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# Sociodemographics and Guidance Sources at Work: A Comparison Between Brazil and the United States

Características Sociodemográficas e Fontes de Orientação no Trabalho: Uma Comparação entre Brasil e Estados Unidos

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#### **ABSTRACT**

This study aimed to statistically test the influence of employees' sociodemographic characteristics on their use of sources of guidance at work in the United States and Brazil. To achieve this objective, 220 employees from a Brazilian university and 166 from an American university filled out a paper-and-pencil questionnaire comprised of a previously-validated scale. We ran correlations and multiple linear regressions to test this influence. Among other results, American employees with higher education levels are more likely to use Informal Rules as sources of guidance at work. In turn, Brazilian employees with previous experience in managerial positions are more likely to use their Own Experience as a guidance source at work. The results yielded from the tests suggest to managers, human resource professionals, and psychologists which sociodemographic characteristics are relevant to predicting the use of guidance sources at work, contributing, for instance, to recruitment and selection processes

Keywords: sources of guidance; sociodemographic characteristics; organizational behavior; human resources management; cross-cultural research.

#### **RESUMO**

Este estudo teve como objetivo testar estatisticamente a influência de características sociodemográficas de trabalhadores em seu uso de fontes de orientação no trabalho nos Estados Unidos e Brasil. Para atingir esse objetivo, 220 trabalhadores de uma universidade brasileira e 166 de uma universidade americana preencheram um questionário físico composto por uma escala previamente validada. Executamos correlações e regressões lineares múltiplas para testar essa influência. Entre outros resultados, os trabalhadores americanos com níveis mais altos de educação são mais propensos a usar Regras Informais como fontes de orientação no trabalho. Por sua vez, os trabalhadores brasileiros com experiência anterior em cargos gerenciais são mais propensos a utilizar a Própria Experiência como fonte de orientação no trabalho. Os resultados dos testes sugerem a gestores, profissionais de recursos humanos e psicólogos quais características sociodemográficas são relevantes para prever o uso de fontes de orientação no trabalho, contribuindo, por exemplo, para processos de recrutamento e seleção.

Palavras-Chave: fontes de orientação; características sociodemográficas; comportamento organizacional; gestão de recursos humanos; pesquisa transcultural.

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### Introduction

To interpret and respond to the events they experience at work, employees use different sources of information, which are attitudes known in the literature as Sources of Guidance (SOGs) (Peterson et al., 2016). Smith et al. (2002) state that the following groups of guidance sources are among the most frequent in a wide variety of cultural contexts and situations at work: employees' own experience; social sources, such as superiors, subordinates, specialists, and co-workers; impersonal sources, such as formal rules, procedures, and informal norms; and country beliefs.

Employees use sources of guidance to handle different events at work. Work events include anything that triggers employees' conscious attention (Smith et al., 2002), such as situations in which equipment or machinery used in the department seems to need a replacement, another department does not provide the resources or support required, there are different opinions within the department, among other work situations (Peterson et al., 2016).

Classical contingency leadership models (e.g., House, 1971) argue that some work tasks and settings are more structured than others, which means that leaders act according to how structured work tasks or settings are. However, Peterson, et al. (1990) proposed something different. According to them, employees' work varies over time, according to the situations with which they are dealing. That means that employees' attitudes and behavior must change over a day or week to correspond with changes in the events they encounter. Such variability in attitudes and behavior in response to situations (events) is what we find in work organizations (Peterson et al., 1990). This hypothesis turned out to be known as the event-based contingency hypothesis, the background of this investigation.

Over the years, several studies have investigated the influence of employees' sociodemographic characteristics on many work outcomes, such as risk-taking (Oreng et al., 2021), well-being at work (Sobrinho & Porto, 2012), employee promotion (Zhang et al., 2020), employee commitment (Konya et al, 2016), work-life balance (Prithi & Vasumathi, 2018), job satisfaction (Kumar, 2021), work learning (Tones et al., 2014), work-related quality of life (Shukla et al., 2017), work values (Li et al., 2007), among other work outcomes. Although there is strong literature evidence pointing that employees' attitude toward relying on sources of guidance varies according to the events they are handling (e.g., Athayde & Torres, 2022), the literature little explores the role of employees' sociodemographic profile (age, sex, education, income, etc.) on their reliance on SOGs at work. Thus, investigating this relationship can help fill this theoretical-empirical gap in the literature and raise important practical and managerial implications.

Given this limitation in the literature, the following problem guided this research: do employees' sociodemographic characteristics influence their use of guidance sources when facing different events at work? Hence, the objective of this study was to statistically test the influence of sociodemographic characteristics on employees' use of sources of guidance when dealing with different events at work, comparing the United States and Brazil, chosen in the present research, beyond accessibility reasons, because they are largely considered culturally different (e.g., Athayde & Torres, 2022; Hofstede Insights, 2022). Constructing a robust sociodemographic profile cross-culturally concerning the use of sources of guidance at work is relevant, especially in times of rising globalization and internationalization.

Globalization is characterized not only by an increase in the movement of capital and products but also by mobilizing workers in different markets (Athayde et al., 2019; Silva et al., 2013). In this internationalization scenario, Hill (2005) emphasizes the relevance of reviewing the management of people concerning recruitment and selection processes, aiming at more effective and contextualized management practices that consider the country where companies are located, as well as employees' sociodemographic profile.

Bearing in mind that the human resources field is critical for the success of an international business (Vance & Paik, 2006), it becomes strategic to investigate the role of sociodemographic characteristics on job attitudes and how these relationships vary among countries. Therefore, exploring differences in the attitudes of American and Brazilian employees concerning their reliance on sources of guidance at work and testing the influence of sociodemographic characteristics on this job attitude seem to be compatible with this mindset. Moreover, once the attitude toward relying on SOGs guides employees' actions when dealing with different work events, studying this construct is relevant due to its intimate relationship with employees' ultimate behavior and performance (Smith et al., 2002).

This research also offers practical and managerial implications. For instance, a company in the USA fosters, besides formal rules and procedures, reliance on informal work rules and wishes that its employees do not rely on standard operating procedures only but also informal norms within the organizational environment. These research findings suggest employees' sociodemographic characteristics that lead them to rely more on this expected source of guidance when dealing with different events at work. We can access that in recruiting and selecting processes. Similarly, a company in Brazil, for instance, wants to hire proactive professionals who rely mainly on their own experience. These research findings suggest employees' sociodemographic characteristics that lead them to rely more on this desired source of guidance at work. We can also access that in recruiting and selecting processes.

To accomplish the main objective of this research, 220 employees from a Brazilian university and 166 employees from an American university filled out a paper-and-pencil questionnaire comprised of sociodemographic items, as well as items that show the extent to which they rely on sources of guidance when dealing with different events at work. Figure 1 illustrates the proposed investigation.

Figure 1

Investigation model

#### Sociodemographics Sources of Guidance at work – (age, sex, education level, income **SOGs** level, number of children living at (formal rules and procedures, home, religion, race, position at work, number of subordinates, work hours informal rules. specialists, workers, superiors, own experience, per week, years living in the native country beliefs, and people outside country, number of countries where the organization) the employee lived for one year or longer, years in the organization, years in the department, and years in the position)

Five sections comprise this article. Right after this introductory section, the literature review section will conceptualize the investigated construct and present previous empirical studies about it. In section 3, we will present the methodological procedures adopted in this research. In section 4, we will present and discuss the results. At last, final remarks will highlight this study's theoretical and practical implications.

### Literature Review

Sources of Guidance (SOGs), the dependent construct in the present research, are sources of information that employees rely on to interpret and respond to the work situations they encounter (Athayde & Torres, 2020; Athayde & Torres, 2022; Peterson et al., 2016). When employees have to deal with work events, they operate within a context of alternative SOGs, many of which extend beyond the individual. SOGs may include interpretive structures, such as memories, thoughts, and understandings to which we can connect new events. In addition, organization members can use prevailing views in society (e.g., country beliefs) and organizational documents (e.g., Standard Operating Procedures) to verify what guidelines they can offer (Smith et al., 2011).

Sources of Guidance and their connections with other variables have been investigated considerably over the years. For instance, Peterson et al. (1990) developed a questionnaire to ask employees from five electronics plants in four countries (The United States, The United Kingdom, Japan, and Hong Kong) to what extent they used five SOGs to respond to two categories of events: day-to-day situations and unusual problems. Peterson (1987) piloted the questionnaire items, whose theoretical framework Smith and Peterson (1988) proposed later. The results indicated that employees responded differently to the five SOGs in the four countries. The correspondence between reliance on co-workers for day-to-day and unfamiliar events was higher for respondents in the USA and UK than those in Japan and Hong Kong. Besides, formal rules and procedures (manuals) were reported to be used the least in the UK and secondarily in Japan for both unfamiliar events and usual daily work. The respondents in Hong Kong believed that manuals were used more there than respondents in the other countries for unfamiliar events. Those in the USA indicated more use of company manuals in ordinary daily events than in the other countries.

Smith et al. (1994) developed a study that evaluated the effectiveness of work teams in similar electronics assembling units (in Japan, Britain, and the USA) and compared which of the five SOGs were used by managers in the management of work events. According to these authors, the choices between SOGs are not considered deliberate, consciously recognized, or publicly announced but refer to how employees direct their actions. The study, therefore, examined whether differences in event management among national samples could predict job performance. The Japanese results indicated a uniform approach to unfamiliar and day-to-day events, and the Western results suggested that ways of achieving optimal performance are contingent on the type of event encountered.

Smith et al. (1996) investigated managers in China, The USA, and Britain, asking them to describe the extent to which they used five sources for handling nine managerial events. The results indicated that Western managers rely more on experience and training. In China, formal rules and procedures were predominant.

Moreover, they reported that they handled less well with events to the extent they used their superiors as a source of guidance.

Smith et al. (2002) tested the hypothesis that the primary values of members of an organizational culture lead them to rely on certain SOGs to respond to what happens around them. By using samples from 53 different countries, they tested whether value differences at the cultural level could predict typical SOGs used to handle work events. Results showed that values at the national level are strongly predictive of reliance on those sources of guidance relevant to vertical relationships within organizations. However, values are less successful in predicting reliance on coworkers and more tacit guidance sources.

Peterson et al. (2010) investigated the influence of employees' values and the use of guidance sources on e-mail use. The study was developed in Canada, the English-speaking Caribbean, Nigeria, and the USA. Results showed that e-mail use was positively associated with work contexts that present high reliance on specialists, subordinates, and informal rules as guidance sources.

Smith et al. (2011) investigated the use of SOGs by 7,701 employees in 56 countries in dealing with work events and the moderating role of national culture in this relationship. Correlations between the sources of guidance that employees use and the perceived effectiveness of how well they handle these events were employed. These correlations varied with dimensions of national culture. Results showed that reliance on one's own experience, formal rules, and subordinates was positively correlated with perceived effectiveness globally.

Athayde and Torres (2020) proposed a theoretical model of the internal antecedents of employees' use of guidance sources while dealing with different work events. The in-depth theoretical review developed by the authors enabled the proposition of a model according to which personality traits and personal values influence each other and might influence employees' use of guidance sources at work.

Moreover, Athayde and Torres (2022) statistically compared employees' use of sources of guidance (SOGs) at work in The United States and Brazil and discussed results in light of differences concerning national cultural characteristics. Americans presented significantly higher means than Brazilians on using informal rules and people outside the organization as guidance sources at work. Brazilians presented significantly higher means than Americans on formal rules. The discussion showed that some of these differences were compatible with national cultural characteristics.

Athayde et al. (2022a) explored statistically significant correlations between personal values and employees' use of sources of guidance when dealing with different work events in the United States and Brazil. In the United States, the authors found correlations between high scores in the value Power-Dominance and less reliance on superiors. Moreover, they found correlations between high scores in the value Conformity-Rules and more reliance on formal rules and procedures. In Brazil, they found correlations between high scores in the value Self-Direction-Action and high use of own experience as a guidance source. At last, they found correlations between high scores in the personal value Tradition and high use of country beliefs.

Aiming at a more robust psychological profile to predict the use of guidance sources and going beyond correlations, Athayde et al. (2022b) investigated the influence of employees' personal values and dark personality traits on their attitude toward relying on sources of guidance. Among other results, high scores in the dark personality trait Psychopathy influenced less use of formal rules and procedures.

Besides, high scores in the personal value Self-Direction-Thought influenced high use of own experience as a guidance source at work.

Figure 2 summarizes the main authors considered in this study for the construct Sources of Guidance.

Figure 2

Main authors considered for the construct Sources of Guidance

Authors	Approaches
Smith and Peterson (1988)	The first authors to propose that employees' work varies over time, according to the situations (events) they deal with and not according to how structured a work task or a work setting is. This hypothesis turned out to be known as the event-based contingency hypothesis.
Peterson et al. (1990); Smith, Peterson, and Misumi (1994); Smith, Peterson, and Wang (1996); Peterson and Smith (2000); Smith, Peterson, and Schwartz (2002); Peterson et al. (2010); Smith et al. (2011).	Authors who empirically tested, over the years, the use of Sources of Guidance at work across different nations.
Athayde and Torres (2020)	The first authors to propose a theoretical model for the internal antecedents of the use of Sources of Guidance at work, establishing a possible connection between personality traits, personal values, and the use of Sources of Guidance.
Athayde and Torres (2022)	Authors who empirically compared the use of Sources of Guidance in Brazil and The United States in light of national cultural characteristics.
Athayde, Torres, and Thomason (2022a)	Authors who empirically tested correlations between personal values and the use of sources of guidance at work.
Athayde, Torres, and Thomason (2002b)	Authors who empirically tested the influence of personal values and dark personality traits on the use of sources of guidance at work.

Therefore, considering the previous studies on guidance sources at work, this research aims to contribute to filling out a theoretical-empirical gap: exploring the relationship between guidance sources and employees' sociodemographic characteristics. Hence, the findings of this study intertwined with previous studies on guidance sources may suggest relevant predictors that can comprise the proposal of more complete explanatory models of the use of guidance sources at work in the future.

Moreover, it is relevant to highlight that, over the years, several studies have investigated the influence of employees' sociodemographic characteristics on many work outcomes, (e.g., Kumar, 2021; Oreng et al., 2021; Prithi & Vasumathi, 2018; Zhang et al., 2020) but no study have explored their relationships with guidance sources at work, as pointed out by previous studies (e.g., Athayde & Torres, 2020). Thus, the present research aims to complement previous studies on guidance sources at work.

Having conceptualized the construct Sources of Guidance and presented some prior empirical studies, the next section will present the methodological procedures adopted in this research.

### Method

The study samples were comprised of employees from an American and a Brazilian university, including professors, administrative staff, and outsourced employees. Before administering the questionnaire at the American university, the research project was submitted to its Institutional Review Board (IRB). The Department of Health and Human Services Policy for the Protection of Human Subjects approved the project (Process Number: 45 CFR 46.104; Project Number: 19-012). Moreover, this research complied with Resolution 510/16 of the Brazilian National Health Council (CNS) which establishes that public opinion surveys with unidentified subjects are exempted from ethical analysis by the Research Ethics Committee (CEP) and the National Research Ethics Commission (CONEP).

The sampling technique used in this study was non-probabilistic by convenience, according to which the most available individuals are selected to provide the necessary information (Hair et al., 2009). Employees were first invited via e-mail to participate in the study and specify a day and time when the questionnaire (paper and pen) could be administered to them in person. We used the official websites of the two universities to obtain employees' e-mail addresses.

Considering the total of 15 predictors (sociodemographic variables: age, sex, education level, income level, number of children living at home, religion, race, position at work, number of subordinates, work hours per week, years living in the native country, number of countries where the employee lived for one year or longer, years in the organization, years in the department, and years in the position), alpha of 5%, and power of 80%, the minimum sample size calculated with the software G\*Power 3.1 was 163 cases. Out of the 193 questionnaires answered by the American employees, we discarded 27 because they had more than 10% of missing values, resulting in 166 valid questionnaires, which fulfilled the minimum sample size calculated previously (163). Out of the 233 questionnaires answered by the Brazilian employees, we discarded 13 because they had more than 10% missing values, resulting in 220 valid questionnaires, which also fulfilled the minimum sample size calculated previously (163). Missing values in the questionnaires left were replaced by the series mean. The questionnaire applied in the research was comprised of an internationally-validated scale, which will be detailed hereafter.

The data collection instrument regarding the use of Sources of Guidance (SOGs) when dealing with different events at work was the Managerial Decisions Questionnaire Global (Mdq1GL), piloted by Peterson (1987) and later revised by Peterson et al. (2016). The events (situations) described in the Mdq1GL were selected as likely to occur within the work of any type of organization in any nation: "When one of your subordinates is doing consistently good work"; "When some of the equipment or machinery used in your department seems to need a replacement"; "When another department does not provide the resources or support you require"; "When there are differing opinions within your department"; "When you see the need to introduce new work procedure into your department"; and "When the time comes to evaluate the success of new work procedures".

The phrasing for each event was: "When [event] ..., to what extent are the actions taken affected by each of the following?". For each event, the question preceded a listing of nine guidance sources, described as follows: a) Formal rules and Procedures (FRP); b) Unwritten rules about "How we do things around here" (Informal Rules - IR); c) Subordinates (SUB); d) Specialists (SPE); e) Other people at my level (Co-Workers - CWO); f) My Superior (SUP); g) Opinions based on my own experience and training

(OEX); h) Beliefs widely accepted in my country about what is right (Country Beliefs – CB); and i) People outside the organization (POU). Responses were made on 5-point Likert-type scales, anchored by terms ranging from 1= not at all to 5= to a very great extent.

The first event, related to subordinates, was discarded in the present study once this event applies only to managers, and this research does not differentiate managers from non-managers. Further, for the same reason, the source of guidance subordinates was also discarded from the other five events left in the present study. So, compared to the original questionnaire (Mdq1GL) by Peterson et al. (2016), the questionnaire used in this research has one less event and one less source of guidance. Nevertheless, it is relevant to point out that this does not mean data loss, given that the reliance on SOGs in previous studies was measured by calculating a mean across all events. Hence, we did not analyze the events separately in this research. The final part of the questionnaire covered sociodemographic items.

We performed statistical analyses with the software IBM® SPSS® Statistics 20.0 (Statistical Package for Social Sciences). Following the recommendations of Tabachnick and Fidell (2001) and Miles and Shevlin (2001), the variables were checked for their normal distribution. Then, we ran correlations and multiple linear regressions (stepwise) to test the influence of sociodemographic characteristics on the use of guidance sources at work. Following recommendations by Hair et al. (2009), we ran Spearman correlations for categorical variables and Pearson correlations for interval variables. Stepwise regression is usually the chosen strategy for exploratory studies and aims to determine the best predictors for a phenomenon. In this type of regression, the selection of the input sequence of predictors in the equation is done statistically. At first, we include all possible predictors in the model, and the statistical software (in this case, SPSS) keeps in the model only the best predictors (Abbad & Torres, 2002).

#### Results and Discussion

In the USA, the majority of participants were comprised of female employees occupying non-managerial positions. In Brazil, the participants comprised a balanced number of male and female employees and a balanced number of managers and non-managers. More details on respondents' sociodemographic characteristics for categorical and interval variables are summarized in Tables 1 and 2 respectively.

 Table 1

 Respondent's sociodemographic characteristics (Categorical variables)

Variable		USA (%)	Brazil (%)
Docition	Managers	29.5	53.6
Position	Non-managers	USA (%)	46.4
Cov	Male	40.4	49.1
Sex	Female	59.6	50.9
	Middle school	1.8	1.4
	Some college or university education	31.3	29.5
Education	Completed undergraduate degree	16.3	10.0
	Some graduate education	7.8	7.3
	Completed Master's degree	22.9	15.4
	Study towards a second Master's degree or Ph.D.	29.5 70.5 40.4 59.6 1.8 or university 31.3 ergraduate degree 16.3 education 7.8 eer's degree 22.9	5.5

	Completed second Master's degree or completed Ph.D.	16.3	30.9
	Christian	59.1	77.7
	Jewish	3.6	-
	Hindu	0.6	-
	Atheist	1.8	0.5
	Spiritual	1.2	3.6
Religion	Do not have a religion	30.7	14.5
	Agnostic	1.8	0.9
	Buddhist	0.6	0.5
	Prefer not to say	0.6	0.9
	Umbanda	-	0.5
	Jehovah Witness	-	0.9
	White	65.2	31.8
	Hispanic	7.8	-
	Asian	5.4	0.9
	Indian	0.6	-
Race	Eastern European	1.2	-
nace	Black	3.6	9.1
	Latin	3.6	0.5
	None	12	20.9
	African	0.6	-
	Pardo (Brown)	<u>-</u>	36.8

Note. Source: Research data.

Table 2

Respondents' sociodemographic characteristics (Interval variables)

Variable	·	Mean	SD
Age (AGE)	USA	37.8	14.3
Age (AGE)	Brazil	35.7	11.0
Number of children living at home (NC)	USA	0.4	8.0
Number of children living at nome (NC)	Brazil	0.6	0.9
Number of subordinates (NS)	USA	3.4	11.3
Number of Subordinates (NS)	Brazil	4.3	9.1
Work hours per week (WHW)	USA	36.8	11.9
work flours per week (WHW)	Brazil	36.1	11.9
Voora living in the native country (VNC)	USA	35.7	14.7
Years living in the native country (YNC)	Brazil	35.6	10.9
Number of countries where the employee lived for	USA	0.4	0.6
one year of longer (NCO) – Besides native country	Brazil	0.0	0.3
•	USA	6.6	6.3
Years in the present organization (YO)	Brazil	7.2	7.4
Veers in the present department (VD)	USA	5.5	5.8
Years in the present department (YD)	Brazil	5.7	5.8
Voors in the present position (VP)	USA	4.3	4.9
Years in the present position (YP)	Brazil	5.8	6.1

Note. Source: Research data.

Concerning employees' reliance on sources of guidance when dealing with different events at work, the highest means in the American sample were Superiors (M=3.75; SD=0.77), Formal Rules and Procedures (M=3.51; SD=0.73), and Informal Rules (M=3.19; SD=0.86). In the Brazilian sample, the highest means for guidance sources were Superiors (M=3.78; SD=0.82), Formal Rules and Procedures (M=3.77; SD=0.73), and Co-workers (M=3.19; SD=0.75). Table 3 shows details for reliance on all sources of guidance.

 Table 3

 Sources of Guidance (Descriptive statistics)

Construct	Variable	US	SA	Bra	Brazil	
Construct	variable	Mean*	SD	Mean*	SD	
	Formal Rules and Procedures (FRP)	3.51	0.73	3.77	0.73	
	Informal Rules (IR)	3.19	0.86	2.86	0.78	
	Specialists (SPE)	2.69	0.78	2.77	0.80	
Sources of	Co-workers (CWO)	3.07	0.94	3.19	0.75	
guidance	Superiors (SUP)	3.75	0.77	3.78	0.82	
	Own Experience (OEX)	3.16	0.88	3.07	0.77	
	Country Beliefs (CB)	2.38	0.99	2.22	0.91	
	People Outside Organization (POU)	1.99	0.80	1.64	0.71	

*Note.* \*Scale from 1 to 5. Source: Research data.

Smith et al. (2002) state that the following groups of guidance sources (SOGs) are among the most frequent in a wide variety of cultural contexts and events at work: individuals' own experience; social sources, based on superiors, specialists, coworkers, and people outside the organization; impersonal sources, based on formal rules or informal norms; and beliefs that are spread in a nation. All those SOGs were present in the instrument Managerial Decision Questionnaire Global (Mdq1GL) administered in this research. Hence, we expected that none of these eight guidance sources would show mean scores close to one (minimum score on the scale). Results confirmed this expectation for all SOGs in the American sample. In the Brazilian sample, this expectation was also confirmed, except for People Outside the Organization (M=1.64; SD=0.71) as Table 3 highlights.

Based on Smith et al. (2002) in a study with samples from 53 different countries, we expected that Specialists and Country Beliefs would be sources of guidance (SOGs) much less used than the others. Results also confirmed this hypothesis in the present research. Country Beliefs and Specialists were the SOGs with the lowest means along with People Outside Organization, both in the American and Brazilian samples.

Having presented descriptive statistics for sociodemographic variables and sources of guidance per country, the next section will discuss correlation tests hereafter. First, for demographic characteristics measured by categorical variables, Spearman-correlations ( $\rho$ ) were run separately per country, following recommendations by Hair et al. (2009). Tables 4 and 5 summarize the correlation results for categorical variables in the USA and Brazil respectively.

 Table 4

 Spearman correlations between sociodemographics and SOGs (USA)

Variables	FRP	IR	SPE	CWO	SUP	OEX	CB	POU
Position	052	017	006	.092	151	.214**	151	.020
Sex	.154 <sup>*</sup>	.130	026	153 <sup>*</sup>	.105	200**	081	016
Religion	065	012	029	.021	.133	.014	.040	050
Education	.198*	.274**	.025	109	077	068	202**	.000
Race	.039	118	.120	160 <sup>*</sup>	110	035	.052	.167*

Note. \*p<0.05; \*\*p<0.01 Source: Research data

**Table 5**Spearman correlations between sociodemographics and SOGs (Brazil)

Variables	FRP	IR	SPE	CWO	SUP	OEX	СВ	POU
Position	047	.088	159 <sup>*</sup>	.037	285**	.279**	.030	.053
Sex	003	091	044	.065	.145 <sup>*</sup>	.015	.009	092
Religion	.073	039	109	096	065	.042	.159*	032
Education	002	.180**	203 <sup>**</sup>	.084	290 <sup>**</sup>	.184**	048	.083
Race	,066	010	.031	066	.007	.005	.039	071

Note. \*p<0.05; \*\*p<0.01 Source: Research data

In the USA, the most significant correlations (p < 0.01) were found between Position x Own Experience ( $\rho$  = 0.21), Sex x Own Experience ( $\rho$  = -0.20), Education x Informal Rules ( $\rho$  = 0.27), and Education x Country Beliefs ( $\rho$  = -0.20). These results suggest that, in the American sample, male managers are the ones who rely more on their Own Experiences as a source of guidance at work. Furthermore, employees with a higher education level are the ones who rely more on Informal Rules and less on Country Beliefs as guidance sources at work.

In Brazil, the most significant correlations (p < 0.01) were found between Position x Superiors (p = -0.28), Position x Own Experience (p = 0.27), Education x Informal Rules (p = 0.18), Education x Specialists (p = -0.20), Education x Superiors (p = -0.29), and Education x Own Experience (p = 0.18). These results suggest that, in the Brazilian sample, managers are the ones who rely less on Superiors and more on their Own Experiences as guidance sources at work. Moreover, employees with a higher education level are the ones who rely more on Informal Rules and their Own Experience, as well as the ones who rely less on Specialists and Superiors as guidance sources at work.

Two correlations were common between the USA and Brazil: a positive correlation between position and Own Experience and a positive correlation between education level and Informal Rules. In both countries, the results indicate that managers are the ones who rely more on their Own Experience, which may relate to the fact that they might be more experienced employees, and this experience might naturally be relevant to them when dealing with a variety of events at work. Likewise, in both countries, the results indicate that highly-educated employees are the ones who rely more on Informal Rules, which may be related to the fact that their broader knowledge in their field might enable them to think of alternative solutions structured through Informal Rules, going beyond Formal Rules and Procedures for a variety of situations at their work environment. Hence, a higher education level might lead them to consider the importance of Informal Rules in the organizational scenario.

We ran Pearson correlations (r) separately per country for demographic interval variables, following recommendations by Hair et al. (2009). Tables 6 and 7 summarize the correlation results for interval variables in the USA and Brazil respectively.

 Table 6

 Pearson correlations between sociodemographics and SOGs (USA)

SOGs	AGE	NC	WHW	YNC	YO	YD	ΥP	NS	HI
 FRP	.130	.188*	.100	.058	.055	.075	.016	.017	025
 IR	012	.101	.139	.031	126	069	095	.046	088

SPE	.056	.028	061	039	.082	.030	023	.101	.010
CWO	073	109	109	043	.029	.002	.066	015	.030
SUP	081	142	063	055	112	078	067	200**	066
OEX	.016	192 <sup>*</sup>	.009	.053	.089	024	.084	.064	.045
СВ	072	046	085	023	023	.036	.042	011	.052
POU	.060	.157*	.046	.018	.052	.052	.005	001	.059

*Note.* \*p<0.05; \*\*p<0.01; HI: Household income measured through ordinal scale based on minimum wage in each country.

Source: Research data

 Table 7

 Pearson correlations between sociodemographics and SOGs (Brazil)

SOGs	AGE	NC	WHW	YNC	YO	YD	YP	NS	HI
FRP	.051	010	024	.056	004	.017	.044	.044	033
IR	.090	043	025	.082	.031	.094	.058	.062	.106
SPE	038	.035	.006	030	.035	020	.002	108	115
CWO	.003	.023	.049	.007	076	067	037	014	.065
SUP	337**	039	098	332**	170 <sup>*</sup>	167 <sup>*</sup>	190**	135 <sup>*</sup>	219**
OEX	.166 <sup>*</sup>	058	.014	.162*	.108	.072	.067	.158*	.192**
СВ	.027	.054	.056	.021	.081	.041	004	.011	.024
POU	.058	.034	.030	.057	007	.027	.070	010	.003

*Note.* \*p<0.05; \*\*p<0.01; HI: Household income measured through ordinal scale based on minimum wage in each country.

Source: Research data

In the USA, the most significant correlation (p < 0.01) was found between the Number of subordinates x Superiors (r = -0.20). This result suggests that, in the American sample, employees who have a high number of subordinates are the ones who rely less on their Superiors as a guidance source at work. In Brazil, the most significant correlations (p < 0.01) were found between Age x Superiors (r = -0.33), Years in the present position x Superiors (r = -0.19), Household income x superiors (r = -0.21), and Household income x Own experience (r = 0.19). These results suggest that, in the Brazilian sample, older employees who have worked longer in their present position and with higher household income levels are the ones who rely less on Superiors as a guidance source at work. Additionally, employees with higher household income levels are the ones who rely more on their Own Experiences when dealing with different events at work. There was no common correlation between the two countries for interval variables.

Based on Smith and Peterson (2005) in a study across 60 nations, we expected age to be negatively associated with reliance on Superiors in the USA and Brazil. This hypothesis was rejected in the USA, with no significant correlation found, but supported in Brazil (r = -0.33, p < 0.01).

Once correlations do not mean causality (Miles & Shevlin, 2001), we ran multiple linear regressions (stepwise) to find out which sociodemographic characteristics would predict employees' attitudes toward relying on sources of guidance at work in each country, accomplishing the main objective of this study. In stepwise regressions, the selection of the input sequence of predictors in the equation is done statistically. At

first, we included all possible predictors in the model, and the statistical software kept in the model only the best predictors (Abbad & Torres, 2002). Tables 8 and 9 summarize the significant predictions found in the USA and Brazil respectively, showing the predictor variables that were kept by the statistical software (SPSS). For instance, when the "Demographic Variable" column shows only one variable, that means it was the only predictor variable kept in the model.

Table 8
Sources of guidance predicted by sociodemographic variables (USA)

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SOG	Demographic Variable	Sig	β	t	R <sup>2</sup>
FRP	No significant prediction	-	-	-	-
IR	Educational level	0.00***	0.32	3.51	0.35
	Age	0.01**	0.45	2.55	
SPE	Vacua in the country	0.01**	0.44	0.50	0.04
014/0	Years in the country	0.01**	-0.44	-2.58	
CWO	No significant prediction	-			
SUP	Number of subordinates	0.01**	-0.19	-2.55	0.04
	Position (manager/non manager)	0.03*	0.17	2.07	
	Age	0.02*	-0.49	-2.33	
	Number of countries where you lived for one year of longer	0.02*	0.21	2.33	
OEX	Years in your native country	0.00***	0.53	2.67	0.19
	Years in your organization	0.00***	0.45	2.66	
	Years in the department	0.00***	-0.82	-3.93	
	Years in present position	0.02*	0.36	2.31	
CB	Educational level	0.03*	-0.16	-2.12	0.03
POU	No significant prediction		-	-	-

Note. \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Source: Research data

Table 9

 Sources of guidance predicted by sociodemographic variables (Brazil)

 SOG
 Demographic Variable
 Sig
 β
 t

30G	Demographic variable	Sig	þ	ι	n-
FRP	No significant prediction	-	-	-	-
IR	No significant prediction	-	-	-	-
SPE	Educational level	0.00***	-0.28	-3.40	0.06
CWO	No significant prediction	-	-	-	-
SUP	Years living in the country	0.00***	-0.32	-4.81	0.11
	Position (manager/non manager)	0.00***	0.26	2.96	
OEX	Number of countries where you lived for one year of longer	0.03*	-0.14	-2.09	0.12
CB	Religion	0.02*	0.15	2.20	0.04
POU	No significant prediction	-	-	-	-

Note. \*p<0.05; \*\*\*p<0.001 Source: Research data The results indicate that, in the USA, higher education levels predict the use of Informal Rules as a source of guidance at work and this sociodemographic characteristic can explain 35% (R2 = 0.35) of variability in the use of this SOG at work, a very relevant explanatory power. The use of Specialists is predicted by higher age and lower years living in the USA. These two sociodemographic characteristics jointly can explain 4% (R2 = 0.04) of variability in using this SOG at work. The magnitude of regression coefficients ( $\beta$ ) shows that these two sociodemographic characteristics influence similarly the use of Specialists as a guidance source at work. However, age positively, and years in the country negatively. A lower number of subordinates predict the use of Superiors and this sociodemographic characteristic can explain 4% (R2 = 0.04) of variability in using this SOG at work.

Moreover, the use of Own Experience as a source of guidance at work is predicted by position (being a manager), lower age, a higher number of countries where the employee lived, a higher number of years in the country and the organization, lower number of years in the department, and higher number of years the present position. These sociodemographic characteristics jointly can explain 19% (R2 = 0.19) of variability in using this SOG at work, a relevant explanatory power. The magnitude of regression coefficients ( $\beta$ ) shows that years in the department are the sociodemographic characteristic that most influences the use of Own Experience as a guidance source at work. At last, in the USA, results indicate that the use of Country Beliefs as a source of guidance at work is predicted by lower education levels and this sociodemographic characteristic can explain 3% (R2 = 0.03) of variability in the use of this SOG at work. That indicates that, in the USA, lower education level leads Americans to rely on country beliefs as a guidance source at work.

In Brazil, results indicate that the use of Specialists as a source of guidance at work is predicted by lower education levels and this sociodemographic characteristic can explain 6% (R2 = 0.06) of variability in the use of this SOG at work. A lower number of years in the country predicts the use of Superiors. This sociodemographic characteristic can explain 11% (R2 = 0.11) of variability in using this SOG at work, a relevant explanatory power. This result suggests that the shorter the time living in Brazil, the more Brazilian employees will rely on Superiors as a guidance source at work.

Furthermore, results indicate that the use of Own Experience is predicted by position (being a manager) and by a lower number of countries where the employee lived for one year or longer. These sociodemographic characteristics can explain, jointly, 12% (R2 = 0.12) of variability in the use of this SOG at work, a relevant explanatory power. The magnitude of regression coefficients ( $\beta$ ) shows that position influences more the use of Own Experience as a guidance source at work. At last, results indicate that the use of Country Beliefs in Brazil is predicted by religion and this sociodemographic characteristic can explain 4% (R2 = 0.04) of variability in the use of this SOG at work. This result seems to make sense once country beliefs are intimately related to maintaining and preserving cultural, family, or religious traditions.

Some of these predictions can be discussed because they present some theoretical support. First, in the USA, it is reasonable to assume that the prediction of Informal Rules by highly-educated employees is probably because their broader knowledge (presumed by higher education level) in their field might enable them to think of alternative informal solutions and guidance that go beyond Formal Rules and Procedures for a variety of situations at their work environment.

Moreover, the prediction of Own Experience by position (being a manager) both in the USA and Brazil may be because managers might be more experienced employees than non-managers, and this experience might naturally be relevant to them when dealing with a variety of events at work. Hence, managers are more likely to handle work events by relying on their professional experience or previous training.

At last, analyzing, in general, the predictions found in the present investigation, it is relevant to remember that, according to Smith and Peterson (2005), sociodemographic effects are expected to be stronger in individualist and low-power-distance nations than elsewhere. This expectation was supported by the present study, once sociodemographic effects were stronger in the United States than in Brazil, not only concerning the number of significant predictions but also the magnitude of explanatory power.

According to cross-cultural studies (e.g., Athayde & Torres, 2022; Hofstede, 2011; Hofstede Insights, 2022), the United States scores high on the cultural dimension of Individualism and low on Power distance. First, Individualism concerns how people are inserted into social groups. Societies based on Individualism as the USA tend to lead people to behavior restricted to themselves, where people look at themselves and their families. On the other hand, collectivist societies as Brazil are guided by the relationships of fidelity exercised by people as a result of behaviors within cohesive and united social groups. Brazil scores low on this cultural dimension, which means that, in business, it is relevant for Brazilians to build trust and lasting relationships. The United States, in turn, is one of the most individualistic cultures in the world. People are expected to take care of themselves and their families without the support of others. In the business world, employees are expected to be proactive, and decisions are based on merit.

Second, power distance refers to the degree of inequality within a society. That means that power is naturally distributed unevenly. In addition, this dimension shows how the less powerful people expect and accept that this power is unequal. Brazil scores high on this cultural dimension and reflects a society that believes hierarchy must be respected and inequalities between people are acceptable. On the other hand, the United States has a low level of this cultural dimension. In American organizations, hierarchy is established for convenience, superiors are accessible, and managers trust the experience of employees and teams (Hofstede Insights, 2022).

Therefore, the results of this study are compatible with national cultural characteristics in the USA and Brazil and previous empirical research (e.g., Smith & Peterson, 2005). That highlights the relevance of investigating the role of sociodemographic characteristics on attitudes and behavior within the organizational environment, as the present research attempted to do.

As informed previously, the following problem guided this research: do employees' sociodemographic characteristics influence their use of guidance sources when facing different events at work? The empirical results from this study point out that sociodemographics influence employees' use of guidance sources at work, and this influence varies between countries. Hence, the role of sociodemographics in this work-related construct contributes to the organizational behavior literature by suggesting sociodemographic profiles for the use of specific sources of guidance prioritized at work.

## **Final Remarks**

The present research achieved its primary objective, suggesting that sociodemographic characteristics influence employees' reliance on sources of guidance. The findings have practical and managerial implications for administrators, human resource professionals, and psychologists. The development of human resources policies can benefit from knowledge about the role of sociodemographic characteristics on employees' attitudes toward relying on sources of guidance when dealing with different events at work, especially recruiting and selecting processes.

For instance, in the USA, if a company fosters, besides Formal Rules and Procedures, reliance on Informal Rules at work, and wishes that its employees do not restrict their reliance only on standard operating procedures but also on informal norms within the organizational environment, the findings of the present research suggest that job candidates with higher education levels are more likely to be the ones who will rely more on this desired source of guidance when dealing with different events at work, and this can be assessed in recruiting and selecting processes. The referred prediction in the USA presented a relevant explanatory power (35%), highlighting the importance of the results and implications suggested by the present investigation.

Similarly, if a company in Brazil, for instance, wants to hire professionals who are proactive and who rely mostly on their Own Experiences or previous training, the findings of the present research suggest that job candidates with previous experience in managerial positions are more likely to be the ones who will rely more on this desired source of guidance when dealing with different events at work, and this, as well, can be assessed in recruiting and selecting processes.

It is relevant to note that even though some predictions in this study presented low explanatory power, they are worth it analyzing in the field of social sciences given the complexity of behavior (Bakker et al., 2019). Furthermore, significant predictions, even with low explanatory power may suggest relevant variables to be included in more complete explanatory models to be tested in the future.

This study focused on using, preferably, reliable statistical methods. Hence, we recommend that future studies complement the present findings with typically qualitative data collection instruments, such as interviews to obtain more details on the influence of sociodemographics on using sources of guidance at work in the USA and Brazil. Moreover, as opportunities for future research, it is suggested that causality studies be carried out by adding other variables to the investigation model, aiming at higher explanatory power.

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#### **Author's contributions**

Authors 1 and 2 worked together on the conceptualization and theoretical-methodological approach, the theoretical review, the discussion and analysis of the theoretical constructs adopted, the collection and analysis of data from the Brazilian sample, and the writing and final revision of the manuscript. Authors 1 and 3 worked together to collect and analyze data from the American sample.

#### Authors' declaration

The authors declare that this manuscript is original, has not been published before, and is not being considered for publication elsewhere. We confirm that the manuscript has been read and approved by all named authors and that there are no other persons who meet the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript was approved by all of us.

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## **Competing interest**

The authors declare that there are no potential competing interest regarding the research, authorship and/or publication of this article.