcial nos valores do PMET encontrados. Ademais, foi observado que é possível reduzir a escala original para uma escala com somente 28 itens, mas mantendo as sete dimensões da escala original. Em relação às diferenças na ETP, verificou-se que os trabalhadores equatorianos e chilenos diferem em autossuficiência, lazer, gratificação atrasada e perda de tempo.

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1. Introduction

Nowadays, organizational environments are characterized as being changing, uncertain, complex, and ambiguous. New generations accessing work are overriding traditional efforts of strategic planning and challenging executives to reconfigure workplaces, calling for new professions, and to rethink the world of labor (Acemoglu & Restrepo, 2018). In this context, the concept of work in Western capitalist countries should be redefined, considering non-commercial forms of labor, changes in wage-earning work, the social organization of production, and the so-called "crisis of centrality" that contrasts with the current traditional socio-cultural meaning of work, compared to the material meaning of it whose only value is its contribution to the survival of people (Bencomo, 2008).

In this new context, personal values emerge as a key driver for managing people. Although there are different theoretical models about values at work, in this research, we have used the Protestant Work Ethic (PWE) approach. The PWE was studied by Max Weber in 1904-1905. His work *The Protestant Ethic and the Spirit of Capitalism* states that one of the core aspects of work is the value that people give to it; so, work is not just a means to receive rewards, but work is rewarding itself. On the other hand, Weber considers leisure, the unnecessary spending of money, the waste of time, and even sociability as banal and mundane acts that are contrary to the work ethic principles, a concept known as the Protestant Work Ethic and its acronym PWE (Furnham, 1984).

In this sense, most of the research on PWE has been carried out in Anglo-Saxon, European, and Asian countries (i.e. Chanzanagh & Akbarnejad, 2011; Meriac *et al.*, 2009; Ozatalay & Chanzanagh, 2013; Tsun-Lok & Pik- Ching, 2017); while in South American countries, as far as we know, there is little scientific evidence about the use and measurement of this construct; specifically, in countries like Chile and Ecuador, there is no developed or adapted scale to measure PWE. This undoubtedly makes it difficult to design human resource management strategies based on culturally validated instruments that allow the differences between groups to be measured (Pérez, 2015). Although currently there is a Latin American version adapted in Mexico and Spanish of the Multidimensional Work Ethics Profile (MWEP) (Woehr *et al.*, 2007), it is well known that it is not recommended to use instruments that have not been adapted culturally since the meaning of each construct can vary due to the characteristics and social and cultural experiences of a given context, even if it is in the same language (Kulakova *et al.*, 2017)

In line with the above, the objectives of this study are: a) to explore the differences in the PWE between Ecuador and Chile, for which it is proposed to previously, b) carry out an adaptation of the MWEP to be used in the Ecuadorian and Chilean population, intending to also: b.1.) to confirm the multidimensional factorial structure of the MWEP through a cross-cultural application; and b.2) to analyze a scale whose properties are invariant between the samples from Ecuador and Chile.

On a practical level, this research not only allows the concept and the practices of the "work" construct to be understood from the work ethic perspective, focusing on the beliefs and values that people place on it; but it also provides a valid and reliable scale for measuring and distinguishing the work ethic between Ecuadorians and Chileans. The aim is to contribute empirical data to the discussion on the various postulates of human resource management.

2. Theoretical Background

2.1. PWE and Organizational Behavior

Miller *et al*. (2002) described the work ethic as a constellation of attitudes and beliefs related to work behavior characterized by (a) being multidimensional; (b) relating to work and activities in general, not being specific to any job; (c) being knowledgeable; (d) referring to attitudes and convictions; (e) being a motivational construct reflected in behavior; and (f) being secular, not necessarily linked to any set of religious beliefs.

Weber's proposal shows the work ethic to be an attitudinal construct derived from work-oriented values (Furnham, 1984). Even though the work ethic has traditionally been approached as a one-dimensional construct, it seems to be composed of various dimensions that grant it a multidimensional character with clearly defined variables (McHoskey, 1994). The dimensions are 1) Centrality of Work (feeling of fulfillment, achievement, and satisfaction with the work done); 2) Self-reliance (importance of having independence in carrying out daily work); 3) Hard Work (believing in the virtues and success that hard work brings); 4) Leisure (belief in the value of free time and leisure activities); 5) Morality-Ethics (believing in a moral existence); 6) Delay of Gratification (belief in the postponement of rewards or an immediate reward); and 7) Wasted Time (belief in the need to use time productively) (Miller *et al*., 2002).

At the organizational level, the hard work, delay of gratification, and even morality-ethics dimensions are directly and significantly associated with professional burnout, job satisfaction, and task performance, and they even reduce the impact of work interruptions on the health and well-being of employees (Hussain *et al*., 2021; Rachwaniec-Szczecinska *et al*., 2018). Alternately, Slabbert and Ukpere (2011) express that productivity can be linked to all the work ethic dimensions with a relationship conditioned by cultural and economic factors of the studied population. Recently, research has found the impact of PWE on counterproductive work behaviors (Zhang et. al., 2020), organizational commitment (Balay-odao *et al*., 2021), and as a positive predictor of unethical pro-organizational behaviors (Grabowski *et al*., 2021). Also, it has pointed out the influence of the PWE in the relationship among human resources practices, work engagement, and organizational citizenship behavior (Zúñiga *et al*., 2022).

Diverse studies expose differences among generational cohorts regarding the work ethic dimensions (Zúñiga *et al*., 2019). Millennials or Generation "Y" are different from Generation "X" and Baby Boomers regarding Leisure, Hard Work, and Delay of Gratification; on the contrary, evidence has found that there are no intergenerational differences between members of the same family regarding PWE (James *et al*., 2020). Finally, the findings of comparative studies indicate that there is a difference in PWE attributable to sociodemographic variables (Harðardóttir *et al*., 2019; Jonck *et al*., 2019), culture (Ahmadi, 2020), and even regions of origin in the same country (Arciniega *et al*., 2019).

2.2. Using the PWE construct to develop organizations in Latin America

The socio-economic situation of Latin American countries has reconfigured its dynamics and growth projections due to the persistence and uncertainty about the pandemic, the maintenance of low investment, productivity, and the slow recovery of employment, as well as as the worsening of the social effects caused by the crisis (CEPAL, 2022).

These factors highlight the importance of understanding the cultural differences between populations for the improvement of commercial relations, the exchange and adaptation of the labor force, and the development of companies (Ochoa & Coello, 2020). In this regard, a key issue that has received little attention in Latin American countries so far is the study of how ethical beliefs about work vary across borders (Ochoa & Coello, 2020).

In an increasingly global context, the managers of Latin American companies, as well as those of multinational companies, need to manage teams that will progressively be more culturally diverse; knowledge about cultural differences regarding the value that employees give to work (i.e. PWE) becomes an important competitive advantage.

In Asia, Europe, and Africa, the PWE has been heavily used to measure differences in the value that people place on work from generational, cultural, and professional perspectives (i.e., Chanzanagh & Akbarnejad, 2011; Li & Madsen, 2009; Ozatalay & Chanzanagh, 2013; Ryan & Tipu 2016; Slabbert and Ukpere, 2011). America has not been the exception, but the usefulness of this construct has only been made visible in two countries: the United States and Mexico (i.e., Woehr *et al.*, 2007); which leads us to think that in a progressive context of globalization and teleworking, the analysis of the differences of the universal construct of the PWE may be of interest. Despite this, one of the limitations in the study of PWE in South America is the lack of adequate measurement instrumentation for it. In the South American sphere, the use of instruments originating from other cultures to measure the different constructs of organizational behavior has been a common practice that has not taken into account the erroneous effects they produce in interpretation (Muñiz *et al.*, 2013). Therefore, the exploration of the ethical values of professionals in South America requires tools contextualized to their environment; to propose policies, human resources practices, and forms of intercultural relations that promote adequate development and therefore improve its management and growth indicators.

2.3. PWE: differences between Ecuadorian and Chilean workers

Ecuador and Chile are two nations that play a significant role in regional trade and in some way have had a presence in the global economy. However, even though both countries are located on the west coast of South America, there are marked cultural differences such as group-work orientation and perception of time, the way of establishing business relationships, and work habits. (Robertson, 2000).

Chilean culture has a very high human development, it is considered the most developed country in South America, characterized by its high levels of social progress compared to the rest of the region (Baumann, 2021). On the other hand, Ecuador has recently been considered an energy power, and worldwide it is one of the main exporters of oil and bananas (CEPAL 2022). Ecuador is a truly South American country with a multiethnic and multicultural nation marked by the majority presence of indigenous people (40% of the population) and also by mestizos and Afro-Ecuadorians according to the 2010 census. Cross-cultural studies developed in LATAM have compared the Ecuadorian and Chilean populations as an emerging response to the rapid economic, social, and technological transformations that are changing workplaces, implying challenges and opportunities for organizations and individuals (i.e. Robertson, 2000; Rozell *et al.*, 2010). This different cultural context leads us to think that there will be differences between Chilean and Ecuadorian workers in the various dimensions of the PWE.

Individual and cultural values are one of the psychological constructs used to understand cultural variability and the differences in meaning that may exist between populations (Matsumoto & Yoo, 2006).

Cross-cultural findings have consistently shown that there is a general two-dimensional structure of values (people-centered and social-centered) capable of describing basic principles of global ethical-moral interest and that has been tested in various cultures worldwide (Fontaine *et al.*, 2008). Therefore, in a world like the one we have, it is not to be expected that there will be differences in the dimension of Morality Ethics between Chileans and Ecuadorians. Similarly, the role of work in the South American society is shared: Chilean and Ecuadorian employees give work a central role in life through characteristics such as entrepreneurship and a low tolerance for failure at work (Rozell *et al.*, 2010). For this reason, it is possible to argue that there will be no differences between Chileans and Ecuadorians in the dimension of the centrality of work. Based on this, we propose the following hypothesis:

> H_1: *Chilean and Ecuadorian workers will not differ significantly in the Morality-Ethics (H_{1a}) and Centrality of Work (H_{1b}) dimensions of the PWE.*

However, the different economic development existing in Ecuador and Chile makes it more relevant for Ecuadorian workers than for Chilean employees to develop an intense labor activity to achieve social recognition and progression in social development (Robertson, 2000; Rozell *et al.*, 2010). On the other hand, in the Chilean economic context, the evidence indicates that family life, leisure, health, and work weigh more than money from the perspective of Chilean workers (Montero & Miranda, 2020). This leads us to argue that for Ecuadorian employees hard work and not wasting time will be more important than for Chilean ones; while for them it will be more relevant to have leisure time. Based on the above, we propose the following hypotheses.

> H_2: *Ecuadorian workers will obtain significantly higher scores than Chilean workers in the dimensions: hard work (H_{2a}) and wasted time (H_{2b}) of the PWE.*

> H_3: *Chilean workers will obtain significantly higher scores than Ecuadorian workers in the Leisure dimension of the PWE.*

Along with this, the same socio-economic and educational context makes Chileans show a social motivation to improve through education, career development, and social mobility (Gomez, 2018; Robertson, 2000). In short, they have a higher level of training and education. According to the latest data published by UNESCO (2017), both Chile and Ecuador have decreased in their literacy rate, however; between the two countries, Chile is the one that shows a higher rate of adult literacy with 96.4% compared to Ecuador which reaches a rate of 92.83%. For this reason, it is possible to say that Chilean workers will have greater self-reliance in their abilities than Ecuadorian workers. In addition, career development in most developed economies is a long-distance career in which gratification for work done is often delayed. This fact implies that people make an investment of time and effort in preparing for the development of their career that does not immediately bear fruit. In this context, since the Chilean economy is more developed than the Ecuadorian one, it is possible to state that Chilean workers have a greater vision of the importance of delayed gratification than Ecuadorian workers. Following the above argumentation, we propose the following hypotheses.

> H_4: *Chilean workers will obtain significantly higher scores than Ecuadorian workers in the dimensions: Self-reliance (H_{4a}) and Delay of Gratification (H_{4b}) of the PWE.*

2.4. Measuring Protestant Work Ethic by Means of MWEP

The MWEP has been applied in several samples from the East and West covering just over 13 countries. Its factorial structure and invariance models have been studied. Likewise, the tool has served to compare the construct between different occupational groups and between hierarchical levels. At the same time, it has also been used to relate the dimensions of work ethic with behavioral variables at the organizational and individual levels in business, educational, social, and religious environments. **Figure 1** shows the extensive use of the MWEP.

Figure 1 – Temporal and content utility of the MWEP
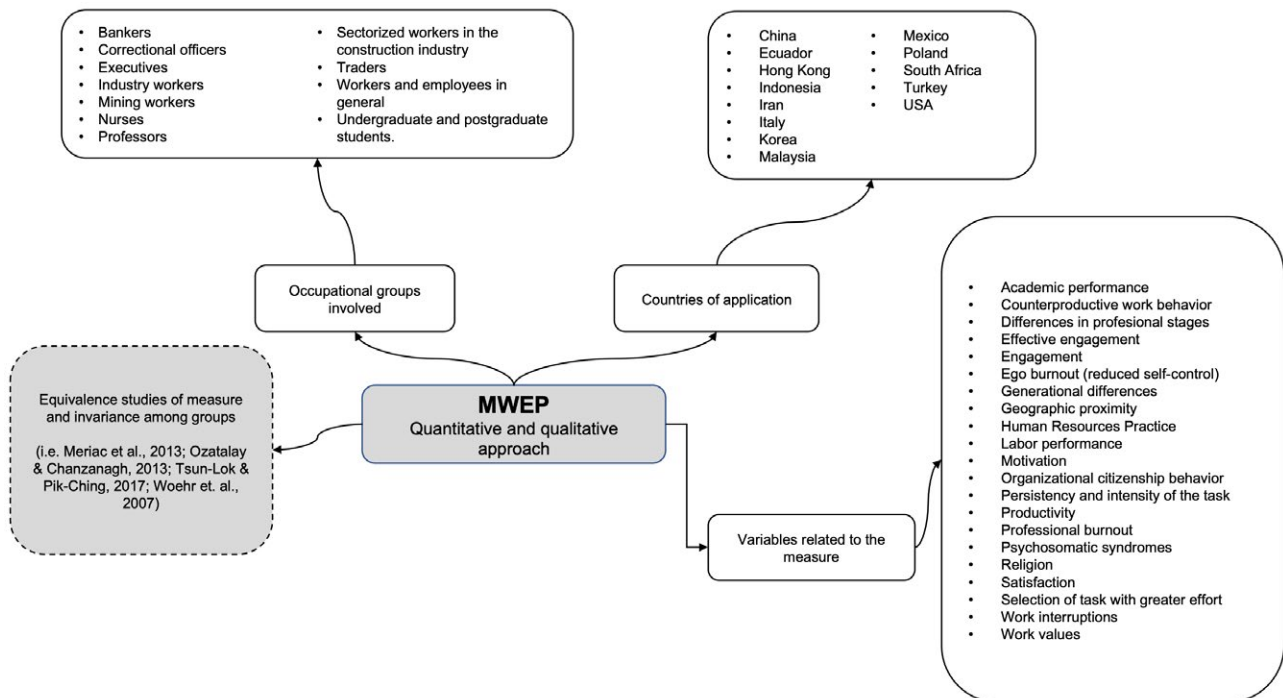
Note. A theoretical review of approximately 45 studies in which the MWEP has been used worldwide for two decades (2002-2022) was carried out. We list the occupational groups that participated, the countries in which the investigations were carried out, and the labor-type variables with which the work ethic has been associated.

The original version (Anglo-Saxon) of the MWEP (Miller *et al*., 2002) showed appropriate psychometric properties. Alpha values, in all dimensions, are at least .80, except for the Delay of Gratification (α = .73). In its Spanish translation, Woehr *et al*. (2007) keep the seven dimensions and the 65 items with acceptable internal consistency estimations for all scores (medium coefficient of α = .79 within a range of α = .64 to .89).

However, the research reveals the sensitivity of the dimensional structure of the MWEP as a function of the population in which it is administered. A detailed analysis of this allows us to observe the existence of different dimensional models: a) the model developed in the United States, Mexico, and Korea by Woehr *et al*. (2007), with 65 items and seven dimensions; b) the summarized model of the scale (Meriac

et al., 2013) validated only in the United States with a total of 28 items and seven dimensions; and c) the models developed with specific populations in Hong Kong (Tsun-Lok & Pik-Ching, 2017), Turkey (Ozatalay & Chanzanagh, 2013), and Iran (Chanzanagh & Akbarnejad, 2011).

In addition, one of the most frequent practices in Latin American countries, in terms of measurement, is to appeal for the use of published questionnaires because they have an underlying theoretical framework that supports the construct under evaluation. However, as these scales were developed under different conditions and contexts, their use implies, as a prior task, verifying the equivalence of their measurements in other cultures (Kulakova *et al.*, 2017). Etic and emic perspectives represent a systematic and empirical way of collecting, analyzing, and interpreting data to provide universally valid answers to problems related to behavior (global cultural phenomena), and these perspectives suggest that an environment should be understood intuitively and empathetically from within. Thus, the scales should be validated according to each cultural context to ensure that collected data is valid and reliable for generalizing results (Epstein *et al.*,2015).

3. Method

3.1. Participants

A total of 530 people were surveyed, 402 Ecuadorians and 128 Chileans, of whom 65.3% were male, with 80.2% of the sample being aged between 18 and 37, and 19.3% being aged between 38 and 57. Another characteristic of the sample is that 57% are working and employed, while 43% are unemployed. The sample was non-probabilistic in different private companies in both countries.

Table 1 - Descriptive characteristics

		Ecuador (N 402)		Chile (N 128)		Total (N 530)	
Age	18 - 37 years	335	83,33%	90	70,31%	425	80,19%
	38 - 57 years	67	16,67%	38	29,69%	105	19,81%
Gender	Male	253	62,94%	93	72,66%	346	65,28%
	Feminine	149	37,06%	35	27,34%	184	34,72%
Employment situation	With employment	177	44,03%	125	97,66%	302	56,98%
	Unemployed	225	55,97%	3	2,34%	228	43,02%

3.2. Instrument

The MWEP Spanish version (Woehr *et al.*, 2007) was used in the same order, which consists of 65 items on a Likert response scale ranging from 1 to 5, with 1 = Totally disagree with the statement and 5 = Totally agree with the statement. The scale measures the seven dimensions explained above: Centrality in Work, Self-Reliance, Hard Work, Leisure, Morality-Ethics, Delayed of Gratification, and Wasted Time.

In terms of the instrument in Spanish (Woehr *et al.*, 2007), before its application, a semantic-idiomatic review was carried out, with only minor modifications made in Ecuador (Zúñiga *et al.*, 2019), while in Chile it was verified that all the words used were known and used daily by the sample because there were no changes. For data collection, all participants signed the respective informed consent form.

4. Results

4.1. MWEP Adaptation: dimensionality analysis and MWEP short version development

To explore the dimensionality of the scale in our samples, we conduct a confirmatory factor analysis (CFA). We test on our data the seven-factor model initially proposed for the MWEP (Miller *et al.*, 2002; Woehr *et al.*, 2007). No item presents kurtosis ≥ 7. According to Mardia's test, the original model obtained a summation of the critical ratio of 76.21, and in the summarized model the critical radio was 42.23; therefore, multivariate normality was not verified. Following Byrne's (2010) recommendation, for small nonnormal samples, a bootstrapping of 200 pieces with a 95% confidence interval (C.I.) has been added; this resampling allows stabilization of the estimated parameters in using the maximum likelihood model. The resampling has been carried out using the Monte Carlo simulation method because it allows a statistical significance test to be used for the estimated parameters.

As **Table 2** shows, the full form version (Woehr *et al.*, 2007) has a very poor fit on five indices GFI, RMR, TLI, CFI, as well as CMIN / DF. The standardized factor loads in the original model ranged from .09 to .98, with an average of .52. An attempt was made to use the validations carried out in other contexts, but none of them met the expectations. Therefore, a summarized model was developed (short-form version model). To reduce the instrument, the recommendations of Hair *et al.* (2010) were adopted as adjustment criteria. The absolute fit indices used were: a) chi-square (X2), which, depending on the number of variables and the sample, is expected to be significant; b) the goodness-of-fit index (GFI), which best adjusts when approaching 1; c) the mean square error of approximation (RMSEA), which is expected to have a value of ≤ .07; and d) the root mean square residual (RMR), which is expected to have a value of ≤ .08. As measures of incremental fit, e) the Tucker-Lewis index (TLI), f) the normed fit index (NFI), and g) the comparative goodness of suitable index (CFI) were used, which are also expected to have a result of ≥ .90. As regards measures of parsimony, h) the chi-square ratio on the degrees of freedom (CMIN / DF) predicted values <3, and i) the Akaike information criterion (AIC), according to which the lowest value corresponds to the most optimal model. Furthermore, the reliability of the factors of the best-obtained model was estimated through Cronbach's alpha coefficient. On the other hand, the fit indices for the scalar, metric, and configurational factor invariance analysis were X2, whose difference should not be significant, RMSEA, which should remain stable at ≤ .07, and CFI with a difference of < .01 (Byrne, 2010).

For developing the MWEP Short version, it was decided to delete items and add parameters while preserving the theoretical meaning and consistency of the data. Only four items were conserved per factor. The items of each factor that required more saturations and more error covariance to achieve

a good fit were eliminated. Only five error covariances were conserved: items 19 and 11 of Delay of Gratification, items 26 and 55, and 20 of Hard Work, and items 47, 4, and 41 of Delay of Gratification, as well as items 9 and 12 of Wasted Time.

The short-form version preserved the seven original dimensions, but with 28 items (four items for each dimension), to keep the criteria fit. The short form fully satisfies the fit indices. In GFI, the value achieved was closer to 1; in RMR, a value ≤ .08 was obtained, and in TLI and CFI, values ≥ .90 were reached. The short form reported the lowest standardized factor load of .42 and the highest of .80 with an average of .61. The average explained variance of the model (standardized regression weights) is 61.25%.

Table 2 - Absolute, incremental, and parsimony indexes for the known models.

Models	X^2	DF	Absolute indexes			Incremental indexes		Parsimony indexes	
			GFI	RMSEA	RMR	TLI	CFI	CMIN/DF	AIC
Full form version (Woehr *et al.*, 2007)	6340.006	1994	.669	.064	.117	.638	.653	3.180	6642.006
Short form version	656.572	324	.917	.044	.043	.902	.916	2.026	820.572

Notes. * p < .05; GFI = goodness-of-fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; AGFI = adjusted goodness-of-fit index; TLI = Tucker-Lewis index; CFI = comparative fit index; CMIN/DF = chi-square divided by degrees of freedom; AIC = Akaike information

Table 3 shows the seven dimensions with the individual items from the full form version (Woehr *et al.*, 2007) and the conserved items that were best adjusted for validation in Ecuador and Chile and correspond to the short form version.

Table 3 - Multidimensional Work Ethic Profile scoring item numbers.

Dimension	Full form version	Short form version
Self-Reliance (SR)	6, 21, 26, 28, 32, 34, 44, 50, 55, 59	26, 34, 44, 55
Morality-Ethics (ME)	7, 16, 15, 25, 37, 48, 51, 54, 57, 61	7, 15, 37, 51
Delay of Gratification (DG)	3, 11, 19, 29, 42, 46, 62	11, 19, 29, 46
Leisure (LE)	5, 8, 14, 18, 27, 31, 43, 49, 58, 63	18, 31, 49, 63
Wasted Time (WT)	1, 9, 12, 23, 36, 39, 56, 65	9, 12, 23, 56
Centrality of Work (CW)	2, 4, 10, 13, 30, 33, 40, 41, 52, 64	4, 41, 52, 64
Hard Work (HW)	17, 20, 22, 24, 35, 38, 45, 47, 53, 60	20, 45, 47, 60

Note. Underlined items are reverse scored. The order of the items is the same as in the full version published by Woehr et al., (2007) for both models.

4.2. MWEP Adaptation: Measurement Invariance

Table 4 presents the results of the invariance analysis for the short form version model: configurational (Model 1), metric (Model 2), scalar (Model 3), and a partial scalar (Model 4). To test the unrestricted model consistency, the RMSEA (≤ .07) and CFI (> .90) settings are evaluated to validate the hypothesis of configural invariance. In Model 2, the 21 factorial loads are restricted, and it is shown that there are

no significant differences concerning Model 1 either in x^2 (p ≥ .05) or in CFI (ΔCFI = .00); therefore, the hypothesis of the metric invariance is tested. Moreover, in Model 3, in addition to the full factorial loads, 21 covariances were restricted; however, only the ΔCFI (< .01) showed that this model is equal to Model 1, the x^2 adjustment shows that this model is different from the Model 1 (p <.001). This situation suggests that the hypothesis of complete scalar invariance should be rejected.

Finally, in Model 4, restrictions were established for 18 covariances that do not present adjustment problems. Three covariances that present low adjustments (Self-Reliance ↔ Wasted Time, Moral-Ethics ↔ Wasted Time, and Delay of Gratification ↔ Leisure) were eliminated from the model. As a result of this process, the hypothesis of scalar invariance can be partially confirmed since there are no differences in x^2 (p ≥ .05) or CFI (ΔCFI < .01).

Table 4 - Goodness-of-fit statistics for tests of multigroup invariance of a short form version for the MWEP across the Ecuadorian and Chilean samples.

Model	Comparative model	x^2	df	Δx^2	Δdf	p	RMSA	CFI	ΔCFI
1. Configural invariance	-	1173.909	648	-	-	-	.035	.902	-
2. Full metric invariance	Model 1 vs 2	1173.909	669	15.203	21	.813	.034	.903	-.001
3. Full scalar invariance	Model 1 vs 3	1252.131	690	78.222	42	.001	.035	.896	.003
4. Partial scalar invariance	Model 1 vs 4	1227.828	687	53.919	39	.056	.035	900	.002

Note. It was tested the configural invariance, metric invariance, and partial scalar invariance of the MWEP between Ecuadorians and Chileans

4.3. MWEP Adaptation: Measurement Reliability

Table 5 shows the reliability indicators for each dimension of the reduced version of the MWEP and their intercorrelations. The analysis with Cronbach's alpha at a general level shows reliability (α = .839), which is also observed at a specific level in Ecuador (α = .836) and in Chile (α = .877). This situation is reflected in most of the dimensions except for Wasted Time, which presents low reliability both at a general level (α = .570) and at a specific level in the Ecuadorian sample (α = .509) without being considered unacceptable.

The intercorrelations between the seven dimensions of the MWEP at a general level obtained an average of .38. In the Ecuadorian sample, it is .41, and in the Chilean selection, it is .36. Most intercorrelations are significant according to the confidence intervals (95% C.I.) of the Monte Carlo simulation method. However, no significant correlations are also observed. Leisure does not correlate with Centrality of work, Delay of Gratification, Hard Work, and Wasted Time. In the Ecuadorian sample, the Leisure dimension shows a non-significant correlation with Delay of Gratification, Hard Work, and Wasted Time. The Chilean sample shows that Leisure has a non-significant correlation with Self-Reliance, Centrality of work, Hard Work, and Wasted Time. Also, in this sample, there is a non-significant correlation between Morality-Ethics with Delay of Gratification and Wasted Time.

Table 5 - Short-form MWEP. Reliability (α) and intercorrelations.

	Scale Dimension	Alpha (α)	ME	LE	CW	DG	HW	WT
Sample (N=530)	Self-Reliance	.648	0.352**	0.298**	0.606**	0.554**	0.645**	0.548**
	Morality-Ethics (ME)	.631		-0.123*	0.454**	0.202**	0.495**	0.459**
	Leisure (LE)	.732			-0.117	-0.048	-0.100	-0.045
	Centrality of Work (CW)	.649				0.518**	0.669**	0.713**
	Delay of Gratification (DG)	.810					0.564**	0.589**
	Hard Work (HW)	.800						0.668**
	Wasted Time (WT)	.570						-
Ecuadorians (N=402)	Self-Reliance	.645	0.345**	0.300*	0.510**	0.644**	0.653*	0.697*
	Morality-Ethics	.631		-0.148*	0.475**	0.354**	0.549**	0.617*
	Leisure	.710			-0.183*	0.072	-0.053	0.019
	Centrality of Work	.618				0.539**	0.624*	0.779*
	Delay of Gratification	.759					0.624*	0.503*
	Hard Work	.795						0.704*
	Wasted Time	.509						-
Chileans N=128)	Self-Reliance	.805	.399**	.158	.814**	.633**	.666**	.354*
	Morality-Ethics	.630		-.352**	.355**	.004	.366*	.100
	Leisure	.715			-.046	.273*	-.198	-.058
	Centrality of Work	.763				.656**	.787**	.688**
	Delay of Gratification	.845					.447**	.798**
	Hard Work	.821						.642**
	Wasted Time	.748						-

Notes. Bootstrapping of 200 samples was applied with Monte Carlo simulation (95% C.I.).
*** p < .01.*

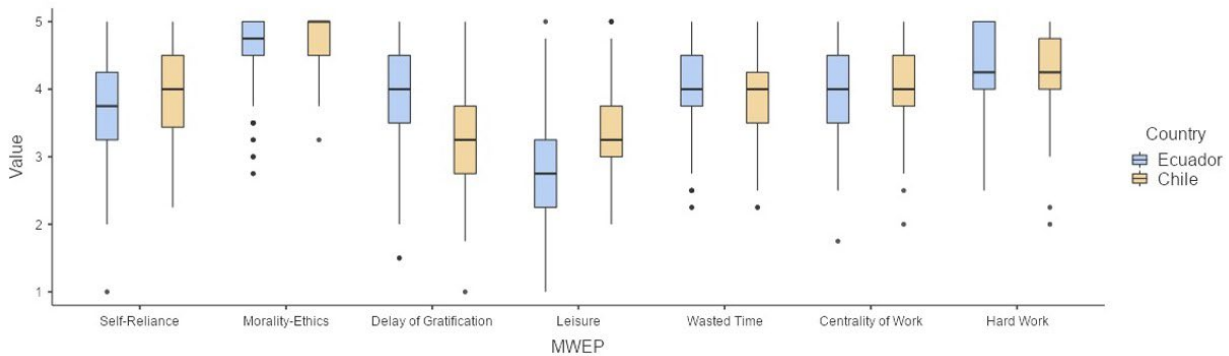## 4.4. Differences between the Ecuadorian and Chilean workers: Hypothesis testing

The comparison between Chilean and Ecuadorian workers mean values (**Table 6** and **Figure 2**) revealed three non-significant differences and four significant differences. There are no differences in Morality-Ethics (H_{1a} is tested), Centrality of Work (H_{1b} is tested), and Hard Work dimensions (H_{2a} is not tested). The Ecuadorian sample exposes higher values in Wasted Time (H_{2b} is tested) and Delay of Gratification (H_{4b} is not tested). Conversely, the Chilean workers exhibit mean values higher than the Ecuadorian workers one in Leisure and Self-Reliance dimensions ($H_3 - H_{4a}$ are tested). Considering the medium (>.50) and large (>.80) effect sizes, according to Cohen's d, the essential differences occur in the Delay of Gratification and Leisure dimensions.

Table 6 - Mean and standard deviations of the MWEP seven dimensions by sample.

	Ecuador		Chile		Total		t	d
	Mean	S.D.	Mean	S.D.	Mean	S.D.		
Self-Reliance	3.76	.72	3.93	.79	3.80	.74	-2.399*	.22
Morality-Ethics	4.55	.59	4.66	.61	4.58	.60	-1.845	.18
Delay of Gratification	3.91	.78	3.25	.91	3.76	.85	8.144*	.78
Leisure	2.79	.79	3.33	.68	2.92	.80	-7.041*	.73
Wasted Time	3.95	.62	3.80	.72	3.92	.64	2.381*	.22
Centrality of Work	3.95	.64	3.95	.72	3.95	.66	.026	.00
Hard Work	4.23	.73	4.14	.75	4.21	.73	1.229	.12

Note: Statistical significance was obtained by the statistic (t) of the Student's t-test. The effect size, by Cohen's d (d).
* Significant difference of <.05

Figure 2 - PWE box-and-whisker comparison plot.

Note. In the third and fourth dimensions illustrated in the center of Figure 2, it is possible to observe the differences between the Chilean and Ecuadorian workers. The delay in gratification has a higher score in Ecuadorians workers, which means that they give more importance to this situation. On the other hand, Chileans workers give more importance to the leisure dimension, an issue that can be seen in the highest location of the Chilean sample box.

5. Discussion

The results of this study show us that there are undoubtedly significant differences in the value that Ecuadorian and Chilean employees give to work. These differences have been evidenced by means of four of the seven dimensions of the universal construct of the PWE: Self-reliance, Leisure, Delay of Gratification, and Wasted Time.

For its part, Chileans obtain higher scores than Ecuadorians in the dimensions of Self-Reliance and Leisure. These results imply that Chileans tend to be more independent at work and, at the same time, they believe and show positive attitudes towards leisure activities, rest, and free time. Conversely, Ecuadorians score significantly higher than Chileans in the dimensions of Wasted Time and Delay of Gratification; that is to say, this population grants relevance to active and productive use of time, while they prefer waiting for a satisfactory long-term reward instead of minor immediate rewards. This outcome is due to Ecuador's current situation, which in recent years has shown socio-economic progress due to the implementation of public policies to promote and stabilize work through labor recruitment services, education and training programs, work incentives and incentives for entrepreneurship, protected and supported employment, direct creation of job and income protection in situations of unemployment. Whose results have surpassed the traditional indicators, impacting on the living conditions of citizens, but which are still insufficient to reach high standards in terms of the quality of work (Midaglia & Castillo, 2018).

The results shown in this work contribute additional evidence regarding the invariance of measure, dimensionality, and reliability of the MWEP to be used in South American evaluation contexts, specifically in Ecuador and Chile. Furthermore, configurational invariance, metric invariance, and scalar (partial) invariance are checked since the ideal/total scalar invariance is unattainable in practice (Marsh *et al.*, 2018).

The adapted model in the United States of America, Mexico, and Korea (Woehr *et al.*, 2007), gave as a result worse adjustment than our proposed reduced model. The short-form version shows a seven-dimensional solution, with 28 items, which explains 61.24% of the variance. The distribution of the four items for each dimension of the proposed scale shows the same distribution as the original scale of Miller *et al.* (2002) and the scale in Spanish of Woehr *et al.* (2007). The reduced proposed version of the MWEP has satisfactory reliability in its dimensions for all the cases. However, there are exceptions for the Wasted Time (in the Ecuadorian sample) and Morality-Ethics (in the Chilean sample) dimensions, which are not quite suitable. As regards the invariance of the measure, our results clearly show that with the reduced MWEP, it is possible to carry out a nonbiased measurement in the two studied populations.

Therefore, our results provide further evidence about how to use the MWEP in PWE studies in the Ecuadorian and Chilean populations. Another of the contributions of our study is that for the first time, the scalar validation of the MWEP is explored, since Woehr *et al.* (2007), in their analysis of factorial invariance in Mexico and China, only report evidence of configurational and metric invariance, and do not evidence a scalar invariance.

Despite the contributions mentioned above, our research is not free of limitations. The disproportion between the participants from the two populations should be noted. The Ecuadorian sample would be considered large (n > 250) and the Chilean sample would be defined as small (n < 250), so the adjustment rates for the small sample are more conservative in the RMSEA, CFI, and TLI, aspects as considered

appropriate to ensure rigor with a small sample. However, the relevance of performing a factor invariance analysis of a small and large sample according to the specifications is open to discussion.

Finally, it is necessary to consider the practical implications of our research. First of all, our results offer empirical evidence for cultural diversity management in organizations. The differences found in the values of Chilean and Ecuadorian workers can be considered by human resource managers for the development of differential motivation and career development practices. In a context of progressive attention to the needs of the employee, our findings can offer a competitive advantage to the managers of the organizations.

 Second, a scale with invariance evidence will allow researchers to analyze work ethics in other population contexts and carry out intergroup and correlational studies with variables of people's behavior. In human capital management, there is now a scale tailored to Ecuadorian and Chilean populations designed to explore the attitudes and values that employees have towards work. The objective of this exploration is to design human resources practices/policies for managing retention, commitment, and organizational satisfaction. From an institutional-level perspective, personnel managers can rely on a valuable instrument for monitoring the evolution of these attitudes in the population. Thus, they can identify policies of interest for the development of employability in a differentiated manner.

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