
IS THE COVID-19 PANDEMIC PROMOTING MORE EMPATHETIC INTERNAL BUSINESS NEGOTIATIONS?

Dr. Murillo de Oliveira Dias

Fundação Getulio Vargas - Instituto de Desenvolvimento Educacional - Rio de Janeiro, Brazil.

ABSTRACT

Given the unprecedented nature of the crisis produced by the Covid-19 pandemic, social interactions have been somehow affected. One example is the internal, face-to-face negotiations, which are increasingly giving way to virtual ones through e-mail, text, or voice messages, once stakeholders work from home in most cases. Is the Covid-19 pandemic making the internal negotiations more empathetic? A random sample of N=1,000 business negotiations was analyzed, divided into two groups: (i) 500 face-to-face negotiations before the pandemic and (ii) 500 virtual negotiations after the pandemic, to determine whether or not there is a statistically significant difference between the means of both independent groups. Key findings pointed out the increase of 26.01 percent of deal values after the pandemic, and the highest deal value increased four times after the pandemic than before, with a 99 percent confidence interval. The null hypothesis has been rejected. This article provides scholars a reasonable image of the effect of the Covid-19 pandemic in internal business negotiations. The understanding of the case and its consequences are discussed. The current examination finds some conclusion with an end and suggestions for future exploration complete this work.

KEYWORDS: Internal business negotiations, deal value, management, Covid-19 pandemic

1. INTRODUCTION

In this article, what investigated N=1,000 internal business negotiations. Through role-play simulation, with the same negotiation case applied to the following groups: (i) before and (ii) after the pandemic, aiming to determine whether there is a significant statistical relevance between the dependent (deal value) and the independent variable (before and after the pandemic), under the assumption that colleagues performed more empathetic negotiations and made generous concessions after the pandemic, due to humanitarian and compassionate grounds.

The topic has attracted scholars' attention since the beginning of the Covid-19 pandemic, as declared by the World Health Organization (WHO) on 11 March 2020 (Dias, 2020; Dias, Lopes and Teles, 2020; Dias and Lopes, 2020a, 2020b), where much has been discussed on how the Covid-19 reshaped our society, affecting social interactions in many ways, including business negotiations (Dias and Lopes, 2020a). Data were collected from March 2019 to March 2021, precisely one year before and after the Covid-19 be declared pandemic.

Negotiation is defined as "a process of communication by which two or more persons seek to advance their interests through joint action." (Salacuse, 2003, p.7). According to Fisher, Ury & Patton (1981), negotiation is "a process of communicating back and forth to reach a joint decision." (p. 20). Internal is a negotiation between two or more parties from the same group, company, institution, constituency, or organization.

Negotiation has been also investigated over the past decades (Raiffa, 1982; Fisher Ury and Patton, 1981; Sebenius, 1992; Ury, 2015; Susskind & Field, 1996; Salacuse, 2008; Duzert and Zerunyan, 2015; Susskind & Cruikshank, 1987; Dias, 2020, 2020b, 2019, Moore, 2003).

In this article, 2,000 subjects were distributed in two groups, before and after the Covid-19 pandemic, as depicted in Figure 1:

Features	Group	
	BEFORE	AFTER
Number of Negotiations	500	500
Third party	no	no
Number of parties	2	2
Number of issues	1	1
Negotiation Type*	Type I	Type I
Number of participants	1	1

Fig. 1: case specifics

Observe in Figure 1 the case distribution and particulars. Third parties, such as agents or mediators, did not participate in the negotiations. The role-play simulations involved two parties and one issue, a budget negotiation between colleagues from different departments of the same company. According to the case instructions, both parties should negotiate a budget increase for the next fiscal year.¹ The Four-Type Negotiation Matrix (Dias, 2020) was chosen to note the type of negotiations due to its straightforwardness in business negotiation classification, therefore, a Type I negotiation (two parties, one issue). The Four-Type Negotiation Matrix is illustrated in Figure 2:

¹ Depending on the country, the fiscal, or budget year changes. In USA, the fiscal year starts on 1 October, ending on 30 September the following year. In Brazil, the fiscal year matches with the calendar year, i.e., from 1 January to 31 December.



Fig. 2: The Four-Type Negotiation Matrix. Source: Dias, 2020. Reprinted under permission.

As per Dias (2020), the Four-Type Negotiation Matrix is a structure helpful to characterize a wide range of exchange including the number of issues and gatherings in a given arrangement measure, paying little heed to the occupation, administrative level, sexual orientation, age, identity, level instruction, for example.

The current examination addressed the following research questions: (i) *are the mean deal values (DEAL) different before and after the pandemic?* (ii) *Are the negotiators more empathetic in internal negotiations, due to the Covid-19 pandemic?* In the conclusion section, the answers are discussed. In the next section, the research design, role-play mechanics, and methods are presented.

RESEARCH DESIGN AND METHODS

The present study followed a positivistic approach and deductive rationale. The confidence interval adopted for this research is 99 percent ($p < 0,001$). Statistical tests were applied to the data set under audit.

A two-party, one issue role-play simulation (Type I negotiation - see Figure 1) was applied to 2,000 Brazilian business negotiators, from all five Brazilian regions. In total, 40 cohorts were investigated from 13 March 2019 to 13 March 2021. In total, $N=1,000$ internal business negotiations were assigned. The Brazilian Portuguese version of SPSS 26 was employed to analyze data. Before the pandemic, the negotiations were face-to-face. After the pandemic, the negotiations were virtual, via phone or

video calls.

Out of the 2,000 examination subjects, 60 percent were male, 40 percent female, 72 percent in the center to undeniable level administration positions, and 20 percent involved low-level administration positions. In this example, 84 percent are utilized, from which 70 percent Caucasians, 45 percent wedded, 35 percent single, separated, or other; 80 percent is 25-35 years of age, 10 percent over 35 years of age. The negotiators had at least three years of negotiation experience. All negotiations were led in quiet places, with no huge foundation commotion that could somehow meddle with the results before the pandemic. After the pandemic, the negotiations occurred from home offices, by and large.

From 13 March 2020 to 13 March 2021, all subjects haggled for the most part from home because of the COVID-19 lockdown limitations. Finally, the arrangements happened in day and night exchange meetings, inside and outside business hours. Every one of the 2,000 subjects were MBA students.

The subjects were told to peruse their jobs and to connect distantly in the exchange through WhatsApp. They were likewise advised to report both open and close qualities toward the finish of the one-hour exchange time. At that point, crude information was input to SPSS and further dissected.

The principal test led was the normality test. Then, connection and direct relapse tests were applied to the information. The outcomes and further investigation are shown in the following section.

In this examination, the Shapiro-Wilk Test for Normality was applied to N=1,000 arrangements. Figure 3 portrays the conditions for the Shapiro-Wilk test:

$$W = \frac{\left\{ \sum_{i=1}^n a_i (x_{(n-i+1):n} - x_{i:n}) \right\}^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

Fig.3: - Shapiro-Wilk Normality Test equations

HYPOTHESIS

H₀: there is no significant correlation between deal values before and after the Covid-19 pandemic. The deal value is not affected by the pandemic in the internal business negotiations from the data set. In sum, the deal value is not affected somehow by the Covid-19 pandemic.

Thus, **H₀** = μBEFORE = μAFTER, or H₀ = μBEFORE - μAFTER = 0, where: μBEFORE is the mean deal value before the pandemic, and μAFTER is the mean deal value after the pandemic.

H_a: The negotiation deal value before the pandemic correlates to the deal value after the pandemic in internal business negotiations. There is a significant correlation between the mean deal value before and after the pandemic in the negotiations analyzed.

RESULTS AND ANALYSIS

Figure 4 illustrated the results of the Shapiro-Wilk normality test due to the number of samples investigated (N>100):

Normality Tests

	Kolmogorov-Smirnov ¹⁰			Shapiro-Wilk, Shapiro-Wilk		
	Statistics	Gf	Sig.	Statistics	Gf	Sig.
DEAL	,198	1000	,000	,852	1000	,000

a. Lilliefors Significance Correlation

Fig. 4: - Normality tests. Source: SPSS 26

Observe in Figure 4 that $p < 0,001$ for the DEAL variable, resulting in non-parametric variable, i.e., the results' distribution did not follow a normal distribution. Therefore, the results' distribution is not normal ($p < 0,01$). Consequently, the parametric T-test is not suitable for analyzing the data set.

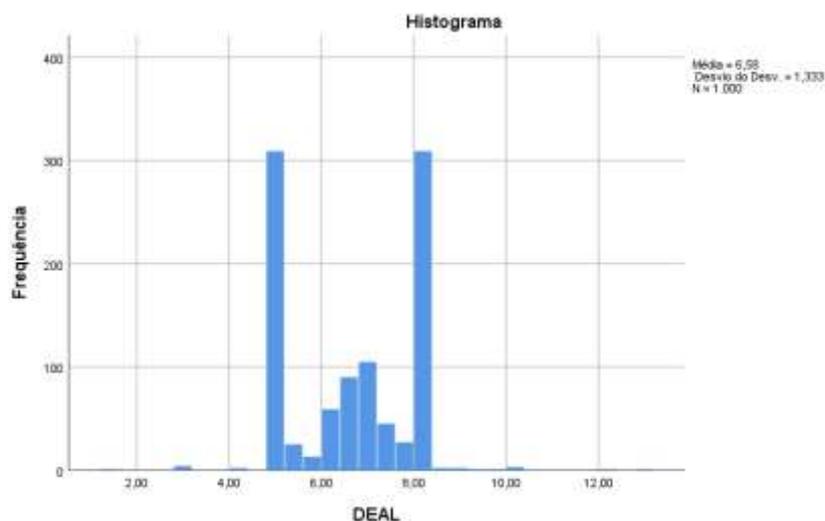
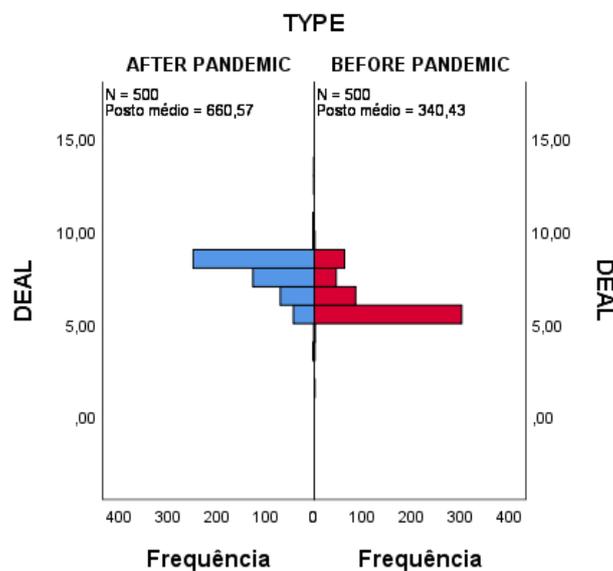


Fig.5: DEAL values frequency. Source: SPSS 26

Observe in Figure 5 the results of the non-normal distribution. Hence, the non-parametric Mann-Whitney U test was used to investigate the two variables, with independent samples, i.e., the groups

before and after the pandemic are independents, i.e., the outcomes of the negotiations did not interfere somehow with any other negotiation results at all.

As previously mentioned, the statistical confidence level adopted for this examination is 99 percent ($p=0,01$). The nominal variable TYPE was assigned with the following values: "0" for BEFORE pandemic, and "1", for AFTER pandemic. The DEAL value is the dependent variable. The result of the U-Mann-Whitney independent sample test is portrayed in Figure 6, as follows:



**Fig. 6: - Mann-Whitney U test independent samples.
Source: SPSS 26 extracted from the data source.**

The Mann-Whitney U Test Summary Independent Samples outcome is shown in Figure 7:

Posts				
	TYPE	N	Midl station	Sum of ratings
DEAL	BEFORE PANDEMIC	500	340,43	170213,00
	AFTER PANDEMIC	500	660,57	330287,00
	Total	1000		

Fig. 7: - Mann-Whitney Test Posts. Source: SPSS 26.

Figure 8 illustrates the nonparametric Test statistics outcomes. Notice the Mann-Whitney U test result for the variable DEAL of 44963,000, with $p < 0,01$.

Test statistics^a

		DEAL
U de Mann-Whitney		44963,000
Wilcoxon W		170213,000
Z		-18,077
Significância (bilateral)	Sig.	,000

a. grouping variable:TYPE

Fig. 8: - Mann- Whitney U Test Statistics. Source: SPSS 26.

Regarding the Deal values from the data sample drawn (DEAL), the Independent Mann Whitney U Test evidenced that the group AFTER presented a superior performance compared to the group BEFORE. Therefore, $U = (330287,00; p < 0,01)$. Observe in Figure 8 that $p < 0,01$. Therefore, the null hypothesis is rejected at the $\alpha = 0,01$ level of significance. The difference between the Before and After group is statistically significant ($p = 0,000; p < 0,01$), i.e., one out of 100 examples may result from some coincidence. Therefore, the alternate hypothesis of H_a is statistically significant. Figure 9 depicts the Hypothesis test summary and conclusions. Observe the null hypothesis rejection:

Hypothesis Test Summary

	Null hypothesis	Test	Sig.	Decision
1	The distribution of DEAL is the same in the TYPE categories.	U Mann-Whitney Test independent samples	,000	Reject the null hypothesis.

Asymptotic significance is displayed. The significance level is,010.

Fig. 9: - Hypothesis Test Summary. Source: SPSS 26.

Figure 10 compares the means between the two variables BEFORE and AFTER pandemic groups, as follows:

Report

DEAL

TYPE	Average	N	Std Err	% N total
BEFORE PANDEMIC	5,8192	500	1,12277	50,0%
AFTER PANDEMIC	7,3374	500	1,06755	50,0%
Total	6,5783	1000	1,33256	100,0%

Fig. 10: - Means Report. Source: SPSS 26.

Observe in Figure 10 that the average deals from the AFTER-PANDEMIC group are 26.08 percent higher than the BEFORE-PANDEMIC group, revealing a superior performance on the after-pandemic group compared to the before-pandemic group.

The frequency of the most common deal value results (in percentage budget increase for the next fiscal year) before and after the pandemic is illustrated in Figure 11:



Fig. 11- most common deal value results. Source: extracted from data

Observe in Figure 11 that before the pandemic, there was a prevalence of the negotiation's absolute worst result (5 percent budget increase), which was the outcome of 269 negotiations (53.8 percent of the 500 negotiations). In comparison, the best budget increase outcome (8 percent) resulted from 62 negotiations (12.4 percent of the 500 negotiations). Note in Figure 11 that after the pandemic, what had reversed the results: the best possible outcome (eight percent) was multiplied by four (from 62 to 246), while the worst outcome possible for the internal negotiation (five percent) decreased almost seven times the output of before the pandemic (from 269 to 39), as depicted in the following Figure 12:

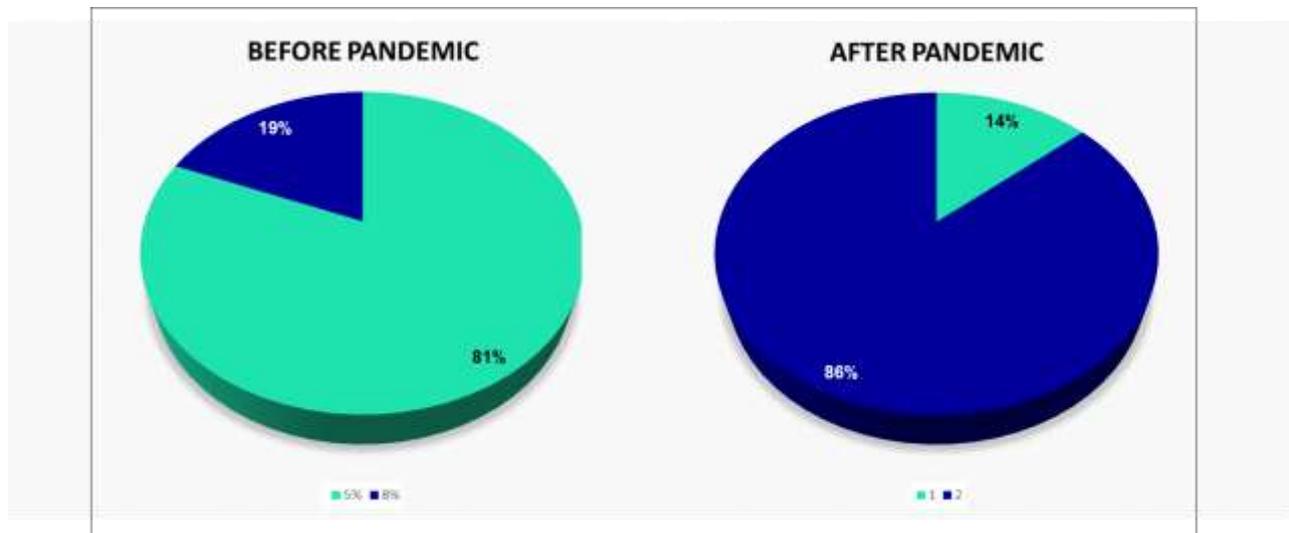


Fig. 12 - deal value results (8%, 5%), before and after the pandemic. Source: extracted from data

Note in Figure 12 how the deal values from before and after the Covid-19 have changed extensively: before the pandemic, 81 percent of the total negotiations resulted in five percent of budget increase, and only 19 percent resulted in an eight percent budget increase for the next fiscal year. However, after the pandemic, the situation has been dramatically inverted: only 14 percent of the total negotiations resulted in a five percent of budget increase, and 86 percent resulted in an eight percent budget increase for the next fiscal year.

CONCLUSION

In this section, theoretical and managerial implications, as well as study limitations are discussed, as follows:

Theoretical Implications

The purpose of this research was to test the hypothesis H_a regarding the variables BEFORE and AFTER the Covid-19 pandemic, as well as answering the two research questions (i and ii) posed at the beginning of the present research:

(i) *Are the mean deal values (DEAL) different before and after the pandemic?*

The answer is yes, for the data set investigated. One conclusion, drawing from the analysis, points out statistical significance in H_a ($p < 0,01$), according to the Mann-Whitney U-tests results (see Figures 8, 9, and 10). Therefore, the null hypothesis is rejected, and the alternate hypothesis is accepted. Hence, the differences between $\mu_{\text{BEFORE}} - \mu_{\text{AFTER}} \neq 0$; consequently, there is a statistical relevance

between before and after the Covid-19 pandemic groups. The After group performed higher deal values than the before group.

(ii) *Are the negotiators more empathetic in internal negotiations due to the Covid-19 pandemic?*

There is strong evidence to suggest more empathetic and generous negotiations due to the Covid-19 pandemic regarding internal negotiations - those in which parties are colleagues and work for the same institution, company, firm, or constituency. Observe in Figure 13 the three most common deal values' shift, before and after the pandemic:

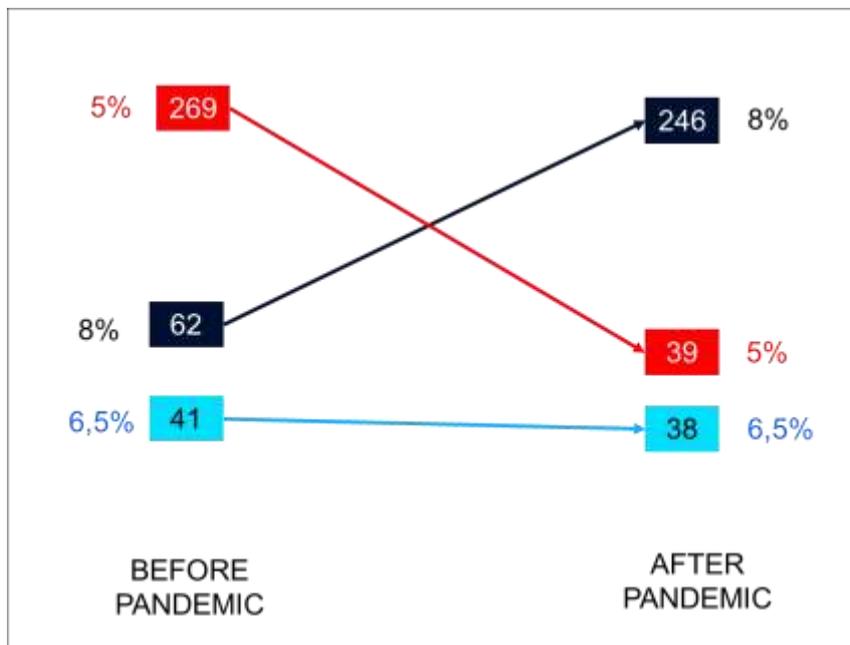


Fig. 13 - deal value shifts, before and after the pandemic. Source: extracted from data

Once the data set analysis confirmed the null hypothesis rejection, it is not possible, therefore, to affirm that the statistical result occurred by chance or by sampling error. Thus, evidence suggests that the Covid-19 pandemic, which caused nearly three million deaths worldwide as this article has been written (WHO, 2021), somehow influenced the negotiations' results under investigation. Observe in Figure 13 the evidence on how the negotiation results shifted dramatically from the worst to the best outcome possible: the number of eight percent deals, the best budget is increased fourfold.

Implications for managerial practice

The article was designed to address the impact of the Covid-19 on the internal negotiation process.

The implications for administrative practice are clear: while the cure for the Covid-19 is not available as this article is written, Humanity struggle for survival. The "new normal" encompasses daily challenges, such as family and friends' losses, dealing with confined spaces, lockdowns, social isolation, mobility restrictions, political turmoil, social and mass media shaping our fears, among others. Finally, in times of difficulties, negotiators seem to find ways to be resilient and empathetic. After all, when a thread suspends life, the coexistence and well-being among human beings become the reason for existence. Therefore, more empathetic social exchanges are utmost expected.

This research also has implications in different fields of related studies, such as (i) Covid-19 pandemic studies (Dias, 2020; Dias, Lopes and Teles, 2020; Dias and Lopes, 2020a, 2020b); (ii) contract negotiation (Dias, 2019c, 2012); (iii) retail business negotiations (Dias et al., 2015); (iv) streaming video industry negotiations (Dias and Navarro, 2018; Dias, 2020c); (v) family business succession (Dias and Davila, 2018); (vi) structured versus situational business negotiation approaches (Dias, 2020); public negotiation projects (Dias, 2016, 2018; Dias and Lopes, 2019); (vii) credit recovery negotiation (Dias, Ribeiro and Lopes, 2019),(viii) e-business negotiations (Dias and Duzert, 2017), among others.

Study Limitations

The conclusions presented in this work are limited to internal Brazilian business negotiations and the data set analyzed. Other countries or business scenarios may differ in their outcomes. It is limited to the artificial classroom environment. Different nations or situations may vary in their results. Finally, the negotiations are limited to Type I (Dias, 2020). Other types of negotiation (Types II, III, and IV) may differ in their outcomes.

FUTURE RESEARCH

Future exploration is encouraged to address the negotiations Types II, III, and IV (Dias, 2020), just as dealings in different situations, like government negotiations. Likewise, qualitative interviews are urged to be examined in future studies to acquire a more profound comprehension of the subject appreciated, investigate the subtleties, and extend such compassionate internal negotiations.

REFERENCES

- Dias, M. (2012). Two Case Studies on how to Deal Effectively with Fixed plus Variable Costs Contracts. *International Journal of Business and Management Studies*, 1(3), 505-515. doi: 10.6084/m9.figshare.7832288
- Dias, M. (2018). Light Vehicle Vehicle in Rio de Janeiro: Alternative to Public Transportation in Brazil? *Australian Journal of Science and Technology*. 2(4), 187-193. doi:

10.6084/m9.figshare.7833362

- Dias, M. (2019c). Is it Worth Competing at the Bargaining Table? *Global Scientific Journals*, 7(9), 1-14. doi: 10.13140/RG.2.2.11557.45288
- Dias, M. (2020) Netflix: from Apollo 13 to the Coronavirus Pandemic. *Global Scientific Journals*, 8(8), 21-35. doi: 10.11216/gsj.2020.08.42678
- Dias, M. (2020) The Four-Type Negotiation Matrix: A Model for Assessing Negotiation Processes. *British Journal of Education*, 8(5), 40-57. doi: 10.6084/m9.figshare.12389627
- Dias, M. (2020b) Structured versus Situational Business Negotiation Approaches. *Journal of Xidian University*, 14(6), 1591-1604. doi: 10.37896/jxu14.6/192
- Dias, M. et al. (2015). Brazilian Fashion Business Dudalina S/A: Case Revisited. *International Journal of Business and Management Studies*, 4(1), 11-24. doi: 10.6084/m9.figshare.7834730
- Dias, M., (2016). São Francisco River Transposition Civil Work: Challenges to the Brazilian Economy. *The International Journal of Business & Management*. 4(12), 65-70. doi: 10.6084/m9.figshare.7834724
- Dias, M., Lopes, R. (2019). Rail Transportation in Brazil: Challenges and Opportunities. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 8(4), 40-49. doi: 10.13140/RG.2.2.27687.70568
- Dias, M., Lopes, R. (2020a) The Age of Protocols: How the COVID-19 Pandemic Reshaped our Society. *East African Scholars Journal of Psychology and Behavioural Sciences*, 2 (5), 17-21. doi: 10.36349/easjpbs.2020.v02i05.004
- Dias, M., Lopes, R. (2020b) Will the COVID-19 Pandemic Reshape our Society? *EAS Journal of Humanities and Cultural Studies (EAS J Humanit Cult Stud)*. 2(2), 93-97. doi: 10.36349/EASJHCS.2020.V02I02.013
- Dias, M., Lopes, R., Teles, A. (2020) Will Virtual Replace Classroom Teaching? Lessons from Virtual Classes via Zoom in the Times of COVID-19. *Journal of Advances in Education and Philosophy*, 4(5), 208-213. doi: 10.36348/jaep.2020.v04i05.004
- Dias, M., Navarro, R. (2018). Is Netflix Dominating Brazil? *International Journal of Business and Management Review*. 6(1), 19-32. doi: 10.6084/m9.figshare.7834643
- Dias, M.; Davila Jr., E. (2018) Overcoming Succession Conflicts in a Limestone Family Business In Brazil. *International Journal of Business and Management Review*, 6(7), 58-73. doi: 10.6084/m9.figshare.7834703
- Dias, M.; Duzert, Y. (2017). Teaching Materials: Role Play Simulation on E-Business Negotiation. *European Journal of Training and Development Studies*, 4(3), 1-15. doi: 10.6084/m9.figshare.7834655
- Dias, M.; Ribeiro, A.; Lopes, R. (2019). When clients do not pay: A Winning Negotiation Case in Brazil. *Journal of Economics and Business*, 2(2), 431-447. doi: 31014/aior.1992.02.02.99
- Duzert, Y. (2015). *Newgotiation: Newgotiation for Life*. Kindle DX version.
- Fisher, R. Ury, W. and Patton, B (Editor). (1981). *Getting to Yes: Negotiating an Agreement without*

Giving in. US: Random House.

Lax, David. (1985) Optimal Search in Negotiation Analysis. *The Journal of Conflict Resolution*, 29(3), 456-472.

Moore, C.W. (12003). *The Mediation Process: Practical Strategies for Resolving Conflict*. San Francisco (California) and London: Jossey-Bass, 3rd Edition.

Retrieved from Amazon.com

Rinehart, L. and Page, T. (1992) The Development and Test of a Model of Transaction Negotiation. *Journal of Marketing*, 56(4), 18-32.

Salacuse, J. (2008). *Seven Secrets for Negotiating with Government: How to Deal with Local, State, National, Or Foreign Governments – And Come Out Ahead*. New York: Amacom.

Sebenius, J. (1992). Negotiation Analysis: A Characterization and Review. *Management Science*, 38(1), 18-38.

Susskind, L. and P. Field (1996), *Dealing with an Angry Public: The Mutual Gains Approach to Resolving Disputes*. New York: Free Press.

Susskind, Lawrence; Cruikshank, Jeffrey (2006) *Breaking Roberts Rules: The New Way to Run Your Meeting, Build Consensus, and Get Results*. New York: Oxford Press.

Susskind, Lawrence; Cruikshank, Jeffrey. (1987). *Breaking the Impasse: Consensual Approaches to Resolving Public Disputes*. New York, NY: Basic Books.

Ury, W. (2015). *Getting to Yes with Yourself and Other Worthy Opponents*. MA: Harper Collins.

WHO (2021); Coronavirus disease (COVID-19) pandemic? Retrieved on 21 March 2021 from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>