

The Effects of Job Autonomy, Learning Culture, and Organizational Cynicism On Learning Transfer in MBA

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Abstract

Purpose: To propose and test a model of learning transfer in MBA, assessing the influence of job autonomy, learning culture, and organizational cynicism on learning transfer.

Theoretical Framework: Based on the taxonomy of use of Yelon, Ford, and Bhatia (2014), we developed and tested a learning transfer scale structured in five dimensions: perform, assess, explain, instruct and lead.

Methodology: We conducted a quantitative study with 306 students in the concluding phase and graduates of MBA courses of Brazilian business schools. The data were analyzed using partial least squares structural equations modeling (PLS- SEM).

Results: The results confirmed that learning culture influences learning transfer, while job autonomy and organizational cynicism do not influence it. In addition, we analyzed the influence of five control variables and two of them had weak but significant effects on learning transfer: age and job position of the student.

Practical and Social Implications of the Research: Despite the increase in academic research on learning transfer in recent decades and the growing investments in training and development (T&D) actions by companies at a global level, there is a lack of studies involving long-duration educational programs. So, this study presents an opportunity to investigate how MBA students transfer what they have learned in the course to the work context.

Contributions: This study contributes to the theory by proposing and testing a multidimensional learning transfer scale. The results also revealed that students

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use what they have learned in MBAs in different ways, showing the contribution of these programs to individuals and organizations.

Keywords: Learning transfer, job autonomy, learning culture, organizational cynicism, MBA.

I Introduction

The study “The training panorama in Brazil 2020/2021” revealed that in 2020 companies invested approximately R\$ 7.7 billion in training and development (T&D) (Associação Brasileira de Treinamento e Desenvolvimento, 2021). In 2015, global investment in T&D was approximately US\$ 356 billion, which shows that organizational leaders have the view that when their employees acquire new knowledge and skills in formal learning events, there are positive impacts over the competitive advantage of the company as a whole (Baldwin et al., 2017). However, research has presented controversial results regarding the real benefits of formal learning for organizations in different aspects. There are studies with positive results in terms of innovation (Sung and Choi, 2013) and productivity at work and increased profits (Kim & Ployahart, 2014) and financial performance in the long run (Kwon, 2019). Others reveal that formal learning has not improved organizational performance (Vandergoot et al., 2020) and results at the individual level (Ford et al., 2018).

These controversial results can be explained by the difficulty of isolating the effects of different types of formal learning in relation to other organizational factors (Noe et al., 2014). Organizations need to assess individual behaviors that show that individuals are using what they have learned in the execution of their work, that is, learning transfer, also called training transfer, which was initially defined in the seminal study of Baldwin and Ford (1988) as the level to which students effectively apply in their work the knowledge, skills, and attitudes acquired in training. Although the transfer topic is one of the most important and active in research on T&D (Saks et al., 2014), with increased publications in the last two decades (Baldwin et al., 2017; Schoeb et al., 2020), it still presents some gaps, particularly two. The first relates to the learning transfer construct, which needs to be better defined, operationalized, and differentiated between use and effectiveness (Blume et al., 2010; Vandergoot et al.,

2020). The second concerns the lack of studies involving long-duration educational programs with more generic and abstract contents (Soerensen et al., 2017).

Thus, the present investigation can contribute to filling the previous two gaps. For the first, we developed and operationalized a learning transfer scale based on the taxonomy of use of Yelon et al. (2014), who define transfer as the use of the knowledge and skills acquired in formal learning in order to meet the job requirements. For the second gap, the object of investigation is the Brazilian MBA, which according to the criteria established by Resolution n. 1 of June 8th of 2007 of the National Education Council are *lato sensu* postgraduate courses lasting a minimum of 360 hours (Resolution n. 1, Brasil, 2007).

From the objective and instrumental perspective, MBAs have been the target of criticisms, which focus on aspects of the courses and the role of business schools (Boff et al., 2018). Despite the criticisms, there are international (Mihail and Kloutsiniotis, 2017) and national (Pires and Sarfati, 2019) empirical studies that reveal the positive impact of MBAs over the career and remuneration of their graduates. However, these studies do not present evidence of whether the MBA graduates had better job performance as a result of the use of the knowledge and skills learned during the course.

In line with the above discussions, it is possible to infer that the learning transfer literature, in which there is a predominance of studies with quantitative models that test the relationships between different antecedents and their influence on transfer (Lancaster et al., 2013), can provide contributions to overcome the previous gaps, since besides the aspects related to the course in itself, it broadens the focus of the investigation to the student and to the organization. Based on that assumptions, we followed the recommendations of Grossman and Salas (2011) and analyzed the main literature reviews (Blume et al., 2019; Burke and Hutchins, 2007; Cheng and Hampson, 2008; Tonhäuser and Büker, 2016) and meta-analyses (Blume et al., 2010) in order to identify what antecedents can exert a greater influence on

learning transfer considering the specificities of the type of formal learning under investigation, in the present study the MBA.

As a result of that review, we selected three antecedents classified as general environmental factors that do not intentionally focus on formal learning events but can influence students' transfer behaviors (Holton et al., 2000). They are: job autonomy, learning culture, and organizational cynicism. So, the research question that guided this study is: "How do job autonomy, learning culture, and organizational cynicism relate with learning transfer?" To answer it, we defined the following as the general objective: propose and test a model of learning transfer in MBA, assessing the influence of job autonomy, learning culture, and organizational cynicism on learning transfer.

This study contributes theoretically by proposing a multidimensional scale of learning transfer as use ("as use" is explained in section 2.1). The scale, in turn, provides the following practical contributions: 1) it broadens the understanding of how students effectively use the knowledge and skills acquired, revealing the MBA's contribution not only to individuals but also to organizations; 2) the scale can be adapted to other types of formal learning and adopted in models with different antecedent and consequent variables, helping organizations to more effectively assess the results of their formal learning initiatives. Finally, as a social contribution, the study broadens the understanding of the role of formal education and of business schools in the development of organizational leaders.

2 Literature review and hypothesis development

2.1 Learning transfer as use

Despite the growth of academic research on learning transfer in recent decades, there remains a divergence between the operational definitions and their measurement instruments (Schoeb et al., 2020). Inconsistent operationalizations can explain why the research results are contradictory (Vandergoot et al., 2020). In this context, one of the most important advances in the transfer literature in relation to the operationalization and measurement of the transfer construct is its distinction between use and effectiveness (Ford et al., 2018), highlighting the contributions of Yelon et al. (2014), who based on qualitative

studies with an inductive approach proposed a model for conceptualizing and operationalizing different modes of application or use of knowledge and skills acquired in formal learning, which was called taxonomy of use.

According to Yelon et al. (2014), transfer as use occurs when the student employs something learned for a specific purpose. In the context of courses focused on developing open skills such as MBAs, that "something" is often intangible: ideas, rules, principles, or procedures to guide actions. The concept of use also considers the personal choices of professionals with relative autonomy, since they decide when, what content, and how to use what they have learned. These different uses in different situations broaden the concept of transfer to the use of the knowledge and skills acquired in formal learning in order to meet the job requirements (Yelon et al., 2014). Use is a multidimensional construct. Table 1 presents the five types of use of the knowledge and skills acquired in formal learning and their respective definitions.

Yelon et al. (2014) suggest that the taxonomy of use should be generalized and adopted to analyze learning transfer in different formal learning events. In this context, MBAs are an opportunity to assess the different uses. Based on the types and definitions from Table 1, we developed and tested a scale of learning transfer as use of the knowledge and skills acquired in formal learning according to the procedures presented in section 3.1.

2.2 Job autonomy

According to Hackman and Oldham (1975), the ways individuals experience and perceive the characteristics of their work affect their behaviors and attitudes in different situations. Among these characteristics, Hackman and Oldham (1975, p. 162) emphasize job autonomy and defined it as: "the degree to which the job provides the employee with substantial freedom, independence, and judgment to plan their work and determine the procedures for carrying it out." With regard to learning transfer, organizational environments where employees have control and autonomy over their work facilitate learning transfer (Helle et al., 2011), as they are free to decide what and how to do things in their work (Laker and Powell, 2011). The studies presented below positively relate job autonomy with learning transfer.

In the study of Axtell et al. (1997), job autonomy had a significant effect on learning transfer. The same study revealed that students with greater job autonomy

Table 1
Types of uses of knowledge and skills acquired in formal learning

Type of use	Definition
Perform	When the individual adopts procedures and principles learned in the course to meet the needs for planning or to fulfill normal job duties, both attributed or chosen.
Assess	When, intentionally or not, based on standards learned in the course, the individual assesses the results of their own job performance or the expected performance of colleagues or others who carry out similar activities.
Explain	When, both in conversations and in writing, the individual voluntarily describes methods and principles learned in the course to colleagues and others who do similar jobs.
Instruct	When the individual teaches colleagues and others who do similar jobs, how to apply methods and principles in the way they were taught in the course, or how they have already been adapted and applied in other work situations.
Lead	As a member or designated leader in relevant tasks or group projects that involve the organization as a whole, the individual guides colleagues or others to apply methods and principles learned in the course and defines the criteria for assessing the application.

Note. Retrieved from “How trainees transfer what they have learned: Toward a taxonomy of use” from Yelon et al. (2014).

depend less on other factors related to the climate of transfer (supervisor support, peer support, etc.), as well as being more motivated to transfer learning and more easily identifying opportunities for application.

In the study of Pham et al. (2012) with MBA students, job autonomy had a statistically significant relationship with learning transfer.

Tho's (2017) study revealed that job autonomy had a significant effect as a direct predictor of transfer and as a moderator of the relationship between acquired knowledge and learning transfer.

Therefore, in line with the above discussions, we have the first research hypothesis: **H1** – Job autonomy positively influences learning transfer.

2.3 Learning culture

The concepts of organizational culture and organizational learning and their relationships gave rise to the concept of learning culture (Banerjee et al., 2017), which is the one that promotes the practices of information acquisition, distribution and learning transfer, and recognition of learning-based application (Yang et al., 2004). The definition itself presents a direct relationship between learning culture and learning transfer, which corroborates the ideas of authors who argue that a learning culture is a key factor in the application of learning (Tracey et al., 1995). Individuals who work in organizations with a learning culture have a greater chance of making efforts to learn and transfer, as they believe that learning is an integral part of their job (Cheng, 2000). In this context, we present some studies that show the relationship between learning and culture.

In Cheng's (2000) study with MBA students, the learning culture was a significant predictor of transfer. Other studies revealed that the learning culture was positively associated with learning transfer (Awoniyi et al., 2002; Bates and Khasawneh, 2005) and with the motivation to transfer (Egan et al., 2004). In the academic context, the results of the research of Banerjee et al. (2017) and Gil et al. (2018) presented conclusive evidence that the learning culture can lead to higher levels of transfer of knowledge and skills learned.

The previous considerations lead to the second research hypothesis: **H2** – Learning culture positively influences learning transfer.

2.4 Organizational cynicism

Organizational cynicism is a negative attitude in relation to the organization, composed of three dimensions: (1) cognitive: the belief that the organization lacks integrity; (2) affective: an affective component in relation to the organization; and (3) behavioral: tendencies for contempt and critical behaviors in relation to the organization, consistent with the previous two dimensions (Dean, Brandes, & Dharwadkar, 1998).

Margelyté-Pleskiené and Vveinhardt (2019) analyzed the causes and consequences of organizational cynicism and concluded that there are significantly more factors of the organizational environment promoting the emergence of cynicism than personal factors. Therefore, what occurs in the organization is subject to different interpretations and attitudes.

Organizational cynicism originates from the study of Kanter and Mirvis (1989), but as it is considered a sensitive subject both for managers and for organizations,

it is still scarcely explored in academic research in general (Chiaburu et al., 2013; Margelyté-Pleskiené & Vveinhardt, 2019). Specifically in the learning transfer literature, we located only one study from Tesluk et al. (1995) with organizational cynicism as an antecedent, whose results confirmed lower levels of transfer for individuals with more cynical attitudes in relation to the organization.

Despite the scarcity of empirical studies that relate organizational cynicism with learning transfer, Cheng and Ho (2001) identified that organizational cynicism can explain learning transfer behaviors. Freitas and Borges-Andrade (2004) describe how this relationship occurs. For these authors, organizational cynicism and formal learning involve the issue of change, and the relationship between them occurs as follows: organizational cynicism is understood as the individual's disbelief about possible changes in the organization, and what is learned in a formal learning event aims to promote changes in individuals' behavior. Consequently, individuals with cynical attitude in relation to the organization in which they work will not make efforts to transfer what they have learned, that is, they will not change their behaviors, as they do not believe that the organization can also change, and so learning transfer does not occur.

The previous considerations lead to the third research hypothesis: **H3** – Organizational cynicism negatively influences learning transfer.

2.5 Control variables

In the learning transfer research, the control variables have been scarcely explored (Massenberg et al., 2017). Thus, in this study we will assess the effects of the following control variables: job position, years of professional experience before joining the course, gender, age and job tenure (time working in the current organization), as presented below.

Regarding job position, for Mintzberg (2004), who is considered one of the staunchest critics of MBA courses, the ideal public for these programs are students with managerial and/or relevant professional experience.

We did not locate any studies that tested job tenure as an antecedent or as a control variable in learning transfer studies. However, it is possible to infer that employees who have been working in an organization for a short period of time transfer less, as they are still getting acquainted to the dynamic and culture of the company and learning the job itself.

With relation to gender, Massenberg et al. (2017) mapped studies whose results revealed different levels of transfer between men and women, recommending the inclusion of gender as a control variable.

Age and years of professional experience are related to the student's previous knowledge and the possibility of exchanging experiences in the classroom, which contribute to learning and transfer (Nijman et al., 2006). In the study of Massenberg et al. (2017), age had no statistically significant relationship with learning transfer. We did not locate studies in which years of professional experience was tested as a control variable.

Figure 1 presents the structural model of this study. The learning transfer and organizational cynicism constructs were modeled as second-order latent variables (LV).

3 Methodological procedures

3.1 Instruments used for the data collection

For the data collection, we used a questionnaire composed of four scales that assessed the variables proposed in the research model. All the variables were measured with 7-point scales (agreement and frequency).

To measure job autonomy, we chose the scale of Nijman et al. (2006), based on the one developed by Hackman and Oldham (1975). It has four items. This scale was also used in the study of learning transfer in MBA by Pham et al. (2012), with a Cronbach's alpha of 0.93. The original scale in English was translated into Portuguese and then back-translated.

For learning culture, we chose the reduced version of the DLOQ-A (Dimensions of the Learning Organization Questionnaire – "A" for abbreviated), adapted by Yang (2003) based on the DLOQ of Marsick and Watkins (2003). The scale was translated and applied in Brazil by Menezes, Guimarães, and Bido (2011), with Cronbach's alpha values above 0.80 in the seven dimensions of the construct. Yang (2003) suggested that in studies with a large number of variables, the researchers should use the reduced version, which is composed of seven indicators, one item from each one of the seven dimensions of learning culture. This procedure was adopted in the present study.

Organizational cynicism was measured with the scale from Brandes et al. (1999). That scale presents the tripartite structure of attitudes (Ajzen and Fishbein,

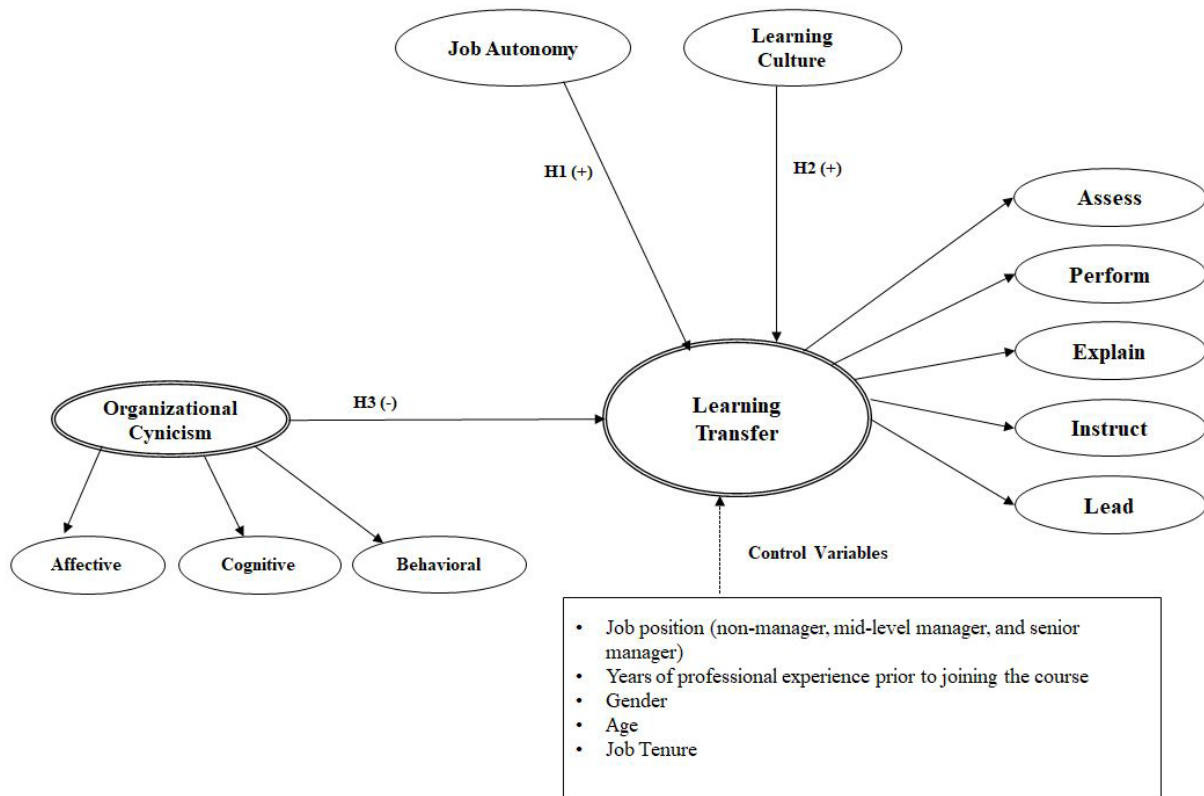


Figure 1. Structural model

1980): cognitive (six items), affective (four items), and behavioral (four items). It was translated and tested in Portugal by Assis and Nascimento (2017), who confirmed the tridimensional structure of organizational cynicism, with the following Cronbach's alpha values: cognitive = 0.87, affective = 0.80, and behavioral = 0.63.

For the learning transfer construct, we developed a first version of the scale composed of 21 items, based on the definitions of each one of the five types of use of the knowledge and skills acquired in formal learning from the taxonomy proposed by Yelon et al. (2014), according to Table 1 of section 2.1. To develop the scale, we adopted a deductive approach (Hinkin, 1998), the items were developed to measure the five dimensions raised in the previous studies, and for that reason it was not necessary to carry out exploratory analyses.

The first version of the scale was submitted to a pre-test with MBA students with the same profile as in the final study, in a sample of 80 valid responses, which were then subjected to confirmatory factor analysis (CFA). Due to the lack of discriminant validity, six items were excluded and all five dimensions of learning transfer were

left with three statements each. The CFA also confirmed learning transfer as a second-order latent variable.

Before the final data collection, we followed the recommendations of Costa (2011), and submitted all the scales to researchers who are expert in topics related to the object of this study. They evaluated the constructs regarding content validity (the fit of the items to the respective constructs) and face validity (statement clarity). The experts recommended changes in the writing of some indicators, which were assessed by the authors and incorporated into the final version of the scales. Indicators from the organizational cynicism scale translated by Assis and Nascimento (2017) were altered in order to cultural and semantic adaptation.

In addition to the previously mentioned scales, we included five questions regarding the demographic profile of the participants: gender (female = 0; male = 1), job position of the student (non-manager = 0; middle-level manager = 1; and executive = 2); age; years of professional experience prior to joining the course; and job tenure (time working at the current organization). The last three were answered in ranges.

3.2 Collection procedures and data preparation

The data collection was carried out between March and June, 2019, in person and online using Google Forms with students from three business schools in São Paulo that offer in-person MBAs with different areas of specialization (marketing, HR, finance, projects, etc.). The survey was carried out with students from the last semester or graduates who finished the course within one year. In both cases they had experiences or opportunities to use what they had learned in the MBA.

In the two forms of data collection, there was an informed consent form that explained the research objective and guaranteed the privacy and confidentiality of the information and that the data would be statistically processed in aggregate form. Approximately 77% of the answers were obtained in the in-person collection.

The minimum sample size was estimated in the G*Power 3 software (Faul et al., 2009), with the following parameters: learning transfer has eight predictors (three independent variables and five control variables), an 80% statistical power, and an effect size f^2 of 0.15. Based on those parameters, the result obtained was a minimum sample of 109 valid cases.

Based on the data collected, we eliminated the records with missing values and with more than 80% repeated answers (for example, when the person answers “totally agree” for all the statements or more than 80% of

them), which suggests low quality answers (ESS EduNet, 2021). We also eliminated the answers of students on courses that did not meet the criteria set for the research. The final sample resulted in 306 valid answers.

3.3 Data analysis

The data were analyzed in three stages: (1) descriptive statistics of the demographic variables; (2) confirmatory factor analysis (CFA) (convergent validity, discriminant validity, and reliability) to assess the measurement model; and (3) hypothesis test – the structural model was estimated using partial least squares (PLS-SEM – partial least squares structural equation modeling). This method requires a smaller sample size than the covariance-based models (LISREL or AMOS), besides testing the relationships between variables without the assumption of multivariate normality. Stage 1 was carried out with Excel and stages 2 and 3 were carried out with the SmartPLS v.3.2.8 software.

4 Presentation of the results

4.1 Descriptive statistics

Table 2 presents the profile of the study participants. Most are finishing the MBA (95%), are in the 25 to 35 year old age group (65%), have more than 10 years of professional experience (48%), occupy middle-level management positions (47%), and have worked in their current company for more than four years (54%).

Table 2
Sample characteristics (n = 306)

Gender	n	%	Job position	n	%
Female	131	42.81%	Non-Managers	134	43.79%
Male	175	57.19%	Mid-Level Managers (Supervisors, Coordinators, etc.)	145	47.39%
			Executive Officers (CEO, president, vice-president, director, entrepreneur, etc.)	27	8.82%
Age	n	%	Job Tenure	n	%
Less than 25 years old	3	0.98%	Less than 6 months	25	8.17%
Between 25 and 30 years old	106	34.64%	Between 6 and 11 months	24	7.84%
Between 31 and 35 years old	94	30.72%	Between 12 and 23 months	27	8.82%
Between 36 and 40 years old	52	16.99%	Between 24 and 35 months	30	9.80%
Between 41 and 45 years old	39	12.75%	Between 36 and 47 months	34	11.11%
Between 46 and 50 years old	8	2.61%	More than 48 months	166	54.25%
More than 50 years old	4	1.31%			
Years of professional experience (prior to joining the course)	n	%	Respondent Profile	n	%
Up to 2 years	8	2.61%	Graduates (finished the course)	14	4.58%
Between 3 and 4 years	35	11.44%	Current students (last semester)	292	95.42%
Between 5 and 6 years	44	14.38%			
Between 7 and 8 years	42	13.73%			
Between 9 and 10 years	30	9.80%			
More than 10 years	147	48.04%			

4.2 Common method bias

Despite the respondent being the information source both for the predictive variables and for the dependent variable, job autonomy, organizational cynicism, and learning transfer were measured with a frequency scale (never to always), and learning culture was measured with a Likert-type scale (totally disagree to totally agree), which minimizes the possibility of method bias (Podsakoff et al., 2012). We also carried out the Harman test in SPSS. The result was 25.06% of total variance extracted by the first factor. Bias is present if a single factor explains more than 50% of the total variance, which did not occur with the data analyzed here.

4.3 Assessment of the measurement model

According to the theoretical framework, all the indicators were analyzed as reflexive (Hair Jr. et al., 2017). The model was estimated with the “path” weighting framework in the SmartPLS v.3.2.8 software (Ringle et al., 2017). Table 3 presents the means, standard deviation, and correlations of the latent variables of the model.

At the item level, the model presented convergent validity, since the factor loadings of the indicators of the four constructs were significant and higher than 0.58 (Hair Jr., et al., 2017). With regard to discriminant validity, there were high cross loadings between the instruct and explain dimensions of learning transfer and between the

cognitive and behavioral dimensions of organizational cynicism. However, as they are dimensions of the same LV, we chose not to exclude any item. The indicators of all the constructs and respective factor loadings can be found in Appendix A.

According to Table 3, the model presented convergent validity, discriminant validity, and reliability at the LV level. The convergent validity was adequate, as the average variance extracted (AVE) values are higher than 0.5. The square root of the AVE (values on the diagonal in Table 3) is higher than the correlations (values outside the diagonal), which according to Hair Jr. et al. (2017) show discriminant validity. Finally, the composite reliability values are above 0.83 and the Cronbach’s alpha values are between 0.72 and 0.90, so the LV reliability can be considered adequate (Henseler et al., 2009).

Organizational cynicism and learning transfer were also modeled as second-order LV, according to the procedures and results presented in the next section.

4.4 Assessment of the measurement model of the second-order latent variables

To model the second-order LVs, we followed the recommendations of Wetzels et al. (2009) and Hair Jr. et al. (2017). The indicators of the three dimensions of organizational cynicism or first-order LVs (affective, cognitive, and behavioral) were repeated in organizational cynicism itself and the indicators of the five dimensions of learning transfer (perform, assess, explain, instruct, and lead) were repeated

Table 3
Matrix of correlations between the 1st order latent variables (n = 306)

Latent Variables (first order)	M	SD	1	2	3	4	5	6	7	8	9	10
1 JOB AUTONOMY	5.42	1.39	0.776									
2 LEARNING CULTURE	4.55	1.68	0.342	0.758								
3 AFFECTIVE	3.65	1.69	-0.319	-0.443	0.792							
4 COGNITIVE	3.74	1.74	-0.254	-0.630	0.687	0.789						
5 BEHAVIORAL	2.78	1.72	-0.239	-0.445	0.593	0.712	0.802					
6 ASSESS	4.27	1.69	0.044	0.140	0.018	-0.015	-0.066	0.842				
7 PERFORM	4.52	1.44	0.059	0.168	0.023	-0.012	-0.091	0.804	0.863			
8 EXPLAIN	4.76	1.64	0.057	0.114	0.094	0.066	0.008	0.709	0.678	0.809		
9 INSTRUCT	4.39	1.65	0.083	0.166	0.040	0.027	-0.065	0.796	0.775	0.816	0.877	
10 LEAD	4.20	1.69	0.189	0.250	-0.047	-0.096	-0.152	0.683	0.677	0.589	0.703	0.914
Average Variance Extracted (AVE)			0.602	0.574	0.627	0.622	0.644	0.709	0.745	0.654	0.769	0.836
Composite reliability			0.856	0.903	0.834	0.907	0.877	0.879	0.897	0.849	0.909	0.938
Cronbach’s Alpha			0.777	0.874	0.720	0.877	0.810	0.794	0.828	0.735	0.849	0.902

Note 1: There is discriminant validity between the constructs, as the values on the diagonal of the matrix (square root of the average variance extracted – AVE) are greater than the values outside the diagonal (correlations) (Hair Jr. et al., 2017).

in the second-order LV. Table 4 presents the correlations between the second-order LVs. It is observed that there is convergent and discriminant validity and reliability when organizational cynicism and learning transfer are modeled as second-order LVs (Latent Variables).

4.5 Hypothesis test

The structural model was analyzed in three stages: (1) all the control variables, (2) only the significant control variables, and (3) antecedents predicted in the model and significant control variables. The results are shown in Table 5. Appendix B presents the Structural Model.

Of the five control variables tested in the model, only two had a statistically significant relationship with learning transfer: job position (non-manager = 0; middle-level manager = 1; and executive = 2) and age (age group). These results reveal that students with higher job positions and who are older make greater use of what they have learned in the MBA in their job. These results corroborate Mintzberg (2004), who argues that the ideal MBA public is students with managerial or relevant professional experience. In their study with MBA students, Pham et al. (2012) also tested the same control variables, but none of them had a significant effect on learning transfer.

Table 4
Matrix of correlations between the LVs of the structural model (n = 306)

Latent Variables (second order)	M	SD	1	2	3	4
1 JOB AUTONOMY	5.42	1.39	0.770			
2 LEARNING CULTURE	4.55	1.68	0.324	0.747		
3 ORGANIZATIONAL CYNICISM	3.42	1.77	-0.291	-0.572	0.873	
4 LEARNING TRANSFER	4.42	1.63	0.105	0.227	-0.028	0.883
Average Variance Extracted (AVE)			0.593	0.557	0.763	0.779
Composite Reliability			0.853	0.897	0.906	0.946
Cronbach's Alpha			0.777	0.874	0.913	0.947

Note 1: There is discriminant validity between the constructs, as the values on the diagonal of the matrix (square root of the average variance extracted – AVE) are higher than the values outside the diagonal (correlations) (Hair Jr. et al., 2017).

Table 5
Hypothesis Test

Structural model relationships	Hypothesis	Structural Coefficient	t-value	p-value	F	R ² adj
JOB POSITION -> LEARNING TRANSFER	Control	0.205	3.525	0.000	0.043	
YEARS OF PROFESSIONAL EXPERIENCE PRIOR TO JOINING THE COURSE -> LEARNING TRANSFER	Control	-0.013	0.178	0.859	0.000	
GENDER -> LEARNING TRANSFER	Control	0.031	0.538	0.590	0.001	5.50%
AGE -> LEARNING TRANSFER	Control	0.137	2.062	0.039	0.013	
JOB TENURE -> LEARNING TRANSFER	Control	0.009	0.164	0.870	0.000	
JOB POSITION -> LEARNING TRANSFER	Control	0.205	3.553	0.000	0.044	6.30%
AGE -> LEARNING TRANSFER	Control	0.132	2.417	0.016	0.018	
JOB AUTONOMY -> LEARNING TRANSFER	H1 (+)	0.005	0.087	0.931	0.000	
LEARNING CULTURE -> LEARNING TRANSFER	H2 (+)	0.305	5.288	0.000	0.068	
ORGANIZATIONAL CYNICISM -> LEARNING TRANSFER	H3 (-)	0.163	2.559	0.009	0.020	11.70%
AGE -> LEARNING TRANSFER	Control	0.154	2.849	0.004	0.026	
JOB POSITION -> LEARNING TRANSFER	Control	0.176	3.181	0.001	0.033	

Note 1: There are 3 models: model 1 with 5 controls, model 2 with the significant controls, and the full model 3. Note 2: The p-values were estimated by bootstrapping with 5000 resamples. Note 3: The lines highlighted in grey and black are the confirmed hypotheses. Note 4: Multicollinearity is not a problem in any of the models, as all the VIF (variance inflation factor) values were lower than 1.6. Note 5: Reference values for the effect size (F²): 0.02 = small, 0.15 = medium and 0.35 = large. Source: Cohen (1988) and Hair Jr. et al. (2017).



Of the three predicted hypotheses, only H2(+) was confirmed, but with a small effect size. Learning culture explained 6.92% of the variation in learning transfer ($\Delta R^2 = \beta * r = 0.305 * 0.227$). The hypothesis on organizational cynicism (H3-) was not confirmed, despite being statistically significant, as it predicted a negative relationship with learning transfer. It is observed in Table 3 that the correlations between the dimensions of organizational cynicism and learning transfer are close to zero. Only the behavioral dimension with the lead dimension was -0.152. It is also possible to observe that the correlations between organizational cynicism and both job autonomy and learning culture are negative (Tables 3 and 4).

5 Discussion, limitations, and suggestions for future research

This study aimed to propose and test a model of learning transfer in MBAs, assessing the influence of job autonomy, learning culture, and organizational cynicism on learning transfer. Of the three hypotheses presented, the one that predicted the positive influence of learning culture on learning transfer was supported by the data, but with a small effect. This result may have been due to the reduced version of the DLOQ-A scale (one indicator per dimension), whose content may not have captured the construct in all its complexity. So, we recommend that future studies adopt the full version of the DLOQ-A.

The result for job autonomy was not expected. The same scale was adopted in the MBA study of Pham et al. (2012), in which job autonomy was statistically significant for explaining learning transfer. In addition, one of the assumptions of the taxonomy of use of Yelon et al. (2014) is that individuals have relative autonomy, and in the sample studied the average of job autonomy was the highest among all the constructs of the model. As a practical implication, these results reveal that the job conditions provided by companies may be changing. To operate in increasingly competitive scenarios, companies have reduced hierarchical levels and demanded employees with autonomy to execute their work and consequently improve their performance. Therefore, we believe that in future studies the literature should be reviewed with the aim of identifying other job autonomy scales or the development of a new more comprehensive scale.

Another unexpected result was the one for organizational cynicism, whose means were the lowest

among the constructs of the model, and hypothesis H3 (-) was not confirmed. This result may have been affected by social desirability, given that organizational cynicism is a sensitive topic. Another possibility is that the study participants do not really have cynical attitudes in relation to the organizations where they work, since its mean was equal to 3.4 on a scale from 1 to 7. From a practical viewpoint, this result suggests that the individuals believe in their organizations and in changes that they propose, which is positive, since they act in constantly changing scenarios.

Organizations are unable to assess which new behaviors employees present after having started or concluded a formal learning event. This problem, called the transfer “gap” (Vandergoot et al., 2020), becomes even more critical in courses with generic and abstract contents, whose learning and transfer environments are different (Soerensen et al., 2017), as in the case of the MBA studied here.

Therefore, the possibility of assessing transfer through different uses of the knowledge and skills learned provides theoretical and practical contributions. As a theoretical contribution, it was found that learning transfer is a multidimensional construct. So, as a practical contribution, the scale could be a tool for supporting the assessment of learning transfer, minimizing the transfer “gap” with the possibility of being adapted for various formal learning events, and it can even be tested in models with other antecedents, aligned with the organizational reality. T&D professionals could analyze the relationships between learning transfer and other indicators (increased sales, results, etc.), assessing the effectiveness of formal learning events.

Most of the MBA studies have aimed to analyze its benefits for students alone, in terms of improving the curriculum and employability (Boff et al., 2018), which is reinforced by the media and rankings periodically published by national and international journals. The means of the five dimensions of learning transfer (Table 3) revealed the positive results of MBAs, suggesting that they are important for developing individuals and can also contribute to organizations. In this context, this study also provides as a social contribution an understanding about the role of formal education and of business schools in the development of current and future organizational leaders, whose decisions have an impact on society as a whole. Therefore, in line with the above discussions, we suggest future research that evaluates the application of

learning from the perspective of the organizations that employ MBA students and graduates.

This study presents some limitations. The first concerns the impossibility of generalizing the results, since the sample is non-probabilistic. The second is that the cross-sectional design for the data collection does not enable causal inferences to be made. Thus, considering that MBAs are long-duration courses and the research on learning transfer is mostly of the cross-sectional type and only carried out after the course ends, qualitative and/or quantitative longitudinal studies could contribute to identifying the possible factors that affect the transfer behaviors of individuals before, during, and after the formal learning. Longitudinal qualitative studies could also reveal other types of uses of the knowledge and skills acquired in formal learning, in addition to those proposed in the taxonomy of Yelon et al. (2014).

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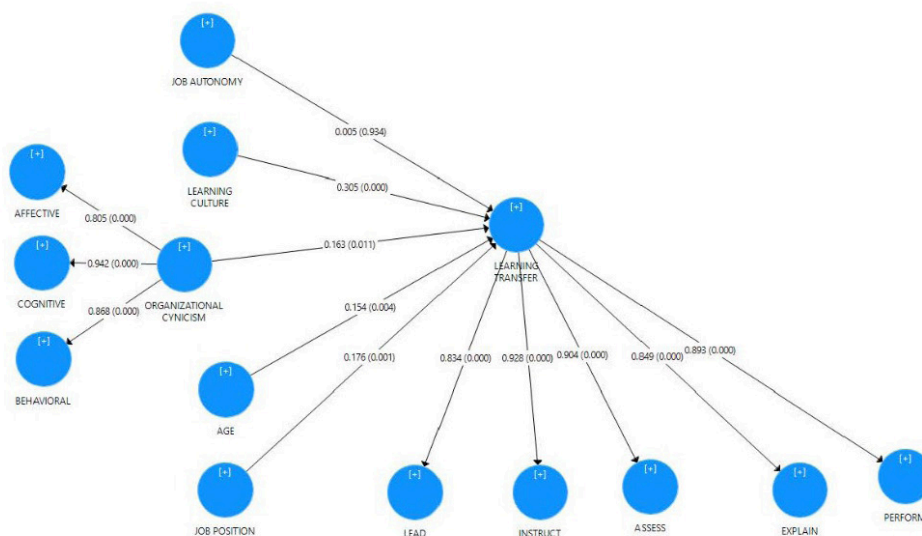
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APPENDIX A – Indicators and factor loadings

	Job Autonomy	Factor Loading
AUTON1 - I have influence on the planning of my work.		0.752
AUTON2 - I have freedom to decide how to carry out my work.		0.838
AUTON3 - I decide how much time I spend on each task in my work.		0.670
AUTON4 - I determine how I carry out my work.		0.811
	Learning Culture	Factor Loading
LEAR_CULT1 - In the company where I work, the people are rewarded when they seek opportunities to learn.		0.747
LEAR_CULT2 - In the company where I work, when people give their opinion, they also ask what others think.		0.751
LEAR_CULT3 - When they work in teams, people believe that the company will follow their recommendations.		0.774
LEAR_CULT4 - The company measures the results of the time and investment used for the training activities and courses in general.		0.760
LEAR_CULT5 - The company recognizes people for their initiatives.		0.839
LEAR_CULT6 - People are stimulated to obtain answers from other parts of the company, when they need to resolve problems in their work.		0.590
LEAR_CULT7 - The managers support requests for learning opportunities, courses, and learning in general.		0.743
	Organizational Cynicism	Factor Loading
OC_AFF1 - When I think about my career, I feel unhappy or unsatisfied.		0.812
OC_AFF2 - When I think about my company, I feel pressured.		0.806
OC_AFF3 - When I think about my company, I feel anxious.		0.773
OC_COG1 - In my company, what is said is not put in practice.		0.805
OC_COG2 - The policies, objectives, and practices of my company appear to have little in common with each other.		0.646
OC_COG3 - When my company says it will do something, I question whether it will really happen.		0.778
OC_COG4 - My company says it expects certain behaviors from the workers, but it rewards other types of behaviors.		0.796
OC_COG5 - I see little similarity between what my company says it will do and what it really does.		0.868
OC_COG6 - When I think about some of my company's practices, I feel irritated.		0.822
OC_BEH1 - I usually complain about what happens at work when I'm with people/friends who do not work at the company.		0.787
OC_BEH2 - I make fun of my company's initiatives and slogans.		0.640
OC_BEH3 - I usually speak negatively to other people about the way things are managed in my company.		0.882
OC_BEH4 - When I'm with other people, I criticize my company's policies and practices.		0.878

Learning Transfer	Factor Loading
PERF1 - I'm using what I learned in the course to carry out the routine activities in my job.	0.845
PERF2 - What I learned in the course helps me to better plan my everyday work activities.	0.846
PERF3 - I am able to apply what I learned in disciplines in the course (procedures, methodologies, etc.) in carrying out tasks in my job.	0.897
ASS1 - After starting this course, I began to use indicators (metrics, standards, etc.) learned to assess my job performance.	0.862
ASS2 - I am able to assess whether the knowledge and skills I developed in the course and I am applying in the company have improved my performance.	0.805
ASS3 - After starting the course, I began to use indicators (metrics, standards, etc.) I learned to assess the performance of other people who carry out similar activities to mine.	0.858
EXPL1 - I often talk about what I learned in the course with peers, subordinates, superiors, and other people from the company.	0.720
EXPL2 - I recommend reading or sharing materials from the course (bibliographies, teaching cases, etc.) to my peers, subordinates, superiors, and other colleagues from the company.	0.836
EXPL3 - I voluntarily explain methods (techniques, standards, among others) that I learned in disciplines in the course to my peers.	0.864
INST1 - I individually teach colleagues or others who carry out similar activities to mine how I am applying what I learned in the course (tools, principles, methods, etc.).	0.841
INST2 - I teach groups of people from my company how I am adapting and using what I learned in the course (tools, principles, methodologies, etc.).	0.892
INST3 - I usually guide people individually or in groups regarding the possible results to be achieved with the application of what I learned in disciplines in the course.	0.896
LEAD1 - Based on what I learned in different disciplines of the course (tools, principles, methodologies etc.), I collaborate in defining new policies and/or changes that involve the company as a whole.	0.898
LEAD2 - In my activities as a leader of projects or group tasks that involve the company as a whole, I define the criteria for assessing the results of different applications of what I learned in the course.	0.930
LEAD3 - I guide and/or ask people from different areas, or who are working with me on projects from the company as a whole, to apply tools (indicators, metrics, procedures, etc.) I learned in this course.	0.913

APPENDIX B – Structural Model



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Conflicts of interest:

The authors have no conflict of interest to declare.

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Authors' Contributions:

1st author: Definition of research problem; Development of hypotheses or research questions (empirical studies); Theoretical framework/Literature review; Definition of methodological procedures; Data collection; Statistical analysis; Analysis and interpretation of data; Manuscript writing.

2nd author: Definition of methodological procedures; Statistical analysis; Analysis and interpretation of data; Critical revision of the manuscript.

3rd author: Critical revision of the manuscript; Manuscript writing; Translation of the manuscript into English.