

Universidade de Évora - Instituto de Investigação e Formação Avançada

Programa de Doutoramento em Gestão

Tese de Doutoramento

Diversity and Inclusion and its impact on Organizational Performance Case Study at Novartis

Luis Miguel Amarilis Indio de Oliveira Ripado

Orientador(es) | Andreia Teixeira Basílio

Maria de Fátima Oliveira

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Evora 2021



A tese de doutoramento foi objeto de apreciação e discussão pública pelo seguinte júri nomeado pelo Diretor do Instituto de Investigação e Formação Avançada:

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THESIS DEDICATION

To Ana, Francisca, Vasco, and Catarina.

Without your support, my dream of having a PhD would not have been fulfilled.

RESUMO

O impacto da diversidade e inclusão no desempenho organizacional – estudo de caso na Novartis

Este trabalho pretende definir e validar um modelo teórico para a influência da Diversidade e Inclusão (D&I) sobre o Desempenho Organizacional (DO).

A pesquisa está apoiada na revisão dos fundamentos teóricos da D&I e DO, teoria e orientação da Novartis, buscando uma interpretação coerente dos conceitos que permitam a sua utilização tanto na pesquisa, como na adoção da D&I na gestão.

Este trabalho segue uma abordagem qualitativa e interpretativa através da utilização do método de um Estudo de Caso único na empresa farmacêutica Novartis, onde se utilizaram instrumentos e técnicas qualitativas e quantitativas. O modelo teórico proposto utiliza as dimensões de D&I (diversidade e inclusão) e as dimensões de DO (inovação, pessoas, qualidade, desempenho, produtividade) para analisar a influência da D&I no DO.

As variáveis latentes e o modelo são validados através de um inquérito feito globalmente pela Novartis (GES - Global Employee Survey), do qual foram escolhidos 4 países devido às suas diferenças de acordo com as dimensões de Hofstede da cultura nacional. Nesses países, 648 associados responderam aos questionários, o que representa uma taxa de respostas de 78%.

A análise dos resultados mostra que todas as dimensões do DO apresentam resultados diferentes ao se considerar as condições necessárias e suficientes de D&I. Por exemplo, a inclusão é uma condição necessária *per se* apenas para o desempenho, enquanto que para pessoas nenhuma das dimensões são condições necessárias para que esse resultado ocorra. O mesmo é verdadeiro para condições suficientes. Por exemplo, diversidade é uma condição suficiente para todas as dimensões do DO.

Este trabalho tem implicações de pesquisa, práticas e sociais, nomeadamente porque os resultados podem auxiliar as organizações na tomada de decisões no tratamento de políticas de D&I, com foco em dimensões que influenciam dimensões específicas do DO, podendo assim estabelecer relações diretas entre variáveis e implementar soluções de acordo com os objetivos organizacionais.

Com este trabalho pretende-se antever a possibilidade de alteração do algoritmo de D&I nas organizações para melhorar as áreas do DO que são percebidas como as que podem ter maior influência nos resultados.

Palavras-chave: Cultura Nacional, Cultura Organizacional, Desempenho Organizacional, Diversidade e Inclusão, Valores e Comportamentos

ABSTRACT

The scope of this research concerns the theme of Diversity and Inclusion (D&I) and Organizational Performance (OP), and its purpose is to define and validate a theoretical model of the influence of D&I in OP.

This research is supported by a review of the fundamentals of D&I and OP, Novartis, theory, and guidance, seeking a coherent interpretation of the concepts that allow its use in research and the adoption of D&I in management.

It follows a qualitative and interpretative approach using the method of a unique Case Study at the pharmaceutical company Novartis, where qualitative and quantitative instruments and techniques were used, and the proposed theoretical model uses the dimensions of D&I (diversity and inclusion) and the dimensions of OP (innovation, people, quality, execution, productivity) to analyze the contribution of D&I in OP.

The latent variables and the model are validated through a survey made globally by Novartis (GES - Global Employee Survey), from which 4 countries were chosen due to their differences according to the Hofstede dimensions of the national culture. In these countries, 648 members responded to the questionnaires, which represents a response rate of 78%.

The analysis of the results shows that all the dimensions of the OP present different results when considering the necessary and sufficient conditions of D&I. For example, inclusion is a necessary condition per se only for performance, whereas for people none of the dimensions are necessary conditions for this result to occur. The same is true for sufficient conditions. For example, diversity is a sufficient condition for all dimensions of OP.

This work has research, practical and social implications, namely because the results can assist organizations in making decisions in the treatment of D&I policies, focusing on dimensions that influence specific dimensions of the OP, thus being able to establish direct relationships between variables and implement solutions according to organizational objectives.

With this work, it is intended to foresee the possibility of changing the D&I algorithm in organizations to improve the areas of OP that are perceived as those that may have the greatest influence on the results.

Keywords: Diversity and Inclusion, National Culture, Organizational Culture, Organizational Performance, Values and Behaviors

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ACRONYMS AND ABBREVIATIONS

- ASX Australian Securities Exchange
- CA Corporate Ability
- CAGR Compound Annual Growth Rate
- CAR Cumulative Abnormal Returns
- CEO Chief Executive Officer
- CRM Cardio, Renal and Metabolism
- CSR Corporate Social Responsibility
- D&I Diversity and Inclusion
- DO Desempenho Organizacional
- EBIT Earnings Before Interest and Taxes
- EFPIA The European Federation of Pharmaceutical Industries and Associations
- **EM** Established Medicines
- ESG Environmental, Social and Governance
- EUROSTAT European Statistical Office
- EU European Union
- fsQCA Fuzzy Set Qualitative Comparative Analysis
- FTSE Financial Times Stock Exchange
- GDD Global Drug Development
- GDP Gross Domestic Product
- GES Global Employee Survey
- HBR Harvard Business Review
- HR Human Resources
- HRC Human Rights Campaign
- l1 Interviewee 1
- I2 Interviewee 2
- I3 Interviewee 3
- I4 Interviewee 4
- IA Identity Attractiveness

- IHD Immunology, Hepatology and Dermatology
- IDV Individualism vs Collectivism
- IND Indulgence vs Restraint
- KPI Key Performance Indicator
- LGBTQ Lesbian, Gay, Bisexual, Transgender, and Queer (or questioning)
- LTO Long Term Orientation vs Short Term Orientation
- M&A Mergers and Acquisitions
- MAS Masculinity vs Femininity
- MLN Millions
- MSCI Morgan Stanley Capital International
- MSD Merck Sharp & Dohme
- NAS New Active Substance
- NBAA Novartis Business Assurance & Advisory
- NBS Novartis Business Services
- NIBR Novartis Institutes for BioMedical Research
- NTO Novartis Technical Operations
- OP Organizational Performance
- P3 Professional Practices Policy
- PDI Power Distance
- PRA Pragmatic
- QCA Qualitative Comparative Analysis
- R&D Research and Development
- rcaap repositórios ciêntificos acesso aberto de Portugal
- RNA Ribonucleic Acid
- Rx Prescription
- S&P Standard & Poor's 500
- SMART Specific, Measurable w/Measurement, Achievable, Relevant, Time-Oriented
- SSL Secure Sockets Layer
- UAI Uncertainty Avoidance
- US United States of America

- USD United States of America Dollars
- V&B Values and Behaviors

CHAPTER 1

INTRODUCTION

In this chapter it is detailed the research background, what are the research questions and research objectives, which are the research methods used in this work, what are the research contributions, and it is explained the thesis structure.

1.1 – RESEARCH BACKGROUND

Diversity, inclusion, leadership, performance, productivity, are terms that have a common association. They are all terms that are found in current literature that relates to organizations that are striving to become successful and competitive in the 21st century global market.

As organizations work to offer high-quality products or services to customers, remaining globally competitive, the focus on ensuring that diverse and inclusive work cultures exist within the organizations is increasing. As the advances in technology and the global economy have become more prominent, organizations have found necessary to invest in ways to better serve their local/global customers with strategies to attract and retain the best and most qualified employees and managers with the right skills to embrace change, being able to draw on the diverse skills of employees.

Changing the culture of an organization to become more diverse and inclusive is not easy. It is important for organizations to gain an understanding of currently occurring behaviors and experiences that are preventing the organizations from reaching targeted goals and ensure that all employees are engaged in diversity initiatives that are promoted by the organization (Konrad et al., 2006).

From the literature it is understood that diversity focuses on the differences and the demographic composition of groups or organizations, while inclusion focuses on organizational objectives designed to increase the participation of employees, leveraging the diversity effects on the organization (Roberson, 2006).

Represented by differences of varying cultural significance (Cox, 1994), diversity can be defined in terms of observable and non-observable characteristics (Milliken & Martins, 1996).

Diversity can be defined as our visible and invisible differences and similarities including but not limited to age, ethnicity, gender, nationality, language, sexual orientation, thinking style, physical ability, and religious belief (Novartis, 2017).

Inclusion can be defined as the extent to which individuals can access information and resources, are involved in work groups, and can influence decision-making processes (Mor Barak & Cherin, 1998).

Inclusion is the capability to encourage and enable individuals and groups to contribute to their fullest potential by leveraging their unique experiences and perspectives (Novartis, 2017).

Although research distinguishes between concepts of diversity and inclusion through the articulation of different organizational cultures and systems, little research has empirically investigated the specific attributes and practices for diversity and inclusion in organizations (Roberson, 2006).

Values can be defined as broad preferences concerning appropriate courses of actions or outcomes. As such, values reflect a person or an organization sense of right or wrong, or the way it should be. Values generate behaviors and influence the choices made by an individual (Rokeach, 1973).

A behavior is the range of actions performed by individuals, organisms, systems, or artificial entities in connection with themselves or their environment, including the other systems or organisms in the environment, as well as the physical environment.

It is the reaction of the system or the organism to different stimuli or inputs, whether internal or external, conscious, or unconscious, open, or covert, voluntary, or involuntary (Minton et al, 2014).

In the global marketplace, performance measurement plays a key role in the organization's development strategy. As Drucker points out (Drucker, 1997), if one does not measure something, one cannot understand a process.

If an organization do not understand the process, it cannot be perfect. Several empirical studies suggest that firms achieve higher levels of profitability and organizational performance through the success and implementation of practices associated with management quality (Parast & Adams, 2012), which may include values and behaviors as innovation, courage, quality, or integrity.

This research is based on the link between diversity, inclusion, values and behaviors, and organizational performance in an organization, and it has the goal to define and validate a theoretical model that allows analyzing the relationship between diversity and inclusion, corporate values and behaviors, and its influence in organizational performance.

This case study is supported by variables from different European affiliates of Novartis Pharmaceuticals. Comparisons are done between country affiliates, measuring how these differences affect the performance country by country, and can unleash the potential of the organization.

Novartis ranks 9th, being 1st in the pharmaceutical industry at Refinitiv D&I Index 2020¹ Top 100 most diverse & inclusive organizations globally, which measures relative performance against multiple factors that define diverse and inclusive workplaces.

Novartis is a global healthcare company based in Basel, Switzerland, with roots dating back more than 150 years. In 2018, Novartis achieved net sales of USD 51.9 billion, while net income amounted to USD 12.6 billion. Headquartered in Basel, Switzerland, the Group companies employed 125,000 full-time equivalent associates as of December 31, 2018. Its products are

¹ https://www.refinitiv.com/en/sustainable-finance/diversity-and-inclusion-top-100
sold in approximately 155 countries around the world, reaching more than 800 million people globally (Novartis, 2018).

1.2 – RESEARCH QUESTIONS

What is the influence of Diversity & Inclusion in Organizational Performance?

The scope of this research concerns the theme of Diversity and Inclusion (D&I) and Organizational Performance (OP), and its purpose is to define and validate a theoretical model of the relationship between D&I dimensions and OP dimensions.

The problem presented in the form of a research question assumes the existence of a causal relationship between D&I and OP. Based on these assumptions, the purpose of this research is to analyze how the dimensions of D&I influence OP and its dimensions (execution, quality, innovation, productivity, and people) as described in Figure 1.



Figure 1- Relation between D&I dimensions and OP dimensions

Source: self-elaboration

Given that D&I is a recent area of focus on organizations, and values and behaviors (V&B) are part of the daily life of associates, their development plans, performance evaluations, having impact on annual incentives, for the purpose of this research, D&I influence on OP is also analyzed together with the V&B of the organization.

So, the problem presented in the form of a research question assumes the existence of a causal relationship between D&I, V&B and OP. Based on these assumptions, the purpose of this research is also to analyze how the dimensions of D&I (diversity, inclusion) and the dimensions of V&B (courage, collaboration, achievement, creative thinking, excellence and integrity) influence OP and its dimensions (execution, quality, innovation, productivity and people) as described in Figure 2.



Figure 2 – Relation between D&I, V&B and OP dimensions

Source: self-elaboration

The purpose is to assess whether D&I and V&B promote better organizational performance and contribute for a more efficient management model for the company.

The proposed problem also refers to the discussion about diversity, inclusion, values, and behaviors that underpin and promote the paradigm shift at a multinational organization according with local cultures.

Figure 3 – Relation between culture and the dimensions of D&I and V&B



Source: self-elaboration

The analysis will also allow us to evaluate the cultural dimensions that influence diversity and inclusion, that create and favor conditions to stimulate better attitudes and behaviors, and good organizational performance.

1.3 – RESEARCH OBJECTIVES

The main objective of this research, according to the stated problem, is to analyze "the relation of D&I dimensions with organizational performance".

Studying the relationship between D&I and V&B, the goal is to respond to a set of specific objectives:

- i) Analyze if D&I in its two dimensions are necessary conditions or sufficient conditions for OP dimensions to occur.
- ii) Analyze if D&I in its two dimensions together with V&B in its six dimensions are necessary conditions or sufficient conditions for OP dimensions to occur.

Answering the problem, the main objective, and the specific objectives, it will be possible to:

- evaluate which D&I and V&B dimensions are needed to drive organizational performance.

- evaluate the implicit advantages of adopting D&I and V&B practices.

- assess the cultural dimensions of different countries that may justify this adoption.

- conclude on the benefits that its adoption brings to the organization, stakeholders, and society.

- conclude on the place that D&I and V&B occupy in the context of Novartis and to advance in the knowledge of the subject, to take robust decisions when aiming to drive different aspects of organizational performance.

To achieve these goals, we need to:

- Review the foundations of D&I, theory, and Novartis guidance, for the empirical study of Diversity and Inclusion, seeking a coherent interpretation of the concepts that allow them to be used in research and adopt D&I in management.

- Study the theoretical foundations, characterization, and typologies of the different Novartis V&B dimensions (Courage, Collaboration, Performance, Innovation, Quality, and Integrity).

- Review Novartis guidance on V&B seeking a coherent interpretation of the concepts that allow them to be used in research and adopt these V&B in management.

- Study the theoretical foundations, characterization, and typologies of the different Novartis OP dimensions (Objectives, Innovation, Quality, Productivity, and People).

- Understand the dimensions that characterize the culture of different countries.

- Collect empirical data.

- Create a model that allows to study the proposed problem.

- Empirically analyze the data collected, draw statistical inferences and conclusions.

1.4 – RESEARCH METHODOLOGY

The current work is based on the interest of investigate the relationship between D&I, V&B, and its influence on organizational performance.

Based on this interest, the contextualization of the relevant theoretical framework, and the complexity and breadth of this topic, it was considered that the systemic approach of D&I and V&B is the most appropriate to study the problem formulated. Thus, the quantitative method is defined as the most indicated method, and Novartis Global Employee Survey data used with this aim.

In the review of the literature, different sources of knowledge were analyzed on D&I and V&B, placing them in the respective approaches.

The problem of this study led to the elaboration of research questions, which are intended to be responded, proposing a conceptual model to analyze the relationship between D&I, V&B, and its repercussion on organizational performance, which is the basis of the development of the empirical study.

This model presents as independent variables the D&I and V&B dimensions and as dependent variables the organizational performance dimensions. It also presents secondary or control variables, Hofstede cultural dimensions.

The empirical study has two objectives: to specify the conceptual model considering the exploratory nature of the study of D&I and V&B in the Novartis context and to define the specific objectives, the questions to be answered and the research hypotheses to be validated.

For the collection of information, a structured questionnaire survey method with closed questions was used (Novartis Global Employee Survey – GES), in which a set of questions related to the respondent, the company, the dimensions of D&I, V&B and organizational performance were reflected.

The methodology to be used in this work will be a mixed approach, qualitative and quantitative, to support the case study as research method, combining documental information, interviews, and questionnaires.

The theoretical model is based on D&I dimensions (2) diversity and inclusion; V&B dimensions (6) courage, collaboration, achievement, creative thinking, excellence, and integrity; and its relationship with organizational performance KPIs (5) as innovation, people, quality, execution, and productivity.

As this is a case study, the six dimensions of V&B, and the five dimensions of organizational performance, were chosen because they are the indicators in both areas at Novartis.

The model will operationalize the research question translated in the evaluation if the D&I and V&B dimensions are necessary or sufficient conditions for organizational performance dimensions to occur, or in other words, which have an impact in organizational performance.

The variables and model are validated through a Global employee survey answered by Novartis associates from different countries.

To achieve this, three constructs or latent variables are made operational: D&I, V&B and OP. The model materializes the main research question translating it into four central hypothesis and will consider the differences between countries that can influence different adoptions of D&I policy and values, translating them into one secondary hypothesis which altogether allow to evaluate the D&I, and the D&I together with V&B relationship with OP, giving an answer to the main purpose of the research.

The reliability and validity of the proposed constructs will be evaluated through fsQCA (Fuzzy Set Qualitative Comparative Analysis).

The statistical analysis of the results will determine the relation between D&I, D&I together V&B with OP through the influence of the dimensions of D&I, V&B in the dimensions of OP.

1.5 – RESEARCH CONTRIBUTIONS

Societal cultures reside in values, in sense of broad tendencies to prefer certain states of affairs to others (Hofstede, 2001, p.5). Organizational cultures reside rather in practices: the way people perceive what is going on in their organizational environment. The way corporate management implement a D&I policy can have different influence on values and behaviors from country to country and this can be related with the cultural dimensions developed by Hofstede.

Diversity research has focus on issues associated with diversity as discrimination, bias, affirmative action, and tokenism (Shore et al., 2009). This research has raised issues and contributed to new theories (Jackson and Joshi, 2011). As diversity field has evolved, scholars have increasingly focused on ways in which diversity enhance work processes and organizational mechanisms that promote potential value. The issue is the link between this approach of diversity and another new topic: inclusion, an area where management scholars have only focused later (Shore et al., 2011). As a result, the inclusion literature is developing, and there are few examples linking diversity and inclusion with corporate performance. IBM and MSD are examples of companies where this is already a reality.

Inclusion is a new subject in the organizational literature for the past decade (Roberson, 2006). There are contextual factors contributing to it, as they contribute to perceptions of inclusion (Shore el al., 2011). Based on the literature, practices associated with insider status such as information exchange, participation in decision-making processes, voice, are inclusion measures. These practices improve employee perceptions of inclusion which has positive consequences for individuals and organizations. However, little is known about how inclusion is a reality and how it can be measured and how it affects an organization's performance.

Today's smart organizations recognize that their diversity can be a source of competitive strength. Rather than just overseeing minority representation within the ranks - a standard goal of diversity programs in the past - they are implementing strategies that aim to better understand the backgrounds, styles, and perspectives of their employees and to use them for real business benefit (Park, 2008).

Clients are asking firms to provide evidence of their diversity, policies, and initiatives (Braithwaite, 2010), so D&I can have a similar impact within an organization and be as important as CSR, as consumers feel closer to companies and brands that have come to occupy a special place in their lives (Fournier, 1998). Consumers to satisfy personal and social needs use those organizations and brands.

Thus, this research aims to evaluate one by one the different factors and have algorithms of influence in each factor according to the country considered. For example, the algorithm to improve quality may be different as an indicator of performance, since in one country it may depend more on courage and in another country on innovation. Here too, the factors that influence courage and innovation may be different from country to country, where innovation depends more on diversity, while on the other it may depend more on inclusion. Thus, direct relations between variables can be established and solutions can be implemented according to the objectives of the organization, in the different countries.

This work is different from what is found in current literature because it goes beyond the direct link between one variable of diversity and inclusion and one variable of performance, or when more variables are measured, the difference is between a qualitative approach done by interviews to management teams, and the quantitative data approach of this study.

For the current research, to define its contribution, relevance and novelty, a literature review was done with focus on pharmaceuticals, Novartis, diversity, inclusion, and performance in different repositories as rcaap – repositórios ciêntificos acesso aberto de Portugal (Portuguese open access scientific repositories from Portuguese Science Foundation), b-on and jstore at Universidade de Evora, and other databases as Elsevier's Science Direct, or Web of Science.

1.6 THESIS STRUCTURE

The structure of the thesis is organized into seven chapters, each chapter comprising a set of sections. Each section is characterized by a short introduction containing the objectives and purposes and ends with a conclusive synthesis.

In Chapter 1, the thesis is framed with the definition of the problem, objectives, delimitation and relevance of the theme and structure of the work.

Chapter 2 is dedicated to the organizational and sectorial context of the pharmaceutical market.

In Chapter 3 is present the literature review, the theoretical framework that underpins the formulation of the research problem and to understand the relevance and originality of this research.

Chapter 4 is dedicated to the research model.

Chapter 5 develops the methodology adopted to carry out the empirical investigation, the population of the study is identified, the respective sample and the method used in the data collection are described. It also describes the research instruments.

In Chapter 6 Novartis is presented, followed by the evaluation and interpretation of the results of the qualitative and quantitative methods applied in this case study at Novartis.

Chapter 7 presents conclusions, contributions, gaps, and recommendations for future research.

CHAPTER 2

ORGANIZATIONAL AND SECTORIAL CONTEXT

This chapter aims to give a brief overview over the pharmaceutical market, key pharmaceutical companies, and health data of the countries where this study is implemented (key health numbers and pharmaceutical market at Western European Countries).

2.1 – GLOBAL PHARMACEUTICAL MARKET (IQVIA, 2019)

The global pharmaceutical market will exceed \$1.5 trillion by 2023 and grow at an average annual growth rate of 3% to 6% over the next five years.

The main drivers of growth will continue to be the US and emerging markets, with average annual growth rates of 4% to 7% in the US and 5% to 8% in emerging markets.

New products and loss of exclusivity will continue to create a similar dynamic in industrialized countries, while the product mix will continue to shift from primary care to specialty care and orphan products.

An average of 54 new active substance (NAS) launches per year is expected over the next five years. Two-thirds of these launches will be specialty products, bringing the share of specialty spend to nearly 50% of spending in most developed countries by 2023.

In the US, overall spending growth is being driven by different factors including new product launches and branded pricing, while being offset by patent expiration and generics.

In Europe, cost containment measures and lower growth from new products are contributing to slower growth of 1% to 4% compared to the average annual growth of 4.7% in the period 2014-2018.

Pharmaceutical spending in Japan was \$86 billion in 2018. However, drug spending is expected to decrease -3% to 0% by 2023, largely due to exchange rates and continued generic adoption.

At the same time, the impact of loss of exclusivity in developed countries as the EU market, US and Japan is projected to be \$121 billion between 2019 and 2023, with 80% of that impact or \$95 billion in the United States, and 20% of that impact or \$26 billion in the EU market and Japan.

Pharmaceutical spending in China was \$137 billion in 2018 and is projected to reach \$140 billion to \$170 billion by 2023. However, growth is likely to slow to 3% to 6%.

By 2023 the competition for biosimilars in the biologics market will be almost three times as great as it is today. This will translate into lower spending of around \$160 billion over the next five years than it would have been if biosimilars had not hit the market.

2.2 – PHARMACEUTICAL COMPANIES

The top 10 positions by Pharm Exec's annual listing of the top pharma players in 2019 (Christel, M. 2020) shows the biggest change in several years, impacted in part by some mega mergers.

Rank	Company	2019 rx sales (USD in mln)	2019 R&D spend (USD in mln)	2019 top-selling drugs (USD in mln)	
1	Roche	\$48.247	\$10.293	\$10.293 Avastin	
2	Novartis	\$46.085	\$8.386	Cosentyx	\$3.551
3	Pfizer	\$43.662	\$7.988	Prevnar 13	\$5.847
4	MSD	\$40.903	\$8.730	Keytruda	\$11.084
5	BMS	\$40.689	\$9.381	Revlimid	\$10.970
6	181	\$40.083	\$8.834	Stelara	\$6.381
7	Sanofi	\$34.924	\$6.071	Lantus	\$3.372
8	Abbvie	\$32.351	\$4.989	Humira	\$19.169
9	GSK	\$31.288	\$5.541	Triumeq	\$3.255
10	Takeda	\$29.247	\$4.432	Entyvio	\$3.182

Table 1 – Top 10 Pharmaceutical companies

Source: Adapted from Christel (2020)

The data for the Pharma 50 listing was sourced from Pharm Exec's annual top drug listing in collaboration with life intelligence research firm Evaluate Ltd.

Roche climbed one place with Rx sales up 8.3% to end Pfizer's four-year tenure on the leaderboard.

Avastin, which accounts for 15% of the Roche's total drug sales, remains its top seller. However, like Herceptin and Rituxan, Avastin will face biosimilar competition in the years to come. Roche's most important sales drivers include the multiple sclerosis drug Ocrevus, the hemophilia drug Hemlibra, and the cancer treatments Tecentriq and Perjeta.

Regarding R&D spending, Roche spent \$10.3 billion in 2019, the only Top 10 Pharmaceutical organization to have double-digit R&D investments.

Novartis also moved up one place from third to second after drug sales rose 6%.

In January 2020, Novartis completed the \$9.7 billion acquisition of The Medicines Company and added Inclisiran, a potential top-tier cholesterol-lowering therapy that uses the body's natural mechanisms for RNA silencing.

Novartis' heart failure drug Entresto rose 74% in the fourth quarter of 2019 to \$1.7 billion for the year. In the first quarter of 2020, the total sales of Entresto were \$569 million.

Also, Zolgensma, a gene therapy for spinal muscular atrophy has steadily gained market momentum as payers continue to support the one-dose treatment price despite its heavy burden.

Pfizer lost two places to become the 3rd top player in 2019 after Rx sales fell 3.6% in part due to declining fourth-quarter numbers for the nerve pain drug Lyrica, which has several competing generic versions. On the other side, sales of the breast cancer treatment Ibrance rose 20.5%.

Pfizer, which completed the \$11.4 billion acquisition of cancer-focused Array BioPharma in July 2019, expects continued growth from other brands such as Eliquis, Xeljanz, Xtandi and Inlyta, as well as recent and expected launches such as Vyndaqel, Vyndamax, Braftovi, Mektovi and oncology biosimilars.

Rx's sales of Keytruda cancer immunotherapy rose 9.5% to \$11.1 billion as the drug continues to gain approvals in new indications, supporting Merck & Co, the 4th largest player in 2019.

For the coming years, research, and reports² shows that CAGR for prescription drugs for 2019 to 2024 will be three times higher than for 2010 to 2018; orphan drug market will almost double. Prescription drug sales projected annual CAGR of +6.9% for 2019-2024, with sales reaching \$1.18 billion can be compared with the annual CAGR of +2.3% from 2010 to 2018.

With this projections, research and reports shows that Pfizer will lead the global ranking of the top 10 companies selling prescription drugs in 2024 followed by Novartis and Roche.

Novartis will keep the current 2nd place, surpassing Roche as Novartis is projected to have a CAGR of 2.3% between 2018 and 2024, versus Roche's 0.8% CAGR.

Bristol-Myers Squibb, the 5th top pharma player in 2019 had a huge impact from the loss of Opdivo market share to Keytruda. However, BMS will continue to be one of the most important players in the pharma market after the announcement, on January 3rd, 2019, of the acquisition of Celgene by \$74 billion.

Also in the mega-merger table, Takeda with the acquisition of Shire in January 2019 will jump several spots in the rankings between 2018 and 2024, with a CAGR of 10.8%.

Based on breakthroughs in the Chinese market and high sales of its oncology products Tagrisso and Lynparza, instead of M&A, AstraZeneca has achieved an impressive 7.7% CAGR.

With these numbers, only Takeda and AstraZeneca are projected to increase their market share between 2018 and 2024.

² EvaluatePharma[®], 2019

2.3 – D&I INDEX

Diversity and Inclusion (D&I) ratings by Refinitiv ESG

data³ are designed to measure the relative performance of companies against factors that define diverse and inclusive workplaces.

Novartis ranks 9th with an overall D&I score of 77.5, being 1st in the pharmaceutical industry at Refinitiv D&I Index 2020⁴ Top 100 most diverse & inclusive organizations globally.

The 24 ESG measures supporting the D&I index by Refinitiv are:

The number of controversies published in the media linked to workforce diversity and opportunity (e.g., wages, promotion, discrimination, and harassment).

Number of controversies linked to workforce diversity and opportunity (e.g., wages, promotion, discrimination, and harassment) published since the last fiscal year company update.

Number of controversies published in the media linked to the company's relations with employees or relating to wages or wage disputes.

Number of controversies linked to the company's relations with employees or relating to wages or wage disputes published since the last fiscal year company update.

Percentage of board members that have a cultural background different from the location of the corporate headquarters.

Does the company have a policy to drive diversity and equal opportunity?

Has the company set targets or objectives to be achieved on diversity and equal opportunity?

Percentage of women employees.

Percentage of new women employees.

Percentage of women managers.

Percentage of females on the board.

Percentage of female executive members.

The score of the company in the HRC corporate equality index from the Human Rights Campaign Foundation.

Does the company claim to provide flexible working hours or working hours that promote a work-life balance?

Does the company claim to provide day care services for its employees?

Percentage of employees with disabilities or special needs.

³ https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/diversity-inclusion-rating-methodology.pdf

⁴ https://www.refinitiv.com/en/sustainable-finance/diversity-and-inclusion-top-100

Does the company report on policies or programs on HIV/AIDS for the workplace or beyond?

Does the company have a policy to improve the skills training of its employees?

Does the company have a policy to improve the career development paths of its employees?

Average hours of training per year per employee.

Does the company claim to favor promotion from within?

Does the company claim to provide regular staff and business management training for its managers?

Training costs per employee in U.S. dollars; the percentage of employee satisfaction as reported by the company.

Refinitiv D&I Index 2020⁵ Top 100 most diverse & inclusive organizations globally is presented in Table 2, with focus on pharmaceutical industry.

Company Rank	Company Name	Industry	Country	Overall D+I Score
1	BlackRock, Inc.	Investment Banking & Investment Services	United States	81
2	Natura & Co Holding SA	Personal & Household Products & Services	Brazil	80.25
3	Accenture Plc	Software & IT Services	Ireland	80
4	Royal Bank of Canada	Banking Services	Canada	79
5	Industria de Diseno Textil SA	Specialty Retailers	Spain	78.5
6	L'Oreal SA	Personal & Household Products & Services	France	78
7	Allianz SE	Insurance	Germany	77.75
8	Telecom Italia SpA	Telecommunications Services	Italy	77.75
9	Novartis AG	Pharmaceuticals	Switzerland	77.5
23	Roche Holding AG	Pharmaceuticals	Switzerland	74.5
33	Merck & Co., Inc.	Pharmaceuticals	United States	73
40	Johnson & Johnson	Pharmaceuticals	United States	72.5
46	AstraZeneca plc	Pharmaceuticals	United Kingdom	71.25
59	Eli Lilly And Co	Pharmaceuticals	United States	70.25
61	CSL Limited	Pharmaceuticals	Australia	70.25
91	UCB SA	Pharmaceuticals	Belgium	69.25
96	Bristol-Myers Squibb Co	Pharmaceuticals	United States	69

Table 2 – D&I index⁶

⁵ https://www.refinitiv.com/en/sustainable-finance/diversity-and-inclusion-top-100

⁶ https://www.refinitiv.com/en/sustainable-finance/diversity-and-inclusion-top-100

The D&I rating ranks over 9,000 publicly listed companies, as measured by the 24 separate metrics already detailed. Data is gathered from publicly available information sources and is manually collected to ensure that the information is standardized, comparable and reliable.

Refinitiv's ESG database provides in-depth coverage in the industry, tracking detailed ESG data on a broad range of companies, including the constituents of indices such as the S&P 500, ASX300, MSCI World, MSCI Emerging Markets, FTSE100, Bovespa and others.

2.4 – IMPORTANCE OF PHARMACEUTICAL INDUSTRY IN EUROPE

According with EFPIA⁷, in 2017 the European pharmaceutical industry invested more than €35,300 million in R&D in Europe.

A decade of strong US market dominance led to a significant shift in economic and research activity towards the US in the period 1995-2005. In addition, Europe is now facing increasing competition from emerging countries with the rapid growth of the market and the research environment in countries such as Brazil and China, helping to shift economic and research activities to markets outside of Europe.

The geographical balance of the pharmaceutical market, and ultimately the R&D base, is likely to gradually shift towards emerging markets.

According to EUROSTAT, the pharmaceutical industry is the high-tech sector with the highest added value per employee, well above the average for high-tech and manufacturing industries.

The pharmaceutical industry is also the sector with the highest ratio of R&D investment to net sales. According to the 2018 EU Industrial R&D Investment Scoreboard, the pharmaceutical and biotechnology sectors account for 18.9% of total corporate R&D spending worldwide.

The research-based pharmaceutical industry is one of the most important industrial employers in Europe, and recent studies have shown that the research-based pharmaceutical industry indirectly creates around four times more jobs, upstream and downstream, than the jobs created directly. In addition, a significant proportion of these jobs are valuable professionals, for example in the fields of science or clinical science, who can help maintain a high level of knowledge and prevent European of brain drain.

2.5 – KEY HEALTH NUMBERS FOR WESTERN EUROPEAN COUNTRIES

To understand the countries where this study is implemented there are some key numbers that can describe their health systems and environment.

⁷ The Pharmaceutical Industry in Figures, Key Data 2019

Regarding major health indicators as life expectancy at birth, at age 60, and child mortality, data reflect the developed health systems of all these countries, namely life expectancy above 80 years old, and child mortality below 4 per 1.000 births. For comparison, life expectancy in Angola is 52.2 years and child mortality are 98.8 per 1.000 births.

Total healthcare expenditure has a similar rate as percentage of GDP, around 10%, except for Greece with 8.08%. Also due to this similar rate, absolute values are quite different from the USD\$6.469 of Switzerland, more than 3 times the per capita expenditure in Greece, USD\$2.098. Despite these differences, these values are much higher for example those of Angola where per capita health expenditure is USD\$239.01 per capita, 3.01% of GDP.

	Austria	Belgium	Greece	Netherlands	Portugal	Switzerland
Life expectancy at birth (years)	81,34	80,59	81,29	81,30	80,72	82,85
Life expectancy at age 60 (years)	24,10	23,90	23,80	24,10	24,00	25,40
Child mortality (per 1,000 births)	3,00	3,40	3,70	3,30	3,00	3,50
Physicians (per 1,000 people)	4,84	4,89	6,17	2,86	4,10	4,05
Total healthcare expenditure per capita (USD per capita)	5.038	4.392	2.098	5.202	2.690	6.469
Total healthcare expenditure (%GDP)	11,21	10,59	8,08	10,90	9,50	11,66
Public healthcare expenditure (%GDP)	8,73	8,25	4,99	9,84	6,16	7,70
Out-of-pocket healthcare expenditure (% of private health expenditure)	72,95	80,45	90,94	40,18	76,29	78,82

Table 3 – Key health numbers 2014

Source: Adapted from World Bank (2014)

2.6 – PHARMACEUTICAL MARKET FOR WESTERN EUROPEAN COUNTRIES

Austria, Belgium, Greece, Netherlands, Portugal, and Switzerland are mid-sized European countries with a population of around 8.4 million in Austria and Switzerland to the 17.3 million of The Netherlands. Portugal, Greece, and Belgium have a population of around 11.0 million inhabitants.

According with theses similarities, the six markets are similar and worth around USD\$7 to 8 billion, except for Portugal where the market worth USD\$4.55 billion. Per capita values are quite different from the USD\$950 of Austria and Switzerland where the total healthcare expenditure is also the highest, to the USD\$450 of Portugal and The Netherlands, less than half of the values of Switzerland and Austria.

	Austria	Belgium	Greece	Netherlands	Portugal	Switzerland
Total pharmaceutical sales (USD Billion)	8,10	7,73	6,57	7,97	4,55	7,71
Pharmaceutical sales (USD per capita)	950,60	688,50	597,60	465,60	437,30	939,40
Pharmaceutical sales (% of health expenditure)	17,70	14,10	34,50	8,20	20,80	9,80
Pharmaceutical sales Rx drugs (USD Billion)	7,07	6,90	5,82	6,99	4,27	
Pharmaceutical sales OTC (USD Billion)	1,03	0,83	0,76	0,98	0,28	
Pharmaceutical sales Originator (USD Billion)	5,94	6,01	4,23	5,03	3,29	
Pharmaceutical sales Gx (USD Billion)	1,13	0,89	1,58	1,97	0,98	

Table 4 – Pharmaceutical market 2014

Source: Adapted from Business Monitor International (2014)

Concerning pharmaceutical sales as percentage of health expenditure, the Southern European countries have higher values with the 34.5% of Greece and 20.8% of Portugal versus the 8.2% of The Netherlands and 9.8% of Switzerland, which reflects the impact and importance of the pharmaceutical industry in these countries. As a benchmark, other major European economies have a percentage of 13.5% in Germany, 13.7% of France, and 26.5% of Spain, reflecting these differences between Northern and Southern European counties.

CHAPTER 3

LITERATURE REVIEW

This chapter aims to present the literature review, the theoretical framework that underpins the formulation of the research problem and to understand the relevance and originality of this research.

3.1 – CRITERIA FOR LITERATURE REVIEW

For the current research, to define its contribution, relevance and novelty, a literature review was done with focus on pharmaceuticals, Novartis, diversity, inclusion, and performance in different repositories as rcaap – repositórios científicos acesso aberto de Portugal (Portuguese open access scientific repositories from Portuguese Science Foundation), b-on and jstore at Universidade de Evora, and other databases as Elsevier's Science Direct, or Web of Science.

Regarding the literature review, the following table presents the number of results from b-on and rcaap.

Key words	rcaap	b-on
Novartis	95	251.379
Diversidade	26.092	
Inclusão	23.913	
Diversidade AND Inclusão	1.292	
Diversity	23.741	
Novartis AND Diversity		16.849
Inclusion	19.193	
Diversity AND Inclusion	908	
Novartis AND Diversity AND Inclusion		4.801
Novartis AND Diversity AND Inclusion AND Performance		2.829

Table 5 – Results from b-on and rcaap

Source: self-elaboration

Despite the significant number of articles, thesis, publications with a mention to Novartis, as Novartis is a pharmaceutical company focused on research and development, the great majority of these publications are linked with disease management, research studies, congress presentations and other topics focused on pharmaceuticals.

When the search was done with all key words, Novartis, diversity, inclusion and performance, the number of publications goes from 251.379 of Novartis to 2.829, and from this number, which is still very significate, an analysis was done to see if there were similar studies of this research.

This research has the purpose of understanding the influence that diversity and inclusion has on organizational performance, not only directly, but also when in the presence of the values and behaviors of the organization.

With this purpose, it is only possible to understand this relation in organizations in which D&I is well implemented, because if this does not happen, we do not have the necessary and sufficient conditions within the company that are the basis of this research work, which are the set of dimensions that define diversity and inclusion, and not just one or two dimensions.

Beyond this objective, it is also intended to make the connection between the different variables of diversity and inclusion, values and behaviors, and organizational performance, and foresee if it is possible to change the algorithm in the company to improve the areas that are perceived as those that may have greater influence on the results.

To understand the state of the art, current literature on the theme was reviewed, namely different studies, reports and thesis about diversity and inclusion policies, the influence of its dimensions on performance, the importance of culture and leadership, and other management factors. A brief description of this research is presented in table 6, presented in the next page.

Research suggests that diversity can improve performance (Early & Mosakowski, 2000). Particularly, diverse teams can be more productive than homogeneous teams (DiStefano & Maznevski, 2000). Team members bring their own backgrounds and personalities to the task at hand. Their views are also influenced by their individual personalities, their professional backgrounds, and their cultural backgrounds (Palmer, 2007).

As can be seen from the literature review, analyzes of the influence of diversity and inclusion in organizational performance are made based on isolated dimensions such as gender (Eisner, 2013), race or ethnicity (Brown et al., 2011), or at most two dimensions together where the dimensions of analysis are mainly gender and race or ethnicity (McKinsey & Company, 2018).

On the other hand, when researching about the influence of D&I over performance, the majority of current literature link diversity and inclusion specific dimensions with innovation or company results measured in revenue gains.

As an example, in McKinsey's report, "Delivering through Diversity", 2018, its aim was the link between diversity and inclusion and value. In this case, the focus of D&I was gender and cultural/ethnic diversity.

Key findings were that leadership roles are important. Companies in the top quartile for gender diversity in leadership teams were 21% more likely to outperform profitability and 27% more likely to generate superior value.

The top performing companies in terms of profitability and diversity had more women in their leadership roles.

Publication	Title	Key topic
Thesis	Diversidade e Inclusão: um estudo sobre genero em uma industria farmacêutica (Soranz, 2009)	Gender
Report	Delivering through Diversity – McKinsey & Company (Hunt et al., 2018)	Value
Report	The effects of diversity in business performance: Report of the diversity research network (Kochan et al., 2003)	Performance
Article	Disentangling the meanings of diversity and inclusion in organizations. (Roberson, 2006)	Diversity
Thesis	Diversity and Inclusion in a multinational corporation: senior manager's perception across three Asian regions (Ponce-Pura, 2013)	Different countries
Article	Investor reactions to diversity reputation signals (McMillan-Capehart et al., 2010)	Reputation
Article	Creating hybrid team cultures: An empirical test of transnational team functioning. (Earley et al., 2000).	Diversity
Article	Towards transnational CSR. Corporate social responsibility approaches and governance for multinational corporations (Filatotchev et al., 2015)	CSR
Report	Top executives in corporate diversity (Brown et al., 2011)	Innovation
Report	Diversity and Inclusion: A Pharma 50 Perspective (Noor et al., 2016)	Pharma
Article	True to what we stand for: championing collective interests as a path to authentic leadership (Steffens, 2016)	Leadership
Article	The 5-C framework for managing talent (Schuler, 2015)	Novartis
Article	From creative to competitive (Subramnyam, 2017)	Competitiveness
Article	The impact of racial and gender diversity in management on financial performance: how participative strategy making features can unleash a diversity advantage (Thomas, 1993)	Gender, Race
Article	Champions of corporate inclusion (Black Enterprise, 2016)	Management
Article	A comparison of the international diversity on Top management teams of multinational firms based in the United States, Europe, and Asia: status and implications (Palmer, 2007)	Different countries
Article	Corporate Social Responsibility (CSR) of innovative pharmaceutical corporation. The case of BIOGEN (Witkowska, 2018)	Pharmaceuticals
Report	2016 Pharm Exec 50 (Pharmaceutical Executive, 2016)	Pharmaceuticals
Article	Leadership: Gender and executive style (Eisner, 2013)	Gender
Article	Review: global talent management: literature review, integrative framework, and suggestions for further research (Tarique et al., 2010)	Talent Management
Article	Stages of corporate citizenship (Mirvis et al., 2006)	Performance
Article	Talent management at Novartis Oncology: supporting a decade of success (Hoffman, 2010)	Novartis
Article	Top executives in Diversity (Brown et al., 2011)	Race
Thesis	New HR governance: an empirical study on gender diversity and board recruitment practices in Switzerland (Hathorn, 2016)	Gender
Article	Female board representation, corporate innovation, and firm performance (Chen et al., 2018)	Gender, Performance
Article	Recognizing the benefits of diversity: when and how does diversity increase group performance? (Roberge et al., 2010)	Performance
Article	When members of entrepreneurial teams differ linking diversity in individual-level entrepreneurial orientation to team performance (Kollmann et al., 2017)	Diversity

Source: self-elaboration

It was not just gender. Companies in the upper quartile for ethnic / cultural diversity on executive teams were 33% more likely to have industry-leading profitability.

On the other side, overall companies in the bottom quartile for both gender and ethnic/ cultural diversity were 29% less likely to achieve above-average profitability than were all other companies. In short, not only were they not leading, but they were also lagging.

But despite mentioning D&I, research had the focus on diversity, as for example the article of Chen et al. (2018) where they studied the influence of diversity on innovation, but again, only one dimension. Again, there is a positive influence of diversity on performance, in this specific case, gender over innovation.

"We find that firms with greater representation of female directors invest more in innovation and achieve greater innovative success, as measured by patent and citation counts, for given R&D expenditures. In other words, the R&D expenditures in firms with female directors are more productive in generating innovation. These findings are robust to the use of alternative measures of board gender composition, econometric specifications and subsamples" (Chen et al., 2010, p.25)

In fact, "little research has empirically investigated the specific attributes and practices for diversity and inclusion in organizations" (Roberson, 2006, p. 213).

Thus, it is recognized the effects that some dimensions of diversity can have on organizational performance, namely areas of focus in the United States where this theme has been studied for a longer time, such as gender or race, sometimes defined in a more aggregating way as ethnic minority (Black Enterprise, 2016), but in the literature review there is no joint approach to D&I organizational policy, and how it affects organizational performance.

But inclusion is also a decisive factor since people are heard (Soranz, 2009), their opinions are considered, contributing more decisively to the performance of the organization in its different aspects, not only in those that are more studied as the innovation and results.

Soranz (2009) says that "creating diversity is not enough" (Soranz, 2009, p.121). In the case of the study in question, women from a history of discrimination do not feel included just because companies have diversity practices or policies, but if they feel valued, if they have a voice, if they are recognized and represented in management positions within the organization.

But, despite that overall, the influence of D&I in organizations is positive, some authors found that for a specific dimension the influence is negative as race in group processes.

Kochan et al. (2003) states that "diversity had a significant effect on group processes, but the nature of the effect depended on whether the diversity was in gender or race. Specifically, gender diversity increased constructive group processes, while racial diversity inhibited them. In summary, our results in this organization showed no significant direct effects of either racial or gender diversity on performance. Gender diversity had positive effects on group processes while racial diversity had negative effects." (Kochan et al., 2003, p.15)

It is known that in addition to improving aspects or dimensions of organizational performance such as innovation and results, an organizational culture of diversity and inclusion is well regarded by the market, which can generate gains in addition to the direct results from organizational performance.

Results by McMillan-Capehart et al. (2010) indicate that diversity management reputation will result in a positive impact on firm share price in the short term. Organizations that made DiversityInc's list enjoyed significantly positive cumulative abnormal returns (CARs).

As such, it appears that investors and the market react positively to information regarding an organization's diversity reputation. This study also provides practical evidence that a firm's investment in diversity and quality diversity management techniques will be recognized and rewarded by the market.

An organizational culture of diversity and inclusion is also well regarded by customers, as it is reflected in the purpose of the companies, as well as in the business model, since companies can adapt their resources to the markets where they are present, which is important in an increasingly globalized market.

Corporate Social Responsibility (CSR) is defined as the voluntary integration of social and environmental issues into business activities and relations with stakeholders combined with the readiness to sacrifice profit for the sake of certain social interests (Witkowska, 2018).

Although the transnational approach is not without problems—in particular, it is often difficult to strike an appropriate balance between global consistency and local adaptation— this approach appears best able to guide managerial decision making, as well as to help executives address the CSR challenges in the global arena.

For example, IBM does not have gay, lesbian, and transgender policies in some Asian countries where issues related to sexual orientation are not well accepted, thus making implementation of such policies difficult. However, other policies and programs related to diversity are considered "non-negotiable" and implemented worldwide with few, if any, local adaptations.

Such transnational flexibility in diversity practices enables IBM to build and leverage local talent in a way that remains consistent with local norms but still sufficiently globally standardized to avoid discrimination and ensure that all parts of the organization attract, develop, and retain diverse talent (Filatotchev et al, 2015).

The innovativeness of pharmaceutical firms is understood here as their ability to make a breakthrough in the treatment of rare, incurable diseases. One of the links between the CSR of the pharmaceutical industry and its innovativeness is its attitude to so-called orphan drug development and the marketing strategy in this field (Witkowska, 2018).

Once we know under what conditions diversity is more likely to lead to positive consequences, it becomes relevant to address the question of how diversity may lead to increased group performance.

When the appropriate conditions are implemented, it may then be assumed that such conditions activate underlying social psychological mechanisms that mediate the relationship between diversity and an increased group performance. "Although several mechanisms have already been identified in the literature, our understanding of how diversity may increase group performance is still limited" (Roberge et al., 2010, p.299).

So, when analyzing a D&I policy in an organization, and according to the issues of the D&I index, in addition to the dimensions of gender and ethnicity found in the multiple studies that support this research, for the analysis of the influence of diversity and inclusion, multiple dimensions must be considered, and this can only be achieved if D&I is at the center of the organization's culture.

From the literature review, the analysis of the influence on organizational performance is not done in the whole of the dimensions that characterize it, which, for example, in the case under study are results, productivity, quality, innovation and people, but only in one factor alone.

In this context, from the literature review, an organization where D&I is recognized as being fully implemented is the basis to understand how D&I in its various dimensions influence OP. And this organization is Novartis.

In what is now a global war for talent, commitment to diversity and inclusion in human capital is an across-the-board competitive differentiator in the Pharma industry (Noor et al., 2006).

Novartis is classified as the first pharmaceutical company in the D&I ranking, which includes more than 9000 of the largest global companies listed on the stock exchange. Globally, Novartis is in ninth place, standing out from the rest of the companies representing the same industry.

In this context, Hoffman (2010) studied the oncology division at Novartis.

Hoffman (2010) showed that diversity matters. As an example, "the Oncology Business Unit (OBU) has continued to maintain a highly diverse group of senior leaders. *As of this writing, the Executive Coordinating Committee (ECC), the most senior leadership body in the OBU, comprises men and women who were reared in at least four countries and have also worked in at least 15 countries throughout their careers. That diversity, both gender and cultural, is also strongly encouraged and reinforced throughout the OBU" (Hoffman, 2010, p.36).*

So, leadership can have a different impact on the adoption of diversity and inclusion practices, and even on the adoption of certain values and behaviors depending on the country, the culture, since there are countries that, due to their culture, must be the leadership to command and not just to manage.

In this context, despite the influence of the culture of organizations in an increasingly globalized environment, the country where these companies develop their activity has an influence on the way in which diversity and inclusion, or the values and behaviors are adopted by the organization.

For example, in the research done for a doctoral thesis, Ponce-Pura (2013) mentions that "cross-border implementation of diversity management has become a challenge for many organizations due to globalization and expansion beyond their home countries. Though these organizations have attempted to implement diversity management, it was evident from this research work that companies cannot simply transfer diversity practices from headquarters in view of fundamental differences in the socio-economic, historical and legal contexts of the country". (Ponce-Pura, 2013, p.192).

"This research also showed that while the centralized approach was effective in creating awareness for D&I throughout the organization, different perceptions surfaced when it came to the implementation of these policies" (Ponce-Pura, 2013, p.195). The author concluded that the understanding of diversity and inclusion is different in the different countries due to its culture, and this have an impact on its adoption.

In addition, because the countries are different, and the different Hofstede variables vary among these countries, we can verify the differences between countries that affect the implementation of diversity and inclusion policies, and from there, how to implement it and work in the company. Diversity research has focus on a particular measure / factor of diversity, and how it is linked to the results or variation of the organizations' results.

In other areas and doctoral theses, the differences in the implementation of diversity policies and the inclusion of a company according to the characteristics of the countries are studied.

In this thesis is also intended to study the impact of cultural characteristics on the adoption of diversity and inclusion policies, which factors positively and negatively influence the implementation of these policies and within these policies the perception of top managers in relation to the most important factors within the organization.

So, the main global companies that lead indicators such as "Best Companies to Work for", or "Most Admired Companies", are companies that have moved from a people management model to a talent management model (Schuler, 2015). Among these companies was Novartis, which, like other companies, considers human capital and talent as high value corporate assets. They link this talent to leadership, company culture, strategy, and external environment as the culture of the country where it is implemented.

Here too, in addition to diversity and inclusion, values and behaviors arise in the organization, that is, if the different dimensions of diversity and inclusion are already part of the organizational culture, as is the case with Novartis, the way employees act has an influence on organizational performance.

Thus, to understand how people in organizations influence the performance of these same organizations, this analysis is more robust if we integrate diversity and inclusion with values and behaviors.

By itself, diversity or inclusion can be catalysts for the different dimensions of organizational performance if they are experienced by the organization, and combined with values and

behaviors, they can better explain their influence on the dimensions of organizational performance.

Management can be seen as a bridge between a civilization that is developing rapidly around the world, and a culture that expresses different traditions, values, beliefs, and legacies.

The question that arises from the literature review is whether D&I arrives to improve organizational performance. The theory says yes, but in specific dimensions for variables other than organizational performance.

In summary, the great difference of this research work in relation to the existing literature is that in this work the dimensions of D&I are not analyzed one by one, but the whole in a company in which there is a recognized D&I policy, and from this assumption understand how organizational performance is influenced. After a D&I policy has been implemented and consolidated, this is sufficient to improve organizational performance, or something more is needed, such as alignment with certain values and behaviors?

The purpose of this research is different from what is found in current literature because it goes beyond the direct link between one or two variables of diversity and inclusion and one variable of performance, or when more variables are measured, the difference is between a qualitative approach done by interviews to management teams, and the quantitative data approach of this study.

This literature review is supported by the definitions of each of the dimensions that support this research, presented in 3.2, 3.3, 3.4, 3.5 and 3.6.

3.2 - FROM CULTURE TO ORGANIZATIONAL CULTURE

This review on culture is supported on the article 'Dimensionalizing Cultures: The Hofstede Model in Context', which describes the Hofstede model of six dimensions of national cultures: Power Distance, Uncertainty Avoidance, Individualism/Collectivism, Masculinity/ Femininity, Long/Short Term Orientation, and Indulgence/Restraint (Hofstede, 2011).

Culture has been defined in many ways. For Hofstede G. (2001), culture is the collective programming of the mind that distinguishes the members of a group or category of people from others. Culture is always a collective phenomenon, but it can be associated with different collectives. There is a multitude of individuals within each collective. If one imagines the characteristics of individuals to vary according to a particular bell curve, the variation between cultures is the shift in the bell curve as one moves from one society to another. Most often, the term culture is used in anthropology for tribes or ethnic groups, in political science, sociology and management, culture for nations, and the term culture is linked with organizations in sociology and management.

A relatively unexplored area is professional culture (for example engineers, accountants, or academics from various disciplines). The term culture can also be applied to genders,

generations, or social classes. However, changing the degree of aggregation studied may change the nature of the concept of "culture". Social, national, and gender-specific cultures that children acquire from their early teens are much more deeply rooted in the human mind than professional cultures acquired at school or organizational cultures acquired at work (Hofstede, 2001).

Social cultures tend to lie in (often unconscious) values, in the sense of a broad tendency to prefer certain facts to others (Hofstede, 2001).

Organizational cultures tend to lie in (visible and conscious) practices: the way people perceive what is going on in their organizational environment (Hofstede, 2001).

One key topic is the importance of creating and strengthening a clearly defined corporate culture that supports the strategy and an overall vision of what an organization wants to be.

Culture is a complicated mix of systems, attitudes and values associated with the way the organization achieves its goals (Hofstede, 2001).

Culture permeates everything a company does and has a profound impact on how it grows and is successful. It influences strategic decisions from hiring to product development to geographic expansion.

'In principle ... there is a generalized framework that underlies the more apparent and striking facts of cultural relativity. All cultures constitute so many somewhat distinct answers to essentially the same questions posed by human biology and by the generalities of the human situation. ... Every society's pattern for living must provide approved and sanctioned ways for dealing with such universal circumstances as the existence of two sexes; the helplessness of infants; the need for satisfaction of the elementary biological requirements such as food, warmth, and sex; the presence of individuals of different ages and of differing physical and other capacities' (Kluckhohn, 1962, p.306).

Many authors in the second half of the twentieth century speculated about the nature of the basic problems of societies that would represent different dimensions of culture.

The most common dimension for the order of societies is the degree of their economic development or modernity.

A one-dimensional order of societies from traditional to modern fit well with the belief in progress of the 19th and 20th centuries. Economic development will inevitably be reflected in people's collective mental programming, but there is no reason why economic and technological development should suppress other cultural differences.

There are dimensions of culture that have nothing to do with economic development (Hofstede, 2011).

Cultures can be divided into high context cultures (much of the information is implicit) and low context cultures (almost everything is explicit) according to the way they communicate (Hall, 1976). In practice, this distinction largely overlaps the traditional versus the modern distinction.

Parsons and Shils (1951) suggested that all human actions are determined by five pattern variables, choosing between pairs of alternatives as affectivity or need for satisfaction versus affective neutrality or withholding impulses; self-orientation versus collective orientation; universalism as the application of general standards versus particularism as consideration of certain relationships; attributing or judging others for who they are versus performance or judging what they do; and specificity, which can be defined as the restriction of relationships with others to certain areas versus diffusivity, since there are no prior restrictions on the nature of the relationships).

These alternatives exist on an individual, social, and cultural level.

IMPORTANCE OF ORGANIZATIONAL CULTURE AND ITS COMMUNICATION

Today's leaders achieve far more engagement and credibility when engaging in real conversations with the people who work for and with them. A conversation is an open exchange of ideas and information with an implicit or explicit agenda.

Corporate meetings reflect a new reality, thanks in part to digital and social technologies, where employees have found a public voice and use it, whether their superiors like it or not. (Groysberg & Slind, 2012).

Consumers feel closer to some companies and brands than others and speak eloquently and passionately about those brands and companies that hold a special place in their lives (Fournier, 1998).

These organizations and brands are used by consumers to meet personal and social needs.

Organizational affiliation creates a positive social identity that increases the overlap between the definition of a member by oneself and the organization (Tajfel, 1978).

Other forms of value that differ from those that relate to the company's main production activity such as social support, can add to the emotional reward of consumers in addition to that obtained with the product.

The contribution of corporate social responsibility to the attractiveness of corporate identity is much higher than that of corporate capability (Marin et al., 2006).

The extent to which individuals identify with an organization depends on the attractiveness of the organizational identity, which helps individuals to satisfy one or more important self-defining needs.

Many organizations have adopted social concerns based on the assumption that consumers reward companies for their support for social programs (Levy, 1999).

The contribution of Corporate Social Responsibility (CSR) to the attractiveness of identities (IA) is much stronger than that of Corporate Ability (CA) (Marin et al., 2006).

Identity attractiveness is the degree to which subjects, due to their enduring characteristics, prefer, are attracted to and support relationships with a company (Ahearne et al., 2005).

Corporate social responsibility associations reflect the status and activities of the organization in relation to its perceived social obligations (Brown et al., 1997). Consumers feel closer to some companies and brands than others (Fournier, 1998).

When a company behaves in a way that is perceived as socially responsible, consumers are likely to conclude that it has certain desirable traits that are consistent with their self-esteem.

The greater the CSR associations perceived by the consumer, the more the consumer perceives the congruence between consumer and company (Marin et al., 2006).

From a marketing perspective, the economic advantages of the company through CSR in connection with the positive product and brand selection by consumers and brand recommendations were documented (Brown et al., 1997; Sen et al., 2001; Vitell, 2003). The greater the associations perceived by the consumer with corporate social responsibility, the greater the appeal of the identity for the consumer.

Consumer-business congruence will have a positive impact on consumer ratings for a business as consumers become more involved with that business.

Marketing literature has shown that consumers use both performance-based business associations and perceived social responsibility to form an impression of a company (Winters, 1988). When making purchases, consumers consider the perceptions of ethical and unethical business activities (Creyer & Ross, 1997).

Consumers expect companies to behave ethically and are willing to punish those companies if they find that they fall below expected standards (Joyner et al., 2002; Vitell, 2003; Vitell & Muncy, 1992).

Emphasizing the role of the non-product aspects of the company, such as its value and traits, its social responsibility efforts and related networking opportunities that form the basis of a corporate culture are a key aspect of consumer building corporate bond (Bhattacharya & Sen, 2003).

If the company wants to increase the likelihood of long-term relationships with consumers through identification, that is, if the attractiveness of identity is deemed desirable, it must communicate and articulate its identity by providing information on both corporate social responsibility and measures to improve business performance, while monitoring consumer support for corporate social responsibility policies.

3.3 - NATIONAL CULTURE versus ORGANIZATIONAL CULTURE - HOFSTEDE DIMENSIONS

Societal cultures reside in values, in sense of broad tendencies to prefer certain states of affairs to others (Hofstede, 2001, p.5). Organizational cultures reside rather in practices: the way people perceive what is going on in their organizational environment. The way corporate management implement a D&I policy can have different influence on values from country to country and this can be related with the cultural dimensions developed by Hofstede.

As mentioned in the article 'Dimensionalizing Cultures: The Hofstede Model in Context' (Hofstede, 2011), "Professor Geert Hofstede conducted one of the most comprehensive studies on how values in the workplace are influenced by culture".

He analyzed a large database of employee value scores collected at IBM between 1967 and 1973.

The data covered more than 70 countries, from which Hofstede first used the 40 countries with the largest groups of respondents and then expanded the analysis to 50 countries and 3 regions.

Subsequent studies, confirming earlier results, include respondents such as commercial airline pilots and students in 23 countries, public service managers in 14 counties, "upscale" consumers in 15 countries, and "elites" in 19 countries.

The 2010 edition of the book Cultures and Organizations: Software of the Mind, lists the results for the dimensions for 76 countries, based in part on replications and extensions of the IBM study on various international populations and by various scientists.

The country values for the dimensions are relative as we are all human and at the same time all unique. In other words, culture can only be used meaningfully in comparison.

These relative values have proven to be stable over time. The forces that lead to cultural change are usually global or continent-wide, which means that they affect many countries at the same time. So, when their cultures change, they change together, and their relative positions stay the same. Exceptions to this rule are failed states and societies in which the level of prosperity and education rise comparatively quickly. In such cases, however, the relative positions change only very slowly.

The country culture scores for The Hofstede Dimensions correlate with other data for the countries concerned.

Distance from power, for example, correlates with income inequality, and individualism correlates with national prosperity. In addition, masculinity is negatively related to the percentage of national income spent on social security. In addition, avoiding uncertainties is linked to the legal obligation of citizens in industrialized countries to carry ID cards with them, and the long-term orientation (LTO) is linked to the results of school mathematics in international comparisons.

The values, which differentiate the country cultures from one another, could be statistically divided into four groups.

These four groups became the Hofstede dimensions of national culture and were referred to as power distance (PDI), individualism versus collectivism (IDV), masculinity versus femininity (MAS), and uncertainty avoidance (UAI).

A fifth dimension was added in 1991, based on research by Michael Harris Bond, supported by Hofstede, who conducted an additional international study among students using a survey tool developed together with Chinese professors.

This dimension, based on Confucian thinking, was called Long Term Orientation (LTO) and applied to 23 countries.

In 2010, research by Michael Minkov identified two dimensions using the most recent World Values Survey data from representative samples of national populations.

One was a new dimension and the second was a replication of the fifth dimension.

The number of country values for the fifth dimension could now be increased to 93.

On the one hand, the fifth dimension of Bond and Minkow correlate strongly, but the constructs are not completely identical. The country values used on this website correspond to the results of Minkov's research.

This fifth dimension is called Long Term Orientation versus Short Term Orientation (LTO).

In 2010 a sixth dimension was added based on Michael Minkov's analysis of the data from the World Values Survey for 93 countries.

This new dimension is called Indulgence versus Restraint (IND) (Hofstede et al., 2010).

3.3.1 – POWER DISTANCE (PDI) (Hosftede, 2011)

Power Distance has been defined as the extent to which the less powerful members of organizations and institutions (such as the family) accept and expect power to be unevenly distributed.

This dimension represents inequality. It suggests that the degree of inequality of a society is advocated by both its followers and its leaders.

The fundamental question here is how a society deals with inequalities between people.

People in societies with a high degree of distance from power accept a hierarchical order in which everyone has a place, and which does not require any further justification.

Table 7 lists a selection of differences between national societies that validation research showed to be associated with the Power Distance dimension.

Small Power Distance	Large Power Distance
Use of power should be legitimate and is	Power is a basic fact of society antedating good or
subject to criteria of good and evil	evil: its legitimacy is irrelevant
Parents treat children as equals	Parents teach children obedience
Older people are neither respected nor feared	Older people are both respected and feared
Student-centered education	Teacher-centered education
Hierarchy means inequality of roles, established for convenience	Hierarchy means existential inequality
Subordinates expect to be consulted	Subordinates expect to be told what to do
Pluralist governments based on majority vote and changed peacefully	Autocratic governments based on co-optation and changed by revolution
Corruption rare; scandals end political careers	Corruption frequent; scandals are covered up
Income distribution in society rather even	Income distribution in society very uneven
Religions stressing equality of believers	Religions with a hierarchy of priests

Table 7 – Ten Differences Between Small- a	and Large- Power Distance Societies
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Source: Adapted from (Hosftede, 2011)

In societies with little power distance, people strive to balance the distribution of power and to demand justification for power differences.

Power and inequality are basic facts of any society. All societies are unequal, but some are more unequal than others.

3.3.2 – INDIVIDUALISM VS COLLECTIVISM (IDV) (Hosftede, 2011)

The high side of this dimension, called individualism, can be defined as a preference for a loosely knit social framework in which individuals are expected to take care of only themselves and their immediate families.

Its opposite, collectivism, represents a preference for a tightly knit framework in society in which individuals can expect their relatives or members of a particular in-group to look after them in exchange for unquestioning loyalty.

A society's position on this dimension is reflected in whether people's self-image is defined in terms of "I" or "we."

On the individualistic side, there are the cultures where ties between individuals are loose, therefore everyone is expected to look after themselves and their immediate family.

On the collectivist side, there are the cultures where people are integrated since birth into strong, cohesive groups, often extended families who continue to protect them in exchange for loyalty.

Table 8 lists some differences between societies associated with this dimension.

Individualism	Collectivism
Everyone is supposed to take care of him or herself and his or her immediate family only	People are born into extended families or clans which protect them in exchange for loyalty
I – consciousness	We – consciousness
Right of privacy	Stress on belonging
Speaking one's mind is healthy	Harmony should always be maintained
Others classified as individuals	Others classified as in-group or out-group
Opinion expected: one person one vote	Opinions and votes predetermined by in-group
Transgression of norms leads to guilt feelings	Transgression of norms leads to shame feelings
Languages in which the word "I" is indispensable	Languages in which the word "I" is avoided
Purpose of education is learning how to learn	Purpose of education is learning how to do
Task prevails over relationship	Relationship prevails over task

Table 8 – Ten Differences between Collectivist and Individualist Societies

Source: Adapted from (Hosftede, 2011)

3.3.3 – MASCULINITY VS FEMININITY (MAS) (Hosftede, 2011)

The masculinity side of this dimension represents a preference in society for achievement, heroism, assertiveness, and material rewards for success.

A masculine society is more competitive.

The opposite, femininity, stands for preference for cooperation, modesty, concern for the weak, and quality of life. This type of society is more consensus oriented.

In a business context, masculinity versus femininity is sometimes referred to as "tough versus tender" culture.

Table 9 lists a selection of differences between societies associated with this dimension.

Femininity	Masculinity
Minimum emotional and social role	Maximum emotional and social role
differentiation between the genders	differentiation between the genders
	Men should be and women may be assertive
Men and women should be modest and caring	and ambitious
Balance between family and work	Work prevails over family
Sympathy for the weak	Admiration for the strong
Both fathers and mothers deal with facts and	
feelings	Fathers deal with facts, mothers with feelings
Both boys and girls may cry but neither should	Girl's cry, boys don't; boys should fight back,
fight	girls shouldn't fight
Mothers decide on number of children	Fathers decide on family size
Many women in elected political positions	Few women in elected political positions
Religion focuses on fellow human beings	Religion focuses on God or gods
Matter-of-fact attitudes about sexuality; sex is a	Moralistic attitudes about sexuality; sex is a way
way of relating	of performing

Table 0 Tap Differences	hatwaan	Famining and	Macaulina Casiatias
Table 9 – Ten Differences	permeen	Feminine and	Masculine Societies

Source: Adapted from (Hosftede, 2011)

The IBM studies have shown that the values of women in societies are less different than those of men, and the values of men from one country to another contain a dimension from very assertive and competitive and differ as much as possible from the values of women on the one hand to modest and caring values that are like the values of women on the other.

The assertive pole has been labeled "male" and the humble, caring pole has been labeled "female".

Women in female countries share humble, caring values with men, while in the male countries they are somewhat assertive and competitive, but not as much as the men, so these countries have a gap between the values of men and women.

In male cultures there is often a taboo around this dimension (Hofstede et al., 1998).

Taboos are based on deeply rooted values; this taboo shows that the Masculinity/Femininity dimension in some societies touches basic and often unconscious values, too painful to be explicitly discussed.

In fact, the taboo validates the importance of this dimension.

3.3.4 – UNCERTAINTY INDEX (UAI) (Hosftede, 2011)

The *uncertainty avoidance* dimension expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity.

The fundamental issue here is how a society deals with the fact that the future can never be known: should we try to control the future or just let it happen?

Countries with a strong UAI adhere to strict rules of belief and behavior and do not tolerate unorthodox behavior and ideas. Weak UAI societies maintain a more relaxed attitude, in practice more counts than principles.

Uncertainty avoidance is not the same as risk avoidance; it's about a society's tolerance of ambiguity. It indicates the extent to which a culture programs its members in such a way that they feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are new, unknown, surprising, and different from the usual.

Cultures that avoid uncertainty try to minimize the possibility of such situations through strict rules of conduct, laws and regulations, disapproval of dissenting opinions, and belief in the absolute truth. "There can only be one truth and we have it".

Research has shown that people in countries that avoid insecurity are also more emotional, being motivated by internal nervous energy.

The opposite type, uncertainty accepting cultures, are more tolerant of opinions that are different from those to which they are used. They try to have fewer rules, and on a philosophical and religious level they are empirical, relativistic and allow different currents to flow side by side.

People in these cultures are more phlegmatic and contemplative, and those around them are not expected to express emotions.

Table 10 lists a selection of differences between societies associated with the Uncertainty Avoidance dimension.

Weak Uncertainty Avoidance	Strong Uncertainty Avoidance
The uncertainty inherent in life is accepted	The uncertainty inherent in life is felt as a
and each day is taken as it comes	continuous threat that must be fought
Ease, lower stress, self-control, low anxiety	Higher stress, emotionality, anxiety, neuroticism
Higher scores on subjective health and well- being	Lower scores on subjective health and well-being
Tolerance of deviant persons and ideas: what	Intolerance of deviant persons and ideas: what is
is different is curious	different is dangerous
Comfortable with ambiguity and chaos	Need for clarity and structure
Teachers may say 'I don't know'	Teachers supposed to have all the answers
Changing jobs, no problem	Staying in jobs even if disliked
Dislike of rules - written or unwritten	Emotional need for rules – even if not obeyed
In politics, citizens feel and are seen as	In politics, citizens feel and are seen as
competent towards authorities	incompetent towards authorities
In religion, philosophy, and science: relativism and empiricism	In religion, philosophy, and science: belief in ultimate truths and grand theories

Table 10 – Ten Differences between Weak- and Strong- Uncertainty Avoidance Societies	5
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Source: Adapted from (Hosftede, 2011)

3.3.5 – LONG TERM VS SHORT TERM ORIENTATION (LTO) (Hosftede, 2011)

Every society needs to maintain some connections with its own past while dealing with the challenges of the present and the future.

Societies prioritize these two existential goals differently.

Societies that score low on this dimension, for example, prefer to maintain time-honored traditions and norms while viewing social change with suspicion.

By contrast, those with high-scoring culture tend to be more pragmatic: they encourage frugality and effort in modern education to prepare for the future.

In a business context, this dimension is referred to as "normative (short term) versus pragmatic (long term)".

East Asian countries are long-term oriented, followed by Eastern and Central Europe. A medium-term orientation can be found in southern and northern European and South Asian

countries. The USA and Australia, Latin American, African, and Muslim countries are short-term oriented.

Table 11 – Ten Differences between Short- and Long-Term-Or	riented Societies
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Short-Term Orientation	Long-Term Orientation
Most important events in life occurred in the past or take place now	Most important events in life will occur in the future
Personal steadiness and stability: a good person is always the same	A good person adapts to the circumstances
There are universal guidelines about what is good and evil	What is good and evil depends upon the circumstances
Traditions are sacrosanct	Traditions are adaptable to changed circumstances
Family life guided by imperatives	Family life guided by shared tasks
Supposed to be proud of one's country	Trying to learn from other countries
Service to others is an important goal	Thrift and perseverance are important goals
Social spending and consumption	Large savings quote, funds available for investment
Students attribute success and failure to luck	Students attribute success to effort and failure
Slow or no economic growth of poor countries	Fast economic growth of countries up till a level of prosperity

Source: Adapted from (Hosftede, 2011)

Table 11 lists a selection of differences between societies related to the long-term and short-term orientation dimension.

3.3.6 – INDULGENCE VS RESTRAINT (IND) (Hosftede, 2011)

Indulgence stands for a society that allows for the relatively free satisfaction of basic and natural human urges associated with enjoying life and having fun.

Restraint stands for a society that suppresses the satisfaction of needs and regulates it through strict social norms.

The sixth dimension uses Minkov's label Indulgence versus Restraint. It is also based on current World Values Survey elements and is complementary to long-term and short-term orientation. In fact, it is weakly negatively correlated with it.

Table 12 lists a selection of differences between societies to be associated with this dimension.

able 12 - Ten Differences between Indulgent and Restrained Societies	

Indulgence	Restrained
Higher percentage of people declaring themselves very happy	Fewer very happy people
A perception of personal life control	A perception of helplessness: what happens to me is not my own doing
Freedom of speech seen as important	Freedom of speech is not a primary concern
Higher importance of leisure	Lower importance of leisure
More likely to remember positive emotions	Less likely to remember positive emotions
In countries with educated populations, higher birthrates	In countries with educated populations, lower birthrates
More people actively involved in sports	Fewer people actively involved in sports
In countries with enough food, higher percentages of obese people	In countries with enough food, fewer obese people
In wealthy countries, lenient sexual norms	In wealthy countries, stricter sexual norms
Maintaining order in the nation is not given a high priority	Higher number of police officers per 100,000 population

Source: Adapted from (Hosftede, 2011)

It focuses on aspects that are not covered by the other five dimensions but are known from the literature on "happiness research".

Results in this dimension are also available for 93 countries and regions.

Indulgence tends to prevail in South and North America, in Western Europe and in parts of Sub-Sahara Africa. Restraint prevails in Eastern Europe, in Asia and in the Muslim world. Mediterranean Europe takes a middle position on this dimension.
3.4 – DIVERSITY AND INCLUSION

In the organizational literature, diversity has been used to describe the composition of groups or workforces (Roberson, 2006).

Diversity is a characteristic of groups that refers to demographic differences among members (McGrath, Berdahl, & Arrow, 1995).

Larkey (1996) defines diversity as differences in perspectives resulting in potential behavioral differences among cultural groups as well as identity differences among group members in relation to other groups.

In the organizational literature, definitions and measurements of diversity have evolved to include different dimensions as non-observable characteristics that include cultural, cognitive, and technical differences among employees (Kochan et al., 2003). For example, there are other dimensions beyond gender, religion, race, and sexual orientation, as education, functional background, organizational tenure, socioeconomic background, and personality to influence patterns of interaction between group members (Jackson, May, & Whitney, 1995; Tsui, Egan, & O'Reilly, 1992).

With this broader definition in organizations, diversity reflects *"the varied perspectives and approaches to work that member of different identity groups bring"* (Thomas & Ely, 1996, p. 80).

Regarding inclusion, it can be defined as the person's ability to contribute fully and effectively to an organization (Miller, 1998; Mor Barak & Cherin, 1998).

More specifically these authors define inclusion as the extent to which individuals can access information and resources, are involved in work groups, and can influence decision-making processes. Inclusion is focused on the degree to which individuals feel a part of critical organizational processes.

Research shows that individuals from diverse social and cultural groups are often excluded from networks of information and opportunities to grow in organizations (Ibarra, 1993; Pettigrew & Martin, 1989). So, inclusion has been used in other areas to describe worker participation and empowerment, or the ability to be included in the networks of information, having opportunities of development in the organizations where they work.

From the previous definitions of diversity and inclusion, researchers have proposed different organizational approaches to the management of diversity that incorporate the definitional distinction between diversity and inclusion (Roberson, 2006).

Two different approaches were presented by Cox (1991), and Thomas and Ely (1996).

There are different conditions that should be considered as critical for organizations to fully unleash their diversity potential as the degree of acculturation, structural and informal integration, lack of cultural bias, organizational identification, and integroup conflict (Cox, 1991).

These critical conditions lead to three different types of organizations based on their diversity potential, or the level of structural and cultural inclusion of employees across varying group memberships. Cox (1991) suggests that organizations can be characterized as monolithic, plural, or multicultural.

In the monolithic organization, the amount of structural integration, or the presence of people from different cultural groups in a single organization is minimal. These organizations may have minority members within the workforce, but not in positions of leadership and power.

Plural organizations may be characterized by a focus on employment profiles (i.e., workforce composition) and fair treatment. In other words, plural organizations can be considered as heterogeneous organizations committed to preventing discrimination.

In the multicultural organizations there are policies and practices that facilitate the full utilization of human resources and enhance employees' abilities to contribute to their maximum potential. A multicultural organization is one that has a workforce that includes people from diverse backgrounds across all departments, and which offers them equal opportunity for input and advancement within the company.

Thomas and Ely (1996) also proposed a typology of organizational approaches to diversity.

In this second organizational approach to the management of diversity, diversity is considered as the different knowledge and perspectives that members of different groups bring to the organization, and is incorporated into strategies, operations, and practices.

More specifically, Thomas and Ely identify three paradigms regarding diversity in organizations.

First, the discrimination-and-fairness paradigm, which involves a focus on equal opportunity, fair treatment, recruitment, and compliance.

Second, as the most common approach to diversity management, the access-and-legitimacy paradigm, which focuses on matching workforce demographics with those of key consumer groups to expand and better serve specialized market segments.

Third, the learning-and-effectiveness paradigm, which links diversity to organizational strategy, markets, processes, and culture. More specifically, diverse employee perspectives and approaches are incorporated into business processes to leverage the benefits of diversity and to leverage organizational learning and growth.

In organizations functioning under the discrimination-and-fairness paradigm approach or the access-and-legitimacy paradigm approach, management of diversity focuses on assimilation and/or differentiation of perspectives. Organizations functioning under the learning-and-effectiveness paradigm are organized around the overarching theme of integration and inclusion.

Ely and Thomas (2001) investigated the effects of their three diversity management paradigms on work group functioning in a qualitative study of three professional services organizations.

Other area of research about diversity in the organizational literature are the diversity climates where authors offer insights about the relationship between diversity and inclusion.

Diversity climate is based on the employee's perceptions of the relationship between organizational excellence and the recruitment and retention of women and minorities, two of the dimensions on diversity, their qualifications and performance, their access to resources and rewards in comparison to other employees within the organization.

Diversity climate can be described as the value perceived by employees on the efforts to promote diversity in the organization, and attitudes toward the beneficiaries of these efforts (Kossek and Zonia, 1993), which are in this specific example, women and minorities.

Using a sample of faculty and academic staff at a university in the US with a demonstrated commitment to diversity, Kossek and Zonia found support for the proposed dimensions of diversity climate, which explained 66% of the variance. These results highlight workforce composition and equality as components of employees' diversity climate perceptions.

Other authors, as Mor Barak et al. (1998), also researched about diversity climate. In this second example the diversity climate was represented as having a personal dimension, namely the individuals' views and feelings toward people who are different from them, and an organizational dimension which was the management's policies and procedures targeted toward women and minorities. Again, as in the Kossek and Zonia research, the two dimensions of diversity were gender and race, or as stated in these research, women, and minorities.

Measuring employees' perceptions of issues and practices that are important to understanding and managing diversity, results suggested four dimensions of diversity climate—personal value for diversity, personal comfort with diversity, organizational fairness, and organizational inclusion, which explained 57% of the variance.

Together with Kossek and Zonia's (1993) research, this study highlights other personal and organizational dimensions of diversity climate, and the influence of specific practices that structurally include or exclude employees from diverse backgrounds as employee network support groups, mentoring programs, or diversity awareness training.

Despite the research on diversity climates provides some insights also for inclusion, only one study in the management literature has empirically investigated the construct of workplace, inclusion.

Building on prior conceptualizations of inclusion as a centrality or an employee's position within exchange networks (O'Hara et al., 1994; Schein, 1971), Pelled et al. (1999) defined inclusion as the degree to which an employee is accepted and treated as an insider by others in a work system.

Linking diversity, inclusion with leadership and management, key concepts in organizations, beyond being a multi-purpose organ that manages business, manages managers, and manages workers and work (Drucker, 1954), management is also a culture and a system of values and beliefs.

Management can be seen as a bridge between a civilization that is developing rapidly around the world, and a culture that expresses different traditions, values, beliefs, and legacies. Management must be the instrument with which cultural diversity can be created to serve the common goals of humanity (Drucker, 1969).

While a value in the diversity perspective emphasizes the strategic importance of understanding and evaluating differences among employees (Cox, 1991, 1994; Cox & Blake, 1991), the strategic human resource management model ensures that a sustainable competitive advantage is derived from the combination of human resource skills, strategically relevant behavior of employees, and systems of personnel practices (Wright et al., 2001).

Despite these different perspectives, values in the diversity perspective or in the strategic human resource management perspective contain the overlapping assumption that the human capital pool directly affects sustainable competitive advantage when diverse human resources create value, having differentiated characteristics which cannot be easily copied by competitors. Therefore, organizations try to capitalize the diverse human resources (Barney & Wright, 1998; Richard, 2000).

In essence, resource acquisition shows how businesses build reputations by attracting and retaining human capital from different backgrounds.

Human capital from different backgrounds can include in organizations or institutions dimensions of diversity such as age, culture, disability, ethnicity, race, gender, and sexual orientation (Shore et al., 2009).

Overall, the ability to attract and retain diverse ethnicities, different genders, and older workers with critical skills and valuable experience, will most likely result in an ongoing competitive advantage for organizations that are striving to become successful and competitive in the 21st century global market.

Today, the world's smartest organizations recognize that their diversity can be a source of competitive strength.

With global demographic change, understanding and assessing diversity has become a reality to change policies and procedures in the workplace (Bell, 2007; Carr-Ruffino, 2007; Harvey & Allard, 2008; Thomas, 2005).

Rather than just overseeing minority representation within the ranks which was a standard goal of diversity programs in the past, as seen in the diversity climate research by Kossek and Zonia, (1993), and Mor Barak et al. (1998), smartest organizations are implementing holistic strategies aimed at better understanding the backgrounds, styles, and perspectives of their employees, using them for real business benefit (Park, 2008).

A more diverse workforce benefits the company through more creativity and problem-solving skills, better access to new consumer markets, greater market share gains, and significant improvements in employee and organizational performance (Cox, 1994; McLeod & Lobel, 1996; Richard et al., 2004; Joshi et al., 2006; McKay et al., 2008).

Diversity research has historically been characterized by a focus on the issues related to diversity such as discrimination, bias, positive action, and tokenism (Shore et al., 2009). This research has produced and continues to produce many strong and informative theories and empirical studies (Jackson & Joshi, 2011).

However, as diversity evolves, academics have increasingly focused on how diversity can improve work processes and organizational mechanisms that promote the potential value of diversity.

Companies ranked in the upper quartile for different leadership qualities (primarily gender, race, and ethnicity) achieved an average return on equity that was 53% higher than companies in the lower quartile. Their EBIT was 14% higher (McKinsey Quarterly, 2012).

Later, management scholars started to focus on inclusion (Shore el al., 2011). As a result, the inclusion literature is still in development, with limited agreement on the conceptual basis of this construct.

The concept of inclusion has been emerging in the organizational literature for a decade (Roberson, 2006). Although this concept has gained increasing attention, inclusion remains a new concept with no consensus on the nature of its construct or its theoretical basis.

This lack of consensus hinders the benefits of inclusion both theoretically and practically.

The traditional approach to achieve diversity and inclusion goals in organizations has been to recruit and hire diverse staff (Jackson, 1992; Shore et al., 2009).

Until recently, little research has focused on the internal organizational processes that create inclusion rather than mere numerical representations of diversity.

There are several contextual factors that contribute to inclusion as they can contribute to its perception (Shore el al., 2011). These contextual factors are for example the climate of inclusiveness as a fairness system and the climate of diversity; inclusive leadership as management philosophy and values as well as strategies and decisions; inclusivity practices that promote the satisfaction of belonging needs and the satisfaction of uniqueness needs.

These contextual factors affect how employees perceive their involvement in workgroups. For example, management values can directly affect the types of practices that are enacted in work groups that promote or undermine inclusion (Reskin, 2000).

Results of the highest perception of inclusion within an organization are higher quality relationships with group members and supervisors, job satisfaction, better performance, organizational commitment and engagement, wellbeing (stress, health), creativity, and career opportunities for different people.

So, diversity and inclusion provide a competitive advantage, driving innovation and organizational performance.

Waters (2004) stated that "unless your diverse workforce is cohesive, you most likely won't have a productive workforce". However, "when properly supported within corporate culture, workforce diversity serves a source of significant competitive advantage" (Waters, 2004, p.36). Fassinger (2008) stated "research indicates that diversity can be highly effective in workplace tasks requiring and exploring new opportunities and new ideas" (Fassinger, 2008, p.253).

DIVERSITY IN THE WORKPLACE

Diversity is becoming increasingly important as the service economy grows, interactions between people are central, the customer base is more diverse, and similarities between people facilitate processes.

There are different types of diversity at the workplace as for example gender, age, sexual orientation, or nationality / culture.

One example of gender diversity is the difference of income between women and men. During a lifetime of employment, the average 25-year-old woman who works full-time year-round until she retires at 65 earns \$523,000 less than the average professional man. Also, regarding gender, 58% of workers who benefited from the latest minimum wage increase were women (Kolb, 2018).

A second example of diversity in the workplace is age.

As the population ages, there are older workers available, and today we have unprecedented generational diversity in the workforce. Today, at institutions and organizations, there are people from four different generations working together: Traditionalists (born 1900-1945), Baby Boomers (born 1946-1964), Generation X (born 1965-1980) and Millennials (born 1981-1999).

Cultural diversity influences values and the worldview, having a strong impact in organizations. For example, more than 40% of new entrants to the US workforce are from non-majority groups with approximately 22% new immigrants and 20% African American or Hispanic-American (Loden & Rosener, 1991).

The growth of international business and the willingness of employees to maintain links with national and cultural heritage also affect cultural diversity in organizations. This can be measured in terms of the cultural dimensions of the Hofstede model, where managers and employees vary in the six dimensions of national culture outlined in section 3.3.

A third example is Sexual Orientation.

Approximately 10% to 14% of the US workforce is lesbian, gay, or bisexual (LGB) (Powers, 1996).

Disclosure of sexual orientation is a critical and complex decision that is influenced by many factors (Ragins et al., 2001). Most sexual discrimination laws did not protect sexual identity

and discrimination against employees who are LGB, or perceived as LGB, in most workplaces (Button et al., 1997; van der Meide, 2000).

Other types of diversity in the workplace includes family situations such as single workers, physical and mental disabilities, political views, and personal idiosyncrasies for example.

3.5 – VALUES AND BEHAVIORS

A value is a broad tendency to favor certain state. In ethics, a value denotes the degree of importance of an action with the aim of determining which actions are the best to do, the best to live, or to describe the meaning of different actions.

Values can be defined as broad preferences regarding appropriate approaches or outcomes. As such, values reflect a person or organization's feeling of being right or wrong, or how it should be. Values create behaviors and influence an individual's decisions (Rokeach, 1973).

A behavior is the range of actions performed by individuals, organisms, systems, or artificial entities in connection with themselves or their environment, including the other systems or organisms in the environment, as well as the physical environment. It is the reaction of the system or organism to various stimuli or inputs, whether internal or external, consciously, or unconsciously, openly, or covertly, voluntarily, or involuntarily (Minton et al., 2014).

3.5.1 – INTEGRITY

In the review by Huberts, L. (2018) at "Integrity: What it is important and why it is important" it is possible to distinguish in the literature on ethics and integrity at least eight perspectives for integrity (Huberts, 2014) using the key words wholeness and coherence.

Some perspectives for integrity are professional responsibility; moral reflection; values like incorruptibility, laws, and rules; moral values and norms; and exemplary behavior.

Beyond these perspectives by Huberts (2014), there are multiple definitions and approaches to integrity.

According to Montefiore & Vines (1999), the dominant perspective corresponds to the meanings of the Latin integrals: intact, whole, and harmonious, with integrity defined as 'wholeness' or completeness, as consistency and coherence of principles and values.

Karssing (2001, 2007) defines integrity as a professional wholeness or responsibility where the professional carries out his/her tasks appropriately, carefully, and responsibly, considering all relevant interests.

Other authors focus on other specific values as incorruptibility, honesty, impartiality, and accountability. (Dobel, 1999, 2016)

Integrity can also be related to virtues, with integrity being consistent with virtues such as wisdom, justice, courage, and temperance (Becker & Talsma, 2016; van Tongeren & Becker, 2009), or an open reflection on morality (Carter, 1996). In other words, integrity can be related with what is right and what is wrong, what is good or what is bad.

Other authors see integrity more as an umbrella concept that combines several values that are relevant to the civil servant to be assessed.

Among these values there is the legal perspective linked with laws and rules in relation to the essential (Lee & Rosenbloom, 2005; Rosenbloom, 2011), with an emphasis on 'constitutional or regime values' (Rohr, 1989).

Other perspective on integrity considers a broader interpretation because laws don't provide a clear guidance for many aspects of decision-making and implementation processes in government and administration, whereby an interpretation is therefore made regarding compliance with the relevant moral values and standards (Becker, 1998; Fijnaut & Huberts, 2002; Thomas, 2001; Thompson, 1995; Uhr, 1999).

This approach is like a general kind of moral conduct and morality (Brenkert, 2004) or, as DeGeorge (1993) states, *"integrity is the same as ethical or moral to act"* (DeGeorge, 1993, p.5).

Integrity can also be viewed as something to strive for, or integrity as "the stuff of moral courage and even heroism" (Brenkert, 2004, p.5), which means that it is "for exemplary compliance specific aspects are moral standards" (Van Luijk, 2004, p.39).

All interpretations of integrity focus on the behavior of the governance participants in making and implementing decisions, which means it is not only about politics and administration; integrity concerns behaviors, processes, and procedures (in a broader sense). It is not about the content of the output or the societal results (outcome).

3.5.2 – EXCELLENCE (QUALITY V&B)

Even though the term quality is widely used by practitioners and academics, there is no generally agreed definition for quality as different definitions are appropriate in different circumstances (Garvin, 1984; Reeves & Bednar, 1994; Seawright & Young, 1996; Russell & Miles, 1998; Beaumont & Sohal, 1999; Sebastianelli & Tamimi, 2002; Ojasalo, 2006).

Quality was defined differently by different authors. Quality was defined as excellence (Tuchman, 1980), and value (Feigenbaum, 1951). It was also defined as conformity to specifications (Shewhart, 1931), or conformity to requirements (Crosby, 1979).

Quality can also be defined as a measure of usability (Juran, 1974; Juran & Godfrey, 1999), desirable properties of the product (Leffler, 1982), avoidance of losses (Taguchi, 1987) or the fulfillment of customer expectations (Ryall & Kruithof, 2001).

So, there is no generally accepted definition of quality for various reasons, and due to this, in the context of this work, quality as a value or behavior is associated with excellence, the definition by Tuchman (1980).

The transcendent approach of quality as excellence (Tuchman, 1980) is derived from philosophy, and is heavily linked with Plato's discussion of beauty. In this approach, quality is synonymous of innate excellence (Seawright & Young, 1996). This definition of quality, linked with excellence, depends on who determines the quality standards, and who determines the extent to which excellence has been achieved (Reeves & Bednar, 1995).

For researchers, defining quality based on excellence makes it difficult to measure quality in the empirical domain (Garvin, 1984), which means that the reliability criterion may not be met because it is difficult to consistently measure quality.

Leadership engagement, customer focus and involvement, supplier relationship, teamwork and empowerment are key drivers for quality and excellence in an organization.

Since it is difficult to measure quality in the empirical field, authors discussed the importance of leadership engagement in implementing quality practices, and Samson & Terziovski (1999) point out that this is the element that drives quality development.

Kaynak (2003) also notes that management support plays an important role in the implementation of quality practices. By supporting quality management, managers create an environment in which quality performance is rewarded (Flynn et al., 1994).

Customer focus is one of the principles of quality management and it is necessary for quality service to emphasize customer relationships (Flynn et al., 1994).

Customer involvement affects quality performance by improving the initial design, setting specifications and tolerances, and simplifying the process of designing new features (Naor, M. et al., 2008).

Kaynak (2003) emphasizes the importance of supplier relationships and states that this practice has a positive influence on quality management practices and therefore has an indirect influence on quality performance.

Finally, within the organization, teamwork, and the ability to solve group problems are also important components of quality management, as they increase the efficiency of decision-making through decentralization (Flynn et al., 1994).

3.5.3 – COLLABORATION

As a value or behavior, collaboration can be defined as respecting diversity and strengthening teamwork. Collaboration can also be linked with effective communication.

Teamwork can be defined as "a cooperative process that allows ordinary people to achieve extraordinary results" (Scarnati, 2001, p.5). Teamwork responds to individuals working

together in a collaborative environment to achieve common team goals through the sharing of knowledge and skills.

Literature emphasizes that one of the essential elements of a team is to focus on a common goal and clear purpose (Fisher, Hunter & Macrosson, 1997; Johnson & Johnson, 1995, 1999; Parker, 1990; Harris & Harris, 1996).

Successful teamwork relies on synergies between all team members creating an environment in which they are all willing to contribute and participate to promote a positive and effective team environment.

To do so, team members need to be flexible enough to adapt to collaborative work environments where goals are achieved through collaboration and social interdependence rather than individual competitive goals (Luca & Tarricone, 2001).

Researchers provided several attributes that are required for associates to drive successful collaboration.

Many of these attributes have been consistently identified in the literature as commitment to team success and shared goals, interdependence, interpersonal skills, open communication and positive feedback, appropriate team composition, commitment to team processes, leadership and accountability, and effective communication.

Commitment to team success and common goals arises when team members are committed to the success of the team and their common goals for the project. Successful teams are motivated, committed and strive for top performance.

Interdependence is key as team members need to create an environment in which they can contribute far more collectively than as individuals. A positive, interdependent team environment brings out the best in each person and enables the team to achieve its goals on a far superior level (Johnson & Johnson, 1995, 1999). Individuals encourage their teammates to achieve, contribute, and learn, and to do so interpersonal skills are important.

Interpersonal skills include the ability to openly discuss issues with team members, be honest, trustworthy, and supportive, and show respect and commitment to the team and its individuals. Fostering a caring work environment is important, including the ability to work effectively with other team members.

Team members should be willing to provide and receive constructive criticism and provide authentic feedback, so to drive collaboration and teamwork, open communication and positive feedback are key. Team members should be described as actively listening to the concerns and needs of other team members, appreciating their contribution and expressing this to create an effective work environment. This is also a measure of inclusiveness.

Appropriate team composition is critical to creating a successful team. Team members need to be fully aware of their specific team role and understand what is expected of them in relation to their contribution to the team and the project.

Engagement in team processes, leadership, and accountability comes when team members are responsible for their contribution to the team and the project. Associates need to be aware of team processes, best practices, and new ideas. Effective leadership is critical to team success, including joint decisions and problem solving.

Besides the need for diversity and teamwork, another key attribute that is required for successful collaboration is effective communication.

Regarding this key attribute for collaboration, the ideal team should be highly diversified in terms of the talents and knowledge that each member brings to the team while maintaining open, non-threatening communication (Bradley & Frederic, 1997).

Other key aspects of effective communication that can drive collaboration are the emphasis on effective listening and communication that meet the needs of the group (Harris & Harris, 1996); conduct open dialogue and communication (De Vries, 1999); cultivate a team spirit of constructive criticism and authentic non-judgmental feedback (Harris & Harris, 1996).

Team members must also be open and honest (Critchley & Casey, 1986), enabling members to express group feelings (Harris & Harris, 1996), listening to all ideas and feelings; (Critchley & Casey, 1986), facing and working through conflicts (Critchley & Casey, 1986).

So, for the purpose of this research, as value or behavior, collaboration is linked with teamwork and effective communication.

3.5.4 – ACHIEVEMENT (INDIVIDUAL PERFORMANCE V&B)

Achieving high levels of performance is a key challenge given the continuous development of institutions and corporations, and the continuous increase of the market standards.

The greater the employees' achievements, the greater the company's competitive advantage will be.

Currently, improving productivity is a central issue in organizations, and productivity through work performance is a well-researched area in the literature on organizational behavior and human resource development (Lawler & Worley, 2006; Schiemann, 2009).

Corporate culture plays a central role and is key in the process of linking corporate vision, strategy, and goals (Schiemann, 2009).

Work performance as a form of performance evaluation and management is an essential component of effective associates' management being key for development policies in human resources (Bateman & Snell, 2007; Fay & Luhrmann, 2004; Hellriegel et al., 2004).

Employee performance can be understood as the work performance of the individual (individual performance) after the necessary effort has been made for the job, which is linked by meaningful work, an engaged profile, and compassionate colleagues and employers (Hellriegel, Jackson & Slocum, 1999; Karakas, 2010).

It is expected that the performance-oriented goals are aligned with the organizational guidelines so that the entire process is not event-driven, but more strategic and person-related driven (Jena & Pradhan, 2014; London, 2003; Mone & London, 2009).

It is also understood that performance includes a group of behaviors that arise from a person's technical knowledge, that is, knowledge of the specifics in its area of expertise, its abilities and adaptability, and interpersonal relationships as building team spirit, loyalty, and networking.

It is also expected that individual behaviors can drive organizational results in the form of increased productivity, customer satisfaction, organizational development, and growth.

At the organizational level, an organization that performs well is an organization that effectively implements an appropriate strategy, namely goals, strategies and plans for their achievement, goal setting, incentive and reward structures, and information feedback loops (Otley, 1999).

According to Fletcher (2001), performance management is an approach to creating a shared vision of the purpose and objectives of the organization that helps each individual employee understand and recognize their contribution, and thus manage and improve both individual performance as well as the organization.

Bacal (1999) defines performance management as an ongoing communication process that is carried out in partnership between an employee and his or her immediate supervisor and which includes the setting of clear expectations and an understanding of the essential tasks the employee must perform.

In accordance with Yang (2008) who claims that organizations can use direct bonuses and rewards based on individual performance when employee performance is palpable, Bishop (1987) examined employee performance and found that acknowledgement and recognition, and employee performance reward discrimination can be linked with employee productivity.

Employee morale and productivity are greatly influenced by the effectiveness of an organization's performance and its reward management system (Yazici, 2008).

Recognition of individual performance is key as when employees are satisfied, they will work more and ultimately the customers will be more satisfied (Ahmad et al., 2012).

3.5.5 – COURAGE

Courage as a behavior is shown through speak-up and challenging the norm, acknowledging when things do not work and learns, and giving and accepting constructive feedback.

For this work, courage as a behavior is related with speak-up and feedback.

Speaking up is a relational exercise and is only effective if active listening or 'listening-up' occurs (Hughes, 2019).

Recently there has been a growing number of studies on voice behavior of employees (Chamberlin et al., 2017). By constructively questioning the status quo, voice is one of the most important means that employees can use to help their organizations innovate and adapt. However, it is widely viewed as a risky activity for employees.

Van Dyne & LePine (1998) defined voice in their keynote paper as "promoted behavior that emphasizes expression of constructive challenge intended to improve rather than merely criticized" and as "making innovative suggestions for change and recommending changes to standard procedures even when others disagree" (Van Dyne & LePine, 1998, p.109).

Different studies define and operationalize the voice as an expression of a constructive challenge in the form of suggestions, new ideas, concerns, or opinions.

As an example, the voice of employees is widely viewed as an out-of-role behavior that is critical to organizational innovation, performance improvement, and the avoidance of mistakes (Morrison, 2014).

Burris (2012) deviated from the challenging part of the definition of speak-up and argued that the voice of employees can also support the status quo. Maynes & Podsakoff (2014) suggested that an encouraged and challenging communication is just a type of voice.

However, these are exceptions to the large number of studies that approximated the original definition by Van Dyne & LePine (1998).

Despite the value of the employee's voice to organizational performance, employees often fail to speak with valuable ideas or important concerns.

Research has shown that employees often withhold potentially useful or important information because they fear that offering new ideas or opinions, or expressing concerns could lead to friction with coworkers, being seen in an unfavorable way, leading to a lower performance rating (Detert & Edmondson, 2011; Detert & Trevino, 2010; Milliken et al., 2003).

Seibert, Kraimer & Crant (2001) found a negative effect of the voice on subsequent promotions and salary increases.

Similarly, Burris (2012), found lower performance ratings for employees who constructively challenged a new proposal compared to those who expressed support for it.

The other area of courage is feedback.

Individual feedback has generated a lot of research and evolved over several decades (Ashford, Blatt & VandeWall, 2003). Individual feedback has long been used as a tool to facilitate improvement and progress in organizations and companies (Levy & Williams, 2004).

It is only recently that researchers and executives have begun to think about feedback from a large-scale perspective (Dahling & O'Malley, 2011).

In most cases, feedback is used to provide information about proximal goals and immediate and actual behaviors. It is also used to provide information on desirable developments and outcomes (Baker, 2010; London, 2003).

Many authors have found that companies recognize that employees can be an important source of competitive advantage.

One method most organizations have in common for enhancing existing human capital is using employee feedback technology (Baker, 2010).

It shows how managers can more effectively capture and process performance information about subordinates, conduct performance appraisals and feedback surveys from multiple sources, and return that information in a manner that is non-threatening and leads to productive behavior changes. It also shows how employees can collect, accept, and use meaningful performance information from assessments, surveys, and informal discussions to change their own behavior (London, 2003).

There is evidence that a company that makes effective use of feedback practices has a greater competitive advantage, especially in today's difficult economic climate (Baker, 2010; Chatman & Cha, 2003).

Feedback is therefore an essential element in organizations as it combines organizational goals with continuity and fluidity, promotes creativity, promotes trust, and promotes motivation of the individual (Mulder, 2013).

Focused on giving feedback is the importance and necessity of high-quality feedback.

When managers are held accountable to meet with their subordinates about their feedback, they are more likely to use the feedback and improve performance (Levy & Williams, 2004).

Giving feedback is critical to learning and improving individual performance in the context of their work.

3.5.6 - CRIATIVE THINKING (INNOVATION V&B)

For this study, and because questions of the Global Employee Survey are the same for the V&B Innovation, that for the purpose of the thesis is denominated as Creative Thinking, as for the OP dimension Innovation, this V&B is described in section 3.6.3.

3.6 – ORGANIZATIONAL PERFORMANCE

In the global marketplace, performance measurement plays a key role in the organization's development strategy.

As Drucker points out (Drucker, 1997), if one does not measure something, one cannot understand a process. If an organization do not understand the process, it cannot be perfect.

A growing number of researchers assess the organization financial performance, but also how it handles social responsibility.

Social performance is necessary to achieve business legitimacy (Freeman, 1994). These developments shift the focus from only financial orientation to a broader focus (Barnett and Salomon, 2006).

This focus can include all processes that take place in the company as values, behaviors, diversity, and inclusion.

Several empirical studies suggest that firms achieve higher levels of profitability and organizational performance through the success and implementation of practices associated with management quality (Parast & Adams, 2012), which may include values and behaviors as innovation, courage, quality, or integrity.

According to these authors, organizations tend to replicate best practices to improve their organizational performance.

Corporate social responsibility appears to have a significant impact on internal quality results (operational performance) (Parast & Adams, 2012).

Today, organizations have a variety of responsibilities and objectives that encompass not only profitability, but also innovation, competitiveness, ethical and social goals in the sense of sustainability.

The evaluation of the achievement of these objectives is measured by the KPIs of organizational performance, which will be understood here as five key success factors as innovation, development and retention (people), patient and customer centricity (quality), employee performance (execution) and productivity, and evaluated according to the financial, organizational, operational, and social dimension.

The goal is also to assess whether D&I and V&B contribute to these enabling conditions.

To unleash their potential and leverage good results, institutions and organizations deal with static factors as internal rate of return, payback, and financial ratios as deal with dynamic factors as knowledge, technology, innovation, and culture which influence its performance.

These last factors require companies to care for and emphasize them as real assets as success tend to be more dependent of intellectual and holistic capacities than physical assets, or in other words, more in the field of idea generation than in the generation of tangible assets, so the ability to manage associate's potential becomes an essential executive skill (Martinet & Marti, 1995).

3.6.1 - ORGANIZATIONAL PERFORMANCE INDICATORS

Performance may refer to the individual, the group, the organization, the process, or the business activity.

The performance of a company is reflected in the results set of all the activities considered relevant and that allows to evaluate the effectiveness of the fulfillment of the established objectives.

This means that the entire implementation of action in business management, values and behaviors requires a process of evaluation of its performance, even if it is informal.

The processes of evaluation of organizational performance have undergone significant changes.

Initially, organizational evaluation focused on financial and economic criteria. They used quantitative and normative models centralized in the organization capabilities to generate profits.

Changes in the organizational environment led to new ways of thinking and evaluating the organization and its performance (Dutra, 2005).

Thus, new models of performance measurement began to emerge, which seek not only to include non-financial measurements, but also information regarding the performance of each area and business process.

According to this, it is necessary to use more comprehensive non-financial indicators to measure organizational performance, as business success cannot be assessed only by traditional patterns or past events.

Although quantitative data is key to compare different business indicators, it is also necessary to have qualitative information from different areas of development as organization culture, diversity and inclusion, values, and behaviors.

Although organizational performance is the dependent variable often used in business administration, it is not a simple construct to measure, and its operationalization has not yet gained consensus (Combs et al. 2005).

There are different types of performance measures centered at non-financial subjective performance, and objective financial performance, and centered at marketing case and market share, which demonstrates the existence of different ways and means of measuring performance.

Another way to measure performance is using scales to assess performance against major competitors which is one of the most widely accepted practices in recent studies (Choi et al., 2008).

Many researchers use the manager's subjective perception to measure business results. Others prefer objective data, such as return on assets, but organizations need clear indicators and models to measure organizational performance (Carvalho, Lopes & Reimão, 2011).

A large variety of literature establishes a high correlation and concurrent validity between objective and subjective data on performance, which implies that both are valid for the calculation of company performance (Matzler et al., 2008).

In the present study, even considering the limitations of the process, performance evaluation is done by the analysis of the perception/responses of the respondents regarding the financial, organizational, operational, and social dimensions of organizational performance at Novartis: innovation, development and retention (people), patient and customer centricity (quality), employee performance (execution) and productivity.

3.6.2 – PRODUCTIVITY

Productivity corresponds to how much can be produced from a given number of inputs (Hall et al., 2010; Hall, 2011).

Associated with productivity is the efficiency that results from production process. This serves as a measure of productivity and corresponds to the level of success achieved in transforming inputs into outputs (Oum & Chunyan, 1995).

Productivity is related to the efficiency in the use of inputs to produce goods and services, while production refers only to the activity of producing goods and services (Biscaya et al, 2002).

Kendrick (1961) points out that efficiency plays an important role in stating that the output of an economy is not only conditioned by the increase in inputs needed for production, but also in improving its efficiency.

Several studies show that differences in productivity are mostly explained by differences in knowledge between firms (Hall & Mairesee, 2006; Hall, 2011).

In the scope of this thesis, and as Novartis is an organization supported in knowledge, R&D and innovation, these are key areas to focus on productivity.

When linking Research and Development (R&D) with productivity, Griliches (1979) was the first to delineate a concept of a production function in which the contribution of R&D and knowledge spillover to productivity growth would be measured, with the basic assumption that the product of innovation would be the result of investment in R&D (Taveira, 2016).

In this way, R&D spending would increase productivity by reducing the costs of producing goods (process innovation) or increasing the range of products offered (product innovation) (Griliches, 2007). Thus, R&D, along with patents, product, and process innovation as indicators of knowledge generation, are important determinants of productivity (Goedhuys, 2007).

Firms invest in knowledge and capital to increase their competitiveness and increase profits (Johansson and Loof, 2009), so a more productive technology and the growth of innovative activity and investment to reduce technological gaps are determining factors of economic development (Fagerberg, 1988).

Goedhuys, Janz and Mohnen (2006) point out that both innovation product and R&D measures explain differences in productivity between firms. Moreover, even when innovations in

product quality do not introduce a new good to the market, by increasing the price of the product, it is possible to notice positive impacts on firm performance (Syverson, 2011).

Regarding the relationship between innovation products and productivity, there is a positive relationship between innovation and firm performance (Raffo et al., 2008). Simpson, Siguaw and Enz (2006) point out that innovation, while positively impacting company performance is also exposing it to market risks and increasing costs, and due to this could have a negative effect on productivity.

In Griliches's (1979) approach to the production function, total factor productivity or labor productivity would be a function of past investments in R&D, physical capital, human capital, firm size, and industry-specific factors.

This can be viewed as a virtuous cycle or a vicious cycle as R&D investments tend to be affected by past productivity and that both variables tend to move together with other variables of interest (Johansson & Loof, 2009).

Thus, R&D or innovation would be endogenous to the model because, while more productive firms invest more in R&D and thus generate more innovation, those that invest more in R&D and generate a higher level of innovative product have higher productivity.

3.6.3 - INNOVATION

Innovation is a concept underlying value creation, based on the search of opportunities for change. The success of innovation is closely related to financial performance (Marques, 2004), which is key for organizations, reason why it is an organizational performance indicator.

Schumpeter (1939, 1947) defined innovation as a new production function.

Drucker (1985) considers innovation as a tool for entrepreneurs, as it consists in the mold of exploration of change and consequent transformation into different business opportunities or services. Drucker (1985) also emphasizes that innovation has the capacity to rise as a discipline, capable of being learned and practiced.

Through time, the perspective of innovation has extended and gained adherents as described by Dosi (1988), to whom innovation is the search for and the discovery, experimentation, development, imitation, and adoption of new products, new production processes, and new organizational structures.

Other authors stated that innovation moves away from invention (Freeman, 1989). According to the author, invention is the creation of a new product or process compared to existing ones. Innovation portrays the use of a nontrivial change and improvement in a process, product, or system that is new to the institution that developed the change.

Porter (1990) says that innovation is a process of turning opportunities into new ideas by putting them on the market, and Lundvall (1992) presents innovation as the result of the

processes of learning, demand, and exploration, from which come new products, new techniques, new organizational forms, and institutional and market changes.

Innovation is also linked with teamwork. Tidd, Bessant and Pavitt (2003) definition of innovation is 'increasingly teamwork and creative combination of different disciplines and perspectives', and afterwards Tidd and Bessant (2009) state that innovation is driven by the ability to identify relationships, find opportunities, and take advantage of them.

Innovative companies are especially adept at continually responding to changes of any kind in their environments and are characterized by creative people who develop new products and services. Innovation in organizations encompasses both technological and organizational innovation perspectives (McAdam et al., 2008).

For Conway and Steward (2009) innovation is understood as the creation, acceptance and implementation of new ideas, processes, products, or services. What happens in the company may involve the use of creativity as well as invention. Application and implementation are central aspects of this definition and involve the ability to change and adapt.

Buse, Tiwari and Herstatt (2010) consider innovation as the invention and commercialization of new products, processes and / or services.

The space where the whole innovation process takes place is the company. Today all companies need to innovate to stay sustainable and survive in the global market (Germak et al., 2010).

Morales et al. (2012) in a study they conducted concluded that a good working environment is positively and significantly associated with innovations.

Several authors demonstrate that innovation is essential for business survival and for improving organizational performance (Damanpor, 1996; Morales et al., 2012).

The multiplicity of forms (product, process, organizational and technological) and diversity of content that innovation assumes can be inferred about the importance and transformative power that innovation can have in companies and their performance.

Innovation is one of the key performance indicators of organizational performance.

3.6.4 - EXECUTION (EMPLOYEE PERFORMANCE)

In the organizational context, employee performance is usually defined as the extent to which an organizational member contributes for the achievement of the goals of the organization.

Therefore, employee performance plays an important role for organizational performance.

For this work, execution as an organizational performance indicator is related with individual performance or employee performance.

Employee performance is originally what an employee does or does not do. Performance of employees could include quantity of output, quality of output, timeliness of output, presence at work, cooperativeness (Gungor, 2011).

Macky and Johnson (2000) pointed that improved individual employee performance could improve organizational performance as well.

Deadrick and Gardner's (1997) stated that employee performance can be defined as the record of outcomes achieved, for each job function, during a specified period.

To Darden and Babin (1994), an employee's performance is a scoring system that is used in many companies to determine an employee's skills and performance.

Employee execution or performance can be associated with increased consumer perceptions of service quality, while poor employee performance may be associated with increased customer complaints and a brand change.

Employee performance can thus be understood as the related activities expected of an employee and how well those activities are performed, so managers need to evaluate employee performance annually or quarterly to help employees identify improvement areas.

The concepts of employee performance are examined through overall performance evaluation and management of performance. Assessment of performance is the process by which results are classified within a specific time frame (Coens & Jenkins, 2002).

To measure employee performance, criteria need to be SMART: unambiguous, clearly explained, relevant and achievable. The criteria should not include factors beyond the scope of the individual employee.

Employees should be provided with adequate training and development opportunities to help overcome underperformance identified during the assessment process. Therefore, managers need to be trained to provide regular, meaningful, and constructive feedback.

The evaluation of the performance of individual employees must also focus on the evaluation of the behavior and work performance of the employees and not on their personality (O'Brien & O'Donnell, 1999).

According to Huselid (1995), employees contribute to the performance of the organization, and HR policies and practices can influence the performance of individual employees through their influence on the skills and motivation of employees, as well as through organizational structures that enable employees to improve their job performance.

Therefore, there are various variables that can have an impact on employee performance or execution as noted by Arnold & Feldman (1982).

These variables are job security, compensation levels, job satisfaction, organizational tenure, D&I variables such as age, gender, education and number of dependents, organizational commitment, whether a job meets an individual's expectations, and the express intention to move to another job.

All these variables must be the focus of management to unleash execution through individual performance.

3.6.5 – QUALITY (PATIENT/CUSTOMER CENTRICITY)

As an organizational performance indicator, quality is linked with answering to patients and customer needs, delivering solutions that meet the needs of health systems, and this is key for their loyalty and satisfaction.

Customer loyalty and customer satisfaction are critical to modern business for two main reasons. First, customers are a scarce resource, being much easier to source from an old customer than a new one. Second, customer loyalty and customer satisfaction have a positive effect on the company's profitability (Rosenberg & Czepiel, 1984).

Customer satisfaction can be defined as an overall rating based on the overall buying and consuming experience of the good or service over time (Fornell et al., 1996).

The concept of customer satisfaction is based on the marketing concept since marketing focuses on customers and their needs. The aim of marketing is long-term customer satisfaction that promotes attractiveness and loyalty (Drucker, 1999).

Customer satisfaction goes hand in hand with marketing, which means that the customer's expectation is determined how the goods and services are facilitated by the companies. Actionable information on how to make customers happier is therefore a critical outcome. Satisfaction is strongly related to the consumer's declarations of intent (Oliver, 1989).

Briefly, customer satisfaction is an integral part of a business strategy, as is customer loyalty and product buyback. Customer satisfaction is a barometer that predicts the future customer behavior (Hill et al., 2007).

However, the product and its features, functions, reliability, sales activity, and customer support are the most important topics required to meet or exceed customer's satisfaction. Satisfied customers usually rebound and buy more.

The value of keeping a customer is only one-tenth of winning a new one. Therefore, when the organization wins a customer, it should continue to build up a good relationship with them.

From the point of view of profitability and productivity, only activities that create value for customers should be carried out. Therefore, companies need to get to know their customers and be able to build trust with them so that feedback is easy to get. In this way, customer-oriented products or services could be developed (Hill et al., 2003).

Customer satisfaction is dynamic and relative. The idea of being "customer-oriented" can help companies improve satisfaction and maintain customer loyalty. On the other hand, if competitors improve customer satisfaction, corporate customers can be lost.

When improving customer satisfaction, customer expectations must be considered. Service quality, product quality and price-performance ratio have a direct effect on customer satisfaction.

When employees have a positive impact, they can play a bigger role in increasing customer satisfaction. When the product use or service experience occurs over time, satisfaction levels can vary greatly depending on which point in the experience cycle the customer is focusing on (Lovelock & Wright, 2007).

Customer satisfaction is influenced by certain product or service functions and the perception of quality. The satisfaction is also influenced by the emotional reactions of the customer, his aspirations, and the perception of justice (Zeithaml & Bitner, 2003).

Increased customer satisfaction can bring benefits to the business such as customer loyalty, extending the life cycle of a customer, extending the life of the product or service the customer is purchasing, and increasing positive word of mouth from customers.

When the customer is satisfied with the company's product or service, they can get the customer to recommend products or services to potential customers. It is impossible for a business organization to grow up if the business ignores the needs of customers (Tao, 2014).

Therefore, it can be stated that customer loyalty is a behavior while customer satisfaction is an attitude.

3.6.6 – PEOPLE (DEVELOPMENT & RETENTION)

In recent years, people management became central as companies constantly seek to optimize their human resources in face of increasing competitiveness (Suliman, 2001).

For this work people as an organizational performance indicator is related with employee's development or learning, and retention or engagement.

There is a consensus in the literature that learning at the organizational level is a prerequisite for successful organizational change and performance (Garvin, 1993; Hendry, 1996).

Although higher education is important in preparing people for work in business, they still need new skills to begin their jobs (Gerbman, 2000). Ensuring that employees have these skills becomes an organizational responsibility and it needs to be an ongoing process.

According to Watkins and Marsick (1996), learning could improve employees' intellectual abilities as organizations ultimately become better at learning from employees.

Garver (1996) shows that there is a significant positive association between the level of learning activity and performance at work, indicating that higher performers are involved in a greater volume of learning activities.

Jashapara (1993) emphasized that learning in an organization has a positive effect on organizational performance, and Skerlavaj et al. (2006) also reported from their study that organizational learning has a positive direct impact on performance.

The organizations with the closest match between organizational goals and individual goals are those that are sensitive to individuals and provide them with the resources and opportunities to learn and achieve (Rowden & Conine, 2005).

Kleiman, M. (2000) points out that the fundamentals of a good employee training program are orientation, soft skills training, and technical skills training. These concepts are the general foundation for any development program.

Kottke (1999) states that "employee development programs should contain the three Cs: core workplace competencies, contextual framework within which the organization conducts its business, and corporate citizenship" (Kottke, 1999, p.531). The core competencies in this model are learning to learn, communication and collaboration, creative thinking and problem solving, and career self-management.

Organizations that made learning, education, and development a priority have seen it pay off through greater profitability and increased employees' job satisfaction (Leslie et al., 1998).

The second variable related with people as an organizational performance indicator is retention or engagement.

Organizational engagement is an important variable in explaining work-related behavior and its impact on performance (Benkoff, 1997). Organizational engagement can also be viewed as a dimension of organizational effectiveness in job performance while reducing sales (McDermott et al., 1996).

Organizational engagement is not necessarily quantifiable, but it is key to the rewards employees feel. When people feel they are helping an organization, they feel good and want to stay and continue to contribute (Logan, 2000).

Employees enjoy the feeling that their work has a purpose and that their activities matter to the organization (Moses, 2000).

Although salary and benefits play a role in employee recruitment and retention, employees also seek learning opportunities, the challenge of new responsibilities, and the prospect of personal and professional growth (Wagner, 2000).

Satisfying these intrinsic needs helps build trust, morale, loyalty, and overall satisfaction (Nunn, 2000).

When it comes to customer loyalty, companies need to focus on retaining their employees and lowering the turnover rate to maintain an inventive and cost-effective business. In general, high turnover indicates that employees leave the organization because they are not satisfied with their work. This has a negative effect on other employees, and they can also be induced to leave the workplace (Louden, 2012).

CHAPTER 4

RESEARCH MODEL

The interest in Diversity and Inclusion and in Corporate Values and Behaviors has been growing, and with it, research, and measurement variables on how to generate and apply D&I and the V&B in the business context.

The literature review allows us to infer about the centrality and the multidisciplinary nature of the themes and leads us to believe that there can be a positive relationship between D&I and OP, and D&I along with V&B with organizational performance.

Therefore, the analysis focuses on the measurement of D&I dimensions (diversity, inclusion), V&B dimensions (creative thinking, excellence, collaboration, achievement, courage, integrity) and organizational performance (execution, quality, innovation, productivity, and people).

Due to the complexity and breadth of the impacts they address, the systemic approach to D&I and V&B is the best way to study their impact on organizational performance.

Based on this approach, it is proposed a research model which corroborated with the literature review, will allow to conclude, and infer about the relationship between D&I and V&B dimensions and their influence on organizational performance dimensions.

In this chapter, the methodology adopted to carry out the empirical investigation is presented, the type of research is defined, the population of the study is identified, and the respective sample and the method used in the data collection are described.

The research questions and hypotheses are presented, and the descriptive analysis of the sample is presented.

Finally, the data of Hosftede's cultural dimensions of research countries is presented.

4.1 – THEORETICAL MODEL

Business activity is characterized by different processes developed in a multiplicity of acts, individual and collective in the pursuit of established tasks and objectives.

All these acts practiced in the business context, which have impact on the well-being, safety, and quality of life of one or more people, and in the results of the organization, need to be leveraged and communicated in a structured approach as D&I dimensions or the Values and Behaviors of an organization.

Companies are collective organizations with specific objectives requiring more capabilities, flexibility, and skills to remain competitive and differentiate in the marketplace.

Today, the value and importance of intangible assets are key to create these competencies to meet new requirements and respond to all stakeholders. The growing importance of intangible

assets as diversity, inclusion, innovation, integrity, courage in business activity justifies the study of their relationship (Stahl et al., 2014) and its impact on organizational performance.

In this work, we choose to approach the issue by using the Novartis GES – Global Employee Survey, where Novartis associates in the different countries, individually, have answered a questionnaire to evaluate the perception, understanding, practice and importance given to the themes, and their different dimensions: D&I, V&B, and organizational performance.

Thus, the central objective of this study is to theoretically find empirical evidence on the relationship between D&I, V&B and OP dimensions.

As a second objective, the model will include cultural dimensions as influencing factors in the adoption of the different dimensions of D&I and V&B, and this will allow comparisons between countries. Although not centrally relevant hypotheses, the inclusion of these factors enriches the explanation of the analysis and is the basis for future research.

The hypotheses underlying the thesis can be represented by a theoretical analysis model - analysis model of the relation between D&I, V&B in relation to organizational performance, which helps to clarify the meaning of the predicted relations between the variables involved (D&I, V&B, organizational performance).

Figure 4 – Relation between culture and the dimensions of D&I and V&B / theoretical analysis model



Source: self-elaboration

In the terms presented, the following fundamental assumptions support the analysis model and the theoretical basis of the proposed research:

- Which D&I dimensions (diversity, inclusion) are necessary conditions for organizational performance dimensions (execution, quality, innovation, productivity, and people) to occur?

- Which D&I dimensions (diversity, inclusion) are sufficient conditions for organizational performance dimensions (execution, quality, innovation, productivity, and people) to occur?

- Which D&I dimensions (diversity, inclusion) together with V&B dimensions (collaboration, achievement, creative thinking, excellence, courage, and integrity) are necessary conditions for OP dimensions (execution, quality, innovation, productivity, and people) to occur?

- Which D&I dimensions (diversity, inclusion) together with V&B dimensions (collaboration, achievement, creative thinking, excellence, courage, and integrity) are sufficient conditions for OP dimensions (execution, quality, innovation, productivity, and people) to occur?

- What is the impact of Hofstede's cultural dimensions over the adoption of D&I and V&B dimensions?

Based on these premises and the review of the literature, empirical research aims to test and validate the analysis model presented.

The recognition of the current situation, the pertinence of the theme and the scarcity of investigations carried out in this field give this work the additional challenge of the exploratory studies that do not yet have broad empirical validation.

Once presented the analysis model, the methodological approach used to study this problem, on which the empirical study is based, delineates the universe of the study, and justifies the options followed in the conduction of the empirical study.

4.2 - RESEARCH METHODOLOGY

After realizing the essential theoretical foundation to frame and contextualize the topic under study, it becomes necessary to approach the methodological options, planning and method to be used in empirical research.

In this way, the analysis of the methodology adopted in the present investigation will comprise the research model, the conceptualization of the study according to the problem and objectives, the conceptual model, research questions and hypotheses, data collection instrument, population and sample, the operationalization of the variables, procedures performed, and identification of statistical methods and techniques used. This is a complex process that requires its own detailed approach.

A scientific study requires the application of a method that guarantees the accuracy of knowledge, that is, that guarantees the correct application of the so-called scientific method.

The scientific method is an instrument for the study of reality, formed by a set of procedures, through which scientific problems are formulated and the hypotheses examined (Barañano, 2004). While methods are defined as the set of steps necessary to achieve a particular end, techniques are the ways to carry out some type of activity, in other words, are a collection of instruments either of collection or processing of research data considered useful for the study.

4.3 – TYPE OF RESEARCH

There are four types of research: experimental or semi-experimental; correlational field studies; case studies and action research (Tharenou et al., 2007).

According to this classification the present investigation is a case study which is exploratory.

According to Yin (2003), the need for case studies arises from the desire to understand complex social phenomena, as the case study methodology allows researchers to maintain the holistic and meaningful characteristics of real events such as organizational and management processes.

Case study research is a heterogeneous activity that covers a range of research methods and techniques, a range of coverage (individual case studies, carefully matched pairs, multiple cases), and different levels of analysis (individuals, groups, organizations, organizational areas, or social areas) and varying lengths and levels of involvement in organizational functioning (Hartley, 2004).

As an exploratory, correlational, transverse, and descriptive research, this work uses a research methodology that is developed according to quantitative and qualitative research methods, using instruments for collecting quantitative data, techniques and qualitative instruments as semi-structured interviews, and an in-depth analysis to present Novartis.

Regarding the quantitative data, it is based on secondary data from a questionnaire survey conducted by Novartis in each population or sample (GES – Novartis Global Employee Survey), in which the relationships between one or more dependent variables and one or more independent variables are analyzed. Details of GES and access to results are presented in 5.1 – data collection.

Since it seeks to bring new knowledge about the possible relation between D&I, V&B and organizational performance, this research aims to find some direct and indirect relation between the variables, seeks to identify the opinion of the population (Novartis associates in four different affiliates) and to verify if the perception of the facts is or not according to the reality, contributing to a better understanding and explanation of the theme.

The quantitative method is based on objective measures that, through mathematical formulas, can be quantified (Cox et al., 2003). According to the author, this method can be characterized by obtaining data or information about characteristics, actions, or opinions of a certain group of people, representative of a population, by means of a research instrument.

In this research, it is critical a previous work to survey existing works on the conceptual relationship between D&I and V&B, their relation, and impact on organizational performance. This work is carried out with the conviction that the knowledge in these areas is under construction, remaining limited to theoretical studies.

4.4 – THE PROBLEM AND OBJECTIVES

The problem under scope in this research assumed that diversity and inclusion have influence in the way we work, also with the values and behaviors of an organization, and with this can have impact on the efficiency and effectiveness of the organization, and the way to achieve the objectives of the business activity.

In this sense, D&I and V&B are analyzed according to its dimensions to better answer the problem of knowing:

"What is the impact of Diversity and Inclusion in Organizational Performance?"

Considering the central objective, the specific objectives are:

- i) Analyze if D&I in its two dimensions are necessary conditions or sufficient conditions for OP dimensions to occur.
- ii) Analyze if D&I in its two dimensions and V&B in its six dimensions are necessary conditions or sufficient conditions for OP dimensions to occur.

The conceptual model is presented, the variables are identified, and the underlying questions and hypotheses are formulated.

4.5 - RESEARCH QUESTIONS AND HYPOTHESIS

Identifying the problem that is under the present research and objectives, it becomes timely to present the conceptual model, identify the variables, the research questions, and the hypotheses.

The analysis model is composed of concepts and hypotheses closely articulated with each other to form a coherent framework of analysis (Quivy & Champenhoudt, 1992).

In general, the theoretical model presented in the next figure suggests that D&I in its two dimensions can have a direct influence on organizational performance dimensions, or organizational performance dimensions can be influenced by both D&I and V&B. Finally, the model also suggests that both D&I and V&B are influenced by the cultural dimension of the countries chosen to implement this study. This suggests that the country where the organization develops its work has an impact on the characteristics of the Novartis affiliate, its employees, and can influence the adoption of D&I and V&B.

In the development of the quantitative empirical study, it is indispensable to identify the set of variables, specifically the dependent, independent and control variables, and the applied statistical method.

The conceptual model presented in following figure operates four variables: D&I; V&B; OP; and culture.

Each of the variables presents a set of dimensions, which from the conceptual point of view, and according to the literature review, show support for the analysis of the main objective and the specific objectives. This means that in addition to analyzing the relationship between D&I and OP, the effect of each of its dimensions with V&B dimensions on OP dimensions is also analyzed in an individualized way, increasing the possibility of finding points of correlation.

The conceptual model of the present research considers OP dimensions as dependent variables susceptible of being influenced by the independent variables of D&I, or D&I and V&B, and the control variables are the cultural factors that may exert influence over D&I and V&B.

Cultural dimensions are presented in the model as secondary variables, but nonetheless with a strong possibility of exerting an influence on D&I and V&B, and although their influence does not interfere in the study problem, they can contribute to value the study and its conclusions.



Figure 5 – Conceptual model

Source: self-elaboration

4.5.1 - RESEARCH QUESTIONS

The purpose and objectives of this research defined in chapter 1, and the review of the literature made in chapter 3 raise the research questions related to the relationship between D&I, D&I and V&B, and the influence that both may have on the organizational performance of Novartis affiliates, and to which it is intended to respond throughout the work.

Thus, some research questions are pointed out:

Question 1 – D&I dimensions are necessary conditions for OP dimensions to occur?

Question 2 – D&I dimensions are sufficient conditions for OP dimensions to occur?

Question 3 – D&I and V&B dimensions are necessary conditions for OP dimensions to occur?

Question 4 - D&I and V&B dimensions are sufficient conditions for OP dimensions to occur?

The first two research questions focus on the possibility of adopting and implementing a D&I policy, and the influence that its dimensions have on organizational performance. The aim is to study the possible relationship between both dimensions of D&I and OP dimensions to create a culture based on common principles that promote growth, innovation, productivity, quality and focus on people.

The other two research questions focus on the possibility of a synergistic effect between the dimensions of D&I, and the dimensions of V&B, and its influence on the dimensions of organizational performance. The answer to these questions is to know how V&B dimensions can combine with D&I dimensions to influence OP dimensions.

In this sense, the present research study seeks to analyze the relationship between D&I and Novartis V&B, and its repercussion on the performance of the organization, and to conclude that D&I dimensions by itself, or combined with V&B dimensions, have an influence on organizational performance dimensions.

To find answers to these questions, empirically observing the validity of the thesis and the relationships between the variables predicted in the conceptual model, next, a set of hypotheses are formulated, that portray the relations between D&I, V&B and the organizational performance.

4.5.2 - RESEARCH HYPOTHESIS

The model of analysis comprises an articulated set of hypotheses that, starting from the appropriate theoretical framework, represent the central axis of the proposed theory.

The theoretical hypothesis represents the main question to be answered. In other words, we want to know the relationship between D&I, D&I together with V&B, and its influence on organizational performance. To evaluate the empirical relevance, it is necessary to operationalize it by means of decomposition in basic hypotheses that represent the diverse relations between the variables that constitute the model.

These hypotheses to be statistically tested should be formalized as the assertion of an objective relationship between two or more variables. Any statement must contain within itself the possibility of its negation (immediate inference) (Marôco, 2010).

These hypotheses provide the roadmap for the empirical research aimed to validate or not the theory underlying the model, allowing the analysis of the dependent variable that is interrelated with other variables, and in constant interaction, and a better knowledge of the problem being studied. In this case, the theoretical hypothesis decomposes into five basic

hypotheses organized into three groups: hypotheses related to D&I (H1 and H2); hypotheses related to D&I and V&B (H3 and H4); and hypotheses related to culture (H5).

To be considered valid, these theoretical approaches require the empirical confirmation of their propositions, which is why they must be verified empirically. The non-empirical validation of the propositions of a theory, in a consistent way, can imply the rejection or non-validation of the theory. In this case it is either subject to revisions or replaced by more robust alternative theories.

Thus, based on the assumption that D&I and its dimensions directly influence other variables, a set of hypotheses are formulated that will be tested empirically and that intend to analyze the causal relations between the variables of D&I, and V&B and D&I over performance, that is, whether D&I in its two dimensions, and D&I and V&B in its eight dimensions, have an impact over organizational performance dimensions.

The arguments lead to the formulation.

Hypothesis 1: D&I dimensions are necessary conditions for OP dimensions to occur.

In the current business context, organizational performance as a dependent variable assumes an essential role in the organizational development strategy. Despite all the definitions found on the literature for performance, in the study we use the five categories used by Novartis.

So, hypothesis 1 is subdivided into five H1 hypotheses (a, b, c, d, e) that seek to analyze the relationship between D&I and the impact on each OP dimension.

Based on these assumptions, it is formulated to:

H1a – D&I dimensions diversity and inclusion are necessary conditions for OP dimension execution to occur.

H1b – D&I dimensions diversity and inclusion are necessary conditions for OP dimension quality to occur.

H1c – D&I dimensions diversity and inclusion are necessary conditions for OP dimension innovation to occur.

H1d – D&I dimensions diversity and inclusion are necessary conditions for OP dimension productivity to occur.

H1e – D&I dimensions diversity and inclusion are necessary conditions for OP dimension people to occur.

Hypothesis 2: D&I dimensions are sufficient conditions for OP dimensions to occur.

As for hypothesis 1, despite all the definitions found on the literature for performance, in this study we use the five categories used by Novartis.

So, hypothesis 2 is subdivided into five H2 hypotheses (a, b, c, d, e) that seek to analyze the relationship between D&I and the impact on each OP dimension.

Based on these assumptions, it is formulated to:

H2a – D&I dimensions diversity and inclusion are sufficient conditions for OP dimension execution to occur.

H2b – D&I dimensions diversity and inclusion are sufficient conditions for OP dimension quality to occur.

H2c – D&I dimensions diversity and inclusion are sufficient conditions for OP dimension innovation to occur.

H2d – D&I dimensions diversity and inclusion are sufficient conditions for OP dimension productivity to occur.

H2e – D&I dimensions diversity and inclusion are sufficient conditions for OP dimension people to occur.



Figure 11 – Relation between D&I dimensions and OP dimensions

Source: self-elaboration

Empirical analysis of previous two hypotheses will allow to answer research questions 1 and 2 and infer about the relationship between D&I and organizational performance.

The empirical validation of these hypotheses was based on a one-way relationship between D&I and organizational performance as represented in the previous figure.

Hypothesis 3: D&I and V&B dimensions are necessary conditions for OP dimensions to occur.

As for hypothesis 1 and 2, despite all the definitions found on the literature for performance, in this study we use the five categories used by Novartis.

So, hypothesis 3 is subdivided into five H3 hypotheses (a, b, c, d, e) that seek to analyze the relationship between D&I and V&B, and the impact on each OP dimension.

Based on these assumptions, it is formulated to:

H3a – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension execution to occur.

H3b – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension quality to occur.

H3c – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension innovation to occur.

H3d – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension productivity to occur.

H3e – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension people to occur.

Hypothesis 4: D&I and V&B dimensions are sufficient conditions for OP dimensions to occur.

As for previous hypothesis, despite all the definitions found on the literature for performance, in this study we use the five categories used by Novartis.

So, hypothesis 4 is subdivided into five H4 hypotheses (a, b, c, d, e) that seek to analyze the relationship between D&I and V&B, and the impact on each OP dimension.

Based on these assumptions, it is formulated to:

H4a – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are sufficient conditions for OP dimension execution to occur.

H4b – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are sufficient conditions for OP dimension quality to occur.

H4c – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are sufficient conditions for OP dimension innovation to occur.

H4d – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are sufficient conditions for OP dimension productivity to occur.

H4e – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are sufficient conditions for OP dimension people to occur.

Empirical analysis of previous two hypotheses will allow to answer research questions 3 and 4 and infer about the relationship between D&I and V&B, and organizational performance.

The empirical validation of these hypotheses was based on a one-way relationship between D&I and V&B, and organizational performance as represented in the figure below.



Figure 7 – Relation between D&I and V&B dimensions, and OP dimensions

Source: self-elaboration

In the proposed model, the hypotheses concerning organizational culture H5 (a, b) are second order or control hypotheses that, while not related to the Theoretical Hypothesis, can contribute to assess different adoptions of D&I and V&B. Unlike the previous ones, these are exploratory hypotheses. Its empirical verification does not affect the validity of the central thesis, although it enriches the explanatory capacity of this research regarding the phenomenon of Diversity and Inclusion.

As mentioned in chapter 3, societal cultures reside in values, in sense of broad tendencies to prefer certain states of affairs to others (Hofstede, 2001, p.5). Organizational cultures reside rather in practices: the way people perceive what is going on in their organizational environment. The way corporate management implement a D&I policy can have different impact on values from country to country and this can be related with the cultural dimensions developed by Hofstede.

The study of these factors is important to try to discover variables that can condition the adoption of D&I and have an impact over different values and behaviors.

The present work includes values that distinguishes country cultures from each other which can be statistically categorized into six groups as described in chapter 3. These six groups became the Hofstede dimensions of national culture namely Power Distance (PDI), Individualism versus Collectivism (IDV), Masculinity versus Femininity (MAS), Uncertainty Avoidance (UAI), Long-Term Orientation (LTO), and Indulgence versus Restraint (IND), and may therefore constitute a factor that contributes to the adoption of D&I and different values and behaviors.

Intending to know if the organizational culture variables (Power Distance, Individualism versus Collectivism, Masculinity versus Femininity, Uncertainty Avoidance, Long-Term Orientation, and Indulgence versus Restraint) are positively related to D&I and V&B, the following hypothesis is elaborated:

Hypothesis 5: culture factors influence the adoption of D&I and V&B

That unfolds in two hypotheses.

H5a – culture variables (Power Distance, Individualism versus Collectivism, Masculinity versus Femininity, Uncertainty Avoidance, Long-Term Orientation, Indulgence versus Restraint) significantly influence the adoption of D&I in the company.

H5b – culture variables (Power Distance, Individualism versus Collectivism, Masculinity versus Femininity, Uncertainty Avoidance, Long-Term Orientation, Indulgence versus Restraint) significantly influence the adoption of V&B in the company.

These variables are independent of the specific characteristics of each business. Their analysis can contribute to understand if these factors have or do not influence the motivation and adoption of D&I and the promotion of V&B.

To respond to the research objectives, questions, and hypotheses 1 to 4 stated here, it was used the Novartis Global Employee Survey, a 50-question survey focused on 15 dimensions including engagement, strategic alignment, change, Values & Behaviors, leadership, talent, organizational excellence, D&I and Corporate Responsibility, presented in Chapter 5. To respond to hypothesis 5 an interview script was developed, and semi-structured interviews were made in the four countries of research. This script is also presented in Chapter 5.

4.6 – HOFSTEDE'S CULTURAL DIMENSIONS OF RESEARCH COUNTRIES

Cultural dimensions are presented in the model as secondary variables, but nonetheless with a strong possibility of exerting an influence on D&I and V&B, and although their influence does not interfere in the study problem, they can contribute to value the study and its conclusions.

For this research, out of the 155 countries where Novartis is present, four countries were chosen: Austria, Netherlands, Portugal, and Switzerland.
4.6.1 – AUSTRIA CULTURAL DIMENSIONS

The Hofstede Insights 6-D Model^{©8} is used to explore the deep drivers of Austrian culture.

Figure 8 – Austria Cultural Dimensions



Source: Adapted from Hofstede 6-D Model©

POWER DISTANCE

Power distance deals with the fact that not all individuals in societies are equal – it expresses the attitude of the culture towards these inequalities.

This dimension reflects the extent to which the less powerful members of Austrian organizations and institutions expect and accept that power is not equally distributed.

Austria scores 11, which is an exceptionally low on this dimension, meaning that the following characterizes the Austrian style: Being independent, hierarchy for convenience only, equal rights, superiors accessible, coaching leader, management facilitates and empowers employees.

Power is decentralized and managers count on the experience of their team members. Employees expect to be consulted by management; control is disliked; communication is direct and participative.

INDIVIDUALISM

Individualism addresses the degree of interdependence that a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "We".

⁸ https://www.hofstede-insights.com/country-comparison/austria/

In individualist societies people are supposed to look after themselves and their direct family only. On the other hand, in a Collectivist society, people belong to 'in groups' that take care of them in exchange for loyalty.

Scoring 55, Austria is an Individualist society which means that there is a high preference for a not very structured social framework, in which individuals are expected to take care of themselves and their immediate families only.

In this type of societies, offence causes guilt and a loss of self-esteem, the employer/employee relationship is a contract based on advantages for both parties, hiring and promotion decisions at organizations or institutions are supposed to be based on merit only, and management is the management of individuals.

MASCULINITY

A high score on Masculinity dimension indicates that the society is competitive. Key behaviors are achievement and success, with success being defined by the winner / best in field. This value's system based in competition starts in school and continues throughout organizational life.

Wanting to be the best is the fundamental reason that motivates people in a Masculine society.

A low score on this dimension (Feminine) means that the dominant values in this type of society are caring for others and quality of life. A Feminine society is one where quality of life is a sign of success and standing out from the crowd is not an admirable quality.

In a Feminine society the key motivation for people is liking what they do.

With a score of 79, Austria is a Masculine society, being highly success oriented and driven.

In Austria, as in other Masculine countries, people live to work, managers are expected to be decisive in organizations and institutions, and the emphasis is always on equity, competition, and performance. In this type of societies, conflicts are resolved by fighting them out.

UNCERTAINTY AVOIDANCE

Uncertainty Avoidance reflects the way that a society deals with the unknown, or the fact that the future can never be known. Societies have two different approaches. The first is to try to control the future, and the second is to just let it happen.

This ambiguity about the future brings anxiety and different cultures deal with it in different ways.

The extent to which the members of a culture feel threatened by ambiguity or unknown situations, and the way they create beliefs and support institutions that try to avoid this ambiguity is reflected in the score on Uncertainty Avoidance.

Austria scores 70 on this dimension which reflects a preference for avoiding uncertainty.

Countries like Austria exhibiting high Uncertainty Avoidance keep rigid codes of beliefs and behaviors, not enduring unorthodox behaviors and ideas. There is an emotional need for rules.

In Austria time is money, people always want to be busy, working hard, and precision and punctuality are the norm. In countries with high scores on Uncertainty Avoidance innovation may be resisted, and security is a key individual motivation.

Decisions are taken after careful analysis of all available information. The usage of academic titles as part of people's names reflects Austria's high score on the Uncertainty Avoidance Index.

LONG TERM ORIENTATION

This dimension describes how every society keeps the links with its own past while dealing with the challenges of the present and future, and how each society prioritize these two existential goals.

Those with a culture which scores high on Long Term Orientation take a more pragmatic approach regarding the present and the future, supporting a modern education to prepare for the future.

On the other hand, societies that score low on this dimension and take a more normative approach regarding the present and the future, prefer to maintain their traditions, what they have done throughout the past, keeping norms, while viewing change with suspicion.

Austria scores 60, a high score, reflecting a pragmatic culture. In societies with a pragmatic orientation as Austria, people believe that results depend on the current situation, context, and time.

Austrians have an ability to adapt the links of its own past to current conditions and context, with a strong propensity to save and invest, showing focus and perseverance in achieving results.

INDULGENCE

This dimension is defined as the extent to which people try to control their desires and impulses, based on the way they were raised.

A relatively weak control of desires and impulses is called Indulgence while a relatively strong control of desires and impulses is called Restraint.

With a score of 63, Austria is an Indulgent country.

Austrians, being classified by a high score on Indulgence, generally exhibit a willingness to realize their impulses and desires about their personal life, celebrating, having fun.

In Austria leisure time has a great importance, and Austrians do not try to control their desires and impulses, acting as they please, spending their money as they wish.

They have a positive attitude and a tendency towards optimism.

4.6.2 – NETHERLANDS CULTURAL DIMENSIONS

The Hofstede Insights 6-D Model^{©9} is used to explore the deep drivers of The Netherlands culture.



Figure 9 – The Netherlands Cultural Dimensions

Netherlands

POWER DISTANCE

This first dimension reflects the fact that all individuals in societies are not equal – it expresses the attitude of a specific culture towards these differences.

Power Distance expresses the extent to which the less powerful members of institutions and organizations in the country expect and accept that power is not equally distributed.

The Netherlands scores 38 in Power Distance, which is a low on this dimension. This score reflects the following characteristics of the Dutch society. Dutch valorize independence, and at the Netherlands hierarchy is used for convenience only. Equal rights, superiors accessible at

Source: Adapted from Hofstede 6-D Model©

⁹ https://www.hofstede-insights.com/country-comparison/the-netherlands/

institutions and organizations, coaching leader, and a management that facilitates and empowers associates are other characteristics of the Dutch society.

Power is not centralized and management count on the experience of their team members, reason why employees expect to be consulted in the decision process. Control is disliked and attitude towards managers is informal and on first name basis.

In a society like the Dutch, communication is direct and participative.

INDIVIDUALISM

Individualism addresses the degree of interdependence that a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "We".

In individualist societies people are supposed to look after themselves and their direct family only. On the other hand, in a Collectivist society, people belong to 'in groups' that take care of them in exchange for loyalty.

With the remarkably high score of 80, The Netherlands is an Individualist society.

This extremely high score in this dimension means there is a high preference in the Dutch society for a not very structured social framework, with low interdependence, in which individuals are expected to take care of themselves, being independent, and taking care of their immediate families only.

In this type of societies, offence causes guilt and a loss of self-esteem, the employer/employee relationship is a contract based on advantages for both parties (a win/win approach), hiring and promotion decisions at organizations or institutions are supposed to be based on merit only, and management is the management of individuals.

MASCULINITY

The Netherlands scores 14 on this dimension and is therefore a Feminine society.

A low score on this dimension (Feminine) means that the dominant values in this type of society are caring for others and quality of life. A Feminine society is one where quality of life is a sign of success and standing out from the crowd is not an admirable quality.

In a Feminine society the key motivation for people is liking what they do. It is important to keep the work/life integration, making sure that all are included.

An effective manager a society like the Dutch is supportive to its team, and decision making is achieved through the involvement of the team.

At institutions and organizations, managers strive for consensus, and people valuate equality, solidarity, and quality in their working lives. In The Netherlands, conflicts are resolved through negotiation and commitment, being the Dutch known for their long discussions until consensus is reached.

UNCERTAINTY AVOIDANCE

The Netherlands scores 53 on Uncertainty Avoidance which reflects a slight preference for avoiding uncertainty.

This 4th dimension reflects the way a society deals with the unknown, or the fact that the future can never be known. Societies have two different approaches. The first is to try to control the future, and the second is to just let it happen.

The extent to which the members of a culture feel threatened by ambiguity or unknown situations, and the way they create beliefs and support institutions that try to avoid this ambiguity is reflected in the score on Uncertainty Avoidance.

So, the Dutch keep rigid codes of belief and behavior, being intolerant with unorthodox behaviors and ideas.

In these cultures, with a slight preference for avoiding uncertainty, there is an emotional need for rules, even if the rules never seem to work. For the Dutch time is money, they have an inner urge to be busy and work hard, they valuate precision and punctuality, they are not the first to adopt innovation, and security is an important aspect for individual motivation.

LONG TERM ORIENTATION

Long Term Orientation, the 5th dimension, describes how every society keeps the links with its own past while dealing with the challenges of the present and the future, and how each society prioritize these two existential goals.

Those with a culture which scores high on Long Term Orientation as The Netherlands, take a more pragmatic approach regarding the present and the future, supporting a modern education to prepare the society for the future.

Dutch society receives a high score of 67 in this dimension, which reflects its pragmatic nature.

So, in The Netherlands, supported by a pragmatic orientation, Dutch people believe that results depend on the current situation, context, and time.

Dutch have an ability to adapt the links of its own past to current conditions and context, with a strong propensity to save and invest, showing focus and perseverance in achieving results.

INDULGENCE

Indulgence is defined as the extent to which people try to control their desires and impulses, based on the way they were raised.

A relatively weak control of desires and impulses is called Indulgence while a relatively strong control of desires and impulses is called Restraint.

With a high score of 68, the culture of the Netherlands is clearly one of Indulgence.

The Dutch, being classified by a high score on Indulgence, generally exhibit a willingness to realize their impulses and desires about their personal life, celebrating, having fun.

In The Netherlands leisure time has a great importance, and Dutch do not try to control their desires and impulses, acting as they please, spending their money as they wish.

They have a positive attitude and a tendency towards optimism.

4.6.3 – PORTUGAL CULTURAL DIMENSIONS

The Hofstede Insights 6-D Model^{©10} is used to explore the deep drivers of Portugal culture.



Figure 10 – Portugal Cultural Dimensions

Source: Adapted from Hofstede 6-D Model©

POWER DISTANCE

This dimension reflects the fact that all individuals in societies are not equal, expressing the attitude of a specific culture towards these differences.

Power Distance highlights the extent to which the less powerful members of institutions and organizations in the country expect and accept that power is not equally distributed.

With a score of 63, the Portuguese society accepts hierarchical distance, and those holding the most powerful positions in Portugal are admitted having privileges associated with their position.

¹⁰ https://www.hofstede-insights.com/country-comparison/portugal/

In this type of society, with high score in this dimension, management controls, which means that management requires information from associates, and it is expected a top-down approach where the manager control both team and information.

In this type of society, a lack of interest about a subordinate would mean that he/she is not relevant in the organization, leading employees to demotivation. Negative feedback is very distressed so on a bottom-up approach, it is very difficult for the subordinate to provide negative information to management. With this lack of feedback, management needs to search for little signals to discover the real problems before they become relevant.

INDIVIDUALISM

Portugal, in comparison with all the other European countries (except for Spain) is Collectivist due to its score of 27 out of 100, in which people belong to 'in groups' that take care of them in exchange for loyalty.

In a collectivist society there is a close long-term commitment to the member 'group', which can mean being part of a family, extended family, or extended relationships.

Loyalty is key in a collectivist culture as the Portuguese, being considered more important than other societal rules and regulations.

Portuguese culture promotes strong relationships where everyone takes responsibility for the other members of the group.

In opposition to the Dutch and Austrian cultures, in a collectivist society like the Portuguese offence leads to shame and loss of face, the relation between manager/associate is perceived in moral terms, like a family link, and hiring and promotion decisions take account of the employee's in-group. In a collectivist society, management is the management of groups.

MASCULINITY

A high score (Masculine) on this dimension indicates that the society is driven by competition, achievement, and success, while a low score (Feminine) on the dimension means that the dominant values in the society are caring for others and quality of life.

Portugal scores 31 on this dimension and is a country where the key word is consensus.

The fundamental issue on this dimension is what motivates people, wanting to be the best (Masculine) or liking what you do (Feminine).

As a Feminine society, well-being is the sign of success and standing out from the crowd is not admirable.

In Portugal the focus is on "working in order to live", and in organizations or institutions, an effective manager is a supportive one, someone that strive for consensus, resolve conflicts through compromise and negotiation, and decision making is achieved through involvement.

In this type of society people value equality, solidarity, and quality in their working lives, so incentives such as free time and flexibility are favored.

UNCERTAINTY AVOIDANCE

If there is a dimension that defines Portugal very clearly, it is Uncertainty Avoidance.

Portugal scores 99 on Uncertainty Avoidance, reflecting a remarkably high preference for avoiding uncertainty.

This 4th dimension highlights the way a society deals with the unknown, or the fact that the future can never be known. Societies have two different approaches. The first is to try to control the future, and the second is to just let it happen.

The extent to which the members of a culture feel threatened by ambiguity or unknown situations, and the way they create beliefs and support institutions that try to avoid this ambiguity is reflected in the score on Uncertainty Avoidance.

The Portuguese society maintain rigid codes of beliefs and behaviors, being intolerant with unorthodox behaviors and ideas.

In these cultures, and Portugal is a clear example due to its score, there is an emotional need for rules, even if they never seem to work. Security is an important element in individual motivation.

The Portuguese need to be busy and work hard, precision and punctuality are key, and as they feel threatened by ambiguity or unknown, innovation may be resisted.

LONG TERM ORIENTATION

Long Term Orientation, the 5th dimension, describes how every society keeps the links with its own past while dealing with the challenges of the present and the future, and how each society prioritize these two existential goals.

Portugal, with a score of 28, shows that Portuguese culture prefers normative thought over pragmatic.

In Portugal, the preference is to maintain time-honored traditions and norms, while viewing societal change with suspicion.

People in such societies have a strong concern with establishing the absolute truth, being normative in their thinking.

The Portuguese exhibit great respect for its past and traditions, a relatively small propensity to save for the future, and a focus on achieving quick results vs perseverance shown by other societies.

INDULGENCE

The relatively low score of 33 in this dimension indicates that Portugal has a culture of Restraint.

Indulgence is defined as the extent to which people try to control their desires and impulses, based on the way they were raised.

A relatively weak control of desires and impulses is called Indulgence while a relatively strong control of desires and impulses is called Restraint.

Societies with a low score in this dimension, as Portugal, tend to cynicism and pessimism. The Portuguese, in contrast to indulgent societies, do not put much emphasis on leisure time and control the gratification of their desires.

People with this orientation have the perception that their actions are restrained by social norms and feel that indulging themselves is wrong.

4.6.4 – SWITZERLAND CULTURAL DIMENSIONS

The Hofstede Insights 6-D Model^{©11} is used to explore the deep drivers of Switzerland culture.



Figure 11 – Switzerland Cultural Dimensions

Source: Adapted from Hofstede 6-D Model©

POWER DISTANCE

With a score of 34, Switzerland positions in the lower rankings of Power Distance reflecting a society that believes that inequalities amongst people should be minimized.

¹¹ https://www.hofstede-insights.com/country-comparison/switzerland/

PDI highlights the extent to which the less powerful members of institutions and organizations in the country expect and accept that power is not equally distributed.

This score of 34 means that the German Swiss style is characterized by an independent mindset, hierarchy is used for convenience only, people believe and thrive for equal rights.

In institutions and organizations, management is accessible, leaders coach their team members, facilitating and empowering associates. Power is decentralized and managers count on the experience of their team members, so associates expect to be consulted in decision making processes.

Control is disliked and attitude towards managers are informal and on first name basis. Communication is direct and participative.

On this dimension there is a vast difference with the French speaking part of Switzerland which scores higher in PDI, like France, but for the purpose of this work, as Novartis is in Basel, it is considered the German Swiss style.

INDIVIDUALISM

With a score of 68 in Individualism, both German and French speaking Switzerland scores relatively high on this dimension, so it can be considered an Individualist society.

Individualism addresses the degree of interdependence that a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "We".

In individualist societies people are supposed to look after themselves and their direct family only. On the other hand, in a Collectivist society, people belong to 'in groups' that take care of them in exchange for loyalty.

Swiss society is not supported on a structured social framework, being characterized by its low interdependence, in which individuals are expected to take care of themselves, being independent, and taking care of their immediate families only.

In this type of societies, offence causes guilt and a loss of self-esteem, the employer/employee relationship is a contract based on advantages for both parties (a win/win approach), hiring and promotion decisions at organizations or institutions are supposed to be based on merit only, and management is focused on the associate.

MASCULINITY

Switzerland scores 70 in this dimension, with both rankings for German speaking and the French speaking of the country indicating a Masculine society, despite that in the German speaking part of Switzerland the impact is more noticeable.

Wanting to be the best is the fundamental reason that motivates people in a Masculine society.

A high score on this dimension indicates that the society is competitive. Key behaviors are achievement and success, with success being defined by the winner / best in field. This value's system based in competition starts in school and continues throughout organizational life.

In Masculine countries, people live to work, and in institutions and organizations management is expected to be decisive, leveraging equity, competition, and performance. Conflicts are resolved by fighting them out.

UNCERTAINTY AVOIDANCE

This 4th dimension reflects the way a society deals with the unknown, or the fact that the future can never be known. Societies have two different approaches. The first is to try to control the future, and the second is to just let it happen.

The extent to which the members of a culture feel threatened by ambiguity or unknown situations, and the way they create beliefs and support institutions that try to avoid this ambiguity is reflected in the score on Uncertainty Avoidance.

Switzerland scores 58 in UAI, perhaps reflecting the difference between the French and German parts.

French speaking Switzerland has a strong preference for avoiding uncertainty while German speaking Switzerland scores lower.

As the Dutch, the Swiss keep rigid codes of belief and behavior, being intolerant with unorthodox behaviors and ideas.

In these cultures, with a slight preference for avoiding uncertainty, considered the German Swiss style, there is still an emotional need for rules, even if the rules never seem to work.

For the Swiss time is money, they have an inner urge to be busy and work hard, they valuate precision and punctuality, they are not the first to adopt innovation, and security is an important aspect for individual motivation.

LONG TERM ORIENTATION

With a high score of 74, Swiss culture is pragmatic. In societies with a pragmatic orientation, people believe that truth depends very much on situation, context, and time.

Long Term Orientation, the 5th dimension, describes how every society keeps the links with its own past while dealing with the challenges of the present and the future, and how each society prioritize these two existential goals.

Those with a culture which scores high on Long Term Orientation as Switzerland, take a more pragmatic approach regarding the present and the future, supporting a modern education to prepare the society for the future.

The Swiss have an ability to adapt the links of its own past to current conditions and context, with a strong propensity to save and invest, showing focus and perseverance in achieving results.

INDULGENCE

Switzerland scores 66 in this dimension which indicates that the culture is one of Indulgence.

Indulgence is defined as the extent to which people try to control their desires and impulses, based on the way they were raised.

A relatively weak control of desires and impulses is called Indulgence while a relatively strong control of desires and impulses is called Restraint.

In Switzerland leisure time has a great importance, and the Swiss do not try to control their desires and impulses, acting as they please, spending their money as they wish.

The Swiss, being classified by a high score on Indulgence, generally exhibit a willingness to realize their impulses and desires regarding their personal life, celebrating, having fun.

They have a positive attitude and a tendency towards optimism.

CHAPTER 5

RESEARCH METHODS

In this chapter, the research methods are presented.

It also describes the research instruments - questionnaire survey and semi-structured interviews - the reasons for choice are presented.

Finally, the analytical approach adopted to carry out the empirical investigation is presented, describing the fsQCA methodology and the software applied in this research.

5.1 – DATA COLLECTION

Data collection is another fundamental step of a research project, as it requires the selection of a method appropriate to the problem under study and the elaboration of an appropriate instrument that meets the objectives initially set and the characteristics of the population.

According to Freitas et al. (2000) in the selection of the data collection instrument, care should be taken to use the best link between the analysis unit and the respondents and to consider whether the research is cross-sectional or longitudinal.

Thus, in this study, to collect data on all the variables under study, there were used two instruments.

The first instrument used in this research was secondary data from the questionnaire survey with structured and closed questions, administered indirectly, sent in electronic format, since it was intended to obtain a broad sample, maintaining the accuracy of the information collected with the available human and material resources (Fortin, 1999).

The choice for web-based inquiry – GES, is due to the recent popularity of this technique (including in academia) and to be an easy and fast way of obtaining data (Ilieva et al., 2002). The option for this instrument considered the time, the low cost and be a means to guarantee a rate of acceptable answers for the study.

As this research is implemented in four specific European countries, data of Hofstede's cultural dimensions for Austria, Netherlands, Portugal, and Switzerland was presented in Chapter 4, and they will be used to analyze the influence of the culture of the countries on the adoption of D&I, V&B and OP on the organization.

The second instrument used in this research was a semi-structured interview that was carried out to analyze the secondary variables, whether the country's culture have influence in the adoption of different values and behaviors, that together with a policy of diversity and inclusion, have an impact on organizational performance.

A questionnaire survey is a set of previously elaborated questions about a problem to be answered by a particular subject. The questionnaire survey consists in placing a series of questions on a set of respondents, generally representative of a population (Quivy & Campenhoudt 1998). These questions concern the social, professional, or family situation of the respondents. They refer to "their

opinions, their attitude towards options or human and social questions, their expectations, their level of knowledge or a problem, or any other point that interests researchers."

Bethlehem (2009) states that the research question must be translated by a series of variables that will be measured by the application of the questionnaire.

Therefore, several different questions from GES are used to address each research variable. The values obtained in these variables are used to estimate the relevant parameters in relation to the population.

The construction of the questionnaire and the formulation of the questions are therefore a crucial stage in the development of an investigation. The construction of the questionnaire and the formulation of the questions should be carefully considered (Ghiglione & Matalon, 1992). Any error, any ineptitude, any ambiguity, will be reflected in all the previous operations, up to the final conclusions.

As the concepts under study (diversity and inclusion, values and behaviors, and organizational performance) are comprehensive and multidisciplinary to be measured directly, in the case of this study, they were defined based on empirical indicators supported by observable answers, in the form of relative items to each of the variables.

The questionnaire survey allows quantifying a multiplicity of data and then performing several correlations analyzes, as well as satisfying the requirement of representativeness of the respondents. However, it is a technique that translates some relativity in the responses and does not give great emphasis to the surrounding environment of individuals.

5.2 - QUESTIONNAIRE - GES (GLOBAL EMPLOYEE SURVEY)

The Novartis Global Employee Survey (GES) gives to Novartis employees a voice. It empowers them to be active players in shaping who they are, what they do and how they do it. It is the place to express own opinion and make commitment and contribution really count; impact positively on work environment, products, processes, and patients; reinforce strengths, identify challenges, and anticipate the future needs of business and stakeholders; embed their V&B into the everyday life of the business across the entire organization at every level.

In 2017, the GES has been simplified and is focused on building a healthy organization, which is defined as the ability to build deep engagement and alignment around Novartis mission, renew the organization and drive execution with excellence. Building a healthy organization will contribute to the health of employees, culture, performance and ultimately – patients.

Supported by the Executive Committee of Novartis (ECN), the GES is a company-wide survey at Novartis and has been implemented to associates around the world in more than 130 countries. The survey was administered in 37 languages and responses were treated in full confidentiality.

The GES was first conducted globally in 2009 and has since been rolled out in 2011, 2013 and 2017, in line with the needs of the business.

The GES has the aim to empower Novartis Group company associates to be active players in shaping the organization, helping to build a healthy workplace. It is an opportunity for associates to influence impactful change at global, divisional, functional, and local levels.

The 50-question survey focuses on 15 dimensions including engagement, strategic alignment, change, Values & Behaviors, leadership, talent, organizational excellence, Diversity & Inclusion and Corporate Responsibility.

The GES enables associates to have their voice heard, positively contribute to Novartis future growth plans, and shape the culture of the organization. The GES also enables Novartis senior management to listen to associates and gauge how people feel in the organization, what they need to do more of and what needs to change, assess, and identify growth opportunities for the organization, discuss and define improvement plans that help to track progress in continuously improving the organization, and showcase and celebrate what associates believe are the strengths of Novartis.

The survey data is also used to acknowledge strengths and create plans for a strong culture and a healthy organization (based on Values & Behaviors), improve workplace environment, helping Novartis to continue to be a high-performing organization delivering on the mission of discovering new ways to improve and extend people's lives.

GENERAL SURVEY INFORMATION

The Novartis Global Employee Survey (GES) ran from February 20 to March 12, 2017.

The 2017 survey was a simpler, shorter, and more user-friendly version than in 2013. Its focus was on building together a healthy organization – a company driven by a clear mission, vision, and strategy, and powered by a highly engaged and agile workforce.

The only company-wide employee survey, the GES went out to all Novartis associates (Associates of Novartis Group companies employed on or before December 1, 2016) in more than 130 countries in 37 languages. The process was managed by an independent survey research firm (CEB) and nobody in Novartis saw any individual responses.

SURVEY IMPLEMENTATION

Organizations, like individuals, can do their best only when they have a good view of their strengths and opportunities for improvement. Therefore, the GES has become Novartis

enterprise-wide "diagnostic tool" providing the organization with the right insights to help identify what is going well and what needs to change.

The GES empowers Novartis Group company associates to be active players in shaping who they are, what they do and how they do it, ultimately helping to build a healthy workplace. It is a unique opportunity for associates to influence impactful change at global, divisional, functional, and local levels.

The GES enables Novartis associates to:

- 1. Have their voice heard.
- 2. Positively contribute to Novartis future growth plans
- 3. Shape the culture of the organization.

The GES enables senior management to:

- 1. Listen to associates and gauge how people feel in the organization.
- 2. Assess and identify growth opportunities for the organization.
- 3. Discuss and define improvement plans that help Novartis to track progress in continuously improving the organization.
- 4. Showcase and celebrate what associates believe are the strengths of Novartis.

On February 20, 2017, Novartis Group company associates with email access received an email invitation from CEB with instructions and a link to the online survey.

Those associates without a Novartis email or computer were able to access the survey in a different way. All countries had a local survey coordinator that provided associates with all necessary details.

All data and responses were treated in full confidentiality. The survey process was managed by an external vendor, CEB, a global consulting firm specializing in opinion survey research. Nobody in Novartis had access to any individual responses. Both Novartis and CEB view confidentiality as critical to the survey process and are contractually committed to it.

CEB conducted the online survey via its secure Internet site. The survey was conducted via a secure channel (SSL) to guarantee that users' survey responses were not cached by any external party.

The data processed in the survey are located on servers in the United Kingdom (UK). However, access to these data from the US cannot be excluded to provide technical support in case of security incidents.

Four weeks after completion of the survey, CEB removes all unique identification features (for example: name, email address, personnel number) from stored responses, thus anonymizing all responses. Other demographic information remains for reporting purposes on the stored responses. However, this information does not allow an individual identification of the stored responses and will be deleted no later than 36 months after survey, i.e., by March 2020.

Four weeks after completion of the survey, all participant data from those who have not participated in the survey will be deleted by CEB from the system.

The overall 2017 GES response rate was 69%, meaning that 7 out of 10 Novartis associates took the survey. This response rate is in line with external benchmarks and reflects the increased data accuracy due to organizational and demographic data being pre-assigned.

TARGET AUDIENCE

The GES was open to all permanent and temporary associates of Novartis Group companies who have been employed on or before December 1, 2016. These employees were invited to participate in the survey from February 20 to March 12, 2017.

Participation was voluntary and all responses were treated in full confidentiality. The survey process was managed by an external vendor, CEB, a global consulting firm based in the US, specializing in opinion survey research.

External or third-party contractors and contingent workers were not included in the survey because they are not employees of a Novartis Group company.

Participant data on work locations well as demographic information (e.g., business area, function, country, age, gender, etc.) were processed by CEB and linked in advance with their personal access code. This was not done to try to identify any individual, but to code the survey responses so that CEB can group the data into meaningful categories, including different locations, levels, and functions. This also allowed CEB to do statistical calculations for different organizational / demographic groups and have a deeper understanding of the results. In addition, this enables to improve data quality, thus helping managers develop better improvement plans by:

- 1. Providing improved results reports to managers for groups with 50 or more associate responses, without any attempt to identify individual respondents.
- 2. Seeing how issues and opinions vary across different parts of the organization, and for different groups of people.
- 3. Customizing findings and improvement plans for different organizations and teams.

Regarding the scope of this research, four countries were chosen due to its differences according with Hofstede dimensions of national culture and constraints for local implementation of this research: Austria, Netherlands, Portugal, and Switzerland. In these countries, 648 associates answered these questionnaires, which represents a rate of responses of 78%.

QUESTIONS

- 1. I feel energized by my job.
- 2. I can see a clear link between my work and my company's goals and objectives.
- 3. At my company, we anticipate changes taking place in the business environment before they happen.

- 4. Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors.
- 5. I have the opportunity to grow and develop at Novartis.
- 6. My job makes good use of my skills and abilities.
- 7. At my company, we are consistently searching for the next great idea.
- 8. The day-to-day decisions in my team demonstrate that quality is a top priority.
- 9. The people I work with share information and ideas that they think will help others succeed.
- 10. I receive ongoing feedback that helps me improve my performance.
- 11. In my team, we provide open and constructive feedback to one another.
- 12. The Code of Conduct has been communicated to me so that I understand it.
- 13. In my team, we have a clear understanding of our patients' / customers' needs.
- 14. My immediate supervisor encourages an environment where individual differences are valued.
- 15. I am able to maintain a healthy balance between my work and personal life.
- 16. I am very confident in the future success of my company.
- 17. My team's activities are clearly aligned with my company's goals.
- 18. The people in my team adapt easily to new ways of doing things.
- 19. Senior Leadership's actions show that they trust employees.
- 20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.
- 21. My company does a good job minimizing or eliminating unnecessary bureaucracy.
- 22. Good ideas are adopted here regardless of who suggests them or where they come from.
- 23. In my team, we discuss quality concerns and opportunities.
- 24. At my company, I see teams working together across different functions to improve business outcomes.
- 25. I trust the people I work with to put the team's goals before their own goals.
- 26. Speaking up is valued in my team.
- 27. Operating with high ethical standards in my team takes priority over achieving business results.
- 28. At my company, we consider what is important to our patients / customers when making decisions.
- 29. At my company, people treat one another with trust and mutual respect.
- 30. My company provides me with a healthy and safe place to work.
- 31. I am proud to work for my company.
- 32. I know what I should do to help my company meet its goals and objectives.
- 33. Senior Leadership actively supports and reinforces the effective implementation of the changes being made at my company.
- 34. I have access to effective learning and training opportunities to enable me to perform in my role.
- 35. I have the tools and resources to do my job well.
- 36. My immediate supervisor emphasizes the importance of quality focus.
- 37. In my job, I have clearly defined goals.
- 38. Conditions at my company make it safe to challenge the status quo.
- 39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.
- 40. In my team, we learn and improve from our mistakes.
- 41. I feel confident that products and services introduced by my company help improve patient health.
- 42. My company is committed to supporting the local communities in which we operate.
- 43. I would recommend my company as a great place to work.
- 44. Senior Leadership effectively communicates what my company is trying to accomplish.
- 45. In my team, we dedicate adequate time to planning for future changes.
- 46. My company has tools in place that enable employees to easily share information.
- 47. At my company, people are encouraged to take appropriate risks to improve business results.
- 48. People in my team are focused on delivering solutions that meet the needs of health care systems.
- 49. I feel that I play a part in programs and activities that help Novartis be a responsible company.
- 50. I can respond to problems without waiting for approvals.

From these 50 questions, and due to the purpose of this research, 41 were used in this work, gathered in 13 groups, and to provide with the right insights for each variable of D&I, V&B and organizational performance, some questions are used in more than one group to better tackle the variable.

Innovation and Quality are variables in both V&B and Organizational Performance, and they are built in different ways. Related with this, the group of questions is different when we use the variable innovation for V&B (creative thinking) and the variable innovation for Organizational Performance as when we use the variable quality for V&B (customer and patient centricity) and the variable quality for Organizational Performance.

There are three questions to address D&I in the GES survey, one addressing Diversity and two addressing inclusion.

Diversity:

14. My immediate supervisor encourages an environment where individual differences are valued.

Inclusion:

22. Good ideas are adopted here regardless of who suggests them or where they come from.

29. At my company, people treat one another with trust and mutual respect.

There are five questions to address Creative Thinking (innovation) when addressing V&B in the GES survey.

7. At my company, we are consistently searching for the next great idea.

22. Good ideas are adopted here regardless of who suggests them or where they come from.

38. Conditions at my company make it safe to challenge the status quo.

40. In my team, we learn and improve from our mistakes.

47. At my company, people are encouraged to take appropriate risks to improve business results.

There are four questions to address Excellence (quality) when addressing V&B in the GES survey.

8. The day-to-day decisions in my team demonstrate that quality is a top priority.

23. In my team, we discuss quality concerns and opportunities.

36. My immediate supervisor emphasizes the importance of quality focus.

40. In my team, we learn and improve from our mistakes.

There are four questions to address collaboration when addressing V&B in the GES survey.

9. The people I work with share information and ideas that they think will help others succeed.

24. At my company, I see teams working together across different functions to improve business outcomes.

25. I trust the people I work with to put the team's goals before their own goals.

46. My company has tools in place that enable employees to easily share information.

There are four questions to address Achievement (performance) when addressing V&B in the GES survey.

9. The people I work with share information and ideas that they think will help others succeed.

10. I receive ongoing feedback that helps me improve my performance.

25. I trust the people I work with to put the team's goals before their own goals.

37. In my job, I have clearly defined goals.

There are seven questions to address courage when addressing V&B in the GES survey.

11. In my team, we provide open and constructive feedback to one another.

26. Speaking up is valued in my team.

38. Conditions at my company make it safe to challenge the status quo.

39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.

40. In my team, we learn and improve from our mistakes.

47. At my company, people are encouraged to take appropriate risks to improve business results.

50. I can respond to problems without waiting for approvals.

There are six questions to address integrity when addressing V&B in the GES survey.

4. Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors.

12. The Code of Conduct has been communicated to me so that I understand it.

19. Senior Leadership's actions show that they trust employees.

26. Speaking up is valued in my team.

27. Operating with high ethical standards in my team takes priority overachieving business results.

39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.

There are four questions to address Execution (objectives) when addressing Organizational Performance in the GES survey.

2. I can see a clear link between my work and my company's goals and objectives.

17. My team's activities are clearly aligned with my company's goals.

32. I know what I should do to help my company meet its goals and objectives.

44. Senior Leadership effectively communicates what my company is trying to accomplish.

There are five questions to address quality when addressing Organizational Performance in the GES survey.

13. In my team, we have a clear understanding of our patients' / customers' needs.

24. At my company, I see teams working together across different functions to improve business outcomes.

28. At my company, we consider what is important to our patients / customers when making decisions.

41. I feel confident that products and services introduced by my company help improve patient health.

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48. People in my team are focused on delivering solutions that meet the needs of health care systems.

There are five questions to address innovation when addressing Organizational Performance in the GES survey.

7. At my company, we are consistently searching for the next great idea.

22. Good ideas are adopted here regardless of who suggests them or where they come from.

38. Conditions at my company make it safe to challenge the status quo.

40. In my team, we learn and improve from our mistakes.

47. At my company, people are encouraged to take appropriate risks to improve business results.

There are four questions to address productivity when addressing Organizational Performance in the GES survey.

6. My job makes good use of my skills and abilities.

21. My company does a good job minimizing or eliminating unnecessary bureaucracy.

35. I have the tools and resources to do my job well.

46. My company has tools in place that enable employees to easily share information.

There are four questions to address people when addressing Organizational Performance in the GES survey.

5. I have the opportunity to grow and develop at Novartis.

20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.

34. I have access to effective learning and training opportunities to enable me to perform in my role.

43. I would recommend my company as a great place to work.

5.3 – ACCESS TO GLOBAL EMPLOYEE SURVEY DATA

The author of this research is one of the more than 100,000 Novartis employees involved in the Novartis Global Employee Survey, which ran from February 20 to March 12, 2017.

On 5 April 2017, when the methodology for this work was defined, the author contacted Novartis Western and Central Europe (WEC) Head and D&I Leader for Europe to have his support for this case study, and its implementation in Novartis. This request came from the fact that the Novartis WEC Head was the responsible at Novartis for the cluster that integrates Portugal, a country that should be included in this work.

After a first skype meeting, on May 12, as part of a business review held in Portugal with the presence of the WEC leadership team, the author and the WEC Head defined some intermediate steps to set up in which countries this research could be implemented.

On May 25, this analysis was sent to the WEC Head.

In parallel, also on May 25, Novartis Portugal CPO Head and Novartis Portugal HR Head communicated the results of the GES to the organization in Portugal, a sign that the process on a global scale was concluded.

As of May 30, Austria, Netherlands, Portugal, and Switzerland were defined as implementing countries, and the WEC Head contacted the HR Heads of these countries to define the local plan of implementation of this work.

Aligned with the purpose of this work, and as the GES results were just presented, as a first step it was asked to WEC if the GES results of these specific countries could be made available for this research, not only the consolidated ones in big areas, but also question by question, as they could support the different areas of the research.

Also, as a second step, following the WEC Head contacts with the HR Heads, interviews with local management for qualitative data would be made.

A positive reply was given almost immediately sharing the GES data for the WEC countries.

As this data is confidential, it can only be used for the purposes of the study in question and cannot be shared outside the defined scope.

All these steps are documented in the emails exchanged during this period.

5.4 – SEMI-STRUTURED INTERVIEWS

The second instrument used a semi-structured interview was carried out to analyze whether the country's culture have influence in the adoption of different values and behaviors, that together with a policy of diversity and inclusion, have an impact on organizational performance.

Interviews were conducted by email or via Microsoft Teams, where a series of questions around these topics were asked to associates from the 4 countries of the study (Austria, Netherlands, Portugal, and Switzerland). All the information collected is intended, only and exclusively, to carry out this academic work and confidentiality is maintained.

Interviews/questionnaires were divided in 5 key topics, and took approximately 30/45min,

and had the following script:

Date:

CPO:

Local:

Begin of Interview / script sent:

End of Interview / script received:

- 1 CHARACTERIZATION OF THE INTERVIEWEE
- 1.1 What is your current role in Novartis?
- 1.2 What is your academic background?
- 1.3 Can you tell me your age?
- 1.4 How long have you been working at Novartis?
- 2 ORGANIZATIONAL PERFORMANCE

Organizational performance indicators are the following: innovation, quality, people (human resources), productivity, performance.

- 2.1 What importance is given to organizational performance at Novartis?
- 2.2 Is there a clear definition of the different organizational performance indicators in the organization?
- 2.3 How would you rate the importance of each of the different performance indicators in your organization?
- 2.4 Is it an organization's concern to provide information regarding the different performance indicators? What are the channels used in the dissemination of information?
- 2.5 Is there a concern in monitoring the adoption of different performance indicators in the organization? Why?
- 3 VALUES AND BEHAVIORS

Values and behaviors are innovation, quality, performance, courage, integrity, collaboration.

- 3.1 What importance is given to values and behaviors at Novartis?
- 3.2 Is there a clear definition of the different values and behaviors in the organization?
- 3.3 How would you rate the impact of each value and behavior in organizational performance?
- 3.4 Is it an organization's concern to provide information regarding values and behaviors? What are the channels used in the dissemination of information?
- 3.5 Is there a concern in monitoring the adoption of different values and behaviors in the organization? Why?
- 4 DIVERSITY AND INCLUSION
- 4.1 What importance is given to diversity and inclusion at Novartis?
- 4.2 Is there a clear definition of diversity and inclusion in the organization?
- 4.3 How would you rate the importance of diversity and inclusion in your organization?
- 4.4 Is it an organization's concern to provide information regarding diversity and inclusion? What are the channels used in the dissemination of information?
- 4.5 Is there a concern in monitoring the adoption of diversity and inclusion policies in the organization? Why?
- 5 CULTURE IMPACT

What impact does the country's culture have on the adoption of values and behaviors, the adoption of a policy of diversity and inclusion, and different factors that influence organizational performance?

- 5.1 What impact does the culture of the country where you work have on the adoption of Novartis values and behaviors in the organization?
- 5.2 What importance is given to the different values and behaviors in the country where you work? Can you organize them in order of importance?
- 5.3 What impact does the culture of the country where you work have on the adoption of a policy of diversity and inclusion in the organization?
- 5.4 What importance is given to diversity and inclusion in the country where you work?
- 5.5 What impact does the culture of the country where you work have on the adoption of organizational performance indicators in the organization?

- 5.6 What importance is given to the different organizational performance indicators in the country where you work? Can you place them in order of importance?
- 5.7 In the country where you work what are the indicators of diversity, inclusion, and values and behaviors that have the greatest impact on organizational performance?

5.5 – fsQCA – FUZZY SET QUALITATIVE COMPARATIVE ANALYSIS METHODOLOGY

The fsQCA methodology has been used as the analytical approach adopted to carry out the empirical investigation.

One of the predominant and most enduring terms highlighted in management research is the cause-and-effect mechanisms or causality.

This causal logic is reflected in management practice through the analysis of the key drivers of the different outcomes. The analysis of causal relationships and causal ambiguity represents an important approach to understand the relationships between strategic decisions, organizational structures, management activities and business performance indicators (King, 2007; Fiss, 2011).

Institutions and organizations are complex systems with interconnected structures and procedures, and as social entities, they rely on the interaction and mutual dependencies between its elements, which cannot be understood in isolation (Short et al., 2008; Hult et al., 2006).

So, these multiple dependencies origin multiple possible configurations of causal conditions that can influence the outcome.

Complex causation considers all theoretically possible configurations of causal conditions (Davis et al., 2007; Ragin, 2008a; Wagemann & Schneider, 2010), and can be defined as a situation "... in which an outcome may follow from several different combinations of causal conditions" (Ragin, 2008a, p.23).

Frequently used data analysis methods as regression analysis or structural equation modeling are based on linear and symmetrical relationships between constructs of interest. These constructs are treated as competing in explaining the variance in the results rather than focusing on ways in which causal conditions may combine to form configurations that contribute to the desired outcome (Greckhamer et al., 2008; Ragin, 2008a).

The discrepancy between management theory that considers organizations as complex systems with interconnected structures and practices (Fiss, 2007) and the limitations of linear methods (Greckhamer et al., 2008; Ragin, 2008a) underlines the need of a different approach that complement existing research methods.

fsQCA can be defined as an innovative analytical approach to build causal theories in the field of management studies (Leischnig, A., 2014).

DIFFERENCES BETWEEN SET-THEORETIC METHODS AND CORRELATIONAL METHODS

One of the main differences between fsQCA and traditional data analysis methods relates to the explanatory approach as presented in Table 13.

While a cause-and-effect approach is central to fsQCA, which means that fsQCA describes cases as combinations of attributes or configurations of causal conditions as well as the outcome in question, the standard linear methods are supported by an effects-to-cause approach, which means that the main goal is to estimate the average effect of one or more variables in several cases.

A second main difference between fsQCA and traditional data analysis methods relates to the concept of causality as presented in Table 13.

Linear methods focus primarily on identifying and analyzing the net effect that one or more independent variables has on a dependent variable by estimating an optimal model that fits the empirical data, while FsQCA was developed as a case-based research approach.

Linear methods require at least medium to large N samples, while fsQCA is still mainly used on samples with small or medium N.

Since fsQCA takes configurations of causal conditions into account, it is a valuable analysis tool to examine situations of complex causality, as fsQCA finds combinations of causal measures that lead to the result. FsQCA is not about independent effects, but about combined effects.

On the other side, regression analysis is used to find the net effects of each variable per se, and not the combined effects that those variables can have in a specific outcome.

Linked with the concept of causality is the third main difference between fsQCA and traditional data analysis methods which is the difference between equifinality and unifinality as presented in Table 13.

fsQCA methodology considers that results of interest rarely have a single cause (multicausality), that causes rarely act independently of one another (interdependence) and that a certain cause can have different (i.e., positive, and negative) effects depending on the context (asymmetry) (Greckhamer et al., 2008; Leischnig et al., 2013; Rihoux, 2006).

Therefore, the basic assumption in fsQCA is equifinality which means that there are multiple ways or solutions to the same outcome. As stated by Katz & Kahn (1978), "a system can achieve the same final state under different initial conditions and by a variety of different paths" (Katz & Kahn, 1978, p.30).

On the other side, for correlational methods, the basic assumption is unifinality. Equifinal solutions are generally understood as alternative ways to achieve an interesting result, so they are treated as logically equivalent and thus substitutable (Ragin, 2008a).

	Set-theoretic methods (e.g., fsQCA)	Correlational methods (e.g., regression, structural equation modeling)
Approach to explanation	Causes-to-effects approach: Explain cases by identifying configurations of causal conditions	Effects-to-causes approach: Estimate average effect of one (or more) independent constructs over all cases
Concept of causality	Analysis of complex causation: Examination of combinations of causal conditions	Analysis of linear causation: Examination of net effects of independent variables on dependent variables
Basic assumption	Equifinality: Several solutions can be equally effective in achieving a final effect state	Unifinality: One optimal model best represents the empirical data and explains the effects
Analytic approach	Boolean algebra	Linear arithmetic

Source: adapted from Leischnig, A. (2014), based on Mahoney and Goertz (2006) and complemented by Fiss (2007) and Ragin (2008).

The 4th main difference between fsQCA and traditional data analysis methods is the analytical approach.

To examine which combinations of attributes, lead to the result in question, fsQCA relies on Boolean algebra rather than linear arithmetic.

fsQCA builds on the premise that relationships between different variables are best understood in terms of the membership specified (Fiss, 2007), while conventional methods of qualitative comparative analysis define the membership to sets using binary values of 0 and 1 where 0 reflects non-membership and 1 is full membership.

With fsQCA, membership in sets is not limited to binary values of 1 and 0 as in correlational methods and can be defined using membership values that range from ordinal to continuous values (Ragin, 2008a).

FUZZY SETS

Supported by the four main differences between set-theoretic (e.g., fsQCA) and correlational methods (e.g., regression, structural equation modeling), a fuzzy set can be defined as a

"continuous variable that has been purposefully calibrated to indicate degree of membership in a well-defined and specified set" (Ragin, 2008a, p.30).

In fsQCA, variables are transformed into sets and the analysis is based on the combination of causal sentences that form a subset of the result set. According to Elliott (2013), sets are groups of things, and fsQCA is basically an analysis of set relationships.

To evaluate the set relationships with fsQCA, both the causal conditions and the result in question are represented in the form of fuzzy set membership values.

The main aim is to explain cases that show the desired values for the outcome in question by describing the extent to which causal conditions or combinations of these conditions exist.

So, fsQCA examines how the association of cases under causal conditions relates with the outcome (Ragin, 2008a). These relationships are interpreted as necessity and/or sufficiency conditions. A causal state is defined as necessary if it must be present for a result to occur, while a causal state is defined as sufficient if by itself it can produce a certain result (Ragin, 1987, 2000, 2008a).

FIVE-STEP APPROACH TO PERFORM fsQCA

Supported by the recommendations by Ragin (1987, 2000, 2008a), a five-step approach is recommended to perform the Fuzzy Set Qualitative Comparative Analysis.

MODELING OF CAUSAL CONFIGURATIONS AND POTENTIAL OUTCOME EFFECTS

The first step in the five-step approach recommended to perform fsQCA is the development of the model containing the specification of the causal conditions and the outcome in question.

FsQCA aims to identify the causal conditions underlying an outcome by examining the attributes of cases exhibiting that outcome (Greckhamer et al., 2008; Ragin, 2000, 2008a), so both the specification of relevant causal conditions, and the selection of cases, are important topics in the development of the model (Greckhamer et al., 2008).

In this step it is needed to select the causal conditions that are relevant to the outcome in question because limited diversity can become a relevant issue (Ragin, 2008b), as "*the potential variety is limited by the attributes' tendency to fall into coherent patterns*" (Meyer et al., 1993, p.1176). The selection of the causal conditions to be studied should be based on the theory and knowledge of the topic, as well as by its relevance.

Finally, as fsQCA refers to a single outcome, if several results are relevant, then it is needed to perform separate fsQCA analysis.

CALIBRATION OF CAUSAL CONDITIONS AND THE OUTCOME IN QUESTION

Having defined the relevant causal conditions and the result in question, the second step in the five-step approach recommended to perform fsQCA is to generate well-constructed fuzzy sets.

To run fsQCA, variables must be converted into sets which can be either crisp or fuzzy. Crisp sets refer to sets in which membership is either on or off, while fuzzy sets are sets in which membership can be expressed in degrees of membership.

The conversion of construct measures into fuzzy set membership scores can be named as calibration. Fuzzy sets must be calibrated to decide how the membership of the set is defined (Elliott, T., 2013).

In different scientific disciplines, researchers calibrate their measuring instruments and adjust them to match or conform to known standards (Fiss, 2011; Ragin, 2008a). The criteria used to calibrate measures and convert them into fuzzy set membership scores reflect these standards based on theoretical and existing empirical knowledge (Ragin, 2008a), specifying what consists full membership, full non-membership, and the cross-over point (Ragin, 2000).

Full membership (value equal to 1) and full non-membership (value equal to 0) therefore represent qualitative states.

The continuum between these two states reflects different degrees of membership in a fuzzy set, ranging from "more out" (values closer to 0) to "more in" (values closer to 1) (Ragin, 2000, 2008a).

Fuzzy sets have a special point between full membership and full non-membership: the crossover point (value equal to 0.5) denoting the cases with maximum ambiguity regarding the fuzzy set membership.

To calibrate metrics and translate them into fuzzy set membership values, researchers can use an indirect or a direct method (Ragin, 2008a). The direct method uses the threshold for full membership, the threshold for full non-membership, and the crossover point (Ragin, 2000) to structure calibration.

The calibration of measures with the direct method can be carried out with the software program fsQCA (Ragin et al., 2007), which contains commands for automatically perform this transformation of variables.

CONSTRUCTION AND REFINEMENT OF THE TRUTH TABLE

The third step in the five-step approach recommended to perform fsQCA is the construction and refinement of the truth table.

This table is a data matrix that consists of 2n rows, where n denotes the number of causal conditions selected. Each row of the truth table displays a specific combination of causal conditions as well as the number of cases with fuzzy set membership scores greater than 0.5.

The full truth table lists all possible combinations of causal conditions with some rows showing many, some only a few, and some no empirical cases (Fiss, 2011).

To perform a fuzzy set analysis, the truth table needs preliminary refinement based on two criteria: frequency and consistency (Ragin, 2008a).

Frequency indicates the extent to which the combinations of causal conditions as expressed in the rows of the truth table are empirically represented. The definition of a frequency cut-off ensures that the assessment of the fuzzy subset relations occurs only for those configurations exceeding a specific minimum number of cases.

Consistency refers to the extent to which cases correspond to the set relationships expressed in a solution. It assesses the degree to which the cases sharing a given causal condition, or combinations of causal conditions, agree in exhibiting the outcome in question (Fiss, 2011).

Consistency is calculated by dividing the number of cases sharing a given combination of causal conditions and the outcome, from the number of cases that exhibit the same combination but do not show the outcome. Previous research recommends that the minimum acceptable consistency level should be set at 0.80 (Ragin, 2008a).

ANALYSIS OF THE TRUTH TABLE

In the fourth step, the truth table is examined.

Data analysis is performed with the fsQCA 3.0 software program (Ragin et al., 2016).

EVALUATION AND INTERPRETATION OF RESULTS

The fifth step in the five-step approach recommended to perform fsQCA, evaluation and interpretation of results, is presented in chapter 6.

CHAPTER 6

CASE STUDY AT NOVARTIS

Novartis has been chosen to this case study as it is one of the leading organizations in the world, leading the pharmaceutical market worldwide and in Portugal, supported by a strong organizational culture where it aims to build a diverse and inclusive workplace where everyone can be its best and true selves, so that together Novartis can discover more, reach underserved communities, and reimagine medicine.

Due to its importance, diversity and inclusion is embedded in Novartis Code of Ethics and is endorsed at the highest level in the company by the CEO and the Executive Committee of Novartis.

In this chapter Novartis is presented, followed by the evaluation and interpretation of the results of the qualitative and quantitative methods applied in this case study at Novartis.

$6.1 - NOVARTIS^{12}$

As a leading pharmaceutical company, Novartis leverages cutting-edge science and digital technologies to develop transformative treatments in areas of major unmet medical need.

In the search for new drugs, Novartis is consistently one of the world's leading companies investing in research and development.

Novartis products reach more than 800 million people worldwide, and it has a focus on finding innovative ways to expand access to innovative treatments.

Novartis' goal is to redefine medicine to improve and extend people's lives. Its vision is to be a trusted leader in changing medical practice. The strategy is to focus Novartis as a leading pharmaceutical company based on advanced therapy platforms and data science.

In 2018, Novartis had net sales of \$51.9 billion while net income was \$12.6 billion.

The Group companies, headquartered in Basel, Switzerland, had 125.000 full-time equivalent employees as of December 31st, 2018, and its products are sold in more than 150 countries worldwide.

The Group currently comprises two global businesses units. Innovative Medicines is centered on innovative patented protected prescription medicines, while Sandoz is focused on generics and biosimilars.

The Novartis business units are supported by different cross-departmental organizational units: the Novartis Institutes for BioMedical Research (NIBR), Global Drug Development (GDD),

¹² novartis-annual-report-2018-en.pdf

Novartis Technical Operations (NTO), and Novartis Business Services (NBS). The financial results of these organizational units are included in the results of the departments for which their work is carried out.

The Novartis Institute for BioMedical Research (NIBR) is the innovation engine of Novartis, which conducts drug discovery research and early clinical development studies for the Innovative Medicines division and works with the Sandoz division. Approximately 6.000 full-time equivalent scientists and staff at NIBR work in locations in the United States, Switzerland, and China to discover new drugs for various diseases.

Global Drug Development (GDD) oversees all drug development activities for the Innovative Medicines Division and the Sandoz Division's biosimilars portfolio. GDD is partnering with NIBR, Innovative Medicines and Sandoz to execute Novartis overall pipeline strategy and has an enterprise approach to pipeline portfolio management.

GDD encompasses centralized global functions such as Regulatory Affairs and Global Development Operations, as well as global development units focused on business franchises. GDD has around 11.000 full-time equivalent employees worldwide.

Novartis Technical Operations (NTO) was founded to centralize the management of production processes and the supply chain in the Innovative Medicines and Sandoz business units, and to further improve efficiency.

NTO is expected to optimize capacity planning, compliance with quality standards, and reduce costs by simplifying, standardizing, and optimizing external spending.

Centralization is also intended to improve the ability to develop next-generation technologies, implement continuous manufacturing and share best practices across departments. NTO has approximately 25.200 full-time equivalent employees and 64 manufacturing facilities in the Innovative Medicines and Sandoz Divisions.

Novartis Business Services (NBS), a Novartis Shared Services organization, offers integrated solutions for the different Novartis business areas and units worldwide.

NBS is committed to making Novartis more efficient and effective by simplifying and standardizing services in six service areas namely human resources, real estate and facility services, procurement, information technology, commercial and medical support activities, and financial reporting and accounting.

NBS has approximately 10.500 full-time equivalents in more than 30 countries. NBS is working to leverage the full reach of Novartis to create enterprise-wide value and free resources to invest in innovation and the product pipeline.

NBS continues to transfer delivery of selected services to its five Global Service Centers in Dublin, Ireland; Hyderabad, India; Kuala Lumpur, Malaysia; Mexico City, Mexico; and Prague, Czech Republic.

NOVARTIS INNOVATIVE MEDICINES DIVISION

The Innovative Medicines Division is a global leader in offering innovation-driven, patentprotected drugs for patients and doctors. The Innovative Medicines division research, develops, manufactures, markets, and sells patented drugs, and consists of two global businesses: Novartis Oncology and Novartis Pharmaceuticals.

The Novartis Oncology division is responsible for the commercialization of products in the areas of cancer and hematological diseases.

The Novartis Pharmaceuticals division is divided into different global divisions, which are responsible for commercializing various products in their respective therapeutic areas. These divisions are Ophthalmology; Neuroscience; Immunology, Hepatology and Dermatology (IHD); Respiratory; Cardio, Renal and Metabolism (CRM); and Established Medicines (EM).

The Innovative Medicines division is the largest contributor among the Novartis divisions generating consolidated net sales of US \$34.9 billion in 2018, representing 67% of Group sales.

The Innovative Medicines Division's product portfolio includes more than 60 major marketed products, many of which are leaders in their respective therapeutic areas.

SANDOZ DIVISION

The Sandoz Division develops, manufactures, and sells prescription drugs and active pharmaceutical ingredients that are not protected by valid and enforceable third-party patents.

Sandoz is divided into three franchises worldwide namely the Retail Generics; Anti-infectives; and Biopharmaceuticals.

At Retail Generics, Sandoz develops, produces, and markets active ingredients and finished dosage forms of pharmaceuticals to third parties. Retail Generics includes the areas of cardiovascular, central nervous system, dermatology, gastrointestinal and hormone therapy, metabolism, oncology, ophthalmology, pain, and respiratory tract as well as the finished dosage form of anti-infectives, which are sold to third parties.

At Anti-Infectives, Sandoz manufactures and supplies active pharmaceutical ingredients and intermediates, mainly antibiotics, for internal use by retail generics and for sale to third party customers.

In biopharmaceuticals, Sandoz develops, manufactures, and markets protein or other biotechnology products, including biosimilars, and provides biotechnology manufacturing services to other companies.

NOVARTIS CORPORATE RESPONSIBILITY¹³

Novartis is taking steps to continue building trust with key stakeholders and society.

The aim is to adhere to the highest ethical standards, be part of the solution for pricing and access to medicines, help address global health challenges, and be a responsible citizen everywhere it works.

Novartis continues to anchor a principles-based approach to compliance through the Professional Practices Policy (P3), which replaced separate compliance guidelines for departments in 2018, ensuring that employees act in the best interests of patients, physicians, and Novartis.

To build trust in society, it is important to act responsibly wherever Novartis does business.

This includes minimizing the environmental impact, risk management in the supply chain, respect for human rights, and transparency.

Novartis has adopted a more ambitious strategy for environmental sustainability in 2030, which aims for carbon neutrality, plastic neutrality, and sustainability of water.

Steps have already been taken to reduce the risk of environmental risks, through the conduction of a series of comprehensive supplier audits and appropriate actions. For example, in the Hyderabad region of India, Novartis is severing relationships with six suppliers who do not adhere to the organization's Supplier Code and is working with nine suppliers to improve their performance in critical areas such as operational efficiency, waste management and use of natural resources. These suppliers share the values of environmental responsibility and employee health and safety.

In October 2018, a third-party risk management program was launched in Mexico. The program was rolled out globally in 2019 in a phased regional approach, starting in the Americas (including the United States) and moving to Asia Pacific and Europe later in the year.

After completing the human rights impact assessments in its own operations in Egypt, Turkey, China and Malaysia, Novartis has established strict guidelines and solid processes to identify and manage potential human rights risks.

It also identified common areas of risk that will require additional follow-up in upcoming years.

For example, at the local level, including representatives of patient groups, local communities, health authorities and third party partners, it was highlighted that a more regular and broader involvement and consultation of external stakeholders was needed in order to gain a better understanding of the issues, to ensure that formal grievance mechanisms and processes were in place for communities living near manufacturing facilities, and to address the risks associated with outsourced labor in some markets.

¹³ novartis-in-society-report-2018.pd.pdf
6.2 – EVALUATION AND INTERPRETATION OF QUESTIONNAIRE RESULTS

The fifth and final step in the five-step approach recommended to perform fsQCA, presented in chapter 5, is the evaluation and interpretation of the results, which implies the analysis of necessary and sufficient conditions to produce an outcome.

Another concept that needs to be introduced in this fifth step is coverage. To assess the relative importance of configurations of causal conditions for an outcome, researchers should inspect coverage values which indicates the percentage of cases that explain a given pathway towards the outcome in question (Fiss, 2011; Ragin, 2000, 2008a).

The fsQCA reports two coverage scores—the raw coverage and the unique coverage— to assess the empirical importance of the solutions.

KEY CONCEPTS FOR RESULTS INTERPRETATION

A necessary condition is a condition (X) that is always present when the result (Y) occurs, that is, the result cannot occur without the occurrence of the condition in question. But X can occur without the occurrence of Y, in other words, X encompasses Y.

For example, the occurrence of A and B leads to Y to occur, and the occurrence of A and C leads to Y to occur. It is concluded that A is an isolated condition for the occurrence of Y, but isolated is not enough. For example, rice is a necessary condition for making paella, but it is not enough.

A perfect case of X as a necessary condition of Y is presented in Figure 12.



Figure 12 – Situation in which X is a necessary condition of Y in a perfect way.

Source: self-elaboration

In real terms, perfection is not easy to find, and it is more common to find situations like the example of necessary condition presented in Figure 13.

Figure 13 – Example of necessary condition



Source: self-elaboration

If we have 27 individuals who exhibit Courage, with 16 exhibiting Implementation, will the Courage condition be necessary for the existence of Implementation?

To answer this question is needed to measure consistency and coverage.

$$Consistency = \frac{14}{(14+2)} = 0.875 = 87.5\%$$

This value for consistency indicates that 87.5% of the individuals who present Implementation, evidenced the presence of Courage.

To assess Coverage, it is needed to do the following calculation:

$$Coverage = \frac{14}{(13+14)} = 0.519 = 51.9\%$$

It indicates that from the total number of individuals who showed Courage, 51.9% exhibited Implementation as well.

Schneider, M. at al (2010) consider that coverage can be read as a measure of triviality, which is, the greater the coverage the less the triviality. The authors consider non-trivial conditions whose coverage is greater than 60%.

In terms of mathematical definition, the consistency rate of causal condition X is defined by equation 1.

Equation 1 – Consistency rate of causal condition X

Consistency
$$(Yi \le Xi) = \frac{\sum_{i=1}^{l} \min(xi, yi)}{\sum_{i=1}^{l} yi}$$

In Boolean definition, $Xi \cap Yi$.

Y is defined as the outcome and I is defined as the number of cases, so the coverage of a necessary causal condition X is given by equation 2.

Equation 2 – Coverage of a necessary causal condition X

Coverage (Yi
$$\leq$$
 Xi) = $\frac{\sum_{i=1}^{l} \min(x_i, y_i)}{\sum_{i=1}^{l} x_i}$

"A causal condition is called necessary if the instances of the outcome constitute a subset of the instances of the causal condition" (Ragin, 2006, p.297).

Usually, the data does not fully verify the established condition. In the probabilistic versions of fsQCA, consistency is used to quantify the percentage of observations that confirm the rule.

As explained in 5.5., the measure of consistency of Ragin (2006) measures the extent of cases that do not observe the defined rule and gives greater weight to bigger failures than to small failures (this is because the system is not binary but calibrated).

If we admit that X is a necessary condition of Y, then the absences of X that arise as a condition of Y will be penalized. In the following figure (Figure 14), situation B would be more penalized than A.





Source: self-elaboration

Overall, the cut-off point for consistency should be 0.9 (Ragin, 2006), while for complex cases, 0.8 can be used.

A sufficient condition is a condition where the result (Y) occurs whenever the condition X is present, then X is said to be sufficient condition for Y, although Y may occur in relation to other conditions.

If X occurs, then Y occurs, but Y can occur without X occurring.

"A causal condition can be considered sufficient to lead to the outcome if each fuzzy membership value of the causal condition X does not exceed the fuzzy membership value of the outcome Y" (Ragin, 2006, p.297).

To obtain sufficient conditions it is necessary to create and model the truth table, presented in 5.5, which is based on consistency and combination of conditions because rarely an isolated condition X is sufficient for Y.

The cutoff consistency for the truth table is set at 0.8.

Queues with lower values of belonging to the solution must be excluded. This solution is based on Boolean logic.

So, for the interpretation of the results, regarding coverage and consistency, there five key concepts to be considered.

First is raw coverage, defined as the proportion of positive cases explained by the proposed combination.

Second is Unique Coverage, which is the proportion of all positive cases explained by this combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis).

Raw Coverage and Unique Coverage are used to select combinations of sufficient conditions and eliminate others, but specifically when Unique Coverage tends to 0.

Third is consistency, which is the degree of belonging to the combination in question, or the degree that measures the belonging of the combination as a subset of the result.

Fourth concept is solution coverage defined as the percentage of Y cases explained by the model, including all combinations.

Equation 3 – Solution coverage

Coverage
$$(Xi \le Yi) = \frac{\sum_{i=1}^{l} \min(xi, yi)}{\sum_{i=1}^{l} xi}$$

Fifth is Solution Consistency, defined as the percentage in which the solution belongs to a subset of the result.

Equation 4 – Solution consistency

Consistency
$$(Xi \le Yi) = \frac{\sum_{i=1}^{I} \min(xi, yi)}{\sum_{i=1}^{I} yi}$$

The cutoff value for the solution consistency is 0.80.

The last concept used for the interpretation of the results are the negated sets, or the absence of a set. Negated sets are denoted by ~A.

The membership of a case in a negated set can be calculated by taking one minus the membership score.

For example, if we have a case with a membership score of 0.75 in the set of people who are European, we can negate the set, so that it is the set of people who are not European.

The case would have a membership score in the negated set of 1 - 0.75 = 0.25.

6.3 – RESULTS

This section presents the results of the influence of Diversity and Inclusion on Organizational Performance, the results of the influence of Values and Behaviors on Organizational Performance, and the results of the influence of all the dimensions of D&I and V&B over each dimension of OP.

In this analysis, other theoretical concepts described in previous sections are used.

Full membership (value equals to 1) and full non-membership (value equals to 0) represent qualitative states. The continuum between these two states reflects varying degrees of membership in a fuzzy set ranging from 'more out' (values closer to 0) to 'more in' (values closer to 1) (Ragin, 2000, 2008a).

A membership score of 0.5 denotes the cases with the maximum ambiguity about their membership in the set, the cross-over point.

6.3.1 – DIVERSITY AND INCLUSION

The influence of Diversity and Inclusion over the different dimensions of Organizational Performance can be measured through the analysis of necessary conditions and sufficient conditions.

6.3.1.1 – ANALYSIS OF NECESSARY CONDITIONS

Considering the indicators Consistency and Coverage presented in the following table, Diversity is not a necessary condition for Execution as fs_diversity has a consistency < 0.8.

Simultaneously, not having Diversity is not a necessary condition for Execution as ~fs_diversity has a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Outcome variable:	fs_Execution	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.672065	0.700422
~fs_diversity	0.574899	0.539924
fs_inclusion	0.797571	0.778656
~fs_inclusion	0.412955	0.412955

Table 14 – Analysis of D&I necessary conditions for Execution

Source: fsQCA 3.0

Considering the same indicators Consistency and Coverage presented in the previous table, Inclusion can be considered as a necessary condition for Execution as fs_inclusion has a consistency = 0.8 and a coverage of 0.78 which means that of the total number of associates that showed Inclusion, 78% exhibited Execution as well.

Simultaneously, not having Inclusion is not a necessary condition for Execution as ~fs_inclusion has a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

So, for the OP dimension Execution, it can occur without the occurrence of Diversity, but Execution cannot occur without the occurrence of Inclusion.

Considering the indicators Consistency and Coverage presented in the following table, both Diversity and Inclusion are necessary conditions for Quality to occur as fs_diversity has a consistency = 0.8, and fs_inclusion has a consistency > 0.8.

Simultaneously, not having Diversity and not having Inclusion are not a necessary condition for Quality as both \sim fs_diversity and \sim fs_inclusion have a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Outcome variable:	fs_Quality	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.800000	0.911392
~fs_diversity	0.574074	0.589354
fs_inclusion	0.840741	0.897233
~fs_inclusion	0.525926	0.574899

	Table 15 – Analysis	of D&I necessary c	onditions for Quality
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Source: fsQCA 3.0

Regarding Coverage presented in the previous table, both dimensions have remarkably high values, meaning that of the total number of associates that showed Diversity, 91% also exhibited Quality, and of the total number of associates that showed Inclusion, 90% exhibited Quality as well.

So, for the OP dimension Quality, it cannot occur without the occurrence of Diversity and Inclusion.

Diversity and Inclusion are necessary conditions for Quality.

As for the OP dimension Quality, both Diversity and Inclusion are necessary conditions for Innovation to occur as fs_diversity has a consistency > 0.8, and fs_inclusion has a consistency > 0.8.

Simultaneously, not having Diversity and not having Inclusion are not a necessary condition for Innovation as both \sim fs_diversity and \sim fs_inclusion have a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Outcome variable:	fs_innovation		
Conditions tested:			
	Consistency	Coverage	
fs_diversity	0.863813	0.936709	
~fs_diversity	0.463035	0.452471	
fs_inclusion	0.898833	0.913043	
~fs_inclusion	0.470817	0.489879	

Source: fsQCA 3.0

Regarding the indicator Coverage presented in the previous table, both dimensions have remarkably high values, meaning that of the total number of associates that showed Diversity, 94% also exhibited Innovation, and of the total number of associates that showed Inclusion, 91% exhibited Innovation as well.

So, for the OP dimension Innovation, it cannot occur without the occurrence of Diversity and Inclusion.

Diversity and Inclusion are necessary conditions for Innovation.

Considering the indicators Consistency and Coverage presented in the following table, Diversity is a necessary condition for Productivity as fs_diversity has a consistency > 0.8, and a coverage of 0.98 which means that almost all associates that showed Diversity exhibited Productivity as well.

Simultaneously, not having Diversity is not a necessary condition for Productivity as \sim fs_diversity has a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Outcome variable:	fs_prod	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.869403	0.983122
~fs_diversity	0.432836	0.441065
fs_inclusion	0.779851	0.826087
~fs_inclusion	0.492537	0.534413

Table 17 – Analysis of D&I necessary conditions for Productivity

Source: fsQCA 3.0

Considering the same indicators Consistency and Coverage presented in the previous table, Inclusion cannot be considered as a necessary condition for Productivity as fs_inclusion has a consistency < 0.8.

Simultaneously, not having Inclusion is not a necessary condition for Productivity as \sim fs_inclusion has a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded. So, for the OP dimension Productivity, it cannot occur without the occurrence of Diversity, but it can occur without the dimension Inclusion.

Diversity is a necessary condition for Productivity, and almost all associates that showed Diversity also exhibited Productivity.

Considering the indicators Consistency and Coverage presented in the following table, both Diversity and Inclusion are not necessary conditions for People as fs_diversity and fs_inclusion has a consistency < 0.8.

Simultaneously, not having Diversity or Inclusion are not necessary conditions for People as ~fs_diversity and ~fs_inclusion have a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Outcome variable:	fs_people	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.724409	0.776371
~fs_diversity	0.531496	0.513308
fs_inclusion	0.787402	0.790514
~fs_inclusion	0.476378	0.489879

Table 18 – Analysis of D&I necessary conditions for People

Source: fsQCA 3.0

The OP dimension People can occur without the occurrence of Diversity and Inclusion.

6.3.1.2 – ANALYSIS OF SUFFICIENT CONDITIONS

Regarding the analysis of sufficient conditions, it is necessary to analyze the indicators Raw Coverage as it shows the proportion of positive cases explained by the proposed combination; and Unique Coverage, defined as the proportion of all positive cases explained by this combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis).

Raw Coverage and Unique Coverage are used to select combinations of sufficient conditions and eliminate others, but specifically when Unique Coverage tends to 0.

As for the necessary conditions, the indicator Consistency reflects the degree of belonging to the combination in question; degree that measures the belonging of the combination as a subset of the result.

The cutoff value for the solution consistency is 0.80.

Considering the indicator Consistency presented in the following table, Diversity and Inclusion is a sufficient condition for Execution as fs_diversity* fs_inclusion has a consistency > 0.8.

Table 19– Analysis of D&I sufficient conditions for Execution

Outcome variable:	fs_Execution		
	raw	unique	
	coverage	coverage	consistency
fs_diversity*fs_inclusion	0.672065	0.672065	0.809756
solution coverage:	0.672065		
solution consistency:	0.809756		

Source: fsQCA 3.0

Execution occurs whenever the condition Diversity and Inclusion is present, then **Diversity and Inclusion is said to be a sufficient condition for Execution**, although Execution may occur in relation to other conditions.

If Diversity and Inclusion occurs, then Execution occurs, but Execution can occur without Diversity and Inclusion occurring.

Considering the indicator Consistency presented in the following table, Diversity is the only sufficient condition for Quality as fs diversity has a consistency > 0.8.

Table 20 – Analysis of D&I sufficient conditions for Quality

Outcome variable:	fs_Quality		
	raw	unique	
	coverage	coverage	consistency
fs_diversity	0.8	0.8	0.911392
solution coverage:	0.8		
solution consistency:	0.911392		

Source: fsQCA 3.0

Quality occurs whenever the condition Diversity is present, then **Diversity is said to be a sufficient condition for Quality**, although Quality may occur in relation to other conditions. If Diversity occurs, then Quality occurs, but Quality can occur without Diversity occurring.

Inclusion is not a sufficient condition for Quality.

As for Quality and considering the indicator Consistency presented in the following table, Diversity is the only sufficient condition for Innovation as fs_diversity has a consistency > 0.8.

Innovation occurs whenever the condition Diversity is present, then **Diversity is said to be a sufficient condition for Innovation**, although Innovation may occur in relation to other conditions.

If Diversity occurs, then Innovation occurs, but Innovation can occur without Diversity occurring.

Outcome variable:	fs_innovation	fs_innovation	
	raw	unique	
	coverage	coverage	consistency
fs_diversity	0.863813	0.863813	0.936709
solution coverage:	0.863813		
solution consistency:	0.936709		

Table 21 – Analy	sis of D&I sufficient conditions f	or Innovation

Source: fsQCA 3.0

Inclusion is not a sufficient condition for Innovation.

As in previous results the indicator raw coverage is equal to the indicator unique coverage, as for these results there is only one proposed combination of results, which is in the case of Innovation, is Diversity only.

As the Raw Coverage gives the proportion of positive cases explained by the proposed combination, and as Diversity is a sufficient condition both for Quality and Innovation, there are more positive cases explained by Diversity in the case of the dimension Innovation than the number of positive cases explained by Diversity in the case of the dimension Quality.

As for Quality and Innovation and considering the indicator Consistency presented in the following table, Diversity is the only sufficient condition for Productivity as fs_diversity has a consistency > 0.8.

Productivity occurs whenever the condition Diversity is present, then **Diversity is said to be a sufficient condition for Productivity**, although Productivity may occur in relation to other conditions. If Diversity occurs, then Productivity occurs, but Productivity can occur without Diversity occurring. **Inclusion is not a sufficient condition for Productivity**.

Outcome variable:	fs_prod		
	raw	unique	
	coverage	coverage	consistency
fs_diversity	0.869403	0.869403	0.983122
solution coverage:	0.869403		
solution consistency:	0.983122		

Table 22 – A	Analysis of D&I	sufficient of	conditions fo	or Productivity
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Source: fsQCA 3.0

As the Raw Coverage gives the proportion of positive cases explained by the proposed combination, and as Diversity is a sufficient condition for three of the OP dimensions, namely Quality, Innovation and Productivity, there are more positive cases explained by Diversity in the case of the dimension Productivity than the number of positive cases explained by Diversity in the case of the dimensions Quality and Innovation.

As for Execution and considering the indicator Consistency presented in the following table, Diversity and Inclusion is a sufficient condition for People as fs_diversity* fs_inclusion has a consistency > 0.8.

Table 23 – Analysis of D&I sufficient conditions	for People
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Outcome variable:	fs_people		
	raw	unique	
	coverage	coverage	consistency
fs_diversity*fs_inclusion	0.665354	0.665354	0.82439
solution coverage:	0.665354		
solution consistency:	0.82439		

Source: fsQCA 3.0

People occurs whenever the condition Diversity and Inclusion is present, then **Diversity and Inclusion is said to be a sufficient condition for People**, although People may occur in relation to other conditions.

If Diversity and Inclusion occurs, then People occurs, but People can occur without Diversity and Inclusion occurring.

As in previous results the indicator raw coverage is equal to the indicator unique coverage, as for these results there is only one proposed combination of results, which is in the case of People the combination of Diversity and Inclusion.

As the Raw Coverage gives the proportion of positive cases explained by the proposed combination, and as Diversity and Inclusion is a sufficient condition for People, only 2/3 of positive cases are explained by the proposed combination, which is the lower value for all the OP dimensions.

6.3.2 – VALUES AND BEHAVIORS

The influence of Values and Behaviors over the different dimensions of Organizational Performance can be measured through the analysis of necessary conditions and sufficient conditions.

6.3.2.1 – ANALYSIS OF NECESSARY CONDITIONS

Considering the indicators Consistency and Coverage presented in the following table, from the six dimensions of V&B, only Excellence and Courage are necessary condition for Execution as fs_Excellence and fs_Courage has a consistency > 0.8.

Outcome variable:	fs_Execution	
Conditions tested:		
	Consistency	Coverage
fs_CT	0.700405	0.714876
~fs_CT	0.522267	0.500000
fs_Excellence	0.931174	0.855019
~fs_Excellence	0.315789	0.337662
fs_Collab	0.736842	0.728000
~fs_Collab	0.457490	0.452000
fs_achievment	0.765182	0.649485
~fs_achievment	0.481781	0.569378
fs_Courage	0.838057	0.787072
~fs_Courage	0.279352	0.291139
fs_integrity	0.724696	0.806306
~fs_integrity	0.388664	0.345324

Table 24 – Analysis of V&B necessary conditions for Execution

Source: fsQCA 3.0

Simultaneously, all the other conditions tested, including the negated sets, or the absence of a set, have a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Regarding the indicator Coverage presented in the previous table, both dimensions have remarkably high values, meaning that of the total number of associates that showed Excellence, 86% also exhibited Execution, and of the total number of associates that showed Courage, 78% exhibited Execution as well.

Integrity as a dimension of V&B has been excluded as it has a consistency < 0.8, but regarding coverage, the total number of associates that showed Integrity, more than 80% also exhibited Execution.

Execution cannot occur without the occurrence of Excellence and Courage. **Excellence and Courage are necessary conditions for Execution**.

Considering the indicators Consistency and Coverage presented in the following table, from the six dimensions of V&B, only Integrity is not a necessary condition for Quality as fs_Integrity has a consistency < 0.8. All negated sets are not necessary conditions.

Outcome variable:	fs_Quality	
Conditions tested:		
	Consistency	Coverage
fs_CT	0.818519	0.913223
~fs_CT	0.603704	0.631783
fs_Excellence	0.907407	0.910781
~fs_Excellence	0.437037	0.510823
fs_Collab	0.859259	0.928000
~fs_Collab	0.477778	0.516000
fs_achievment	0.885185	0.821306
~fs_achievment	0.422222	0.545455
fs_Courage	0.800000	0.821293
~fs_Courage	0.403704	0.459916
fs_integrity	0.785185	0.954955
~fs_integrity	0.503704	0.489209

Table 25 – Analysis of V&B necessary conditions for Quality

Source: fsQCA 3.0

Regarding the indicator Coverage presented in the previous table, all dimensions have high values, meaning that of the total number of associates that showed the 6 V&B, more than 80% also exhibited Quality.

From the total number of associates that showed Creative Thinking, 91% also exhibited Quality; of the total number of associates that showed Excellence, 91% also exhibited Quality; of the total number of associates that showed Collaboration, 93% also exhibited Quality; the total number of associates that showed Achievement, 82% also exhibited Quality; the total number of associates that showed Courage, 82% also exhibited Quality.

As for Execution, Integrity as a dimension of V&B has been excluded as it has a consistency < 0.8, but regarding coverage, of the total number of associates that showed Integrity, more than 95% also exhibited Quality.

Regarding the negative sets, as already mentioned, they are excluded as the have a Consistency < 0.8, but regarding coverage, of the total number of associates not showing Creative Thinking, almost 2/3 exhibited Quality.

So, for the OP dimension Quality, it cannot occur without the occurrence of Creative Thinking, Excellence, Collaboration, Achievement and Courage.

Creative Thinking, Excellence, Collaboration, Achievement and Courage are necessary conditions for Quality.

Regarding the indicators Consistency and Coverage presented in the following table, from the six dimensions of V&B, Creative Thinking, Excellence, Collaboration and Achievement are necessary condition for Innovation as fs_CT, fs_Excellence, fs_Collab, and fs_achievement has a consistency > 0.8. Simultaneously, all the other conditions tested, including the negated sets, or the absence of a set, have a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution are excluded which is the case of the OP dimensions Courage and Integrity.

Considering the indicator Coverage presented in the following table, Creative Thinking has a coverage of 100% which means that of the total number of associates that showed Creative Thinking, all of them also exhibited Innovation.

From the other V&B dimensions that are necessary conditions for Innovation, of the total number of associates that showed Excellence, 80% also exhibited Innovation; of the total number of associates that showed Collaboration, 85% also exhibited Innovation; and of the total number of associates that showed Achievement, 82% also exhibited Innovation.

Courage and Integrity as a dimension of V&B has been excluded as it has a consistency < 0.8, but regarding coverage, of the total number of associates that showed Integrity, 80% also exhibited Innovation.

Regarding the negative sets, as already mentioned, they are excluded as the have a Consistency < 0.8, but regarding coverage, of the total number of associates not showing Courage or Integrity, almost 60% exhibited Innovation.

Outcome variable:	fs_innovation	
Conditions tested:		
	Consistency	Coverage
fs_CT	0.941634	1.000000
~fs_CT	0.470817	0.468992
fs_Excellence	0.836576	0.799257
~fs_Excellence	0.459144	0.510822
fs_Collab	0.828794	0.852000
~fs_Collab	0.521401	0.536000
fs_achievment	0.929961	0.821306
~fs_achievment	0.342412	0.421053
fs_Courage	0.673152	0.657795
~fs_Courage	0.544747	0.590717
fs_integrity	0.688716	0.797297
~fs_integrity	0.634241	0.586331

Table 26 – Analysis of V&B necessary conditions for Innovation

Source: fsQCA 3.0

Innovation cannot occur without the occurrence of Creative Thinking, Excellence, Collaboration and Achievement.

Creative Thinking, Excellence, Collaboration and Achievement are necessary conditions for Innovation.

Regarding the indicators Consistency and Coverage presented in the following table, from the six dimensions of V&B, Creative Thinking, Collaboration and Achievement are necessary condition for Productivity as fs_CT, fs_Collab, and fs_achievement has a consistency > 0.8.

Simultaneously, all the other conditions tested, including the negated sets, or the absence of a set, have a consistency < 0.8. Queues with lower values of belonging to the solution are excluded which is the case of the OP dimensions Excellence, Courage, and Integrity.

From the different dimensions of V&B, Achievement has a Consistency of almost 1, which means that it indicates that 99% of the individuals who present Achievement, evidenced the presence of Productivity.

From the different V&B dimensions that are necessary conditions for Productivity, of the total number of associates that showed Creative Thinking, 93% also exhibited Productivity; of the total number of associates that showed Collaboration, 90% also exhibited Productivity; and of the total number of associates that showed Achievement, 91% also exhibited Productivity.

Outcome variable:	fs_prod	
Conditions tested:		
	Consistency	Coverage
fs_CT	0.839552	0.929752
~fs_CT	0.444030	0.461240
fs_Excellence	0.757463	0.754647
~fs_Excellence	0.511194	0.593074
fs_Collab	0.843284	0.904000
~fs_Collab	0.417910	0.448000
fs_achievment	0.988806	0.910653
~fs_achievment	0.320895	0.411483
fs_Courage	0.638060	0.650190
~fs_Courage	0.440298	0.497890
fs_integrity	0.641791	0.774775
~fs_integrity	0.526119	0.507194

Table 27 – Analysis of V&B necessary conditions for Productivity

Source: fsQCA 3.0

Productivity cannot occur without the occurrence of Creative Thinking, Collaboration and Achievement.

Creative Thinking, Collaboration, Achievement are necessary conditions for Productivity.

Considering the indicators Consistency and Coverage presented in the following table, from the six dimensions of V&B, only Creative Thinking is not a necessary condition for People as fs_CT has a consistency < 0.8. All negated sets are not necessary conditions.

Considering the indicator Coverage presented in the same table, only Courage and Integrity have a coverage of 90% which means that of the total number of associates that showed Courage or Integrity, almost 90% of them also exhibited the OP dimension People.

From the other V&B dimensions that are necessary conditions for People, of the total number of associates that showed Excellence, 84% also exhibited the OP dimension People, and of the total number of associates that showed Collaboration also 84% exhibited People.

On the other side, despite being a necessary condition, of the total number of associates that showed Achievement, only 71% also exhibited the OP dimension People.

Creative Thinking as a dimension of V&B has been excluded as it has a consistency < 0.8.

People cannot occur without the occurrence of Excellence, Collaboration, Achievement, Courage, and Integrity.

Outcome variable:	fs_people	
Conditions tested:		
	Consistency	Coverage
fs_CT	0.751969	0.789256
~fs_CT	0.562992	0.554264
fs_Excellence	0.893701	0.843866
~fs_Excellence	0.346457	0.380952
fs_Collab	0.834646	0.848000
~fs_Collab	0.405512	0.412000
fs_achievment	0.814961	0.711340
~fs_achievment	0.346457	0.421053
fs_Courage	0.917323	0.885931
~fs_Courage	0.311024	0.333333
fs_integrity	0.838583	0.959459
~fs_integrity	0.417323	0.381295

Table 28 – Analysis of V&B necessary conditions for People

Source: fsQCA 3.0

Excellence, Collaboration, Achievement, Courage, and Integrity are necessary conditions for People.

6.3.2.2 – ANALYSIS OF SUFFICIENT CONDITIONS

Regarding the analysis of sufficient conditions, it is necessary to analyze the indicators Raw Coverage as it shows the proportion of positive cases explained by the proposed combination; and Unique Coverage, defined as the proportion of all positive cases explained by this combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis).

Raw Coverage and Unique Coverage are used to select combinations of sufficient conditions and eliminate others, but specifically when Unique Coverage tends to 0.

As for the necessary conditions, the indicator Consistency reflects the degree of belonging to the combination in question; degree that measures the belonging of the combination as a subset of the result. The cutoff value for the solution consistency is 0.80.

Considering the indicator Consistency presented in the following table, the existence of Excellence, Courage and Integrity is a sufficient condition for Execution as fs_Excellence* fs_Courage*fs_integrity has a consistency > 0.8.

Table 29 – Analysis of V&B sufficient conditions for Execution

Outcome variable:	fs_Execution		
	raw	unique	
	coverage	coverage	consistency
fs_Excellence*fs_Courage*fs_integrity	0.696356	0.696356	0.886598
solution coverage: 0.696356			
solution consistency: 0.886598			

Source: fsQCA 3.0

Execution occurs whenever the condition Excellence and Courage and Integrity is present, then **Excellence and Courage and Integrity is said to be a sufficient condition for Execution**, although Execution may occur in relation to other conditions.

If Excellence, Courage, and Integrity occurs, then Execution occurs, but Execution can occur without Excellence, Courage and Integrity occurring simultaneously.

A second OP dimension is Quality.

Consistency measures the degree of belonging to the combination in question, or in other words it is the degree that measures the belonging of the combination as a subset of the result.

Considering the indicator Consistency presented in the following table, there are 3 combinations of OP dimensions that are sufficient conditions for Quality to occur, as they have a consistency > 0.8:

fs_Excellence*fs_Courage*fs_integrity

fs_CT*fs_Excellence*~fs_Collab*fs_achievment*~fs_Courage*~fs_integrity

fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage*~fs_integrity

This means that the existence of Excellence, Courage and Integrity is a sufficient condition for Quality as fs_Excellence* fs_Courage*fs_integrity has a consistency > 0.8.

A second sufficient condition for Quality to occur is the combination of the existence of Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage, and Integrity as fs_CT*fs_Excellence*~fs_Collab*fs_achievment*~fs_Courage*~fs_integrity has a consistency > 0.8.

The third sufficient condition for Quality to occur is the combination of the existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage, and Integrity as $fs_CT^*fs_Excellence*fs_Collab*fs_achievment*^fs_Courage*^fs_integrity$ has a consistency > 0.8.

Table 30 – Analysis of V&B sufficient conditions for Quality

Outcome variable:	fs_Quality		
	raw	unique	
	coverage	coverage	consistency
fs_Excellence*fs_Courage*fs_integrity	0.714815	0.566667	0.994845
fs_CT*fs_Excellence*~fs_Collab*fs_achievment*~fs_Courage*~fs_integrity	0.292593	0.0444444	0.849462
fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage*~fs_integrity	0.337037	0.0851852	0.98913
solution coverage: 0.948148			
solution consistency: 0.948148			

Source: fsQCA 3.0

Quality occurs as for Execution whenever the condition Excellence, Courage and Integrity is present, then Excellence and Courage and Integrity is said to be a sufficient condition for Quality, although Execution may occur in relation to other conditions.

If Excellence, Courage, and Integrity occurs, then Quality occurs, but Quality can occur without Excellence, Courage and Integrity occurring simultaneously.

Quality also occurs whenever the combination of the existence of Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity is present, then the existence of Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity is said to be a sufficient condition for Quality, although Quality may occur in relation to the other two conditions.

If the existence of Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity occurs, then Quality occurs, but Quality can occur without the existence Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity occurring simultaneously.

Finally, Quality also occurs whenever the combination of the existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity is present, then the existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity is said to be a sufficient condition for Quality, although Quality may occur in relation to the other two conditions.

If the existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity occurs, then Quality occurs, but Quality can occur without existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity occurring simultaneously.

Considering that Unique Coverage is the proportion of all positive cases that explain a specific combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis), from the three combinations that are sufficient conditions **the condition Excellence**, Courage and Integrity has the highest Unique Coverage by far, so this is the solution that better 'explains' the outcome Quality.

The third OP dimension is Innovation, and for innovation there are only two sufficient conditions, both with a Consistency =1.

Considering the indicator Consistency presented in the following table, the existence of Creative Thinking, Excellence and Achievement is a sufficient condition for Innovation as fs_CT*fs_Excellence* fs_achievment has a consistency > 0.8.

Based on the same assumption, the existence of Creative Thinking, Collaboration and Achievement is a sufficient condition for Innovation as $fs_CT*fs_Collab* fs_achievment$ has a consistency > 0.8.

Table 31 – Analysis of V&B sufficient conditions for Innovation

Outcome variable:	ne variable: fs_innovation		
	raw	unique	
	coverage	coverage	consistency
fs_CT*fs_Excellence*fs_achievment	0.824903	0.0972763	1
fs_CT*fs_Collab*fs_achievment	0.817121	0.0894941	1
solution coverage: 0.914397			
solution consistency:: 1			

Source: fsQCA 3.0

Innovation occurs whenever the condition Creative Thinking, Excellence and Achievement is present, then Creative Thinking, Excellence and Achievement is said to be a sufficient condition for Innovation, although Innovation may occur in relation to other conditions.

If Creative Thinking, Excellence and Achievement occurs, then Innovation occurs, but Innovation can occur without Creative Thinking, Excellence and Achievement occurring simultaneously.

The result Innovation also occurs whenever the condition Creative Thinking, Collaboration and Achievement is present, then Creative Thinking, Collaboration and Achievement is said to be

a sufficient condition for Innovation, although Innovation may occur in relation to other conditions.

If Creative Thinking, Collaboration and Achievement occurs, then Innovation occurs, but Innovation can occur without Creative Thinking, Collaboration and Achievement occurring simultaneously.

As the values of Raw Coverage and Unique Coverage are similar in both conditions, both have the same weight as sufficient conditions for Innovation.

Regarding the OP dimension Productivity, there are also two sufficient conditions, the same as for the OP dimension Innovation.

Considering the indicator Consistency presented in the following table, the existence of Creative Thinking, Excellence and Achievement is a sufficient condition for Productivity as fs_CT*fs_Excellence* fs_achievment has a consistency > 0.8.

Based on the same assumption, the existence of Creative Thinking, Collaboration and Achievement is a sufficient condition for Productivity as $fs_CT*fs_Collab* fs_achievement$ has a consistency > 0.8.

Table 32 – Analysis of V&B sufficient conditions for Productivity

Outcome variable:	fs_prod		
	raw	unique	
	coverage	coverage	consistency
fs_CT*fs_Excellence*fs_achievment	0.753731	0.0671642	0.95283
fs_CT*fs_Collab*fs_achievment	0.772388	0.0858209	0.985714
solution coverage: 0.839552			
solution consistency: 0.957447			

Source: fsQCA 3.0

Productivity occurs whenever the condition Creative Thinking, Excellence and Achievement is present, then Creative Thinking, Excellence and Achievement is said to be a sufficient condition for Productivity, although Productivity may occur in relation to other conditions.

If Creative Thinking, Excellence and Achievement occurs, then Productivity occurs, but Productivity can occur without Creative Thinking, Excellence and Achievement occurring simultaneously.

Productivity also occurs whenever the condition Creative Thinking, Collaboration and Achievement is present, then Creative Thinking, Collaboration and Achievement is said to be a sufficient condition for Productivity, although Productivity may occur in relation to other conditions.

If Creative Thinking, Collaboration and Achievement occurs, then Productivity occurs, but Productivity can occur without Creative Thinking, Collaboration and Achievement occurring simultaneously.

As for the OP dimension Innovation, the values of Raw Coverage and Unique Coverage are similar in both conditions, both have the same weight as sufficient conditions for Productivity.

Regarding the OP dimension People, there are also two sufficient conditions.

Considering the indicator Consistency presented in the following table, the existence of Creative Thinking, Collaboration and Achievement is a sufficient condition for People as fs_CT*fs_Collab* fs_achievment has a consistency > 0.8.

Based on the same assumption, the existence of Excellence, Courage and Integrity is a sufficient condition for People as fs_Excellence*fs_Courage* fs_integrity has a consistency > 0.8.

Table 33 – Analysis of V&B sufficient conditions for People

Outcome variable:	fs_people		
	raw	unique	
	coverage	coverage	consistency
fs_CT*fs_Collab*fs_achievment	0.751969	0.141732	0.909524
fs_Excellence*fs_Courage*fs_integrity	0.76378	0.153543	1
solution coverage: 0.905512			
solution consistency: 0.923695			

Source: fsQCA 3.0

People occurs whenever the condition Creative Thinking, Collaboration and Achievement is present, then Creative Thinking, Collaboration and Achievement is said to be a sufficient condition for People, although People may occur in relation to other conditions.

If Creative Thinking, Collaboration and Achievement occurs, then People occurs, but People can occur without Creative Thinking, Collaboration and Achievement occurring simultaneously.

The result People also occurs whenever the condition Excellence, Courage and Integrity is present, then Excellence, Courage and Integrity is said to be a sufficient condition for People, although People may occur in relation to other conditions.

If Excellence, Courage, and Integrity occurs, then People occurs, but People can occur without Excellence, Courage and Integrity occurring simultaneously.

As the values of Raw Coverage and Unique Coverage are similar in both conditions, but the Solution Consistency defined as the percentage in which the solution belongs to a subset of the result is higher for the condition Excellence, Courage, and Integrity, from the two combinations that are sufficient conditions the condition Excellence, Courage and Integrity is the solution that better 'explains' the outcome People.

6.3.3 – INFLUENCE ON ORGANIZATIONAL PERFORMANCE DIMENSIONS

The influence of D&I and V&B together over the different dimensions of Organizational Performance can be measured through the analysis of necessary conditions and sufficient conditions.

6.3.3.1 – EXECUTION

In the organizational context, performance is usually defined as the extent to which an organizational member contributes to achieving the goals of the organization.

Execution is the OP dimension for Employee Performance.

Employee performance plays an important role for organizational performance. Employee performance is originally what an employee does or does not do. Performance of employees could include quantity of output, quality of output, timeliness of output, presence at work, cooperativeness (Gungor, 2011).

6.3.3.1.1 – ANALYSIS OF NECESSARY CONDITIONS

Considering the indicators Consistency and Coverage presented in the following table, from the two dimensions of D&I and the six dimensions of V&B, only Inclusion, Excellence and Courage are necessary condition for Execution as fs_inclusion, fs_Excellence and fs_Courage has a consistency > 0.8.

Simultaneously, all the other conditions tested, including the negated sets, or the absence of a set, have a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Regarding the indicator Coverage presented in the following table, Excellence and Integrity have high values, meaning that of the total number of associates that showed Excellence, 86% also exhibited Execution, and of the total number of associates that showed Integrity, 81% exhibited Execution as well.

Integrity as a dimension of V&B has been excluded as it has a consistency < 0.8, but regarding coverage, the total number of associates that showed Integrity, more than 80% also exhibited Execution.

Analysis of Necessa		
Outcome variable:	fs_Execution	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.672065	0.700422
~fs_diversity	0.574899	0.539924
fs_inclusion	0.797571	0.778656
~fs_inclusion	0.412955	0.412955
fs_CT	0.700405	0.714876
~fs_CT	0.522267	0.500000
fs_Excellence	0.931174	0.855019
~fs_Excellence	0.315789	0.337662
fs_Collab	0.736842	0.728000
~fs_Collab	0.457490	0.452000
fs_achievment	0.765182	0.649485
~fs_achievment	0.481781	0.569378
fs_Courage	0.838057	0.787072
~fs_Courage	0.279352	0.291139
fs_integrity	0.724696	0.806306
~fs_integrity	0.388664	0.345324

Source: fsQCA 3.0

Execution cannot occur without the occurrence of Inclusions, Excellence and Courage. **Inclusion, Excellence and Courage are the necessary conditions for Execution**.

All the other D&I and V&B dimensions are not necessary conditions for the OP dimension Execution to occur.

6.3.3.1.2 – ANALYSIS OF SUFFICIENT CONDITIONS

Regarding the analysis of sufficient conditions, it is necessary to analyze the indicators Raw Coverage as it shows the proportion of positive cases explained by the proposed combination; and Unique Coverage, defined as the proportion of all positive cases explained by this combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis).

Raw Coverage and Unique Coverage are used to select combinations of sufficient conditions and eliminate others, but specifically when Unique Coverage tends to 0.

As for the necessary conditions, the indicator Consistency reflects the degree of belonging to the combination in question; degree that measures the belonging of the combination as a subset of the result. The cutoff value for the solution consistency is 0.80.

Table 35 – Analysis of D&I and V&B sufficient conditions for Execution

Analysis of Sufficient Conditions			
Outcome variable:	fs_Execution		
All			
	raw	unique	
	coverage	coverage	consistency
fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage*fs_integrity	0.538462	0.538462	0.858065
solution coverage: 0.538462			
solution consistency: 0.858065			
Only D&I			
	raw	unique	
	coverage	coverage	consistency
fs_diversity*fs_inclusion	0.672065	0.672065	0.809756
solution coverage: 0.672065			
solution consistency: 0.809756			
Only V&B			
	raw	unique	
	coverage	coverage	consistency
fs_Excellence*fs_Courage*fs_integrity	0.696356	0.696356	0.886598
solution coverage: 0.696356			
solution consistency: 0.886598			

Source: fsQCA 3.0

Considering the indicator Consistency presented in the previous table, and for all variables of D&I and V&B, the existence of Inclusion, Creative Thinking, Excellence, Collaboration, Achievement Courage, and Integrity is a sufficient condition for Execution as fs_inclusion* fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage*fs_integrity has a consistency > 0.8.

Considering the indicator Consistency presented in the previous table for the variables of D&I only, Diversity and Inclusion is a sufficient condition for Execution as fs_diversity* fs_inclusion has a consistency > 0.8.

Considering the indicator Consistency presented in the previous table, the existence of Excellence, Courage and Integrity is a sufficient condition for Execution as fs_Excellence* fs_Courage*fs_integrity has a consistency > 0.8.

So, there are three sufficient conditions for Execution to occur.

First, regarding all variables of D&I and V&B, Execution occurs whenever the condition Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity is present, then Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity is said to be a sufficient condition for Execution, although Execution may occur in relation to other conditions as the following two concerning D&I only and V&B only.

If Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity occurs, then Execution occurs, but Execution can occur without Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity occurring.

Second, Execution occurs whenever the condition Diversity and Inclusion is present, then Diversity and Inclusion is said to be a sufficient condition for Execution, although Execution may occur in relation to other conditions.

If Diversity and Inclusion occurs, then Execution occurs, but Execution can occur without Diversity and Inclusion occurring.

Third, Execution occurs whenever the condition Excellence and Courage and Integrity is present, then Excellence and Courage and Integrity is said to be a sufficient condition for Execution, although Execution may occur in relation to other conditions.

If Excellence, Courage, and Integrity occurs, then Execution occurs, but Execution can occur without Excellence, Courage and Integrity occurring simultaneously.

6.3.3.2 – QUALITY

As an organizational performance indicator, quality is linked with answering to patients and customer needs, delivering solutions that meet the needs of health systems, and this is key for their loyalty and satisfaction.

6.3.3.2.1 – ANALYSIS OF NECESSARY CONDITIONS

Considering the indicators Consistency and Coverage presented in the following table, from the two dimensions of D&I and the six dimensions of V&B, only Integrity is not a necessary condition for Quality as fs_Integrity has a consistency < 0.8.

All negated sets are not necessary conditions.

Regarding the indicator Coverage presented in the next table, all dimensions have high values, meaning that of the total number of associates that showed the two D&I dimensions and the six V&B dimensions, more than 80% also exhibited Quality.

From the total number of associates that showed Diversity, 91% also exhibited Quality; of the total number of associates that showed Inclusion, 90% also exhibited Quality; of the total number of associates that showed Creative Thinking, 91% also exhibited Quality; of the total number of associates that showed Excellence, 91% also exhibited Quality; of the total number of associates that showed Collaboration, 93% also exhibited Quality; the total number of associates that showed Achievement, 82% also exhibited Quality; the total number of associates that showed Courage, 82% also exhibited Quality.

As for Execution, Integrity as a dimension of V&B has been excluded as it has a consistency < 0.8, but regarding coverage, of the total number of associates that showed Integrity, more than 95% also exhibited Quality.

Analysis of Necessa		
Outcome variable:	fs_Quality	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.800000	0.911392
~fs_diversity	0.574074	0.589354
fs_inclusion	0.840741	0.897233
~fs_inclusion	0.525926	0.574899
fs_CT	0.818519	0.913223
~fs_CT	0.603704	0.631783
fs_Excellence	0.907407	0.910781
~fs_Excellence	0.437037	0.510823
fs_Collab	0.859259	0.928000
~fs_Collab	0.477778	0.516000
fs_achievment	0.885185	0.821306
~fs_achievment	0.422222	0.545455
fs_Courage	0.800000	0.821293
~fs_Courage	0.403704	0.459916
fs_integrity	0.785185	0.954955
~fs_integrity	0.503704	0.489209

Table 36 – Analysis of D&I and V&B necessary conditions for Quality

Source: fsQCA 3.0

Regarding the negated sets, as already mentioned, they are excluded as they have a Consistency < 0.8, but regarding coverage, of the total number of associates not showing Creative Thinking, almost 2/3 exhibited Quality.

Quality cannot occur without the occurrence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement or Courage.

Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement and Courage are necessary conditions for Quality.

6.3.3.2.2 – ANALYSIS OF SUFFICIENT CONDITIONS

Consistency measures the degree of belonging to the combination in question, or in other words it is the degree that measures the belonging of the combination as a subset of the result.

Analysis of Sufficient Conditions			
Outcome variable:	fs_Quality		
All	INTERMEDIA	TE SOLUTION	
frequency cutoff:	1		
consistency cutoff:	0.989011		
	raw	unique	
	coverage	coverage	consistency
fs_diversity*fs_CT*fs_Collab*fs_achievment*~fs_integrity	0.4	0.188889	0.990826
fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage	0.544444	0.333333	0.993243
solution coverage: 0.733333			
solution consistency: 0.994975			
Only D&I			
	raw	unique	
	coverage	coverage	consistency
fs_diversity	0.8	0.8	0.911392
solution coverage: 0.8			
solution consistency: 0.911392			
Only V&B			
	raw	unique	
	coverage	coverage	consistency
fs_Excellence*fs_Courage*fs_integrity	0.714815	0.566667	0.994845
fs_CT*fs_Excellence*~fs_Collab*fs_achievment*~fs_Courage*~fs_integrity	0.292593	0.0444444	0.849462
fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage*~fs_integrity	0.337037	0.0851852	0.98913
solution coverage: 0.948148			
solution consistency: 0.948148			

Table 37 – Analysis of D&I and V&B sufficient conditions for Quality

Source: fsQCA 3.0

Considering the indicator Consistency presented in the previous table, there are six (6) combinations of D&I, V&B, and D&I and V&B dimensions that are sufficient conditions for Quality to occur, as they have a consistency > 0.8:

fs_diversity*fs_CT*fs_Collab*fs_achievment*~fs_integrity

fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*~fs_Courage

fs_diversity

fs_Excellence*fs_Courage*fs_integrity

fs_CT*fs_Excellence*~fs_Collab*fs_achievment*~fs_Courage*~fs_integrity

fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage*~fs_integrity

First, regarding all variables of D&I and V&B, Quality occurs whenever the combination of the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity is present, then the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity is said to be a sufficient condition for Quality, although Quality may occur in relation to the other five conditions.

If the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity occurs, then Quality occurs, but Quality can occur without the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity occurring simultaneously.

Second, as presented in the previous table, regarding all variables of D&I and V&B, Quality occurs whenever the combination of the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage is present, then the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage is said to be a sufficient condition for Quality, although Quality may occur in relation to the other five conditions.

If the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage occurs, then Quality occurs, but Quality can occur without the existence Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage occurring simultaneously.

Third, as presented in the previous table, and considering D&I variables only, Quality occurs whenever the condition Diversity is present, then Diversity is said to be a sufficient condition for Quality, although Quality may occur in relation to other five conditions. **If Diversity occurs, then Quality occurs**, but Quality can occur without Diversity occurring.

Inclusion is not a sufficient condition for Quality.

There are also three sufficient conditions for V&B dimensions

Forth, Quality occurs, as for Execution, whenever the condition Excellence, Courage and Integrity is present, then Excellence and Courage and Integrity is said to be a sufficient condition for Quality, although Quality may occur in relation to other conditions.

If Excellence, Courage, and Integrity occurs, then Quality occurs, but Quality can occur without Excellence, Courage and Integrity occurring simultaneously.

Quality also occurs in a fifth condition. Whenever the combination of the existence of Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity is present, then the existence of Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity is said to be a sufficient condition for Quality, although Quality may occur in relation to the other two conditions.

If the existence of Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity occurs, then Quality occurs, but Quality can occur without the existence Creative Thinking, Excellence and Achievement, and the absence of Collaboration, Courage and Integrity occurring simultaneously.

Quality also occurs whenever the combination of the existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity is present, then the existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity is said to be a sufficient condition for Quality, although Quality may occur in relation to the other two conditions.

If the existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity occurs, then Quality occurs, but Quality can occur without existence of Creative Thinking, Collaboration and Achievement, and the absence of Excellence, Courage and Integrity occurring simultaneously.

Considering that the Unique Coverage is the proportion of all positive cases that explain a specific combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis), from all the six combinations that are sufficient conditions the condition Diversity has the highest Unique Coverage by far, so this is the solution that better 'explains' the outcome Quality.

6.3.3.3 - INNOVATION

Broadly speaking, innovation can be understood as a management practice that aims not only economic, but also human and social results (Cordeiro, A., 2011).

For Conway and Steward (2009) innovation is understood as the creation, acceptance and implementation of new ideas, processes, products, or services.

What happens in the company may involve the use of creativity as well as invention.

Application and implementation are central aspects of this definition and involve the ability to change and adapt.

6.3.3.3.1 – ANALYSIS OF NECESSARY CONDITIONS

Regarding the necessary conditions for the outcome variable fs_innovation, consistency results represent the extent to which a casual combination leads an outcome, and coverage results represent how many cases with the outcome are represented by a particular casual condition.

Since we are assuming that causal conditions lead to the outcome, it only makes sense to calculate coverage for rows that have high consistency.

Analysis of Necessa		
Outcome variable:	fs_innovation	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.863813	0.936709
~fs_diversity	0.463035	0.452471
fs_inclusion	0.898833	0.913043
~fs_inclusion	0.470817	0.489879
fs_CT	0.941634	1.000000
~fs_CT	0.470817	0.468992
fs_Excellence	0.836576	0.799257
~fs_Excellence	0.459144	0.510822
fs_Collab	0.828794	0.852000
~fs_Collab	0.521401	0.536000
fs_achievment	0.929961	0.821306
~fs_achievment	0.342412	0.421053
fs_Courage	0.673152	0.657795
~fs_Courage	0.544747	0.590717
fs_integrity	0.688716	0.797297
~fs_integrity	0.634241	0.586331

Table 38 – Analysis of D&I and V&B necessary conditions for Innovation

Source: fsQCA 3.0

For this study, and with this in mind, the necessary conditions for Innovation are Diversity, Inclusion, Creative Thinking, Excellence, Collaboration and Achievement which have Consistency > 80%.

In other words, all D&I and V&B variables are necessary conditions for OP dimension Innovation to occur except Courage and Integrity. From the total number of associates that showed Diversity, 94% also exhibited Innovation; of the total number of associates that showed Inclusion, 91% also exhibited Innovation; of the total number of associates that showed Creative Thinking, all exhibited Innovation with a Coverage of 100%; of the total number of associates that showed Excellence, 80% also exhibited Innovation; of the total number of associates that showed Collaboration, 85% also exhibited Innovation; of the total number of associates that showed Achievement, 82% also exhibited Innovation.

Courage and Integrity are the dimensions of D&I and V&B that have been excluded as they have a consistency < 0.8.

Regarding the negated sets, they are excluded as the have a Consistency < 0.8.

Innovation cannot occur without the occurrence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration and Achievement.

Diversity, Inclusion, Creative Thinking, Excellence, Collaboration and Achievement are necessary conditions for Innovation.

6.4.3.3.2 - ANALYSIS OF SUFFICIENT CONDITIONS

Consistency measures the degree of belonging to the combination in question, or in other words it is the degree that measures the belonging of the combination as a subset of the result.

Considering the indicator Consistency presented in the following table, there are five (5) combinations of D&I, V&B, and D&I together with V&B dimensions that are sufficient conditions for Innovation to occur, as they have a consistency > 0.8:

fs_diversity*fs_CT*fs_Collab*fs_achievment*~fs_integrity

 $fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage$

fs_diversity

fs_CT*fs_Excellence*fs_achievment

fs_CT*fs_Collab*fs_achievment

First, regarding all variables of D&I and V&B, as for the OP dimension Quality, Innovation occurs whenever the combination of the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity is present, then the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity is said to be a sufficient condition for Innovation, although Innovation may occur in relation to the other four conditions.

If the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity occurs, then Innovation occurs, but Innovation can occur without the existence Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Integrity occurring simultaneously.

Table 39 – Analysis of D&I and V&B sufficient conditions for Innovation

Analysis of Sufficient Conditions			
Outcome variable:	fs_innovation		
All	INTERMEDIATE SOLUTION		
	raw	unique	
	coverage	coverage	consistency
fs_diversity*fs_CT*fs_Collab*fs_achievment*~fs_integrity	0.424124	0.198444	1
fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage	0.575876	0.350195	1
solution coverage: 0.774319			
solution consistency: 1			
Only D&I			
	raw	unique	
	coverage	coverage	consistency
fs_diversity	0.863813	0.863813	0.936709
solution coverage: 0.863813			
solution consistency: 0.936709			
Only V&B			
	raw	unique	
	coverage	coverage	consistency
fs_CT*fs_Excellence*fs_achievment	0.824903	0.0972763	1
fs_CT*fs_Collab*fs_achievment	0.817121	0.0894941	1
solution coverage: 0.914397			
solution consistency: 1			

Source: fsQCA 3.0

Second, as presented in the previous table, regarding all variables of D&I and V&B, Innovation occurs whenever the combination of the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage is present, then the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage is said to be a sufficient condition for Innovation, although Innovation may occur in relation to the other four conditions.

If the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage occurs, then Innovation occurs, but Innovation can occur without the existence Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, and Courage occurring simultaneously.

Third, as presented in the previous table, and considering D&I variables only, Innovation occurs whenever the condition Diversity is present, then Diversity is said to be a sufficient condition for Innovation, although Innovation may occur in relation to other four conditions.

If Diversity occurs, then Innovation occurs, but Innovation can occur without Diversity occurring.

Inclusion is not a sufficient condition for Innovation.

There are also two sufficient conditions for V&B dimensions, only.

Forth, Innovation occurs whenever the condition Creative Thinking, Excellence and Achievement is present, then Creative Thinking, Excellence and Achievement is said to be a sufficient condition for Innovation, although Innovation may occur in relation to other conditions.

If Creative Thinking, Excellence and Achievement occurs, then Innovation occurs, but Innovation can occur without Creative Thinking, Excellence and Achievement occurring simultaneously.

Innovation also occurs in a fifth condition. Whenever the combination of the existence of Creative Thinking, Collaboration and Achievement is present, then Innovation occurs.

The existence of Creative Thinking, Collaboration and Achievement is said to be a sufficient condition for Innovation, although Innovation may occur in relation to other conditions.

Considering that the Unique Coverage is the proportion of all positive cases that explain a specific combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis), from all the five combinations that are sufficient conditions the condition Diversity has the highest Unique Coverage by far, so this is the solution that better 'explains' the outcome Innovation.

6.3.3.4 – PRODUCTIVITY

Productivity can be defined as the ratio of goods produced to factors used to produce them. Associated with productivity is the efficiency that results from production process. This serves as a measure of productivity and corresponds to the level of success achieved in transforming inputs into outputs (Oum and Chunyan, 1995).

This ratio gives us data for a national economy, a sector of activity, a company, or a worker.

6.3.3.4.1 – ANALYSIS OF NECESSARY CONDITIONS

Considering the indicators Consistency and Coverage presented in the following table, from the two dimensions of D&I and the six dimensions of V&B, only Diversity, Creative Thinking, Collaboration and Achievement are necessary condition for Productivity as fs_Diversity, fs_CT, fs_Collab and fs_achievment has a consistency > 0.8.

Simultaneously, all the other conditions tested, including the negated sets, or the absence of a set, have a consistency < 0.8.

The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Analysis of Necessary Conditions		
Outcome variable:	fs_prod	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.869403	0.983122
~fs_diversity	0.432836	0.441065
fs_inclusion	0.779851	0.826087
~fs_inclusion	0.492537	0.534413
fs_CT	0.839552	0.929752
~fs_CT	0.444030	0.461240
fs_Excellence	0.757463	0.754647
~fs_Excellence	0.511194	0.593074
fs_Collab	0.843284	0.904000
~fs_Collab	0.417910	0.448000
fs_achievment	0.988806	0.910653
~fs_achievment	0.320895	0.411483
fs_Courage	0.638060	0.650190
~fs_Courage	0.440298	0.497890
fs_integrity	0.641791	0.774775
~fs_integrity	0.526119	0.507194

Table 40 – Analysis of D&I and V&B necessary conditions for Productivity

Source: fsQCA 3.0

Regarding the indicator Coverage presented in the previous table, Diversity, Creative Thinking, Collaboration and Achievement have very high values, all above 90%, meaning that of the total number of associates that showed Diversity, 98% also exhibited Productivity; of the total number of associates that showed Creative Thinking, 93% also exhibited Productivity; of the total number of associates that showed Collaboration, 90% also exhibited Productivity; and of the total number of associates that showed Achievement,91% exhibited Productivity as well.

Inclusion, Execution, Courage, and Integrity as dimensions of D&I and V&B have been excluded as they have a consistency < 0.8, but regarding coverage, the total number of associates that showed Inclusion, more than 80% also exhibited Productivity.

Productivity cannot occur without the occurrence of Diversity, Creative Thinking, Collaboration and Achievement. **Diversity, Creative Thinking, Collaboration and Achievement are the necessary conditions for Productivity**.

All the other D&I and V&B dimensions are not necessary conditions for the OP dimension Productivity to occur.
6.3.3.4.2 – ANALYSIS OF SUFFICIENT CONDITIONS

Consistency measures the degree of belonging to the combination in question, or in other words it is the degree that measures the belonging of the combination as a subset of the result.

Considering the indicator Consistency presented in the following table, there are five (5) combinations of D&I, V&B, and D&I and V&B dimensions that are sufficient conditions for Productivity to occur, as they have a consistency > 0.8:

fs_diversity*~fs_inclusion*fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage* ~fs_integrity

```
fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage* fs_integrity
```

fs_diversity

fs_CT*fs_Excellence*fs_achievment

fs_CT*fs_Collab*fs_achievment

Analysis of Sufficient Conditions			
Outcome variable:	fs_prod		
All			
	raw	unique	
	coverage	coverage	consistency
fs_diversity*~fs_inclusion*fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage*~fs_integrity	0.339552	0.190298	1
fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage*fs_integrity	0.552239	0.402985	1
solution coverage: 0.742537			
solution consistency: 1			
Only D&I			
	raw	unique	
	coverage	coverage	consistency
fs_diversity	0.869403	0.869403	0.983122
solution coverage: 0.869403			
solution consistency: 0.983122			
Only V&B			
	raw	unique	
	coverage	coverage	consistency
fs_CT*fs_Excellence*fs_achievment	0.753731	0.0671642	0.95283
fs_CT*fs_Collab*fs_achievment	0.772388	0.0858209	0.985714
solution coverage: 0.839552			
solution consistency: 0.957447			

Table 41 – Analysis of D&I and V&B sufficient conditions for Productivity

Source: fsQCA 3.0

First, regarding all variables of D&I and V&B, Productivity occurs whenever the combination of the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage and Integrity is present, then the existence of Diversity,

Creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage and Integrity is said to be a sufficient condition for Productivity, although Productivity may occur in relation to the other four conditions.

If the existence of Diversity, creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage, and Integrity occurs, then Productivity occurs, but Productivity can occur without the existence of Diversity, creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage, and Integrity occurring simultaneously.

Second, as presented in the previous table, regarding all variables of D&I and V&B, Productivity occurs whenever the combination of all D&I and V&B dimensions occur.

In other words, Productivity occurs whenever the combination of the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity is present, then the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity is said to be a sufficient condition for Productivity, although Productivity may occur in relation to the other four conditions.

If the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity occurs, then Productivity occurs, but Productivity can occur without the existence Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity occurring simultaneously.

Third, as presented in the previous table, and considering D&I variables only, Productivity occurs whenever the condition Diversity is present, then Diversity is said to be a sufficient condition for Innovation, although Productivity may occur in relation to other four conditions.

If Diversity occurs, then Productivity occurs, but Productivity can occur without Diversity occurring.

Inclusion is not a sufficient condition for Productivity.

There are also two sufficient conditions for V&B dimensions, only.

Forth, as for Innovation, Productivity occurs whenever the condition Creative Thinking, Excellence and Achievement is present, then Creative Thinking, Excellence and Achievement is said to be a sufficient condition for Productivity, although Productivity may occur in relation to other conditions.

If Creative Thinking, Excellence and Achievement occurs, then Productivity occurs, but Productivity can occur without Creative Thinking, Excellence and Achievement occurring simultaneously.

Productivity also occurs in a fifth condition. Whenever the combination of the existence of Creative Thinking, Collaboration and Achievement is present, then Productivity occurs.

The presence of Creative Thinking, Collaboration and Achievement is said to be a sufficient condition for Productivity, although Productivity may occur in relation to other conditions.

If Creative Thinking, Collaboration and Achievement occurs, then Productivity occurs, but Productivity can occur without Creative Thinking, Collaboration and Achievement occurring simultaneously.

Considering that the Unique Coverage is the proportion of all positive cases that explain a specific combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis), from all the five combinations that are sufficient conditions the condition Diversity has the highest Unique Coverage by far, so this is the solution that better 'explains' the outcome Productivity.

6.3.3.5 – PEOPLE

The organizations with the greatest alignment between organizational goals and individuals' goals, are those that are sensitive to individuals and provide them with the resources and opportunities for learning and achievement (Rowden and Conine, 2005).

Organizations that have made learning, education, and development a priority have seen it pay off through greater profitability and increased employees' job satisfaction (Leslie et al., 1998).

Regarding retention, to sustain an inventive and cost-effective business, organizations need to focus on retaining their associates, reducing the turnover rate. (Louden, 2012).

6.3.3.5.1 – ANALYSIS OF NECESSARY CONDITIONS

Considering the indicators Consistency and Coverage presented in the following table, from the two dimensions of D&I and the six dimensions of V&B, Excellence, Collaboration, Achievement, Courage, and Integrity are necessary condition for People as fs_Excellence, fs_Collab, fs_achievment, fs_Courage and fs_integrity have a consistency > 0.8.

Simultaneously, all the other conditions tested, including the negated sets, or the absence of a set, have a consistency < 0.8. The cutoff consistency for the truth table is set at 0.8. Queues with lower values of belonging to the solution must be excluded.

Regarding the indicator Coverage presented in the following table, only Integrity has high values, above 90%, meaning that of the total number of associates that showed Integrity, 96% also exhibited People.

Diversity, Inclusion and CT as dimensions of D&I and V&B have been excluded as they have a consistency < 0.8.

People cannot occur without the occurrence of Excellence, Collaboration, Achievement, Courage, and Integrity. Excellence, Collaboration, Achievement, Courage, and Integrity are the necessary conditions for People.

All the other D&I and V&B dimensions are not necessary conditions for the OP dimension People to occur.

Analysis of Necessa	ry Conditions	
Outcome variable:	fs_People	
Conditions tested:		
	Consistency	Coverage
fs_diversity	0.724409	0.776371
~fs_diversity	0.531496	0.513308
fs_inclusion	0.787402	0.790514
~fs_inclusion	0.476378	0.489879
fs_CT	0.751969	0.789256
~fs_CT	0.562992	0.554264
fs_Excellence	0.893701	0.843866
~fs_Excellence	0.346457	0.380952
fs_Collab	0.834646	0.848000
~fs_Collab	0.405512	0.412000
fs_achievment	0.814961	0.711340
~fs_achievment	0.346457	0.421053
fs_Courage	0.917323	0.885931
~fs_Courage	0.311024	0.333333
fs_integrity	0.838583	0.959459
~fs_integrity	0.417323	0.381295

Source: fsQCA 3.0

6.3.3.5.2 – ANALYSIS OF SUFFICIENT CONDITIONS

Consistency measures the degree of belonging to the combination in question, or in other words it is the degree that measures the belonging of the combination as a subset of the result.

Considering the indicator Consistency presented in the following table, there are five (5) combinations of D&I, V&B, and D&I and V&B dimensions that are sufficient conditions for Innovation to occur, as they have a consistency > 0.8:

```
fs_diversity*~fs_inclusion*fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage* ~fs_integrity
```

```
fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage* fs_integrity
```

fs_diversity*fs_inclusion

fs_CT*fs_Collab*fs_achievment

fs_Excellence*fs_Courage*fs_integrity

Table 43 – Analysis of D&I and V&B sufficient conditions for People

Analysis of Sufficient Conditions			
Outcome variable:	fs_People		
All			
	raw	unique	
	coverage	coverage	consistency
fs_diversity*~fs_inclusion*fs_CT*~fs_Excellence*fs_Collab*fs_achievment*~fs_Courage*~fs_integrity	0.287402	0.129921	0.802198
fs_diversity*fs_inclusion*fs_CT*fs_Excellence*fs_Collab*fs_achievment*fs_Courage*fs_integrity	0.582677	0.425197	1
solution coverage: 0.712598			
solution consistency: 0.909548			
Só D&I			
	raw	unique	
	coverage	coverage	consistency
fs_diversity*fs_inclusion	0.665354	0.665354	0.82439
solution coverage: 0.665354			
solution consistency: 0.82439			
Só V&B	raw	unique	
	-	·	consistonay
	coverage	coverage	consistency
fs_CT*fs_Collab*fs_achievment	0.751969	0.141732	0.909524
fs_Excellence*fs_Courage*fs_integrity	0.76378	0.153543	1
solution coverage: 0.905512			
solution consistency: 0.923695			

Source: fsQCA 3.0

First, regarding all variables of D&I and V&B, as for Productivity, People occurs whenever the combination of the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage and Integrity is present, then the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage and Achievement, and the absence of Inclusion, Excellence, Courage and Achievement, and the absence of Inclusion, Excellence, Courage and Integrity is said to be a sufficient condition for People, although People may occur in relation to the other four conditions.

If the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage, and Integrity occurs, then People occurs, but People can occur without the existence of Diversity, Creative Thinking, Collaboration and Achievement, and the absence of Inclusion, Excellence, Courage, and Integrity occurring simultaneously.

Second, similarly to the OP dimension Productivity, as presented in the previous table, regarding all variables of D&I and V&B, People occurs whenever the combination of all D&I and V&B dimensions occur.

In other words, People occurs whenever the combination of the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity is

present, then the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity is said to be a sufficient condition for People, although People may occur in relation to the other four conditions.

If the existence of Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity occurs, then People occurs, but People can occur without the existence Diversity, Inclusion, Creative Thinking, Excellence, Collaboration, Achievement, Courage, and Integrity occurring simultaneously.

Third, as presented in the previous table, and considering D&I variables only, People occurs whenever the condition Diversity and Inclusion is present, then Diversity and Inclusion is said to be a sufficient condition for People, although People may occur in relation to other four conditions.

If Diversity and Inclusion occurs, then People occurs, but People can occur without Diversity and Inclusion occurring.

There are also two sufficient conditions for V&B dimensions, only.

Forth, People occurs whenever the condition Creative Thinking, Collaboration and Achievement is present, then Creative Thinking, Collaboration and Achievement is said to be a sufficient condition for People, although People may occur in relation to other conditions.

If Creative Thinking, Collaboration and Achievement occurs, then People occurs, but People can occur without Creative Thinking, Collaboration and Achievement occurring simultaneously.

People also occurs in a fifth condition.

Whenever the combination of the existence of Excellence, Courage and Integrity is present, then People occurs.

The existence of Excellence, Courage and Integrity is said to be a sufficient condition for People, although People may occur in relation to other conditions.

If Excellence, Courage, and Integrity occurs, then People occurs, but People can occur without Excellence, Courage and Integrity occurring simultaneously.

Considering that the Unique Coverage is the proportion of all positive cases that explain a specific combination alone and no other (percentage of cases that are only explained by the combination of conditions under analysis), from all the five combinations that are sufficient conditions the condition Diversity and Inclusion has the highest Unique Coverage by far, so this is the solution that better 'explains' the outcome People.

6.4 – INTERVIEWS ANALYSIS

A semi-structured interview was carried out intended to perceive whether the country's culture have influence in the adoption of the organization values and behaviors, as well as diversity and inclusion.

In this context the interviews with the Novartis associates from the 4 countries of the study were conducted by email and Microsoft Teams due to the Covid-19 pandemic.

Interviews were conducted between April and June of 2020.

Interviewees are referred to as *I1* (interviewee from Austria), *I2* (interviewee from the Netherlands), *I3* (interviewee from Portugal) and *I4* (interviewee from Switzerland). All interviews were conducted within Management and Leadership Team at each country.

All the information collected is intended, only and exclusively, to carry out this academic work and confidentiality will be maintained. The interview/questionnaire took approximately 30/45min.

Table 44 details the grid of analysis of the interviews through key categories, sub-categories, key indicators, and registry units.

As expected from the differences of Hoftede's cultural dimensions, there are some results where the culture of the country has an impact over the adoption of V&B and D&I.

Despite all interviewed associates highlight that the importance given to D&I, V&B and OP is very high at each country, and there is a clear definition of its dimensions, when asked if the country culture has an impact on the adoption of D&I and V&B, and what is their importance in the country, answers were different, reflecting the different Hoftede's cultural dimensions values presented in chapter 5 for each country.

To set up the same ground in the four countries to understand if the country culture had an impact over the different dimensions of V&B, D&I and OP, some questions regarding the importance of each dimension and how the organization provides information about the different dimensions were asked, detailing the way and channels used to disseminate information about V&B, D&I and OP.

Category	Sub-Category	Key Indicators / Context Units	Registry Units
		"Very high" I1	"importance is
		"High, kind of basic requirements" 12	given to
	Importance given to OP at Novartis	"This performance indicators are important and evaluated frequently by the company. Regarding the company KPI's they are shared with the company frequently through internal channels (town halls, yammer, franchise meetings, email etc). These performance indicators are also discussed with the collaborators in our biannual performance evaluation with the managers. They are embedded in the pillars of the organization and aligned with novartis culture." I3	organizational performance at Novartis is high, kind of basic requirements" 12 "Organizational Performance at Novartis has very
Definition,		"Organizational Performance has a very high importance, performance oriented company. In annual incentives 50 % of the incentive is coming from Business Success (global) and 25 % from individual performance (and 25 % from Values and Behaviors of the individual)" I4	"as an example, the
importance, information and monitoring of Organizational Performance (OP) at	Clear definition	"There is a clear definition of organizational performance indicators" I1 "Yes" I2 "Yes. They are divided by categories, are reviewed frequently by the management teams	annual incentives 50% of the incentive is coming from Business Success
Novartis	of OP indicators	and shared frequently with the company by the leadership team." I3 "This is clarified in the performance objectives of the individual. In the role profile are also listed what are the role KPIs." I4	(global)". I4 "At Novartis, organizational performance is
	Importance of each OP indicator	"In Austria as we have production facilities, focus is on quality and Innovation" I1 "Performance most important but people (unboss & innovation (exploring) increasing importance)" I2 "I believe it depends on the department, role, year, company's targets, etc. But if I had to rate them it would be: innovation, performance, productivity, quality, and people." I3 "We are not looking these items as such separately, the performance objectives are based on the company priorities." I4	very important. Our objectives are linked to the organizational performance indicators and consequently our bonus and career growth" I3

Table 44 – Content of the interviews (categories, sub-categories, key indicators, registry units)

		"There is a clear information to associates" I1	
		"Not sure if on all. Mail, meeting, MS teams, Yammer" I2	
	Information about OP indicators	"Yes. Channels: yammer, Novartis Portal (https://portal.novartis.net/sites/onenovartis), town halls, CPO days, Cycle meetings, Franchise Meetings, internal communication by email, internal communication in the building." I3	
		"Performance evaluation annually and several (at least one) check points in between". I4	
		"I don't think all organizational performance indicators have a follow-up. Focus is on quality and integrity" I1	
		"Not to my knowledge. Always room for improvement but not necessary and concern" I2	
	Monitoring the adoption of OP indicators	"Yes, although I am not certain that all KPIs are monitored the same way or in the same timings. Some KPIs like performance are reviewed frequently because with this review the teams can be aware of the trends and change or adapt behaviors and campaigns if something is not aligned with what was predicted and act towards correction or improvements or risks/ opportunities identification." 13	
		"I do not think there is any concern, people are motivated to have their performance monitored and it has also implication to the annual incentive, salary increase and further development." I4	
		"Very high" I1	"Collaboration,
importance,	Importance given to V&B at Novartis	"High" 12 "My perception is that in the past values and behaviors had less importance but now it's similar to performance indicators. Our objectives are linked to values and behaviors and consequently our bonus and career growth." 13 "Very high importance, with 25 % impact for the annual incentive." 14	Achievement and Excellence have a higher importance in our country versus the other three V&B" I1
	Clear definition	"Yes" I1	"Our objectives
	of V&B indicators	"Yes" I2 "Yes, I believe so." I3	are linked to values and

	Importance of each V&B indicator	"Yes, the definitions are very clear and these are very well adopted in the organization, everyone knows and understands them." 14 "Collaboration, Achievement and Excellence have a higher importance in our country versus the other three V&B, as we have production facilities, and areas as performance and quality are key" 11 "Same importance but performance as a king of requirement for the rest." 12 "All values and behaviors are equally important" 13 "Very high impact, and the company puts a lot of emphasis on the way how things are done." 14	behaviors and consequently our bonus and career growth." I3 "Yes, the definitions are very clear and these are very well adopted in the organization" I4
	Information about V&B indicators	"The information of values and behaviors is done globally through Global Comms" I1 "Mail, Yammer, face to face" I2 "Yes. All internal channels - yammer, Nvs Portal (https://portal.novartis.net/sites/onenovartis), townhalls, CPO days, Cycle meetings, Franchise Meetings, internal communication by email, internal communication in the building, P&O trainings, up4growth trainings" I3 "V&Bs are available everywhere and used in many places and situations, e.g. in 360 tools and disseminated in many communications in all levels." I4	
	Monitoring the adoption of V&B indicators	"V&Bs are evaluated in the annual performance management process" I1 "Not to my knowledge" I2 "Yes, I believe that the company wants that all associates have the same working mindset and they each one represents the company's way of work. By monitoring these KPIs the company can have a better alignment between all associates and is able to identify deviations and act to correct them." I3 "V&Bs are evaluated in the annual performance review, and associates value a lot of this evaluation and it has an impact on incentive, salary increase and development." I4	
Definition, importance, information	Importance given to D&I at Novartis	"D&I is solidly established in company goals, and a standing agenda item" I1	"D&I is solidly established in

1			
and monitoring of		"High and clear focus the last period" 12	company goals
Diversity and		"This is a relevant topic. Novartis is a	and a standing
Inclusion		multinational brand and its part of the company's vision to reimagine medicine through valuing the	agenda item" I1
(D&I) at Novartis		diversity of people in a friendly environment	
Novartis		where people can feel integrated and have the	"This is a
		sense of belonging. I could also say that this is	relevant topic.
		aligned with the positive impact novartis wants to	Novartis is a
		have in the associates or in the society. Several	multinational
		topics are discussed like, equal pay and equal benefits regardless of gender, promotion of an	brand and its
		inclusive environment for minorities like the	
		LGBT, build internal communities that share the	part of the
		same interests or the importance of retaining	company's
		talents regardless of the origin ethnicity or gender." I3	vision" I3
		"Very high importance, this is one of our core	(DQLbaa
		areas of culture." 14	"D&I has a very
		"There is a clean definition of diversity and	high importance,
		"There is a clear definition of diversity and inclusion indicators." I1	as this is one of
			the core areas of culture" I4
		"Yes but the topic is broad." I2	
	Clear definition of D&I	"Yes; the priorities of the D&I are clear and available to all. In my opinion they should be	
	indicators	communicated more often." I3	"this is aligned
		"There a solid KPIs established e.g. gender	with the positive
		balance, equal pay, ERG support , adjustment of	impact Novartis
		benefits to include LGBTI community" I4	wants to have in
		<i>"</i>	the associates or
		"Gender" l1	in the society." I3
		"High" I2	
		"Very important. In my opinion, happy associates	
	Importance of D&I dimensions	in a good working environment perform better."	
		13	
		"It is on a high level, we are proud of our diversity	
		in the various aspects, such as gender, age, thinking styles, nationality etc." I4	
		"Yes, Comms, One Novartis, internal meetings,	
		yammer, email" l1	
	Information	" Mail, Yammer, FtF" I2	
	about D&I indicators	"Yes, One Novartis, internal meetings, yammer, email" 13	
		"We have the D&I council in place with members	
		from across the organization that then arranges	

	Monitoring the adoption of D&I indicators	events and activities and delivers information. The council has a budget from the Business to arrange the events." I4 "We monitor the diversity regularly on gender, disabilities. We are proud of our diversity." I1 "Think yes as so important in the current circumstances to have this right." I2 "Yes. I don't know how and when this is monitored." I3 "We monitor the diversity regularly on gender, age, use of flexible work options, nationalities. We are proud of our diversity." I4	
Impact of the country's culture on the adoption of V&B, D&I policy and factors that influence OP	Impact on the adoption of V&B	"Quality" I1 "They are seen in the culture of the country." I2 "I believe the culture of the country's top management influence the adoption of the Novartis Values and behaviors. Although the values and behaviors are a global policy, local culture influences how it is implemented and adopted." I3 "There are associated from over 100 different countries working in Switzerland and while the culture of the country has a very positive effect on life conditions and equality, the diversity of people brings the beauty" I4 "Novartis company culture is a stronger driver than country culture. We are very international organization and the local country culture has quite little influence." I4	"Quality" I1 "They are seen in the culture of the country." I2 "Novartis company culture is a stronger driver than country culture." I4 "I believe the culture of the
	Importance given to V&B	"The focus is on quality and integrity" I1 "Difficult, as there is no order of importance. Courage and speaking up are in the Dutch culture important." I2 "I would rate them: collaboration, innovation, courage, performance, integrity, quality." I3 "High importance – the order of importance may depend on the division or function. I have the impression that they are equally important. innovation, quality, performance, courage, integrity, collaboration" I4	country and consequentially of the country's top management influence the adoption of the Novartis Values and behaviors." I3

	"Tangibility. In Austria, it is very important that	"Courage and
	"Not sure but think non/ moderate. NL seen as kind of open minded culture (but not sure if true)" 12	speaking up are important in the Dutch culture". 12
Impact on the adoption of D&I	"I believe the culture of the country and consequentially of the country's top management influence the adoption of a Diversity and Inclusion policy. Although it's a global policy, local culture influences how it is implemented and adopted." I3 "There is not much impact, but it is true that the country culture is more conservative and old fashioned than the Novartis culture on what comes to D&I." I4	"Tangibility. In Austria, it is very important that things are tangible, which can be measured". I1
Importance given to D&I	"Very high, aligned with Novartis focus on D&I" I1 "In line with NVS, relatively high" I2 "It is important. I don't feel any kind of selection by gender, age, ethnicity, origin, etc being done in the company." I3 "Depends on a topic, but Switzerland in general is quite old fashioned in what comes to gender equality, sexual orientation etc." I4	"There are associated from over 100 different countries working in Switzerland and while the culture
Impact on the adoption of OP	"Performance and productivity because they can be measured". I1 "Low, more standardized in NVS" I2 "I believe the culture of the country and consequently of the country's top management influence the adoption of organizational performance indicators. Although it's a global policy, local culture influences how it is implemented and adopted." I3 "Switzerland is a high performance culture country and considering that many Swiss are also shareholders of Novartis, I think there is a high expectation that the company performs, being also one of the biggest companies in the country (so high economic importance, e.g. country's biggest exporter)." I4	of the country has a very positive effect on life conditions and equality, the diversity of people brings the beauty" I4 "Not sure but think non/ moderate. NL seen as kind of open minded
Importance given to OP	"In Austria we give a very high importance to performance" I1 "No, as there is no order. Depends on role in organization." I2	culture (but not sure if true)" I2

One builds on the other and drives performance" I4 "All values and behaviors and also diversity and inclusion have an impact on organizational performance" I1 V&B and D&I indicators with higher impact on OP "Exploring mind set." I2 "Idon't know." I3		"I believe it depends on the department, role, year, company's targets, etc. But if I had to rate them it would be: innovation, performance, productivity, quality, people" I3 "My personal sense: people (human resources), innovation, quality, productivity, performance,	
	indicators with higher impact	"All values and behaviors and also diversity and inclusion have an impact on organizational performance" I1 "Exploring mind set." I2	-

Concerning D&I, *I1* mentioned that "*D&I is solidly established in company goals and a standing agenda item*". *I4* mentioned that "*D&I has a very high importance, as this is one of the core areas of culture*". *I3* gave a more exhaustive answer mentioning that D&I is a relevant topic.

Novartis is a multinational brand and its part of the company's vision to reimagine medicine through valuing the diversity of people in a friendly environment where people can feel integrated and have the sense of belonging.

I3 also mentioned that "this is aligned with the positive impact Novartis wants to have in the associates or in the society. Several topics are discussed like equal pay and equal benefits regardless of gender, promotion of an inclusive environment for minorities like the LGBT, build internal communities that share the same interests or the importance of retaining talents regardless of the origin ethnicity or gender".

Also, for D&I, there is a company communication wide level through Global, with high transparency and tools via Intranet, Yammer, webcasts, townhalls, as the CEO Webcast on Novartis celebrating the PRIDE month, open statement against racism, complemented by specific local programs.

When asked about V&B, all interviewees mentioned that all V&B have a remarkably high importance, but *I1* mentioned that *"Collaboration, Achievement and Excellence have a higher importance in our country versus the other three V&B, as we have production facilities, and areas as performance and quality are key".*

As for D&I, it was also mentioned cross the board by all interviewees that leaders and P&O (people and organization) are driving the communication on a companywide level, with

transparency and tools via Novartis Intranet, Yammer (enterprise social networking service used for private communication within Novartis), and webcasts both globally and locally.

Regarding OP, *12* from the Netherlands highlighted that *"importance is given to organizational performance at Novartis is high, kind of basic requirements"*, while all other interviewees refer to it as remarkably high.

For example, *I4* from Switzerland states that *"Organizational Performance at Novartis has very high importance, as it is a performance-oriented company, and as an example, the annual incentives 50% of the incentive is coming from Business Success (global) and 25 % from individual performance, and 25 % from Values and Behaviors of the individual".*

Same in Portugal as mentioned by *I3*: "At Novartis, organizational performance is very important. Our objectives are linked to the organizational performance indicators and consequently our bonus and career growth".

A key difference between OP, V&B and D&I is that OP and V&B as already mentioned by *I3* and *I4* are in the annual incentives where usually 75% of the incentive is coming from performance and 25% from values and behaviors.

Only in D&I leads and senior management, D&I is in their objectives, so despite being an area where the organization is immensely proud of its diversity in the various aspects, such as gender, age, thinking styles, nationality, it is still an area which is worked top-down in management.

Starting by V&B, when asked about the impact of the country culture on the adoption of V&B, the feedback of *l1* from Austria was noticeably clear: "*Quality*" (defined as Excellence to differentiate from the dimension quality in OP).

In relation with the other countries, Netherlands, Portugal, and Switzerland, this very clear answer showed the pragmatic culture of Austria which scores 60 out of 100 in the Long-Term Orientation dimension. The answer to this question clearly reflects the Long-Term Orientation dimension and the pragmatism of each country.

In The Netherlands or Switzerland, the answers were also very sharp reflecting the high scores that both countries have in Long Term Orientation dimension, being very pragmatic, with Switzerland with a score of 74 and The Netherlands with a score of 67.

I4 stated that "*Novartis company culture is a stronger driver than country culture*", mentioning that "*Novartis is an international organization, and the local country culture has quite little influence*". *I2* from The Netherlands stated that "*Novartis V&B are seen in the culture of the country*".

On the other hand, when asked about the impact of the country culture on the adoption of V&B, the feedback from Portugal reflected the lower score in Long Term Orientation

dimension, 28 out of 100, which reflects a culture that prefers normative thought over pragmatism.

I3 mentioned that "*I believe the culture of the country and consequentially of the country's top management influence the adoption of the Novartis Values and behaviors*". Although the values and behaviors are a global policy, local culture influences how it is implemented and adopted. In other words, in Portugal the adoption of V&B is mentioned to be dependent on the adoption and implementation by senior management.

This answer about the impact of the country culture on the adoption of V&B also reflects the extremely high score on Hoftede's cultural dimension Uncertainty Avoidance, where Portugal scores 99 out of 100, a score much higher than all the countries.

This score shows that Portugal maintains rigid codes of belief and behavior with an emotional need for rules (even if the rules seem not to work).

This has an impact over the influence of management in the organization. Also, in this area of the impact of management over the adoption of V&B in Portugal, the Hoftede's cultural dimension Power Distance explains this answer.

The score of 63 (34 in Switzerland, 38 in The Netherlands, and 11 in Austria) reflects that hierarchical distance is accepted, management controls, and subordinates expect their boss to control them.

Another area where the culture of the country is shown through the interviews is when is asked about the importance given to the different values and behaviors in each country. Also, in this area the differences are shown through the answers.

In Austria, Switzerland and The Netherlands, as more individualist cultures with scores of the Hoftede's cultural dimension Individualism of 55, 68 and 80 respectively, answers were very straight to the point. In individualist societies people are supposed to look after themselves and their family only.

In Austria, when asked about the importance of the different V&B in the country, the answer of *I1* was clear: Quality (Excellence) and Integrity.

In The Netherlands, also reflecting the highest score in Individualism, but also the extremely high score in Long Term Orientation meaning that it has a pragmatic nature, answer was Courage and speak-up. As mentioned by *I2*, *"Courage and speaking up are important in the Dutch culture"*.

In Switzerland, also with a high score of the Hoftede's cultural dimension Individualism, *14* stated that "*I am not able to answer this question as never come across this topic*". This answer clearly shows the pragmatism of Swiss culture.

On the other hand, *I3* from Portugal mentioned that *"all V&B are important"*, and they were classified by its importance: Collaboration, Innovation (Creative Thinking), Courage, Performance (Achievement), Integrity and Quality (Excellence).

This reflects the lower score of the Hoftede's cultural dimension Individualism of 27 which in comparison with the other European countries defines Portugal as a Collectivist.

In collective societies, the society fosters strong relationships where everyone takes responsibility for fellow members of the group. All are important, and this is reflected on the answer where it is stated that all are important despite a classification, versus other cultures where one or two were mentioned, or even, no V&B was mentioned due to its cross the board impact, but very specifically by the role.

Significantly is the fact that the V&B mentioned as the most important is Collaboration which is a key characteristic of a Collectivist society.

Regarding D&I, answers also reflect the culture of the countries.

When asked about the importance of D&I in each country there are two segments. In Austria and in The Netherlands, it is mentioned that D&I has a high importance, while in Portugal and in Switzerland it is mentioned that D&I is only starting, or its importance is growing in recent years, but it is still low.

When asked about the impact of the country culture on the adoption of D&I, the feedback from *I1* was clear: Tangibility. In Austria, as mentioned by the interviewee, it is particularly important that things are tangible, which can be measured.

If in Austria the impact of the culture of the country on adoption of D&I is measured by tangibility, in Switzerland, as the society is very conservative, Novartis outperforms the culture of the country on the adoption of D&I as there are associates from more than 100 countries working at Novartis in Switzerland as mentioned by *I4*.

In relation with the other countries, The Netherlands, Portugal, and Switzerland, this clear answer showed the pragmatic culture of Austria which scores 60 out of 100 in the Long-Term Orientation dimension.

In The Netherlands, *I2* mentioned that "there is a moderate impact of the culture of the country on the adoption of D&I" while in Portugal *I3* said that "it depends on the implementation and adoption by senior management".

The answer to this question clearly reflects the Long-Term Orientation dimension and the pragmatism of each country.

In The Netherlands or Switzerland, the answers were also very sharp but quite different.

I4 mentioned that as for V&B, "due to a more conservative society, the culture of Novartis at Novartis has a higher impact than the influence of the country's culture on the adoption of D&I". On the other hand, *I2* stated that there is a moderate/low impact of the country culture over the adoption of D&I so both Novartis and the country culture are aligned.

These answers reflect the high scores that both countries have in Long Term Orientation dimension, being very pragmatic, with Switzerland with a score of 74 and The Netherlands with a score of 67.

When asked about the impact of the country culture on the adoption of D&I, the feedback from *I3* reflected the lower score in Long Term Orientation dimension, 28 out of 100, which reflects a culture that prefers normative thought over pragmatism.

In Portugal, the adoption of D&I is mentioned to be dependent on the adoption and implementation by senior management.

This answer about the impact of the country culture on the adoption of D&I also reflects the extremely high score on Hoftede's cultural dimension Uncertainty Avoidance, where Portugal scores 99 out of 100, a score much higher than all the countries.

This score shows that Portugal maintains rigid codes of belief and behavior with an emotional need for rules (even if the rules seem not to work). This has an impact over the influence of management in the organization.

Also, in this area of the impact of management over the adoption of D&I in Portugal, the Hoftede's cultural dimension Power Distance explains this answer. The score of 63 (34 in Switzerland, 38 in The Netherlands, and 11 in Austria) reflects that hierarchical distance is accepted, management controls, and subordinates expect their boss to control them.

When asked about the influence of the country culture on the adoption of **OP dimensions**, the feedback from Austria and Switzerland was clear: Performance, and Productivity in the case of Austria. *I1* mentioned "*performance and productivity because they can be measured*".

In relation with Netherlands and Portugal this clear answer showed the difference in the Hoftede's cultural dimension Masculinity between these countries, where Austria which scores 79 out of 100 in the Masculinity dimension and Switzerland scores 74 out of 100.

In The Netherlands, *I2* mentioned that "there is a low influence of the country culture on the adoption of Organizational Performance dimensions", and *I3* answer is that "is it not clear that there is any impact of the country culture over the adoption of OP dimensions".

A high score in Hoftede's cultural dimension Masculinity indicates that the society is driven by competition, achievement, and success, while a low score means that the dominant values in society are caring for others and quality of life. In Masculine countries as Austria and Switzerland, people live to work, managers are expected to be decisive, and emphasis is on equity, competition, and performance, which is aligned with the answers given in the interviews.

On the other hand, when asked about the impact of the country culture on the adoption of OP dimensions, the feedback from the Netherlands and from Portugal reflects the lower score in Hoftede's cultural dimension Masculinity.

Compared with the scores of 74 and 79 from Switzerland and Austria, regarding Masculinity, The Netherlands scores 14 out of 100, and Portugal 31 out of 100, which reflects a culture where it is important to keep the life/work balance, making sure that all are included. In countries like Portugal or The Netherlands which according to Hofstede's dimension Masculinity can be defined as Feminine societies, an effective manager is supportive, and decision making is achieved through involvement.

On opposition of countries like Austria and Switzerland where people 'live to work', Portugal and The Netherlands are societies where people 'work to live'. This is shown in the answers of the impact of country culture on the adoption of OP dimensions.

Saying this, in countries with higher scores of the Hoftede's cultural dimension Masculinity, there is a clear impact of the culture over the adoption of OP dimensions, with focus on Performance (Execution) while in countries with lower scores of the Hoftede's cultural dimension Masculinity, there is no clear impact of the culture over the adoption of OP dimensions.

In Austria, when asked about the importance of the different OP the answer from *I1* was very clear: very high, while in Switzerland, also reflecting the highest score in Masculinity, all OP dimensions were rated in a specific order by *I4*, showing how decisive managers are in this countries when setting a strategy related with performance, which is not the case when dealing with V&B and D&I where individualism and pragmatism pops up.

On the other hand, in Portugal and in The Netherlands, it has been mentioned in the interviews that all OP is important, and its importance depends on the role.

So, from the interview analysis, there is a different influence of the culture of the country over the adoption of V&B, D&I and OP by the organization.

Differences between country cultures can explain the impact of senior management, as in Portugal, a more pragmatic and straightforward approach as in Austria or in The Netherlands, or when the organization culture overcomes the country culture as in Switzerland due to its conservative and old-fashioned way of being vs an organization with associates from more than 100 countries working there.

6.5 - RESULTS DISCUSSION

In the previous section the results of the model and the hypothesis test of the proposed model were presented. In summary, four of the five relationships tested (hypothesis H1, H2, H4 and H5) are validated. The hypothesis H3 was not validated.

Disaggregating the different dimensions of OP (H1a, H1b, H1c, H1d, H1e), (H2a, H2b, H2c, H2d, H2e), (H4a, H4b, H4c, H4d, H4e), the hypothesis in general terms is not validated. However, analyzing D&I and D&I together with V&B (H1, H2 and H4) it is possible to verify that D&I

dimensions are necessary conditions for OP dimensions quality and innovation to occur, D&I dimensions are sufficient conditions for OP dimensions execution and people to occur, and D&I dimensions together with V&B dimensions are sufficient conditions for OP dimensions productivity and people to occur.

So, the implications of the results for each hypothesis are now discussed.

Hypothesis 1: D&I dimensions are necessary conditions for OP dimensions to occur.

D&I dimensions (diversity and inclusion) are necessary conditions for OP dimensions quality and innovation to occur. These results indicate that quality and innovation cannot occur without the occurrence of diversity and inclusion. So, D&I have an influence on OP due to its impact on quality and innovation.

Considering the other hypothesis when disaggregating the different dimensions of OP (H1a, H1b, H1c, H1d, and H1e), the hypothesis H1a, H1d and H1e are not validated.

Hypothesis H1a – D&I dimensions diversity and inclusion are necessary conditions for OP dimension execution to occur is not validated as inclusion in the only D&I dimension that is a necessary condition for execution to occur.

Hypothesis H1d – D&I dimensions diversity and inclusion are necessary conditions for OP dimension productivity to occur is not validated as diversity in the only D&I dimension that is a necessary condition for productivity to occur.

Hypothesis H1e - D&I dimensions diversity and inclusion are necessary conditions for OP dimension people to occur is not validated as none of the D&I dimensions are necessary conditions for people to occur.

Hypothesis 2: D&I dimensions are sufficient conditions for OP dimensions to occur.

D&I dimensions (diversity, inclusion) are sufficient conditions for OP dimensions execution and people to occur. D&I have an impact on OP due to its impact on execution and people as whenever diversity and inclusion are present, the OP dimensions execution and people occur.

Considering the other hypothesis when disaggregating the different dimensions of OP (H2a, H2b, H2c, H2d, and H2e), the hypothesis H2b, H2c and H2d are not validated as for all of them only diversity is a sufficient condition for quality, innovation, and productivity to occur.

Hypothesis 3: D&I and V&B dimensions are necessary conditions for OP dimensions to occur.

This hypothesis is not validated as not all D&I and V&B dimensions are necessary conditions for the OP dimensions to occur. Considering the other hypothesis when disaggregating the different dimensions of OP (H3a, H3b, H3c, H3d, and H3e), they are not validated.

Hypothesis H3a – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension execution to occur is not validated as inclusion, excellence and courage are the only dimensions that are a necessary condition for execution to occur. The other five D&I and V&B dimensions are not necessary conditions for execution to occur.

Hypothesis H3b – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension quality to occur is not validated as integrity is not a necessary condition for quality to occur.

Hypothesis H3c – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension innovation to occur is not validated as courage and integrity are not necessary conditions for innovation to occur.

Hypothesis H3d – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension productivity to occur is not validated as diversity, creative thinking, collaboration, and achievement are the only dimensions that are a necessary condition for productivity to occur. The other four D&I and V&B dimensions are not necessary conditions for productivity to occur.

Hypothesis H3e – D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are necessary conditions for OP dimension people to occur is not validated as excellence, collaboration, achievement, courage, and integrity are the only dimensions that are a necessary condition for people to occur. The other three D&I and V&B dimensions are not necessary conditions for people to occur.

Hypothesis 4: D&I and V&B dimensions are sufficient conditions for OP dimensions to occur.

D&I and V&B dimensions diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are sufficient conditions for OP dimensions productivity and people to occur. D&I and V&B have an impact on OP due to its impact on productivity and people as whenever diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity are present, the OP dimensions productivity and people occur.

Considering the other hypothesis when disaggregating the different dimensions of OP (H4a, H4b, H4c, H4d, and H4e), the hypothesis H4a, H4b and H4c are not validated as for all of them,

despite different combinations of D&I and V&B dimensions, the combination of all dimensions is not present as a sufficient condition for execution, quality, or innovation to occur.

Hypothesis 5: culture factors influence the adoption of D&I and V&B

As expected from the differences of Hoftede's cultural dimensions, and presented in section 6.4, there are some results where the culture of the country has an impact over the adoption of V&B and D&I. Despite all interviewed associates highlighted that the importance given to V&B and D&I is remarkably high in each country, with a clear definition of its dimensions, when asked about the impact of the country culture on the adoption of V&B and D&I, answers were different, reflecting the different Hoftede's cultural dimensions values presented in chapter 4.

The present work represents one of the first empirical efforts to systematically investigate the impact of diversity and inclusion on organizational performance, and aims to answer the following research questions: 1) D&I dimensions are necessary conditions for OP dimensions to occur; 2) D&I dimensions are sufficient conditions for OP dimensions to occur; 3) D&I and V&B dimensions are necessary conditions for OP dimensions to occur; 4) D&I and V&B dimensions are sufficient conditions for OP dimensions to occur; 4) D&I and V&B dimensions are sufficient conditions for OP dimensions to occur; 4) D&I and V&B dimensions are sufficient conditions for OP dimensions to occur; 4) D&I and V&B dimensions are sufficient conditions for OP dimensions to occur.

The first two research questions focus on the possibility of adopting and implementing a D&I policy, and the impact that its dimensions have on organizational performance. The aim is to study the possible relationship between both dimensions of D&I and OP dimensions to create a culture based on common principles that promote growth, innovation, productivity, quality and focus on people.

The other two research questions focus on the possibility of a synergistic effect between the dimensions of D&I, and the dimensions of V&B, and its impact on the dimensions of organizational performance. The answer to these questions is to know how V&B dimensions can combine with D&I dimensions to influence OP dimensions.

The analysis of the relationships hypothesized by the proposed model allowed us to answer these questions, as it was proved that D&I has an impact in all OP dimensions. D&I must be present for OP dimensions quality and innovation to occur. Whenever D&I is present by itself, or along with V&B, the other OP dimensions, execution, productivity, and people, also occur.

Much of the empirical research only addresses the constructs independently or broadly. Although studies have been found that analyze the impact of a specific dimension of a construct with other construct, such as diversity and business performance, however, no empirical studies have been found that simultaneously address all the specified dimensions of D&I and all the specified dimensions of OP within an organization.

The model developed in this work considers the relationship between the dimensions of these constructs to enable and specify greater significance between the constructs and sub constructs, which represents an effort to build a theoretical tool in the field of diversity and

inclusion and organizational performance research. Based on data collected from 648 associates from 4 EU countries at Novartis, the model was tested using fsQCA.

6.5.1 – D&I INFLUENCE ON ORGANIZATIONAL PERFORMANCE

Given that D&I is a recent area of focus on organizations, and despite the recognition of Novartis as one of the leading companies in this area, from the interviews in the 4 EU countries of analysis (Austria, The Netherlands, Portugal, and Switzerland), diversity and inclusion is differently consolidated in the organization, being perceived as important in all countries, but still centralized on corporate communication and global initiatives. So, for the purpose of analysis of the impact of diversity and inclusion on organizational performance, one insight that drove to the inclusion of V&B in the research is that D&I should not be analyzed by its own at country level, but together with the values and behaviors of the organization, as values and behaviors are part of the daily life of employees, their development plans, performance evaluations, having a substantial impact on annual incentives.

The culture of each country also influences the way in which the different dimensions of organizational performance are perceived. There are countries like Austria and Switzerland where the focus is clear, across the organization, on what are the most important organizational performance dimensions. As described in the analysis of the impact of culture on the adoption of the different OP dimensions, in Austria the focus is quality and productivity, and in Switzerland the focus is performance.

In countries like Portugal or The Netherlands, the focus is on the associate and its role. Depending on the role that the employee has in the organization, the different dimensions of organizational performance may be more or less important.

This research allows to understand which D&I dimensions and the best combination of D&I and V&B dimensions drive the organization priorities in each country, based on the country culture, and specific organization objectives.

Thus, for example in Austria, and considering the organization focus on quality and productivity, diversity and inclusion are necessary conditions for quality to occur, so quality cannot occur without the occurrence of diversity and inclusion.

Also, quality occurs whenever the diversity is present, then diversity is said to be a sufficient condition for quality, although quality may occur in relation to other conditions. Inclusion is not a sufficient condition for quality.

Taking these results into account, to improve quality in the organization, there must be developed and implemented organizational policies that maximize diversity and inclusion as they are necessary conditions for quality, which is happening in Austria as mentioned in the interviews. In addition, whenever there is diversity, quality is also present.

Knowing that the implementation of values and behaviors is a more developed area in the organization, combining V&B and D&I can be a strategy to maximize organizational performance.

In this sense, and considering the dimension of organizational performance, quality, it cannot occur without the occurrence of diversity, inclusion, creative thinking, excellence, collaboration, achievement, or courage, as they are necessary conditions for quality.

Also, regarding all variables of D&I and V&B, quality occurs with the combination of the existence of diversity, creative thinking, collaboration and achievement, and the absence of integrity, as this combination is said to be a sufficient condition for quality.

But there is also a second combination for quality to occur. The result quality occurs whenever the combination of the existence of diversity, inclusion, creative thinking, excellence, collaboration, achievement, and courage is present, then this combination is also a sufficient condition for quality to occur.

Regarding the second priority area in Austria, productivity, a similar analysis can be done.

Productivity occurs whenever the condition diversity is present, then diversity is said to be a sufficient condition. Inclusion is not a sufficient condition for productivity.

Combining D&I and V&B, productivity cannot occur without the occurrence of diversity, creative thinking, collaboration, or achievement as they are the necessary conditions.

Also, regarding all variables of D&I and V&B, productivity occurs with the combination of the existence of diversity, creative thinking, collaboration and achievement, and the absence of inclusion, excellence, courage, and integrity, as this combination is said to be a sufficient condition for productivity.

Productivity can also occur with the combination of all D&I and V&B dimensions. If the existence of diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity occurs, then Productivity occurs.

On the other hand, in countries like the Netherlands or Portugal where it is mentioned that the importance of the different dimensions of organizational performance depends on the function, for example in human resources where the development of people is critical and the dimension of organizational performance people is key, conclusions are different.

So, for this specific role, and not for the organization a whole, considering D&I dimensions, none is a necessary condition for the OP dimension to occur, so the OP dimension people can occur without D&I, but people cannot occur without V&B dimensions excellence, collaboration, achievement, courage, or integrity as they are the necessary conditions.

Regarding all variables of D&I and V&B, people occurs whenever the combination of the existence of diversity, creative thinking, collaboration and achievement, and the absence of inclusion, excellence, courage, and integrity is present, as this combination is said to be a sufficient condition for people.

People can also occur with the combination of all D&I and V&B dimensions. If the existence of diversity, inclusion, creative thinking, excellence, collaboration, achievement, courage, and integrity occurs, then people occur.

A similar approach can be done to other roles with different needs.

Based on these two examples, in each country, according to their culture, and according to the specific priorities and objectives of the organization, human resources management policies can be established, focused on the development of specific values and behaviors, employee diversity, or policies that maximize inclusion.

Regarding the literature review presented in chapter 3, the results of this research are supported by the work done in this area so far, namely in the importance that the dimensions of diversity and inclusion have on the performance of organizations, as well as the importance of leadership regarding the country where the organization develop its activity, and as such, the culture of that same country.

From the results, and as found in the literature review, more diverse and more inclusive organizations (here with less data since inclusion is a less explored area of study as described in the literature review), tend to have better performance indicators, or in other words, diversity or inclusion are necessary or sufficient conditions for the different dimensions of organizational performance to occur, as mentioned above.

This research brings innovation to the knowledge of D&I and OP as this influence is quite different when considered by itself, or in conjunction with the values and behaviors of the organization that may have a different influence in the occurrence of the different dimensions of OP.

On the other hand, there are some indicators of the performance of organizations that are not so explored in research related to diversity and inclusion. In this context, performance indicators such as quality or development and talent retention were also in the core of this work. In this context, from the analysis to the state of the art, companies are increasingly looking for talent, but nothing mentions how the D&I policy impacts this search beyond the perception that more diverse and inclusive companies are better to work, as presented in CSR analysis.

Thus, this work goes beyond the most common indicators of organizational performance found in the literature as innovation or results. In this work, all the performance indicators of an organization are evaluated equally, realizing how D&I and the organizational culture, through the different values and behaviors, influence them.

Also, this research allows us to understand how a country's culture influences the dimensions under study. In this context, the results are in accordance with what is found in the literature, namely the Hofstede's dimensions of culture for each of the countries under analysis, according to the responses to the interviews made in each of the countries. Here, not only are the results presented supported by previous research, but they also show how leadership has different impact in each of the countries in the adoption of D&I policies and as such, the way that leadership influences the performance of the organization.

Thus, the results found in this work are supported by the literature review, not only in the importance that D&I has for the OP, but also the influence that culture has on the adoption of these policies.

Supported by this research it is possible to align the objectives of the organization with the way of acting in each country, to make the most appropriate choices to maximize organizational performance.

6.5.2 – FINAL REMARKS

This research work contributes to improving knowledge on diversity and inclusion and organizational performance in several ways:

First, this research provides a theoretical tool that identifies the key dimensions of D&I and OP in a specific organization, including diversity, inclusion, execution, quality, innovation, productivity, and people, defined in chapter 3.

Second, based on the observation the concept of D&I is under construction mainly due to inclusion dimension, D&I impact in the company was operationalized also through the analysis of its relationship with V&B dimensions as they are part of the daily life of associates, their development plans, performance evaluations, having impact on annual incentives, which allowed the proposed problem to be explored more exhaustively.

Third, this work provides evidence to support the conceptual and prescriptive literature on untested claims related to the impacts of D&I on OP. The empirical results allow us to conclude the different impact of D&I over OP dimensions. There is no unique relation between D&I and OP overall. There are different combinations of D&I, or D&I together with V&B which are necessary conditions or sufficient conditions for OP dimensions to occur.

Fourth, this study reveals the importance of V&B dimensions on OP through its influence along with D&I dimensions. The empirical results of this relationship are significant for current knowledge in the field of D&I and OP because as revealed in this research, D&I cannot have an impact by itself in all OP dimensions, but along with V&B this impact occurs (e.g., productivity).

Fifth, this study reveals that despite a clear definition of D&I dimensions and V&B dimensions within an organization, the culture of the country has an impact over the adoption of V&B and D&I, which has an impact over OP dimensions.

In general, the results confirm the influence of diversity and inclusion on organizational performance. The results also show the significant role of analyzing the relationship between the different dimensions of D&I, V&B and OP.

The results contribute to knowledge in management and D&I as they reveal that the combined effect of D&I with other V&B can generate positive effects on organizational performance. This work allowed the development of a model that systematically incorporated human resources management and business sciences.

Supported by the previous topics, it is believed that the arguments presented have important implications for research on diversity and inclusion, values and behaviors, and organizational performance.

Chapter 7 concludes this work with conclusions, contributions, gaps, and future research.

CHAPTER 7

CONCLUSIONS, CONTRIBUTIONS, GAPS AND FUTURE RESEARCH

After discussing the results, some general conclusions of this study, contributions, gaps, and recommendations for future research are presented.

7.1 – CONCLUSIONS

The purpose of this work was fundamentally, through the results obtained, to answer the research question and empirically test the formulated hypotheses, to achieve the research objectives and contribute to the progress of the scientific knowledge about diversity and inclusion and organizational performance.

After concluding this investigation, the main conclusion from this research and data analysis is that there is a relationship between diversity and inclusion and organizational performance, not overall, but differently on each dimension of organizational performance.

This work was done based on data and interviews from 4 EU countries, but results allow to conclude its applicability to other countries, maintaining the alignment between the importance of the culture of the country where the organization operates, and the priorities of the organization in that country.

So, regarding the scope and practical dimensions of the concepts of diversity and inclusion and organizational performance, it can be stated that this is research is not finished. D&I dimensions have different impacts according with the country, and the OP dimensions can be different according with the industry and organization.

This research showed that diversity is already a well stablished concept with the organization, but inclusion is a new concept not only in organizations but also in literature (Roberson, 2006).

From the study of necessary conditions and sufficient conditions for OP dimensions to occur, and from the interviews, D&I dimension diversity has a bigger impact on OP than D&I dimension inclusion, so this is still an area of development in the organizations.

The investigation carried out throughout this dissertation allowed to answer the research problem and research questions.

The results obtained allow us to conclude that diversity and inclusion can be considered as a driver of organizational performance by itself, or along with the values and behaviors of the organization.

Future research may be in the expansion of this research to other countries, as well as for the performance of specific functions, where the country culture states that organizational performance depends more on the function than on the objectives of the company.

7.2 – CONTRIBUTIONS

In terms of the results of this research presented in section 6.5, it is expected to make the thematic of diversity and inclusion, values and behaviors and organizational performance more explicit as well as the contribution of the different dimensions of diversity and inclusion, and the dimensions of values and behaviors on the different dimensions of organizational performance.

It is expected that this research contributes for the better understanding of the contribution of diversity and inclusion in organizations, and how it promotes quality, execution, innovation, productivity, and people development.

This work has different significant contributions:

It is the first to incorporate the different dimensions of diversity and inclusion and the different dimensions of organizational performance, being supported by extensive data from different countries.

This work was done based on data and interviews from 4 EU countries, but results allow to conclude its applicability to other countries, maintaining the alignment between the importance of the culture of the country where the organization operates, and the priorities of the organization in that country.

Supported by this research it is possible to align the objectives of the organization with the way of acting in each country, to make the most appropriate choices to maximize organizational performance.

A broader view of this research, for example in other organizations or industries, can be supported if the importance of diversity and inclusion continues to grow within organizations.

This research allowed to conclude that the effect of diversity and inclusion is more significant together than individually, when analyzing the constructs diversity and inclusion, values and behaviors, and organizational performance.

It allowed to state that there is no one solution fits all when dealing with the organizational performance dimensions. There are different combinations of D&I dimensions, or D&I dimensions together with V&B dimensions that can impact the different OP dimensions.

It allowed to state that when a specific combination of D&I dimensions, or D&I dimensions together with V&B dimensions influences a specific OP dimension, the culture of the country influences how these dimensions are adopted.

This work shapes new research themes, becoming a significant challenge for future research.

7.3 – GAPS AND FUTURE RESEARCH

Adequate interpretation of results requires that the key limitations of this research emerged during the investigation become explicit.

Although this study provides significant contributions for the theme of diversity an inclusion, and organizational performance, both form a theoretical and practical point of view, it has limitations that will be described.

The verification of these limitations may drive future researchers in this area of investigation.

However, key concerns come from the D&I variables as key data that support this research is broad, and detail of these variables will enrich this study.

The study measures on the variables for D&I are based on 3 questions of GES that despite being answered by 648 associates (78% of the total associates in the 4 countries in study), they involve a certain degree of subjectivity and bias in the response as they are extremely broad, not detailing diversity and inclusion variables as gender, religion, age, race, or sexual orientation.

Also, the qualitative study on the different dimensions (diversity and inclusion, values and behaviors, and organizational performance) are based on the perceptions of a single respondent per country, which despite being nominated by each CLT (Country Leadership Team), involves a certain degree of subjectivity and bias in the responses.

Despite being key associates with an overall view from each organization (e.g., P&O Heads and LT members), the use of a single respondent may generate some inaccuracy in the measurement, so the results must be interpreted considering this limitation.

A fourth area is data. In this study data source is the GES 2017. This fact prevents the study of the evolution of the variables under study.

As GES 2017 was the last big scale broad questionnaire in these areas during the period of this research, it was not possible to address this issue. This aspect is of particular interest for future research.

Based on these limitations some recommendation can be addressed in future research.

Suggestions and proposals for future research are the result from the investigation process carried out and limitations highlighted before. It is considered that these suggestions may bring other new evidence on the impact of D&I on OP, and more specifically on the variables of diversity and inclusion that support each dimension of D&I.

This is particularly important at country level as they were highlighted differently in the questionnaires.

Despite the contribution of this research in the study of the impact of D&I on OP, it must be noticed that this was the first approach of this kind, tackling different OP dimensions at the same time, and it will be important for other investigations to confirm or reject the conclusions of this study.

So, the discussion of current study limitations can lead to some suggestions for future investigations.

Future research should seek to obtain more than one respondent per country, as a single answer per country can generate some inaccuracy, more than a usual random error. In this sense future investigations must use multiple respondents from each country, to increase the validity and reliability of the study results.

As the study only provides reliable and valid measures at the level of the two dimensions of the D&I construct, future investigation should consider the incorporation of the different variables of diversity and inclusion as age, gender, religion, race, or sexual orientation.

Future research may also be focused on the expansion of current investigation to other countries, as well as for the performance of key roles in the organization.

This investigation identified a positive relationship between the constructs (D&I, V&B and OP). Future investigations can be based on these results to carry out other research with different structure and other constructs.

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ANNEXES

ANNEX 1 – GLOBAL EMPLOYEE SURVEY – DATA

Table 45 – GES survey – overall data

	П	Austria compared to	Belgium compared to	Switzerland	Nederlands	Portugal compared to	Greece compared to
Category	L	Global Top Norm	Global Top Norm	compared to Global	compared to Global	Global Top Norm	Global Top Norm
Alignment	Π	12%	17%	16%	10%	16%	11%
Engagement		5%	17%	13%	6%	16%	5%
Change Versatility		-1%	4%	-1%	-15%	12%	-3%
Innovation		1%	-3%	-2%	-14%	8%	-9%
Quality		6%	10%	2%	1%	13%	0%
Collaboration		-2%	0%	1%	-10%	4%	-9%
Courage		-1%	7%	2%	2%	6%	-4%
Performance		-2%	-3%	-1%	-12%	1%	-12%
Integrity		6%	13%	10%	8%	19%	11%
Patient / Customer Centricity		9%	12%	10%	1%	18%	7%
Leadership		1%	14%	7%	-1%	18%	7%
Talent		1%	14%	5%	-4%	18%	-3%
Diversity & Inclusion		3%	2%	0%	-3%	8%	-7%
Organizational Excellence		-13%	-17%	-11%	-29%	-10%	-18%
Corporate Responsibility		-7%	0%	-1%	-9%	6%	-13%
AVERAGE ALL		1%	6%	3%	-5%	10%	-2%

Source: adapted from GES – Global Employee Survey

	Austria compared to	Belgium compared to	Switzerland	Nederlands	Portugal compared to	Greece compared to
Category	Global Top Norm	Global Top Norm	compared to Global	compared to Global	Global Top Norm	Global Top Norm
Performance - Objectives	12%	17%	16%	10%	16%	11%
V&B - Innovation	1%	-3%	-2%	-14%	8%	-9%
V&B - Quality	6%	10%	2%	1%	13%	0%
V&B - Collaboration	-2%	0%	1%	-10%	4%	-9%
V&B - Courage	-1%	7%	2%	2%	6%	-4%
V&B - Performance	-2%	-3%	-1%	-12%	1%	-12%
V&B - Integrity	6%	13%	10%	8%	19%	11%
Performance - Quality	9%	12%	10%	1%	18%	7%
Performance - People	1%	14%	5%	-4%	18%	-3%
Diversity & Inclusion	3%	2%	0%	-3%	8%	-7%
Performance - Productivity	-13%	-17%	-11%	-29%	-10%	-18%

Source: adapted from GES – Global Employee Survey

As some of the dimensions have the same name at Novartis, for the purpose of this thesis, the V&B dimension Innovation was renamed as Creative Thinking (CT), the V&B dimension Performance was renamed as Achievement, the V&B dimension Quality was renamed as Excellence. Also, the OP dimension Objectives was renamed as Execution.

ANNEX 2

QUESTIONS GLOBAL EMPLOYEE SURVEY

Questions GES – D&I

There are 3 questions to address D&I in the GES survey

14. My immediate supervisor encourages an environment where individual differences are valued.

22. Good ideas are adopted here regardless of who suggests them or where they come from.

29. At my company, people treat one another with trust and mutual respect.

Questions GES – V&B

As some of the dimensions have the same name at Novartis, for the purpose of this thesis, V&B dimension Innovation was renamed as Creative Thinking (CT), V&B dimension Performance was renamed as Achievement, V&B dimension Quality was renamed as Excellence.

There are 5 questions to address Innovation (Creative Thinking) in the GES survey

7. At my company, we are consistently searching for the next great idea.

22. Good ideas are adopted here regardless of who suggests them or where they come from.

38. Conditions at my company make it safe to challenge the status quo.

40. In my team, we learn and improve from our mistakes.

47. At my company, people are encouraged to take appropriate risks to improve business results.

There are 4 questions to address Quality (Excellence) in the GES survey

8. The day-to-day decisions in my team demonstrate that quality is a top priority.

23. In my team, we discuss quality concerns and opportunities.

36. My immediate supervisor emphasizes the importance of quality focus.

40. In my team, we learn and improve from our mistakes.

There are 4 questions to address Collaboration in the GES survey

9. The people I work with share information and ideas that they think will help others succeed.

24. At my company, I see teams working together across different functions to improve business outcomes.

25. I trust the people I work with to put the team's goals before their own goals.

46. My company has tools in place that enable employees to easily share information.

There are 4 questions to address Performance (Achievement) in the GES survey

9. The people I work with share information and ideas that they think will help others succeed.

10. I receive ongoing feedback that helps me improve my performance.

25. I trust the people I work with to put the team's goals before their own goals.

37. In my job, I have clearly defined goals.

There are 7 questions to address Courage in the GES survey

11. In my team, we provide open and constructive feedback to one another.

26. Speaking up is valued in my team.

38. Conditions at my company make it safe to challenge the status quo.

39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.

40. In my team, we learn and improve from our mistakes.

47. At my company, people are encouraged to take appropriate risks to improve business results.

50. I can respond to problems without waiting for approvals.

There are 6 questions to address Integrity in the GES survey

4. Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors.

12. The Code of Conduct has been communicated to me so that I understand it.

19. Senior Leadership's actions show that they trust employees.

26. Speaking up is valued in my team.

27. Operating with high ethical standards in my team takes priority over achieving business results.

39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.

Questions GES – Objectives

As some of the dimensions have the same name at Novartis, for the purpose of this thesis, the OP dimension Objectives was renamed as Execution.

There are 4 questions to address Objectives (Execution) in the GES survey

2. I can see a clear link between my work and my company's goals and objectives.

17. My team's activities are clearly aligned with my company's goals.

32. I know what I should do to help my company meet its goals and objectives.

44. Senior Leadership effectively communicates what my company is trying to accomplish.

There are 5 questions to address Quality in the GES survey

13. In my team, we have a clear understanding of our patients' / customers' needs.

24. At my company, I see teams working together across different functions to improve business outcomes.

28. At my company, we consider what is important to our patients / customers when making decisions.

41. I feel confident that products and services introduced by my company help improve patient health.

48. People in my team are focused on delivering solutions that meet the needs of health care systems.

There are 5 questions to address Innovation in the GES survey, the same for V&B

7. At my company, we are consistently searching for the next great idea.

22. Good ideas are adopted here regardless of who suggests them or where they come from.

38. Conditions at my company make it safe to challenge the status quo.

40. In my team, we learn and improve from our mistakes.

47. At my company, people are encouraged to take appropriate risks to improve business results.

There are 4 questions to address Productivity in the GES survey

6. My job makes good use of my skills and abilities.

21. My company does a good job minimizing or eliminating unnecessary bureaucracy.

35. I have the tools and resources to do my job well.

46. My company has tools in place that enable employees to easily share information.

There are 4 questions to address People in the GES survey

5. I have the opportunity to grow and develop at Novartis.

20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.

34. I have access to effective learning and training opportunities to enable me to perform in my role.

43. I would recommend my company as a great place to work.

ANNEX 3

RESULTS GLOBAL EMPLOYEE SURVEY

Overall Results GES – D&I

Table 47 – Questions to address D&I in the GES survey

Item	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Diversity & Inclusion	1%	0%	-2%	-5%	6%	-9%
14. My immediate supervisor encourages an environment where individual differences are valued.	-1%	-3%	-2%	-6%	4%	-3%
22. Good ideas are adopted here regardless of who suggests them or where they come from.	7%	-3%	-6%	-14%	3%	-12%
29. At my company, people treat one another with trust and mutual respect.	-3%	6%	4%	6%	11%	-11%

Source: adapted from GES – Global Employee Survey

Overall Results GES – V&B

Table 48 – Questions to address Creative Thinking in the GES survey

Item	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Innovation	1%	-3%	-2%	-14%	8%	-9%
7. At my company, we are consistently searching for the next great idea.	5%	-15%	4%	-33%	8%	-2%
22. Good ideas are adopted here regardless of who suggests them or where they come from.	7%	-3%	-6%	-14%	3%	-12%
38. Conditions at my company make it safe to challenge the status quo.	0%	4%	8%	-4%	10%	-20%
40. In my team, we learn and improve from our mistakes.	-1%	4%	-5%	0%	11%	-9%
47. At my company, people are encouraged to take appropriate risks to improve business results.	-6%	-7%	-10%	-16%	9%	-1%

Table 49 – Questions to address Excellence in the GES survey

Item	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Quality	1%	5%	-3%	-4%	8%	-5%
8. The day-to-day decisions in my team demonstrate that quality is a top priority.	-2%	2%	-4%	-16%	8%	-5%
23. In my team, we discuss quality concerns and opportunities.	4%	8%	-4%	3%	6%	-6%
36. My immediate supervisor emphasizes the importance of quality focus.	6%	7%	1%	-3%	10%	0%
40. In my team, we learn and improve from our mistakes.	-1%	4%	-5%	0%	11%	-9%

Source: adapted from GES – Global Employee Survey

Table 50 – Questions to address Collaboration in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Collaboration	-3%	-1%	0%	-11%	3%	-10%
9. The people I work with share information and ideas that they think will help others succeed.	-3%	-3%	1%	-4%	2%	-18%
24. At my company, I see teams working together across different functions to improve business outcomes.	8%	2%	4%	-6%	12%	-8%
25. I trust the people I work with to put the team's goals before their own goals.	-10%	3%	-4%	-5%	-7%	-15%
46. My company has tools in place that enable employees to easily share information.	-5%	-4%	0%	-28%	4%	1%

Source: adapted from GES – Global Employee Survey

Table 51 – Questions to address Achievement in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Performance	-2%	-3%	-1%	-12%	1%	-12%
9. The people I work with share information and ideas that they think will help others succeed.	-3%	-3%	1%	-4%	2%	-18%
10. I receive ongoing feedback that helps me improve my performance.	4%	-11%	-6%	-31%	3%	-13%
25. I trust the people I work with to put the team's goals before their own goals.	-10%	3%	-4%	-5%	-7%	-15%
37. In my job, I have clearly defined goals.	0%	0%	3%	-9%	5%	1%

Table 52 – Questions to address Courage in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Courage	-4%	4%	-1%	-1%	3%	-7%
11. In my team, we provide open and constructive feedback to one another.	3%	6%	-1%	-12%	1%	-14%
26. Speaking up is valued in my team.	-11%	-3%	-4%	0%	-1%	-5%
38. Conditions at my company make it safe to challenge the status quo.	0%	4%	8%	-4%	10%	-20%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.	1%	6%	4%	7%	7%	-2%
40. In my team, we learn and improve from our mistakes.	-1%	4%	-5%	0%	11%	-9%
47. At my company, people are encouraged to take appropriate risks to improve business results.	-6%	-7%	-10%	-16%	9%	-1%
50. I can respond to problems without waiting for approvals.	-16%	13%	-2%	15%	-18%	0%

Source: adapted from GES – Global Employee Survey

Table 53 – Questions to address Integrity in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Integrity	-5%	2%	-1%	-3%	8%	0%
 Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors. 	-1%	10%	-5%	1%	13%	3%
12. The Code of Conduct has been communicated to me so that I understand it.	-3%	-2%	-1%	-1%	4%	5%
19. Senior Leadership's actions show that they trust employees.	-17%	7%	-2%	-7%	14%	1%
26. Speaking up is valued in my team.	-11%	-3%	-4%	0%	-1%	-5%
27. Operating with high ethical standards in my team takes priority over achieving business results.	-3%	-9%	1%	-17%	10%	-1%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.	1%	6%	4%	7%	7%	-2%

Source: adapted from GES – Global Employee Survey

Overall Results GES – Performance

Table 54 – Questions to address Execution in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Objectives	2%	7%	6%	0%	6%	1%
2. I can see a clear link between my work and my company's goals and objectives.	3%	6%	9%	5%	7%	1%
17. My team's activities are clearly aligned with my company's goals.	6%	8%	3%	-4%	6%	3%
32. I know what I should do to help my company meet its goals and objectives.	0%	6%	4%	5%	5%	0%
44. Senior Leadership effectively communicates what my company is trying to accomplish.	1%	9%	8%	-7%	7%	0%

Table 55 – Questions to address Quality in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Quality	-1%	2%	0%	-9%	8%	-3%
13. In my team, we have a clear understanding of our patients' / customers' needs.	1%	2%	1%	-26%	5%	-4%
24. At my company, I see teams working together across different functions to improve business outcomes.	8%	2%	4%	-6%	12%	-8%
28. At my company, we consider what is important to our patients / customers when making decisions.	-15%	2%	-7%	-6%	8%	2%
41. I feel confident that products and services introduced by my company help improve patient health.	1%	3%	3%	0%	2%	3%
48. People in my team are focused on delivering solutions that meet the needs of health care systems.	1%	1%	2%	-4%	14%	-3%

Source: adapted from GES – Global Employee Survey

Table 56 – Questions to address Innovation in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Innovation	1%	-3%	-2%	-14%	8%	-9%
7. At my company, we are consistently searching for the next great idea.	5%	-15%	4%	-33%	8%	-2%
22. Good ideas are adopted here regardless of who suggests them or where they come from.	7%	-3%	-6%	-14%	3%	-12%
38. Conditions at my company make it safe to challenge the status quo.	0%	4%	8%	-4%	10%	-20%
40. In my team, we learn and improve from our mistakes.	-1%	4%	-5%	0%	11%	-9%
47. At my company, people are encouraged to take appropriate risks to improve business results.	-6%	-7%	-10%	-16%	9%	-1%

Source: adapted from GES – Global Employee Survey

Table 57 – Questions to address Productivity in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
Productivity	-3%	-7%	-1%	-19%	0%	-8%
6. My job makes good use of my skills and abilities.	6%	-11%	3%	-19%	-1%	-2%
21. My company does a good job minimizing or eliminating unnecessary bureaucracy.	-15%	-18%	-16%	-27%	-20%	-22%
35. I have the tools and resources to do my job well.	2%	5%	9%	-2%	16%	-9%
46. My company has tools in place that enable employees to easily share information.	-5%	-4%	0%	-28%	4%	1%

Table 58 – Questions to address People in the GES survey

ltem	Austria	Belgium	Switzerland	Nederlands	Portugal	Greece
People	-5%	8%	-1%	-10%	12%	-9%
5. I have the opportunity to grow and develop at Novartis.	-4%	1%	2%	-10%	12%	-13%
20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.	-4%	12%	-6%	0%	11%	-7%
34. I have access to effective learning and training opportunities to enable me to perform in my role.	-9%	8%	-12%	-21%	14%	-10%
43. I would recommend my company as a great place to work.	-2%	11%	11%	-7%	11%	-8%

ANNEX 4

GES RESULTS – DETAILS BY COUNTRY

Results GES – Countries of the study

Novartis products are available in 155 countries. There are different regions worldwide, and Portugal is a member of WEC – Western European Countries, with Austria, Belgium, Greece, Netherlands, and Switzerland. To this study, 4 countries were selected: Austria, Netherlands, Portugal and Switzerland.

Austria – D&I

Austria (n = 145)					Comparisons	
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Diversity & Inclusion		73%	19%	9%	70%	3%
14. My immediate supervisor encourages an environment where individual differences are valued.		77%	14%	10%	70%	7%
22. Good ideas are adopted here regardless of who suggests them or where they come from.		68%	22%	10%	68%	0%
29. At my company, people treat one another with trust and mutual respect.		73%	21%	6%	73%	0%

Table 59 – Questions in the GES survey to address D&I dimensions in Austria.

Austria – V&B

Table 60 – Questions in the GES survey to address V&B dimension Creative Thinking in Austria

Austria (n = 145)					Compa	arisons
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Innovation		68%	22%	10%	67%	1%
7. At my company, we are consistently searching for the next great idea.		77%	20%	3%	68%	9%
22. Good ideas are adopted here regardless of who suggests them or where they come from.		68%	22%	10%	68%	0%
38. Conditions at my company make it safe to challenge the status quo.		59%	25%	15%	63%	-4%
40. In my team, we learn and improve from our mistakes.		84%	11%	5%	76%	8%
47. At my company, people are encouraged to take appropriate risks to improve business results.		51%	33%	16%	62%	-11%

Source: adapted from GES – Global Employee Survey

Table 61 – Questions in the GES survey to address V&B dimension Excellence in Austria.

Austria (n = 145)					Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Quality		83%	11%	5%	77%	6%
8. The day-to-day decisions in my team demonstrate that quality is a top priority.		77%	15%	8%	77%	0%
23. In my team, we discuss quality concerns and opportunities.		83%	12%	5%	77%	6%
36. My immediate supervisor emphasizes the importance of quality focus.		90%	8%	3%	78%	12%
40. In my team, we learn and improve from our mistakes.		84%	11%	5%	76%	8%

Austria (n = 145)					Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Collaboration		69%	19%	11%	71%	-2%
9. The people I work with share information and ideas that they think will help others succeed.		76%	15%	8%	80%	-4%
24. At my company, I see teams working together across different functions to improve business outcomes.	Strength	79%	14%	6%	61%	18%
25. I trust the people I work with to put the team's goals before their own goals.		56%	26%	18%	74%	-18%
46. My company has tools in place that enable employees to easily share information.		66%	22%	13%	70%	-4%

Table 62 – Questions in the GES survey to address V&B dimension Collaboration in Austria.

Source: adapted from GES – Global Employee Survey

Table 63 – Questions in the GES survey to address V&B dimension Achievement in Austria.

Austria (n = 145)					Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Performance		74%	15%	11%	76%	-2%
9. The people I work with share information and ideas that they think will help others succeed.		76%	15%	8%	80%	-4%
10. I receive ongoing feedback that helps me improve my performance.		75%	13%	12%	65%	10%
25. I trust the people I work with to put the team's goals before their own goals.		56%	26%	18%	74%	-18%
37. In my job, I have clearly defined goals.		88%	6%	6%	84%	4%

Austria	Austria (n = 145)					Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm	
Courage		66%	20%	14%	67%	-1%	
11. In my team, we provide open and constructive feedback to one another.		83%	10%	7%	66%	17%	
26. Speaking up is valued in my team.		69%	17%	14%	66%	3%	
38. Conditions at my company make it safe to challenge the status quo.		59%	25%	15%	63%	-4%	
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.		86%	11%	3%	67%	19%	
40. In my team, we learn and improve from our mistakes.		84%	11%	5%	76%	8%	
47. At my company, people are encouraged to take appropriate risks to improve business results.		51%	33%	16%	62%	-11%	
50. I can respond to problems without waiting for approvals.	Opportunity	30%	32%	38%	72%	-42%	

Table 64 – Questions in the GES survey to a	address V&B dimension Courage in Austria.
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Source: adapted from GES – Global Employee Survey

Table 65 – Questions in the GES survey to address V&B dimension Integrity in Austria.

Austria (n = 145)			Compa	arisons		
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Integrity		74%	15%	11%	68%	6%
4. Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors.		74%	14%	11%	65%	9%
12. The Code of Conduct has been communicated to me so that I understand it.	Strength	89%	9%	2%	68%	21%
19. Senior Leadership's actions show that they trust employees.	Opportunity	43%	27%	31%	70%	-27%
26. Speaking up is valued in my team.		69%	17%	14%	66%	3%
27. Operating with high ethical standards in my team takes priority over achieving business results.		80%	14%	6%	71%	9%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.		86%	11%	3%	67%	19%
Austria – Performance

Table 66 – Questions in the GES survey to address OP dimension Execution in Austria.

Austria (n = 145)						arisons
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Performance		87%	10%	3%	75%	12%
2. I can see a clear link between my work and my company's goals and objectives.		86%	11%	3%	74%	12%
17. My team's activities are clearly aligned with my company's goals.	Strength	92%	7%	1%	77%	15%
32. I know what I should do to help my company meet its goals and objectives.		92%	7%	1%	79%	13%
44. Senior Leadership effectively communicates what my company is trying to accomplish.		79%	16%	6%	71%	8%

Source: adapted from GES – Global Employee Survey

Table 67 – Questions in the GES survey to address OP dimension Quality in Austria.

Austria	(n = 145)				Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Quality		81%	13%	6%	72%	9%
13. In my team, we have a clear understanding of our patients' / customers' needs.		88%	9%	3%	74%	14%
24. At my company, I see teams working together across different functions to improve business outcomes.	Strength	79%	14%	6%	61%	18%
28. At my company, we consider what is important to our patients / customers when making decisions.		63%	22%	15%	78%	-15%
41. I feel confident that products and services introduced by my company help improve patient health.	Strength	97%	3%	0%	73%	24%
48. People in my team are focused on delivering solutions that meet the needs of health care systems.		77%	17%	6%	72%	5%

Austria	a (n = 145)				Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Innovation		68%	22%	10%	67%	1%
 At my company, we are consistently searching for the next great idea. 		77%	20%	3%	68%	9%
22. Good ideas are adopted here regardless of who suggests them or where they come from.		68%	22%	10%	68%	0%
38. Conditions at my company make it safe to challenge the status quo.		59%	25%	15%	63%	-4%
40. In my team, we learn and improve from our mistakes.		84%	11%	5%	76%	8%
47. At my company, people are encouraged to take appropriate risks to improve business results.		51%	33%	16%	62%	-11%

Table 68 – Questions in the GES survey to address OP dimension Innovation in Austria.

Source: adapted from GES – Global Employee Survey

Table 69 – Questions in the GES survey to address OP dimension Productivity in Austria.

Austria	a (n = 145)				Comparisons	
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
Productivity		60%	17%	22%	73%	-13%
 My job makes good use of my skills and abilities. 		88%	8%	5%	81%	7%
21. My company does a good job minimizing or eliminating unnecessary bureaucracy.	Opportunity	18%	21%	61%	63%	-45%
35. I have the tools and resources to do my job well.		69%	20%	11%	77%	-8%
46. My company has tools in place that enable employees to easily share information.		66%	22%	13%	70%	-4%

Austria	ı (n = 145)				Compa	arisons
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Austria Compared To Global Top Norm
People		66%	23%	10%	65%	1%
5. I have the opportunity to grow and develop at Novartis.		66%	25%	9%	58%	8%
20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.		67%	26%	7%	73%	-6%
34. I have access to effective learning and training opportunities to enable me to perform in my role.		59%	22%	19%	60%	-1%
43. I would recommend my company as a great place to work.		73%	21%	6%	69%	4%

Table 70 – Questions in the GES survey to address OP dimension People in Austria.

Source: adapted from GES – Global Employee Survey

Netherlands – D&I

Table 71 – Questions in the GES survey to address D&I dimensions in The Netherlands

Nederlands (n = 188)						Comparisons	
Diversity & Inclusion		67%	20%	13%	70%	-3%	
14. My immediate supervisor encourages an environment where individual differences are valued.		72%	19%	9%	70%	2%	
22. Good ideas are adopted here regardless of who suggests them or where they come from.		47%	30%	24%	68%	-21%	
29. At my company, people treat one another with trust and mutual respect.		82%	12%	6%	73%	9%	

Netherlands – V&B

Table 72 – Questions in the GES survey to address V&B dimension Creative Thinking in The Netherlands

Nederla	nds (n = 188)				Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Innovation		53%	28%	19%	67%	-14%
7. At my company, we are consistently searching for the next great idea.	Opportunity	39%	30%	31%	68%	-29%
22. Good ideas are adopted here regardless of who suggests them or where they come from.		47%	30%	24%	68%	-21%
38. Conditions at my company make it safe to challenge the status quo.		55%	34%	11%	63%	-8%
40. In my team, we learn and improve from our mistakes.		85%	11%	4%	76%	9%
47. At my company, people are encouraged to take appropriate risks to improve business results.		41%	33%	25%	62%	-21%

Source: adapted from GES – Global Employee Survey

Table 73 – Questions in the GES survey to address V&B dimension Excellence in The Netherlands

Nederla	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Quality		78%	15%	7%	77%	1%
8. The day-to-day decisions in my team demonstrate that quality is a top priority.		63%	22%	15%	77%	-14%
23. In my team, we discuss quality concerns and opportunities.		82%	14%	4%	77%	5%
36. My immediate supervisor emphasizes the importance of quality focus.		81%	14%	5%	78%	3%
40. In my team, we learn and improve from our mistakes.		85%	11%	4%	76%	9%

Table 74 – Questions in the GES survey to address V&B dimension Collaboration in The Netherlands

Nederla	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Collaboration		61%	22%	17%	71%	-10%
9. The people I work with share information and ideas that they think will help others succeed.		75%	17%	8%	80%	-5%
24. At my company, I see teams working together across different functions to improve business outcomes.		65%	18%	17%	61%	4%
25. I trust the people I work with to put the team's goals before their own goals.		61%	27%	12%	74%	-13%
46. My company has tools in place that enable employees to easily share information.		43%	27%	30%	70%	-27%

Source: adapted from GES – Global Employee Survey

Table 75 – Questions in the GES survey to address V&B dimension Achievement in The Netherlands

Nederla	Comparisons					
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Performance		64%	24%	13%	76%	-12%
9. The people I work with share information and ideas that they think will help others succeed.		75%	17%	8%	80%	-5%
10. I receive ongoing feedback that helps me improve my performance.	Opportunity	40%	36%	24%	65%	-25%
25. I trust the people I work with to put the team's goals before their own goals.		61%	27%	12%	74%	-13%
37. In my job, I have clearly defined goals.		79%	14%	7%	84%	-5%

Nederlar	nds (n = 188)				Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Courage		69%	20%	11%	67%	2%
11. In my team, we provide open and constructive feedback to one another.		68%	21%	11%	66%	2%
26. Speaking up is valued in my team.		80%	12%	9%	66%	14%
38. Conditions at my company make it safe to challenge the status quo.		55%	34%	11%	63%	-8%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.	Strength	92%	6%	2%	67%	25%
40. In my team, we learn and improve from our mistakes.		85%	11%	4%	76%	9%
47. At my company, people are encouraged to take appropriate risks to improve business results.		41%	33%	25%	62%	-21%
50. I can respond to problems without waiting for approvals.	Strength	61%	22%	17%	72%	-11%

Table 76 – Questions in the GES survey to address V&B dimension Courage in The Netherlands

Source: adapted from GES – Global Employee Survey

Table 77– Questions in the GES survey to address V&B dimension Integrity in The Netherlands

Nederlar	nds (n = 188)				Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Integrity		76%	16%	7%	68%	8%
4. Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors.		76%	22%	2%	65%	11%
12. The Code of Conduct has been communicated to me so that I understand it.		91%	6%	2%	68%	23%
19. Senior Leadership's actions show that they trust employees.		53%	27%	20%	70%	-17%
26. Speaking up is valued in my team.		80%	12%	9%	66%	14%
27. Operating with high ethical standards in my team takes priority over achieving business results.		66%	24%	10%	71%	-5%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.	Strength	92%	6%	2%	67%	25%

Netherlands – Performance

Table 78 – Questions in the GES survey to address OP dimension Execution in The Netherlands

Nederla	Nederlands (n = 188)					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Performance		85%	11%	4%	75%	10%
2. I can see a clear link between my work and my company's goals and objectives.		88%	7%	5%	74%	14%
17. My team's activities are clearly aligned with my company's goals.		82%	13%	4%	77%	5%
32. I know what I should do to help my company meet its goals and objectives.	Strength	97%	2%	1%	79%	18%
44. Senior Leadership effectively communicates what my company is trying to accomplish.		71%	22%	7%	71%	0%

Source: adapted from GES – Global Employee Survey

Table 79 – Questions in the GES survey to address OP dimension Quality in The Netherlands

Nederlar	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Quality		73%	18%	9%	72%	1%
13. In my team, we have a clear understanding of our patients' / customers' needs.		61%	26%	12%	74%	-13%
24. At my company, I see teams working together across different functions to improve business outcomes.		65%	18%	17%	61%	4%
28. At my company, we consider what is important to our patients / customers when making decisions.		72%	19%	9%	78%	-6%
41. I feel confident that products and services introduced by my company help improve patient health.	Strength	96%	4%	0%	73%	23%
48. People in my team are focused on delivering solutions that meet the needs of health care systems.		72%	22%	6%	72%	0%

Nederla	nds (n = 188)				Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Innovation		53%	28%	19%	67%	-14%
7. At my company, we are consistently searching for the next great idea.	Opportunity	39%	30%	31%	68%	-29%
22. Good ideas are adopted here regardless of who suggests them or where they come from.		47%	30%	24%	68%	-21%
38. Conditions at my company make it safe to challenge the status quo.		55%	34%	11%	63%	-8%
40. In my team, we learn and improve from our mistakes.		85%	11%	4%	76%	9%
47. At my company, people are encouraged to take appropriate risks to improve business results.		41%	33%	25%	62%	-21%

Table 80 – Questions in the GES survey to address OP dimension Innovation in The Netherlands

Source: adapted from GES – Global Employee Survey

Table 81 – Questions in the GES survey to address OP dimension Productivity in The Netherlands

Nederla	Nederlands (n = 188)					
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
Productivity		44%	20%	36%	73%	-29%
6. My job makes good use of my skills and abilities.		63%	19%	18%	81%	-18%
21. My company does a good job minimizing or eliminating unnecessary bureaucracy.	Opportunity	6%	17%	77%	63%	-57%
35. I have the tools and resources to do my job well.		65%	18%	18%	77%	-12%
46. My company has tools in place that enable employees to easily share information.		43%	27%	30%	70%	-27%

Nederlar	Nederlands (n = 188)					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Nederlands Compared To Global Top Norm
People		61%	24%	15%	65%	-4%
5. I have the opportunity to grow and develop at Novartis.		60%	22%	17%	58%	2%
20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.		71%	18%	11%	73%	-2%
34. I have access to effective learning and training opportunities to enable me to perform in my role.		47%	32%	22%	60%	-13%
43. I would recommend my company as a great place to work.		68%	23%	10%	69%	-1%

Table 82 – Questions in the GES survey to address OP dimension People in The Netherlands

Source: adapted from GES – Global Employee Survey

Portugal – D&I

Table 83 – Questions in the GES survey to address D&I dimensions in Portugal

Portugal (n = 197)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm	
Diversity & Inclusion		78%	13%	9%	70%	8%	
14. My immediate supervisor encourages an environment where individual differences are valued.		82%	11%	8%	70%	12%	
22. Good ideas are adopted here regardless of who suggests them or where they come from.		64%	21%	14%	68%	-4%	
29. At my company, people treat one another with trust and mutual respect.		87%	8%	5%	73%	14%	

Portugal – V&B

Table 84 – Questions in the GES survey to address V&B dimension Creative Thinking in Portugal

Portuga	Portugal (n = 197)						
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm	
Innovation		75%	17%	8%	67%	8%	
7. At my company, we are consistently searching for the next great idea.		80%	16%	5%	68%	12%	
22. Good ideas are adopted here regardless of who suggests them or where they come from.		64%	21%	14%	68%	-4%	
38. Conditions at my company make it safe to challenge the status quo.		69%	22%	9%	63%	6%	
40. In my team, we learn and improve from our mistakes.		96%	2%	2%	76%	20%	
47. At my company, people are encouraged to take appropriate risks to improve business results.		66%	24%	10%	62%	4%	

Source: adapted from GES – Global Employee Survey

Table 85 – Questions in the GES survey to address V&B dimension Excellence in Portugal

Portug	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm
Quality		90%	6%	3%	77%	13%
8. The day-to-day decisions in my team demonstrate that quality is a top priority.		87%	9%	4%	77%	10%
23. In my team, we discuss quality concerns and opportunities.		85%	10%	5%	77%	8%
36. My immediate supervisor emphasizes the importance of quality focus.		94%	5%	2%	78%	16%
40. In my team, we learn and improve from our mistakes.		96%	2%	2%	76%	20%

Portuga	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm
Collaboration		75%	16%	9%	71%	4%
9. The people I work with share information and ideas that they think will help others succeed.		81%	14%	6%	80%	1%
24. At my company, I see teams working together across different functions to improve business outcomes.		83%	10%	7%	61%	22%
25. I trust the people I work with to put the team's goals before their own goals.		59%	26%	15%	74%	-15%
46. My company has tools in place that enable employees to easily share information.		75%	15%	10%	70%	5%

Table 86 – Questions in the GES survey to address V&B dimension Collaboration in Portugal

Source: adapted from GES – Global Employee Survey

Table 87 – Questions in the GES survey to address V&B dimension Achievement in Portugal

Portuga	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm
Performance		77%	14%	9%	76%	1%
9. The people I work with share information and ideas that they think will help others succeed.		81%	14%	6%	80%	1%
10. I receive ongoing feedback that helps me improve my performance.		74%	13%	13%	65%	9%
25. I trust the people I work with to put the team's goals before their own goals.		59%	26%	15%	74%	-15%
37. In my job, I have clearly defined goals.		93%	4%	4%	84%	9%

Portuga	al (n = 197)				Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm
Courage		73%	14%	13%	67%	6%
11. In my team, we provide open and constructive feedback to one another.		81%	12%	7%	66%	15%
26. Speaking up is valued in my team.		79%	12%	9%	66%	13%
38. Conditions at my company make it safe to challenge the status quo.		69%	22%	9%	63%	6%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.		92%	5%	3%	67%	25%
40. In my team, we learn and improve from our mistakes.		96%	2%	2%	76%	20%
47. At my company, people are encouraged to take appropriate risks to improve business results.		66%	24%	10%	62%	4%
50. I can respond to problems without waiting for approvals.	Opportunity	28%	23%	49%	72%	-44%

Table 88 – Questions in the GES survey to address V&B dimension Courage in Portugal

Source: adapted from GES – Global Employee Survey

Table 89 – Questions in the GES survey to address V&B dimension Integrity in Portugal

Portuga	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm
Integrity		87%	9%	4%	68%	19%
4. Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors.		88%	9%	4%	65%	23%
12. The Code of Conduct has been communicated to me so that I understand it.	Strength	96%	3%	1%	68%	28%
19. Senior Leadership's actions show that they trust employees.		74%	20%	6%	70%	4%
26. Speaking up is valued in my team.		79%	12%	9%	66%	13%
27. Operating with high ethical standards in my team takes priority over achieving business results.		93%	6%	1%	71%	22%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.		92%	5%	3%	67%	25%

Portugal – Performance

Table 90 – Questions in the GES survey to address OP dimension Execution in Portugal

Portugal (n = 197)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm	
Performance		91%	6%	2%	75%	16%	
2. I can see a clear link between my work and my company's goals and objectives.		90%	7%	4%	74%	16%	
17. My team's activities are clearly aligned with my company's goals.		92%	7%	1%	77%	15%	
32. I know what I should do to help my company meet its goals and objectives.	Strength	97%	3%	1%	79%	18%	
44. Senior Leadership effectively communicates what my company is trying to accomplish.		85%	10%	5%	71%	14%	

Source: adapted from GES – Global Employee Survey

Table 91 – Questions in the GES survey to address OP dimension Quality in Portugal

Portuga	al (n = 197)				Compa	arisons
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm
Quality		90%	7%	3%	72%	18%
13. In my team, we have a clear understanding of our patients' / customers' needs.		92%	7%	1%	74%	18%
24. At my company, I see teams working together across different functions to improve business outcomes.		83%	10%	7%	61%	22%
28. At my company, we consider what is important to our patients / customers when making decisions.		86%	10%	4%	78%	8%
41. I feel confident that products and services introduced by my company help improve patient health.	Strength	98%	1%	1%	73%	25%
48. People in my team are focused on delivering solutions that meet the needs of health care systems.		90%	8%	2%	72%	18%

Portug	Portugal (n = 197)					Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm	
Innovation		75%	17%	8%	67%	8%	
 At my company, we are consistently searching for the next great idea. 		80%	16%	5%	68%	12%	
22. Good ideas are adopted here regardless of who suggests them or where they come from.		64%	21%	14%	68%	-4%	
38. Conditions at my company make it safe to challenge the status quo.		69%	22%	9%	63%	6%	
40. In my team, we learn and improve from our mistakes.		96%	2%	2%	76%	20%	
47. At my company, people are encouraged to take appropriate risks to improve business results.		66%	24%	10%	62%	4%	

Table 92– Questions in the GES survey to address OP dimension Innovation in Portugal

Source: adapted from GES – Global Employee Survey

Table 93– Questions in the GES survey to address OP dimension Productivity in Portugal

Portugal (n = 197)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm	
Productivity		63%	12%	25%	73%	-10%	
6. My job makes good use of my skills and abilities.		81%	6%	13%	81%	0%	
21. My company does a good job minimizing or eliminating unnecessary bureaucracy.	Opportunity	13%	20%	68%	63%	-50%	
35. I have the tools and resources to do my job well.		83%	8%	9%	77%	6%	
46. My company has tools in place that enable employees to easily share information.		75%	15%	10%	70%	5%	

Table 94– Questions in the GES survey to address OP dimension People in Portugal

Portuga	Portugal (n = 197)					
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Portugal Compared To Global Top Norm
People		83%	11%	6%	65%	18%
5. I have the opportunity to grow and develop at Novartis.		82%	12%	6%	58%	24%
20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.		82%	13%	6%	73%	9%
34. I have access to effective learning and training opportunities to enable me to perform in my role.		82%	9%	9%	60%	22%
43. I would recommend my company as a great place to work.		86%	11%	3%	69%	17%

Source: adapted from GES – Global Employee Survey

Switzerland – D&I

Table 95 – Questions in the GES survey to address D&I dimensions in Switzerland

Switzerland (n = 118)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm	
Diversity & Inclusion		70%	21%	9%	70%	0%	
14. My immediate supervisor encourages an environment where individual differences are valued.		76%	12%	12%	70%	6%	
22. Good ideas are adopted here regardless of who suggests them or where they come from.		55%	34%	11%	68%	-13%	
29. At my company, people treat one another with trust and mutual respect.		80%	16%	4%	73%	7%	

Switzerland – V&B

Table 96 – Questions in the GES survey to address V&B dimension Creative Thinking in Switzerland

Switzerla	Switzerland (n = 118)					arisons
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm
Innovation		65%	26%	9%	67%	-2%
7. At my company, we are consistently searching for the next great idea.		76%	19%	4%	68%	8%
22. Good ideas are adopted here regardless of who suggests them or where they come from.		55%	34%	11%	68%	-13%
38. Conditions at my company make it safe to challenge the status quo.		67%	22%	10%	63%	4%
40. In my team, we learn and improve from our mistakes.		80%	16%	4%	76%	4%
47. At my company, people are encouraged to take appropriate risks to improve business results.		47%	36%	17%	62%	-15%

Source: adapted from GES – Global Employee Survey

Table 97 – Questions in the GES survey to address V&B dimension Excellence in Switzerland

Switzerla	Comparisons					
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm
Quality		79%	15%	7%	77%	2%
8. The day-to-day decisions in my team demonstrate that quality is a top priority.		75%	18%	8%	77%	-2%
23. In my team, we discuss quality concerns and opportunities.		75%	16%	8%	77%	-2%
36. My immediate supervisor emphasizes the importance of quality focus.		85%	9%	6%	78%	7%
40. In my team, we learn and improve from our mistakes.		80%	16%	4%	76%	4%

Switzerland (n = 118)						Comparisons	
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm	
Collaboration		72%	19%	9%	71%	1%	
9. The people I work with share information and ideas that they think will help others succeed.		80%	11%	9%	80%	0%	
24. At my company, I see teams working together across different functions to improve business outcomes.		75%	19%	6%	61%	14%	
25. I trust the people I work with to put the team's goals before their own goals.		62%	25%	14%	74%	-12%	
46. My company has tools in place that enable employees to easily share information.		71%	22%	7%	70%	1%	

Source: adapted from GES – Global Employee Survey

Table 99 – Questions in the GES survey to address V&B dimension Achievement in Switzerland

Switzerland (n = 118)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm	
Performance		75%	15%	11%	76%	-1%	
 The people I work with share information and ideas that they think will help others succeed. 		80%	11%	9%	80%	0%	
10. I receive ongoing feedback that helps me improve my performance.		65%	19%	15%	65%	0%	
25. I trust the people I work with to put the team's goals before their own goals.		62%	25%	14%	74%	-12%	
37. In my job, I have clearly defined goals.		91%	3%	5%	84%	7%	

Table 100 – Questions in the GES survey to address V&B dimension Courage in Switzerland

Switzerla	Switzerland (n = 118)					
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm
Courage		69%	19%	12%	67%	2%
11. In my team, we provide open and constructive feedback to one another.		79%	13%	8%	66%	13%
26. Speaking up is valued in my team.		76%	13%	11%	66%	10%
38. Conditions at my company make it safe to challenge the status quo.		67%	22%	10%	63%	4%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.		89%	7%	4%	67%	22%
40. In my team, we learn and improve from our mistakes.		80%	16%	4%	76%	4%
47. At my company, people are encouraged to take appropriate risks to improve business results.		47%	36%	17%	62%	-15%
50. I can respond to problems without waiting for approvals.	Opportunity	44%	30%	26%	72%	-28%

Source: adapted from GES – Global Employee Survey

Table 101 – Questions in the GES survey to address V&B dimension Integrity in Switzerland

Switzerland (n = 118)					Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm
Integrity		78%	15%	7%	68%	10%
4. Senior Leadership at my company acts in accordance with the Novartis Values & Behaviors.		70%	20%	9%	65%	5%
12. The Code of Conduct has been communicated to me so that I understand it.	Strength	91%	7%	3%	68%	23%
19. Senior Leadership's actions show that they trust employees.		58%	26%	16%	70%	-12%
26. Speaking up is valued in my team.		76%	13%	11%	66%	10%
27. Operating with high ethical standards in my team takes priority over achieving business results.		84%	14%	2%	71%	13%
39. In my team, people feel comfortable asking for advice when faced with an ethical decision related to the Code of Conduct.		89%	7%	4%	67%	22%

Switzerland – Performance

Table 102 – Questions in the GES survey to address OP dimension Execution in Switzerland

Switzerland (n = 118)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm	
Performance		91%	7%	3%	75%	16%	
 can see a clear link between my work and my company's goals and objectives. 	Strength	92%	6%	2%	74%	18%	
17. My team's activities are clearly aligned with my company's goals.		89%	8%	3%	77%	12%	
32. I know what I should do to help my company meet its goals and objectives.	Strength	96%	4%	0%	79%	17%	
44. Senior Leadership effectively communicates what my company is trying to accomplish.		86%	9%	5%	71%	15%	

Source: adapted from GES – Global Employee Survey

Table 103 – Questions in the GES survey to address OP dimension Quality in Switzerland

Switzerland (n = 118)					Comparisons	
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm
Quality		82%	14%	4%	72%	10%
13. In my team, we have a clear understanding of our patients' / customers' needs.		88%	6%	6%	74%	14%
24. At my company, I see teams working together across different functions to improve business outcomes.		75%	19%	6%	61%	14%
28. At my company, we consider what is important to our patients / customers when making decisions.		71%	20%	8%	78%	-7%
41. I feel confident that products and services introduced by my company help improve patient health.	Strength	99%	1%	0%	73%	26%
48. People in my team are focused on delivering solutions that meet the needs of health care systems.		78%	22%	0%	72%	6%

Table 104 – Questions in the GES survey to address OP dimension Innovation in Switzerland

Switzerland (n = 118)						Comparisons	
ltem	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm	
Innovation		65%	26%	9%	67%	-2%	
7. At my company, we are consistently searching for the next great idea.		76%	19%	4%	68%	8%	
22. Good ideas are adopted here regardless of who suggests them or where they come from.		55%	34%	11%	68%	-13%	
38. Conditions at my company make it safe to challenge the status quo.		67%	22%	10%	63%	4%	
40. In my team, we learn and improve from our mistakes.		80%	16%	4%	76%	4%	
47. At my company, people are encouraged to take appropriate risks to improve business results.		47%	36%	17%	62%	-15%	

Source: adapted from GES – Global Employee Survey

Table 105 – Questions in the GES survey to address OP dimension Productivity in Switzerland

Switzerland (n = 118)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm	
Productivity		62%	20%	18%	73%	-11%	
6. My job makes good use of my skills and abilities.		85%	12%	3%	81%	4%	
 My company does a good job minimizing or eliminating unnecessary bureaucracy. 	Opportunity	17%	29%	54%	63%	-46%	
35. I have the tools and resources to do my job well.	Strength	76%	16%	8%	77%	-1%	
46. My company has tools in place that enable employees to easily share information.		71%	22%	7%	70%	1%	

Table 106 – Questions in the GES survey to address OP dimension People in Switzerland

Switzerland (n = 118)						Comparisons	
Item	Strengths / Opportunities	Favorable	Neutral	Unfavorable	Global Top Norm (favorable)	Switzerland Compared To Global Top Norm	
People		70%	22%	9%	65%	5%	
5. I have the opportunity to grow and develop at Novartis.		72%	17%	11%	58%	14%	
20. If I were offered a comparable position with similar pay and benefits at another company, I would stay with Novartis.		65%	29%	6%	73%	-8%	
34. I have access to effective learning and training opportunities to enable me to perform in my role.	Opportunity	56%	29%	15%	60%	-4%	
43. I would recommend my company as a great place to work.		86%	12%	3%	69%	17%	