The Next Generation of Professionals in Ecuador:

A MANAGER´S GUIDE TO MILLENNIAL/GENERATION Z UNIVERSITY STUDENTS

Aleksandar Tusev

UEES

UNIVERSIDAD ESPÍRITU SANTO
Km. 2,5 Vía a Samborondón - Ecuador
Teléfono: (593-4) 2835630
ceninv@uees.edu.ec
www.uees.edu.ec

Author:
Aleksandar Tusev

Editors:
Fernando Espinoza Fuentes
Alexandra Portalanza Chavarría

Editorial coordinator:
Natascha Ortiz Yánez

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Teléfono: (593-4) 2383926
ventas1@impgraficorp.net

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Dedication

To the future generations of the world, to whom we entrust the destiny of Mankind.

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About the author

Aleksandar Tusev

Education

Master of International Relations. La Trobe University, Melbourne, Australia.
Bachelor of International Relations. La Trobe University, Melbourne, Australia.
Bachelor of Business (Accountancy). RMIT University, Melbourne, Australia.

Prior research and book publications

Research Project Director. What Millennials Want: A Detailed Cross-Cultural Profile of Ecuador´s Future Professionals. Sponsored by Universidad de Especialidades Espíritu Santo. (2017-2019).
Book Author. Solidarity of a Nation: 7.8 in Ecuador. (2018).
Book Author. Going to Ecuador: Culture, Education and Industry. (2017).

Table of Contents

Introduction

Barry Salzberg, CEO of Deloitte Global, correctly predicted that "... the business community … need to change the way they engage Millennial talent or risk being left behind" (Deloitte, 2015, p. 2). By 2020, Millennials alone will make up 50% of the global workforce (PricewaterhouseCoopers [PwC], 2012). Consequently, organisations need to be prepared to adapt to the expectations of the latest generations of tech-savvy recruits, particularly when it comes to attracting, retaining and training them (PwC, 2012). Generational challenges can hardly fail to become more acute over the next decade as younger Generation Z graduates transition into the workplace.

As discussed by O'Boyle, Atack and Monahan (2017), the workplace, especially entry level positions targeted at Millennial and Generation Z graduates, is changing. Entry level positions, aimed at graduates, traditionally eased employees into the workplace with light supportive duties. Today, many of the traditional trainee tasks have been replaced by technology. For example, in accounting entry level tasks used to include the filtering and classification of clients' receipts, a timeconsuming task. However, today, technology has made it possible for receipts to be processed electronically, automatically linking them to clients' accounts via online user-friendly platforms. As computing power continues to accelerate exponentially, ("Moore's Law," n.d. para. 1), coupled with the introduction of artificial intelligence, almost all aspects of the workplace are set to undergo dramatic changes. Today, graduate recruits from the Millennial and Generation Z cohorts are increasingly expected to apply their dynamic skills in the workplace from the outset, such as performing complex analytical calculations (O`Boyle et al., 2017).

The generational gap between Millennials/Generation Z and older cohorts, including Generation X and Baby Boomers, is much more profound than earlier generational gaps due to the fundamental changes technology has brought with it. As discussed by Singh and Dangmei (2015), without proper understanding, organisations will have difficulty recruiting and retaining the best talent, leading to failures in motivating and inspiring them, which could negatively impact overall organisational performance. Organisations are now facing the inevitability of three of four generations working in the same space, each with their distinct attitudes, behaviours and value system. This creates a challenge for managers to encourage their current staff to transfer knowledge and build trust with the new generations of professionals entering the workplace (Bencsik, Juhász, & Horváth-Csikós, 2016). Without greater understanding of the new generations, organisations may revert to the use of stereotypes, leading to further problems.

Academics and managers are increasingly focusing on studying Millennials and Generation Z cohorts. This is clear in the abundance of attention this topic has received from across academic fields and industries across the world. Since at least 2013, Deloitte, the prominent multinational accounting firm, has published annual reports on Millennials, in their *Millennial survey* series, aimed at helping organisations and managers better understand the latest generation of employees (Deloitte, 2013). In 2018, the Deloitte series transitioned from Millennials to Generation Z cohorts, with their report *Welcome to Generation Z* (Deloitte, 2018a). Deloitte referred to Millennials as those born from January 1983 until December 1994, and Gen Z as those born from January 1995 to December 1999 (p. 3). Such industry sponsored reports have helped describe and analyse Millennials and Generation Z cohorts from across the world, including Latin America. However, to date, Ecuador has received little attention.

Ecuador has been developing at a rapid pace over the past few decades, seeing great strides of improvement in economic growth and stability as well as a decrease in poverty and greater investment in higher education (World Bank Group, 2017; 2018; Ramirez, 2016). Of the adult population in Ecuador, 24%[1] come from the Millennial and Generation Z cohorts (Instituto Nacional de Estadística y Censos [INEC], 2010), (born from 1985 to 2000). Inevitably, these two generations will be responsible for the direction the country takes over the coming decades. Unfortunately, there is scarce information on them.

[1] The statistics are taken from the national census and the projected populations for 2018 by age categories (INEC, 2010). The 24% stated represents the projected population of people aged 18 to 33 in 2018.

The importance of knowing and understanding significant generational shifts in values, beliefs, attitudes and behaviours of this demographic is essential for the future prosperity of Ecuador. Additionally, many future politicians and business leaders are set to come from the Millennial and Generation Z cohorts, increasing the need to better understand them. In the arena of political cohesion, Ecuador has seen a rise in polarisation amongst its population. This was evidenced in the last presidential election of 2017, where voters were evenly divided between the two final candidates, Lenin Moreno and Guillermo Lasso, representing the left and right respectively. Moreno ended up winning by the smallest of margins, 51.16% to 48.84% (Ulmer, 2017). The results were contested for weeks, triggering protests by some of Lasso`s most passionate supporters, including Millennials and Generation Zers. Identifying the differences that these generations bring with them may help to minimise conflicts in the future.

Only thirty-two percent of representatives from 135 businesses in Ecuador stated that their organisation was *highly* committed to attracting and retaining Millennials[2] (Marconi & Ramirez Valarezo, 2017). However, Millennials and Generation Z make up an estimated 37.6%[3] of the workforce in Ecuador (INEC, 2018). Hence, the workplace environment is beginning to change as Millennials and Generation Z professionals grow in numbers. By better understanding the personalities and preferences of these generations, managers will be better placed to recruit, train and retain their future talent. Literature on professionals from the Millennial and Generation Z cohorts in Ecuador is limited. The few studies that exist rely mainly on limited survey samples or qualitative data from interviews. This book addresses the large gap that exists in the literature regarding Millennials and Generation Z in Ecuador, particularly university students, many of whom are currently transitioning into the workplace.

This aim of the book is to present a detailed national profile of Millennial and Generation Z university students from across the country, providing information about their workplace preferences, values, attitudes and personality. This is done by presenting the results of a national survey, conducted by the author in 2018[4]. These students are set to soon enter the professional workplace. As such, the information presented in chapters one through five can serve as a human resource tool for managers. This will assist managers with the recruitment of graduate professionals, as well in developing customised training and retention programs suited for Millennials and Generation Z.

In this book, the focus is placed exclusively on the majority of Ecuadorians that attended university in 2018 (i.e. late Millennials and early Generation Z). Throughout this book this group will be referred to as Millennial/ Gen Z, referring to Ecuadorians born between 1985 and 2000 (18–33 years old in 2018). More details justifying the allocation of these dates is provided in the next section, *Millennials and Generation Z*, as well as in the *Methodology* section.

The total valid responses received in the national survey were 3117, mainly from the four targeted provinces of Pichincha, Guayas, Azuay and Manabí. The questions in the national survey focused on the following areas:

- Workplace preferences and attitudes
- General personality
- Life goals and priorities
- Computer skills and English proficiency

Furthermore, the book explores the differences and similarities amongst Ecuadorian university students from across the country. Specifically, Chapter 1 presents the national results of the 3,117 university students

2 The question was asked with three options available, low, medium and high.
3 Population employed by age group. 15 to 24 years: 1,164,903; 25 to 34 years: 1,744,295; 35 to 44 years: 1,828,678; 45 to 64 years: 2,383,349; 65 years and older: 609,807. Total employed population: 7,731,032.
4 The national survey was conducted as part of a 19 month university sponsored research project (August 2017-February 2019), through Universidad de Especialidades Espíritu Santo (UEES), titled *What Millennials Want: A Detailed Cross Cultural Profile of Ecuador's Future Professionals*. The author of this book, Aleksandar Tusev, was the sole project director. This book is the direct product of that investigation.

surveyed. Chapters 2 through 5 present segmented results, based on four cultural variables: gender (Chapter 2), Province (Chapter 3), university type and socio-economic level (Chapter 4), and academic major (Chapter 5). This breakdown of the national results can further assist managers with different needs to focus in on the relevant subgroup of Millennial and Generation Z students. The results of the survey are mainly descriptive. Due to resource constraints, statistical analysis, such as correlations between variables, is limited in this book.

The findings of this book will be of particular value to medium and large sized organisations looking to recruit university graduates within the coming years. In addition, foreign organisations would benefit from this book by better understanding the latest generation of graduates across Ecuador. Finally, universities may also find the information useful, helping them better understand their own students in order to revise policies and teaching methods, so that they may be more in tune with student profiles.

Millennials and Generation Z

A generation is defined as "a set of historical events and related phenomena that creates a distinct generational gap" (Parry & Urwin, 2011). Furthermore, to be considered to belong to a particular generation, one must have shared these events from a social and cultural perspective, forming part of what is termed a generational cohort. People from the same generation may have different characteristics depending on their culture. The social and cultural impact of local events as well as broader events impacts people differently. For instance, the impact of *9/11* on Millennials in the US would have been very different compared with Millennials living in Afghanistan. There are currently four generations that make up the workforce. The Pew Research Centre describes them as Baby Boomers, born between 1946 to 1964; Generation X, 1965 to 1980; Millennials, 1981 to 1996; and Generation Z, 1997 and onwards (Dimock, 2019).

The actual year that one generational cohort ends and another begins is not determined by scientific means. However, it is valid to imply that the invention of the smartphone (mid 90s) was a turning point for society. Since then, broadband internet has become widely available, and social networks have come to dominate communication channels. This technology has come to differentiate Millennials and Generation Z from prior generations.

Millennials

Traditionally, Millennials were seen as those that reached adulthood around the turn of the millennium (2000). However, there have been many generational spans referenced for Millennials. The United States National Chamber Federation lists Millennials to include people born between 1980 and 1999 (Seppanen, 2012). Nevertheless, they acknowledge that there have been at least 21 different generational spans listed for Millennials. The Ecuadorian government agency *Consejo Empresarial para el Desarrollo Sostenible* ([in English, Business Council for Sustainable Development] CEMDES, 2015) referred to Millennials as people born between 1982 and 2000, and referenced people born after 2000 as being part of Generation Z (p. 9). INEC (2014) defined Millennials as those born between 1981 and 1995. However, there is little disagreement that the most identifiable trait associated with Millennials is their familiarity with technology, including their taking for granted things like high speed internet access and social networking. A Pew Research Centre (2010) report confirmed that one of the characteristics that differentiate Millennials from their Generation X predecessors is their self-identification with being technologically able.

PwC (2012) stated that in terms of their behaviour, Millennials tend to look after their personal needs over those of the organisation. They are uncomfortable with traditional corporate structures, preferring flexibility and less formality. They expect constant training, feedback and to progress quickly. They have a flexible approach to work and want their work to have a positive outcome for society. In a survey by PwC (2012), over half of the Millennials said they would prefer to communicate electronically over face-to-face or telephone methods. Millennials are regarded as innovative and have the ability to learn how to use new technological devices and tools. They are independent, have virtual friends and communicate with the use of social media (Bencsik et al., 2016).

A study by Stafford and Griffis (2008) identified key characteristics of Millennials with relation to the workplace. These included a strong cohort identification, entitlement perception, reliance on social influence and networks when making important decisions, a high priority on education, high use of technology for work, life balance, and an active desire to change the world around them, in the workplace and in social and political arenas. Stafford and Griffis also supported a number of generalisations about Millennials; these include that Millennials believe they are special, they are sheltered, confident, team-oriented, conventional, they feel they are pressured, and they are achieving.

Generation Z

Researchers have used many dates when describing Generation Z. The starting year of birth has included 1990, 1993, early 90s, 1995, 1997 and 2000; also, this cohort has been called by many names including internet generation, I-generation, net-gen, Gen Wii, Gen Tech, Gen Z, and digital natives (Rue, 2018; Turner, 2015; Williams, 2015; Seemiller & Grace, 2016; Montana & Petit, 2011; Tulgan, 2013; Jones & Martin, 2007; Ozkan & Solmaz, 2015; Wood, 2013; Schroth, 2019; Singh & Dangmei, 2016; Merriman, 2015). From this point forward the author will refer to them as either Generation Z or Gen Z for short.

Generation Z is a do it yourself generation. Vraňaková, Chlpeková, Koltnerová, and Pračková (2017) hold that Gen Z have certain things in common, including growing up with a cell phone, notebook and the internet. Also, this generation has never lived in a world without smartphones and the internet, and they do not expect to lose access to these when attending the workplace (Singh & Dangmei, 2016). They prefer transparency, self-reliance, flexibility, personal freedom and have non-negotiable needs (Singh & Dangmei, 2016). They have a low tolerance of ambiguity (Rodriguez, Boyer, Fleming & Cohen, 2017). Also, they are in need of strong leaders in the workplace, with a focus on personal growth and development, as well as Job flexibility (work/life balance). They are self-confident, have entrepreneurial initiatives and prefer working independently (Adecco, 2015). Gen Z is clearly more technologically savvy than prior generations. They use technology in everything they do including learning, doing business and communicating. Their easy and speedy access to information makes them great at multitasking (Turner, 2015). They are innovative, adaptable and great at problem solving (Rodriguez et al., 2017). According to Bencsik et al. (2016), Gen Z will likely choose a career of their interests, and they have an entrepreneurial mindset. They look for a work-life balance and workplace stability. They like technology and use applications to make their lives easier, yet at the same time their pace of life is much quicker. Schilling, Thill & Brauch (2017) mention that Gen Z is a generation that wants to influence the world. They are more aware of global challenges and want to make a difference. They place a great emphasis on wanting to do meaningful work. As such, working for a company whose values are in line with theirs can have a positive impact on their motivation, well-being and motivation to stay.

Comparatively, there are some less positive traits researchers have assigned to Gen Z. According to Iorgulescu (2016), Gen Z is needy. They expect to be mentored and receive constant feedback. They are impatient and eager to achieve, expecting constant training and development leading to promotions. Rodriguez et al. (2017) state that Gen Z can be seen as disloyal, lazy and entitled. They are often anxious, feel disappointed and seek constant feedback. To sum up, Rodriguez et al. state that Gen Z is the most difficult generation to date to understand and engage.

Turner (2015) describes Gen Z as unique in that it is the most technologically advanced generation, especially in the area of multimedia (tablet, smart phone, social media, flat screen, smart TV, etc.). This is what makes Gen Z connected all the time. Tulgan (2013) boldly claims that because they are the first truly global generation, they represent "... the greatest generational shift the workplace has ever seen" (p. 2).

In terms of formative events, there are a number associated with Gen Z. Turner states that Gen Z is more socially conscious when expressing themselves, growing up in a world where lesbian, gay, bisexual, and transgender (LGBT) issues have been a primary political and social topic, and they are more urbanised, leading to an increased sense of multiculturalism. Additionally, Gen Z grew up with the global *War on Terror*,

global financial crisis, and the rise of mobile devices and the Cloud (Ozkan & Solmaz, 2015; Seemiller & Grace, 2016; Montana & Petit, 2011; Rodriguez et al., 2017).

Dr. Schroth (2019), of the University of California Berkeley, describes what makes Gen Z unique and how this new generation could challenge the workplace. After describing Gen Z as those born between 1997 and 2013, Schroth describes this generation as the least prepared generation for the realities of the workplace. Gen Zers are distinct from past generations in that they have less work experience, less face-to-face communication skills, value social justice movements and are brought up in a culture of overprotection (p. 10).

Furthermore, Tulgan (2013) suggests that Gen Z need human connection more than Millennials. This means that they need to work with management that develops strong personal relationships with them. Also, Adecco (2015) states that Gen Z need a strong mentorship program with other staff, requiring greater coaching to integrate and realise their expectations.

Millennials and Gen Z.

The main differences between Millennials and Gen Z are not automatically obvious. So far, these generations appear to have more similarities than differences. However, such differences have begun to be studied and become clearer. Gen Z is more immersed in technology and better suited to the label of *digital native*, than Millennials. They are both great at multitasking, but Gen Z is better (Iorgulescu, 2016). Gen Z is more connected to electronics and the digital world (Singh & Dangmei, 2016; Wood, 2013). In the US particularly, Gen Z will be the most culturally diverse generation to date. Both Millennials and Gen Z are accustomed to interaction and communication in an ever more connected world (Turner, 2015). They have unlimited access to information, all the time; current issues can be immediately proximate and personal to them (Seemiller & Grace, 2016). Gen Z is more likely to be environmentally aware, have distrust towards corporations, and leave a job more quickly (Montana & Petit, 2011). They are constantly stimulated by information, leading to a lack of engagement with traditional learning methods (Jones & Martin, 2007). Gen Z is more likely to be living in a state of fear than Millennials, due to mass shootings and terror attacks, and they are likely to be more suspicious of the future of the economy, having grown up during the global recession of 2008 (Williams (2015). Bencsik et al. (2016) state that Millennials and Gen Z have the least desire to work with each other. Millennials were found to prefer to work with Generation X employees over Gen Z.

Bencsik et al. (2016) listed some behavioural similarities and differences between Millennials and Gen Z. They both live in the present, with a short-term view, and do not feel that they owe commitment to the organisation. They connect well virtually, with the use of technology. Amongst some differences mentioned, Gen Z aims to live for the present while Millennials seek to compete for leadership positions. IT is a part of Millennials' daily life, but is intuitive for Gen Z. Gen Z seem to be more overwhelmed with information; more inclined to fast reactions; exercise greater initiative, and at the same time think less about their actions; seek instant pleasure; have divided attention; their work and entertainment barriers overlap; and they can feel at home anywhere (p. 95).

Merriman (2015) differentiates Gen Z from Millennials by stating that this younger cohort is more self-aware than Millennials, who are more self-centred. In addition, this generation is the first truly technologically native generation. Unlike Millennials, who grow up witnessing the changes towards a technological world, Gen Z were born into it, not knowing a world before technological interconnectedness, such as smartphones, social media and the ability to look up the answers to anything instantly online (Merriman, 2015, p. 5; Schwieger & Ludwig, 2018). Rue (2018) explains that this cohort shares many characteristics with Millennials, but they will have qualitative differences. Rodriguez et al., (2017) stated that Gen Z likely possesses the same values and attitudes as Millennials, leading to continued loyalty problems for managers. In fact, Gen Z may be an even bigger problem regarding retention than Millennials.

A Goldman Sachs sponsored report claimed that Gen Z will be larger and more influential than Millennials (Boroujerdi & Wolf, 2015, p. 11). They warn not to consider these young people as merely young Millennials,

but rather to treat them as a new and more complex cohort, that will soon revolutionise the workforce and consumer market. The report describes Gen Z as those born in 1998 and after, seeing the first turn 18 in 2016.

Generalising and Stereotyping

Before continuing, it is important to caution about making broad generalisations, or stereotypes about any group, including generational cohorts. The complexities involved in any one generational cohort are numerous, and the years of one's birth is only a small part of what makes people who they are. Generational comparisons are often done in a manner which, while helpful to better understand societal changes, is questionable.

Three main factors make generalisations and comparisons difficult with generational cohorts. These include age, period and cohort, referred to as *APC* (Yang, Fu & Land, 2004). Age is the biological age of a person or group being studied, and may be an effect based on the life cycle or social processes a person is going through; the period includes events that affected people of all ages at the time they occurred, for example wars, economic crisis, political events etc.; and a cohort is the narrowly defined group of people born from and to a certain year, such as Baby Boomers and Millennials. Cohorts go through events at the same age as other people, possibly affecting them differently from other age groups. Costanza, Darrow, Yost and Severt (2017) argue that the intersection of age and period results in "unresolvable identification problems, making it very difficult to isolate the effect of any one of the factors" (p. 161). Furthermore, Costanza et al. suggest that differences that appear to be explained by generational differences may just as plausibly be explained by age. Debiasi (2018) concluded that there has been a shift away from descriptive studies and towards more reliable methods that can better untangle the effects of APC (p. 16).

The author is aware of the APC's limitations for generational cohorts. The results presented throughout the chapters are mainly descriptive, based on the response given by the university students in the national sample. Certain sections of results are likely to be the result of a number of factors such as age, as young people of any generation may have similar responses. For instance, there was a question regarding the importance Millennials/Gen Z placed on having children and getting married. The young adults in this study are likely to have a lower desire for these items at present, but, if asked again in ten years' time, their response is likely to change. Nevertheless, the results of such questions can still be used to identify current trends of this generation, as well as compare them with similar cohorts in different cultures. Also, future comparative and follow up studies are made possible using the base data in this book.

Ecuador - Recent studies

As mentioned, there are limited studies describing Millennials or Gen Z in Ecuador. By doing a Google Scholar search, only a few relevant results appeared, and two of these were bachelor theses at a prominent university in Guayaquil. However, the paper *Attracting and retaining millennial talent* (Marconi & Ramirez Valarezo, 2017) seems to be of value. The study surveyed 135 employees from national (41.6%), multinational (48.1%) and family (10.4%) businesses in Ecuador. The people surveyed were employed in human resource management (7%), other management (13%), upper management (50%) and other positions including trainees, assistants, analysts and specialists (30%). The businesses belong to 16 different industry areas. The survey aimed to capture the current practices employed at these businesses regarding recruitment and retention of millennial talent. There were questions in the survey that directly or indirectly correlate to questions presented in the 2018 national Millennials study, that is the focus of this book. These are compared, side-by-side in Table 1. In Chapter 1, the results of the Marconi and Ramirez Valarezo study are used to analyse the results students gave in the national survey.

Table 1

Marconi and Ramirez Valarezo Study Questions and the Equivalent Question in the National Study

Marconi and Ramírez Valarezo questions (2017)	National Millennial study questions (Tusev, 2018)
What is the method usually used to recruit millennial talent?	How would you look for a full time job?
What emphasis should an employer present in order to attract millennial talent? (choose only 1) - Organisational culture - Work flexibility - Job security - Corporate social responsibility (CSR)	Rate the importance you give to the following work factors - Flexible work hours - Job security - Corporate social responsibility (CSR)
What should be done to retain millennial talent? Can choose multiple answers - Remuneration package - work life balance - Career development - Technology - Recognition - Non-traditional employment methods	Rate the importance you give to the following work factors - Good salary - Flexible hours - Ongoing training

Note. Marconi and Ramirez Valarezo questions from Marconi and Ramirez Valarezo (2017); National Millennial Study. Questions from author`s original survey (2018).

One of the most detailed Millennial studies conducted in Ecuador was sponsored by Fundacion Telefónica and authored by Gutierrez-Rubí (2016): *Millennials en Latinoamérica, una perspectiva desde Ecuador*. The study totalled 136 pages and provided a mixed quantitative and qualitative look at Millennials in Ecuador. The study provided many general insights into the personality of Millennials as well as how they behave and react in the current environment. The report focused on six areas: technology use, entertainment and leisure, educational and professional development, business and employment trends, news and information consumption, and political and social participation. At the end of each section, the study presents challenges and opportunities for Millennials and the next generation. The most relevant chapter from the Gutierrez-Rubí study, with relation to this book, was Chapter 5: *New concepts and forms of employment* (pp. 58-74). The information assessed in the other chapters is useful, but does not focus on the topics of this book, mainly professionals and the workplace. Gutierrez-Rubí's chapter 5 looks at three main concepts that are relatable to these topics. These include job searching, the workplace environment and job hopping. The comparative sections from the 2018 national Millennial survey and the Gutierrez-Rubí study are compared in Table 2.

Table 2

Comparison of Topics from Chapter 5 of Gutierrez-Rubí's Study and Chapter 1 of Tusev's study

Gutierrez-Rubí (2016)	Tusev (2018 national study)
5.1 New channels and techniques for job search	Workplace preferences and attitudes: Reaching Millennials
5.2 the profile of the millennial company	Workplace preferences and attitudes
5.3 Job hopping as a value strategy	Workplace preferences and attitudes: Employment mobility

Note. Questions in left Column from Gutierrez-Rubí (2016); questions from the right column from author`s original survey (2018).

The Gutierrez-Rubí study was based on three methods. First, it analysed literature from regional studies (Latin America), not specifically Ecuador. These included the Telefonica Global Millennial Survey (2013 and 2014) and the Deloitte surveys (2014, 2015 and 2016). Second, the study conducted interviews with fifteen "prominent Millennials" from Ecuador and conducted a single focus group of six Millennial employees of a multinational company (Forward, p. 11). Finally, the 2016 report completed an online survey from across Ecuador, with a sample of 331 people aged 18 to 33, consisting of 42 questions that took approximately 20 minutes to complete. The author acknowledged limitations in his methods:

> All online methodology, as is known, often leads to some errors of representation and coverage, as well as a lower response rate. To this we must add that the questionnaire prepared lasted approximately 20 minutes, perhaps somewhat excessive for the target audience, which caused greater margins of indifference and incomplete responses (Gutierrez-Rubí, 2016, p. 7).

In addition, the Gutierrez-Rubí (2016) study was too broad and did not provide much depth describing Millennials' values towards the workplace. Rather, the best results for the overall study can be found in the sections on technology use and communication preferences of Millennials, not the workplace.

The section on the workplace, Chapter 5, revealed some trends amongst Ecuadorian Millennials. For the ways they search for work, and the profile of the ideal Millennial workplace, Gutierrez-Rubí (2016) offered original results. However, despite including a discussion on job hopping, entrepreneurial Millennials, freelance work and co-working spaces, he did not provide substantial original results in other areas; here, the discussion relied mainly on secondary sources and comparative studies not from Ecuador. In addition, many results presented were based on interviews of sixteen people. Finally, the study grouped all Ecuadorians aged 18 to 33 as Millennials, without accounting for factors such as education and socio-economic level. The chapters in this book go further than the Gutierrez-Rubí study, by incorporating a much larger sample size of 3117. Additionally, the author here focuses on university students exclusively, and analyses differences in the population by assessing key cultural factors separately, namely gender, province, socio-economic level and university type, and academic major.

Formative Events

One of the main elements that shapes the values within generational cohorts is the major events that occur during their upbringing. These events are referred to as formative events. Momentous events are those that are vividly recalled by people, often to the extent that people can remember where they were and what they were doing when the event happened. The JFK assassination is a clear example of a formative event for Baby Boomers. September 11 has been associated with Millennials and in some research to Gen Z as well. Other events are not limited to a single moment in history, rather they can span a social, political or technological trend that comes to dominate the public sphere. The Vietnam War, personal computer, internet and social media are examples of such events. However, formative events are not universal across cultures. Based on estimated dates of each generational cohort, key events that took place in Ecuador during the upbringing of

Millennials and early Gen Z are described in Table 3.

Millennials in Ecuador, generally, experienced the effects of a number of local formative events – some of these overlap with Generation Z. These include the Indigenous Rights movements during the 1990s and the border dispute with Peru in 1995. Also, Millennials were witness to the political and economic crisis the country faced in the late 1990s into the first years of the new millennium. Another impactful even for Ecuadorians was the qualification of Ecuador in the FIFA World Cup in 2002. Gen Z Ecuadorians have grown up with a political movement led by former President Rafael Correa. In 2008, the country voted to adopt a new constitution legitimising the sweeping social reforms that followed over the next decade, under the slogan "Citizens' Revolution". Ecuador launched an international tourism campaign with the slogan *All you need is Ecuador*, which featured as an advertisement during the Super Bowl. 2016 saw the most devastating natural disaster in decades, with a 7.8 earthquake centred in the Province of Manabí (Tusev, 2018). The most recent event that impacted this generation was the eleven days of violent protests in response to President Moreno announcing an austerity deal with the International Monetary Fund (IMF), where he ended a 40-year fuel subsidy. After outcry from the public, he rescinded the deal and entered negotiations with opposition leaders.

Table 3

Formative Events for Millennials and Generation Z in Ecuador

Generational cohort	Year	Event
Millennials	1992	"Thousands of indigenous protesters seeking land reform march in Quito on the 500th anniversary of Columbus' arrival. In ensuing negotiations they are granted title to 2.5 million acres in Amazonia".
	1995	"Ecuador and Peru have another short but intense border dispute that leaves 400 dead. A 1998 peace treaty resolves hostilities, with both sides dedicated to removing thousands of land mines".
	2000	"Facing spiraling inflation and contracting GDP, Ecuador dumps the sucre (the national currency) for the US dollar. The economy makes a modest recovery, although many Ecuadorians slip into poverty".
	2002	"The men's national soccer (football) squad qualifies for the FIFA World Cup for the first time ever, but does not pass the group stage of the tournament".
Gen Z	2008	"In a nationwide referendum, Ecuadorians approve a new constitution, which expands the president's powers while increasing spending on social welfare and enshrining rights for indigenous people and the environment".
	2011	"Following an 18-year court case, the US oil giant Chevron is ordered to pay $18 billion to clean up decades of petroleum contamination in the northeast Oriente. Chevron appealed, and in 2017 the decision was reversed".
	2015	"Ecuador runs a 30-second commercial promoting tourism during America's Super Bowl (championship football game) in January. Themed on a classic Beatles' song, the spot is called 'All You Need is Ecuador".
	2016	"A devastating 7.8 magnitude earthquake rocks the Pacific coast of the nation, resulting in widespread destruction, nearly 700 deaths, and thousands of injuries".
	2017	"Lenín Boltaire Moreno, former vice president, is elected president in April in a runoff with conservative Guillermo Lasso. Moreno became the only current global head of state in a wheelchair, having been paralyzed in a shooting in 1998".

	2019	President Moreno announced an austerity deal with the IMF that included the ending of the nearly 40 year-old fuel subsidy. In response, protests around the nation paralysed the country for almost 2 weeks, after which the president rescinded his decision and entered into talks with opposition forces.

Note. *Data for all rows, except for 2019, are from Lonely Planet (n.d.).*

The 2019 data is from "Ecuador protests end …" (2019).

University Students - Ecuador

In 2015, the total number of students enrolled in a university or polytechnic school was 587,799 (Secretaria de Educación Superior, Ciencia, Tecnológica, e Innovación [SENESCYT], 2017). This increased to 594,106 in 2016 (SENESCYT, 2018, p. 20), 2016 being the latest year of available data. The percentage of all people aged 18-24 enrolling in higher education remained steady between 2012 and 2016, with a slight increase from 26.78% in 2012 to 27.81% in 2016 (SENESCYT, 2018, p. 30). The estimated percentage of all higher education students, in Ecuador, aged 18-24 was approximately 95.57%[5], in 2016.

Today, there is greater participation in higher education from the lower socio-economic sectors of society. Ramirez (2016) pointed out that in 2014, one in every two students that entered university came from a family where neither of their parents had attended university (p. 26). The possibility calculated by Ramirez for a student entering higher education coming from the poorest 20% of the population had increased from 33% in 2006 to 67% in 2014 (p. 26). This suggests a new composition of socio-economic profile of Millennial/Gen Z studying at universities across Ecuador.

5 The projected population for 18-24 year olds in 2016 was 2,041,757 (INEC, 2010). SENESCYT (2018) stated that 27.81% of all higher education students in Ecuador in 2016 were aged 18-24. The total number of students enrolled in higher education was 594,106 in 2016 (SENESCYT, 2018). Calculation: 2041757 * 27.81% = 567812. Then, 567812 / 594106 *100 =95.57%

Methodology

Numerous studies acknowledge that people from different generational groups have differences in their values and attitudes towards the workplace, including Zemke, Raines and Filipczak (2000), Deloitte (2013; 2015; 2016; 2017), Stafford and Griffis (2008), Greenwood, Teahen, Ruiz-Gutierrez, Murphy and Madero (2012), PwC (2012) and Susaeta et al. (2013). Additionally, Susaeta et al. confirmed that there was a correlation between values towards the workplace and generational cohorts. Also, they concluded that local culture influences differences within generational cohorts. Specifically, their study found differences between Millennials and Generation X cohorts, and between cohorts from across five Latin American countries. Hence, it would be inaccurate to consider Ecuadorian Millennials as being the same as Latino Millennials. The focus of this book is to describe the Millennial/Gen Z cohort of university students in Ecuador, in 2018. This was done by administering an original questionnaire.

The questions in the instrument were developed in a pilot study, across three stages. First, prior papers and studies on Millennials and Gen Z, including studies in Latin America and Ecuador, were analysed. This included both peer-reviewed and non-peer-reviewed studies. Some of the themes and question types were borrowed from these studies. Second, interviews were conducted with human resource managers from Ecuador at a number of medium and large sized companies. This allowed for questions to be adjusted so that they were more closely related to the local culture. The managers provided suggestions for areas of interest, based on local views, regarding Millennials/Gen Z in Ecuador. This helped to filter some questions, and home in on areas that were otherwise neglected or absent in existing literature. Finally, the instrument was tested on a small sample of the targeted population. This helped to iron out issues with the wording, structure and content of the questions. More importantly, this final stage allowed for testing for reliability and relevance (Tusev, 2018). The process mentioned here is detailed and the results are stated in the publication of the pilot study, *A cross cultural study of millennials and the workplace in Ecuador: the pilot study* (Tusev, 2018). For details of this process, the published pilot study is available online[6].

The quantitative survey results are intended to be exploratory and descriptive. As there is little information on the population targeted, it is exploratory in nature. Also, as the instrument is original, the results are limited to being descriptive. The questions in the instrument can be categorised into four broad areas: workplace preferences and attitudes, general personality, life goals and preferences, and computer skills and English proficiency. In addition, the survey revealed other non-categorical information including year of birth, gender, home province, university attended, and university major.

The questions were not arbitrarily constructed; rather they were generally based on previous studies on Millennials and Generation Z and the workplace. Various workplace preference factors were discussed by Connell, McMinn and Bell (2012), Bell and Griffin (2010), Bencsiket al. (2016), Holt, Marques, and Way (2012), and Telefónica (2013). Telefónica also tested how Millennials preferred to look for work. In addition, the commitment level, or intention to quit for Millennials was investigated by Costanza, Badger, Fraser, Severt and Gade (2012). Expected salary was researched by Westerman, Bergman, Bergman and Daly (2011). Leadership ambitions were tested by Universum (2014). Ambitions about self-employment were covered by Telefónica (2014a; 2014b). A variety of life goals and importance placed on them were discussed by Telefónica (2013), Bell, and Griffin (2010), and Holt et al. (2012). Ethical behaviour and Millennials' expectations of companies were based on the study by Culiberg and Mihelič (2015).

Administering the Questionnaire

The questionnaire was conducted from March 22, 2018, to December 5, 2018. The tool used to distribute the survey was the online platform QuestionPro. The instrument was administered to students studying across the four main provinces targeted: Pichincha, Guayas, Azuay and Manabí. A random sample of students was

6 The full article, *A cross cultural study of millennials and the workplace in Ecuador: the pilot study* (Tusev, 2018), is available, as at December 2019, from the following link: http://recursosbiblio.url.edu.gt/CParens/Revista/ECO/Numeros/18/02/02_ECO18.pdf

targeted, including students from different year levels, age, major, and gender. The survey was completed via the online link to the questionnaire in QuestionPro, in most cases, on digital devices including smartphones, tablets, laptops and desktops. The distribution method included inside classrooms, by social media (snowball sampling), and email. In one case, there was a public university that lacked the technological capabilities to allow for online completion of the survey. The Wi-Fi connection was weak or not working, and some students did not have a digital device. In this case, paper surveys were completed, and later transposed into Microsoft Excel.

The most efficient way to have students complete the survey in a timely manner was to have them take the survey in the classroom. This was the main method implemented to gather the vast majority of survey responses. Typically, the link to the survey was written on the classroom board. Students were asked to access the link via their smartphone, tablet or laptop. In some cases, students had a desktop available to them. This direct method ensured that a large number of students were exposed to the survey, and a high completion rate.

To assist in this process, teachers from different universities from across the four provinces were relied on to present the survey in their classrooms. To incentivise teachers, they were offered opportunities to participate in follow-up research projects, as well as given full access to the results they produced. In some cases, financial compensation was provided to teachers based on the number of surveys they produced, at an average rate of 50 cents per valid survey. Also, at one university the author was allowed to access multiple classrooms personally, without the assistance of teachers. Students were made aware that their participation was voluntary and anonymous, so as to not pressure students for their participation. There were no rewards or penalties for participation, nor non-participation by students.

Sample Population

The targeted population was university students enrolled at the time of the study, 2018. The youngest students in the sample were 18, born in 2000, and the oldest were 33, born in 1985. This can be interpreted as a mix of Millennials and Gen Z cohorts, or Millennial/Gen Z. Frey (2018) describes these age groups: “Millennials are defined as persons born between 1981 and 1997. In some parts ... special focus is given to younger Millennials, aged 18-24, and older Millennials, aged 25-34, as these groups represent different stages of the young adult cycle” (p. 5). Rodriguez, Boyer, Fleming and Cohen (2017) refer to people born between the mid-90s to 2000 as Generation Z/Millennial cusp. Throughout the chapters of this book, the sample population will be referred to as Millennial/Gen Z.

Across Ecuador, the total number of students enrolled in a higher education institution was 594,106, in 2016 (SENESCYT, 2018) (the latest data available at the time of this publication). The total number of respondents to the survey from across the country was 3,627. Of these, the valid sample population was reduced to 3117 with 510 or 14.1% of surveys being discarded. The discarded surveys were deemed to be invalid for the study for a number of reasons. For validity, there were a number of requirements.

Overall, 85.9% of the responses were deemed reliable, making up the sample population of the study (*Figure 1*). 10.9% (396 respondents) of the sample was discarded for being deemed unreliable and inaccurate. It was expected that some participants would be indifferent to questions and possibly mark answers randomly, as stated by Gutierrez-Rubí (2016), in his national study on Ecuadorian Millennials (p. 7). In order to limit this inherit problem, a control statement was inserted twice throughout the questionnaire: “*To test if you are paying attention to this question, select not important here*”. The statement was inserted amongst a number of statements in 2 side-by-side matrix tables. There were five options available to students. If students did not select “*not important*” their survey was discarded for being unreliable and inaccurate. 1.9% of all completed responses, or 69 people, of the initial sample were discarded for being outside of the age range (born after 2000 or before 1985). Finally, as the population included only currently enrolled university students in Ecuador, 1.2% (45 respondents) either did not study at a university, or were not from Ecuador.

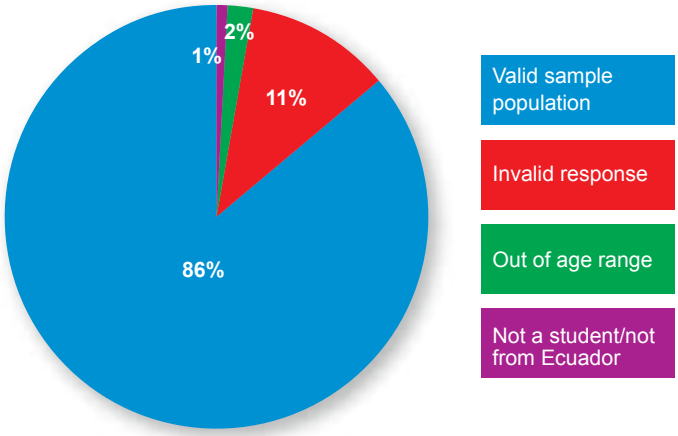


Figure 1. Valid and invalid sample population

From *Figure 2*, the distribution of age of the sample population can be seen. The mean birth year of students was 1996 (22 years old). The median year was 1997 (21 years old), and the mode was 1999 (20 years old). This is in accordance with the targeted population, university students enrolled in 2018, where the great majority of students are between 18 and 24 (born 1994-2000). As stated in the introduction, approximately 95.57% of all students in Ecuador enrolled in higher education, in 2016, were 18-24 years of age (SENESCYT 2018; INEC, 2010). In the sample, 84.2% of students were born from 1994 to 2000 (18-24), slightly lower than the national level. This sample can be interpreted as representing the oldest cusp of Gen Z, and youngest cusp of Millennials. Students aged 25 or 26 (1992-1993) made up 8.6% of the sample. The remaining 7.2% of the sample was aged from 27 to 33 (1985-1991). This last group is representative of Millennials (see Appendix B for detailed statistics on the age demographic of the sample population). The sample is representative of the next generation of university graduates that will be entering the workforce, most of which will have done so within the next four years.

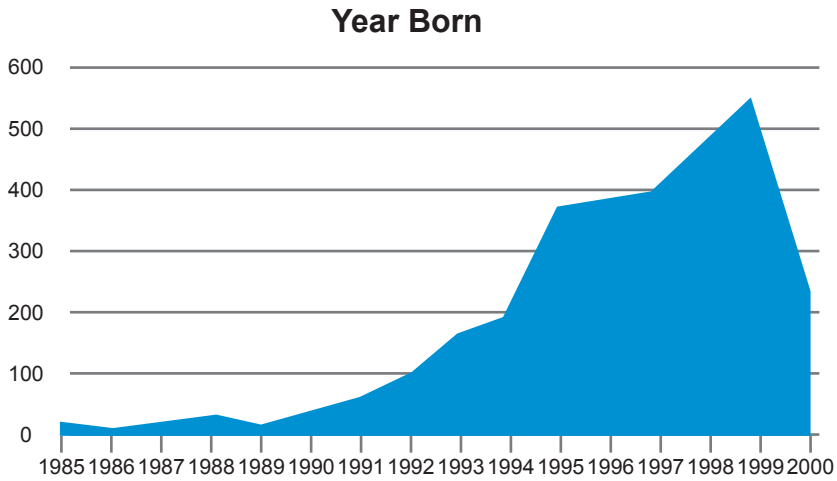


Figure 2. Sample population by year born

Note. Author`s original data from national survey.

The sample focused on students in the four major provinces where university enrolments are concentrated in Ecuador: Pichincha, Guayas, Azuay and Manabí. Table 1 provides details about the population of students studying in these provinces, in 2015 (the latest data found for each province). From the sixty higher education institutions nationwide, thirty-eight are located in one of these four provinces. The majority of students in Ecuador attended a university in one of these four provinces (69%). The percentage of students, nationally, enrolled in each province saw Pichincha having the highest rate, with 27% of all enrolments, followed by Guayas, 23%, Azuay, 11%, and Manabí, 8%.

Table 1

Populations of Higher Education Students in the Four Provinces (2015)

	Pichincha	Azuay	Guayas	Manabí	Total	National
Number of higher education institutions	16	4	13	5	38	60
National student population	27%	11%	23%	8%	69%	100%

Note. Percentages are rounded to the nearest whole number. Data adapted from SENESCYT (2017).

Reliability Test – Cronbach`s Alpha

To test for reliability, Cronbach's alpha was used. Generally, Cronbach's alpha is used to test for reliability where there are Likert scale type questions, especially in longer questionnaires with many items. Cronbach's alpha tests instruments for internal consistency, in order to provide predictability (Tavakol & Dennick, 2011). The test result is represented by a score between 0 and 1, where a higher score infers greater reliability (interrelatedness between items). Generally, a score between 0.7 and 0.95 has been seen as an acceptable score for reliability, depending on the study (Tavakol & Dennick, 2011). The test was completed using IBM statistical package for the social sciences (SPSS) Statistics. The data was downloaded in the SPSS format directly from QuestionPro.

Overall, Cronbach`s alpha was above 0.7 for the final sample population (Table 2). There were three categories of questions that were deemed relatable for testing. These included workplace preferences and attitudes, life goals and priorities and computer skills. The eight items in workplace preferences and attitudes were reliable, scoring a Cronbach´s alpha of 0.78. Furthermore, Table 3 shows the details for each of these eight items. The seven items for life goals and priorities scored a Cronbach´s alpha of 0.703. The detailed analysis for each of these seven items can be seen in Table 4. Finally, the three items in computer skills scored a Cronbach´s alpha of 0.815, the highest for the three categories seen in Table 2.

Table 2

Workplace Preferences and Attitudes – Reliability Statistics

Category	Cronbach's Alpha	Number of Items
Workplace preferences and priorities	.780	8
Life goals and priorities	.703	7
Computer skills	.815	3

Note. Author`s original data computed in IBM SPSS.

Table 3

Workplace Preferences and Attitudes (Detailed)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Job stability	28.26	15.719	.499	.282	.755
Good salary	28.41	15.386	.523	.298	.751
Opportunity for promotion	28.75	15.197	.473	.236	.758
Flexible hours	28.97	15.428	.420	.188	.768
An organisation that helps the community	28.79	15.307	.459	.229	.761
Friendly atmosphere	28.29	15.341	.537	.297	.749
Ongoing training	28.47	15.124	.522	.288	.750
Private healthcare	28.69	14.989	.456	.210	.762

Note. Author`s original data computed in IBM SPSS.

Table 4

Life Goals and Priorities (Detailed)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Make my family happy	19.72	16.007	.418	.192	.671
To be rich	21.07	17.130	.183	.060	**.722**
Have an active religious or spiritual life	20.94	13.855	.442	.220	.664
Get married	21.26	13.241	.561	.535	.626
Have children	21.08	13.029	.577	.545	.620
Make a positive contribution to society	20.07	16.590	.314	.148	.692
Have an active social life	20.51	15.717	.404	.178	.673

Note. To be rich is the least correlated item in the category Life Goals and Priorities.
If it were eliminated, the Cronbach´s alpha would increase to 0.722.
Author`s original data computed in IBM SPSS.

Limitations

There was an inherent limitation in gathering random samples from across the populations targeted, particularly the four provinces, study major, gender and university type. Although the teachers assisting in distributing the survey were given instructions to target varied samples of students, from their university, including by major, gender and age, some teachers presented less representative survey samples. For example, an engineering teacher from a university in the Sierra mainly returned surveys from engineering students, most of whom were male. Another example was a law faculty member from a university in the coast who returned a majority of samples from law students. The limitations for gathering representative samples across the variables described were anticipated. As such, a minimum of 400 students from each of the four provinces were targeted, from multiple universities, across multiple faculties. Also, mixes of public and private universities in each province were targeted (see Appendix E, Table E2 for student samples by universities).

Presenting the results into the additional categories of gender, socio-economic level and university type, province, and major provides added value to the study. Deloitte (2015) warned that any study on Millennials must ensure that the populations are representative samples, as "accepting youth characteristics from a small population of youth in one community as representative of those across the country is not scientifically sound" (p. 17)

Presentation of Results

The results were downloaded from QuestionPro into SPSS format, and then transferred into IBM SPSS for analysis. Certain variables were isolated and descriptive data was obtained in SPSS. Using this data, charts and graphs were created in Microsoft Excel, and then recreated by a qualified graphics designer for publication quality and visual effects.

These results are described and analysed across the first five chapters of the book. Each chapter focuses on different compositions of the national student population. Chapter 1 presents the overview of the national profile, including a snapshot of all students sampled. This chapter is useful to assess broad trends of Ecuadorian Millennial/Gen Z students, and is suitable for comparative studies with other populations, such as Generation X in Ecuador, or Millennial/Generation Z cohorts from other countries. Chapter 2 presents the results by gender, comparing male and female responses. The results can highlight existing inequalities between genders. Chapter 3 describes the responses given by three groups of students, those attending public universities, private universities and students from a university that is considered to represent higher socio-economic students. This chapter is useful to point out differences by university type and socio-economic level. Chapter 4 compares students from the four provinces of Pichincha, Guayas, Azuay and Manabí. This chapter highlights geographically led cultural differences. Finally, chapter five assess the differences and similarities of students by the major they study. End users may find this chapter particularly useful, to zone in on the responses of the group their organisation intends to recruit from. Demographic data and theoretical foundations are provided in each chapter. Moreover, sampling limitations are addressed in detail within each chapter.

Figure 3, Figure 4, Figure 5 and *Figure 6* outline the sample populations addressed in Chapters 2 through 5. In Chapter 2, gender differences, there are a total of 1317 male students and 1800 female students represented. In Chapter 3, the sample population from each province is 950 students from Guayas, 690 from Azuay, 542 from Manabí, 484 from Pichincha and 451 from other provinces. Chapter 4 includes 1500 students from public universities, 1084 from private universities and 490 that, on average, self-identified as being from high socio-economic level, represented by UEES. Chapter 5 assesses students by the major they study. There are 612 students from engineering, 499 from business, 358 from law, 193 from accounting, 191 from medicine, 185 from education, 164 from economics, 112 from psychology and 803 from other majors.

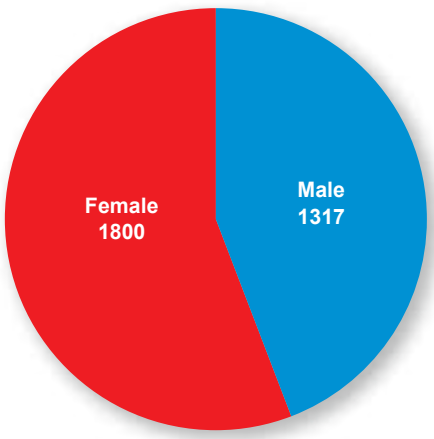


Figure 3. Sample population by gender (Chapter 2)

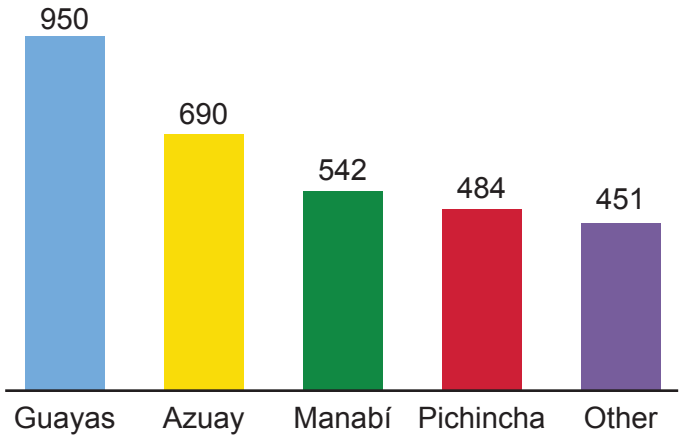


Figure 4. Sample population by home province (Chapter 3)

Q. Which province have you spent the majority of your life in?

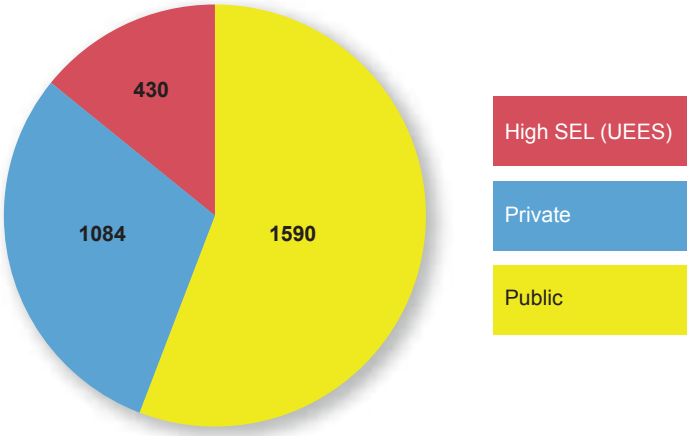


Figure 5. Sample population and university type (Chapter 4)

Note. There were 13 samples that did not have a response for this question, resulting in a total of 3104 samples.

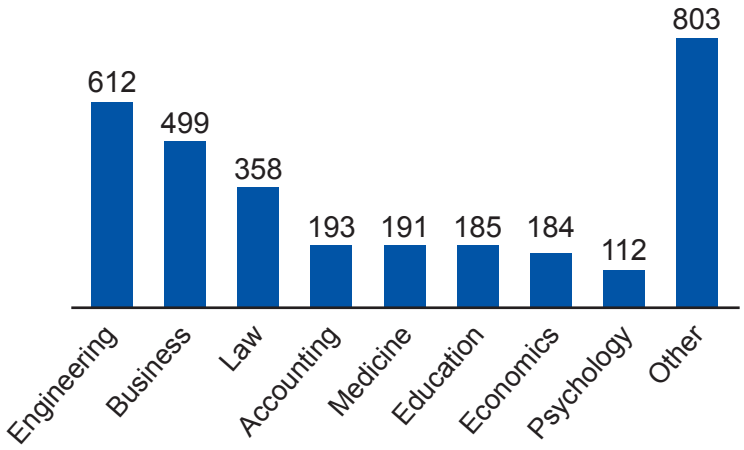


Figure 6. Sample population and field of study (Chapter 5)

Chapter 1

A National Profile of Millennial/Gen Z University Students

This chapter aims to provide a comprehensive profile of Ecuadorian Millennial/Gen Z higher education students. The results are mostly descriptive, with some analysis and discussion provided. The analysis of results is informed by comparisons with other studies on Millennials and Gen Z from both Ecuador and abroad. It is hoped that these results will familiarise readers with the personality and attitudes of university students from across Ecuador, as well as the type of workplace they desire, and their longer term life goals.

This chapter is based on the responses of 3117 students from across Ecuador.

This information can be used by organisations to help formulate recruitment policies, as well as remuneration packages, corporate cultures and training programs. The four chapters that follow this one focus on specific demographics of the population surveyed, namely gender, socio-economic level and private versus public institutions, provincial differences and study major.

Millennials and Gen Z will soon make up the majority workforce in Ecuador. They are already making an impact with their enhanced technological abilities. The workplace, adapted to the preferences of Generation X and Baby Boomers, needs to accommodate these latest generations if employers wish to recruit the best talent, provide an environment that will minimise employee turnover, and facilitate higher productivity and more efficient training procedures.

Over the past decade, prominent organisations such as Deloitte (2016) and PwC (2012) have studied the impact these new cohorts are having in the workplace. For instance, Deloitte (2016) reported that Millennials are more inclined to seek ongoing training; they are impatient for promotions; they value an organisation that is socially responsible; and they are interested in flexible work hours and more work-life balance. In addition, the youngest Millennials, also regarded as amongst the first of Gen Z to reach adulthood, add more dynamics to the changing workforce: Gen Z are even more technologically enabled than Millennials, being the first generation not to have known a pre-internet world (Deloitte, 2016).

Employers seeking to attract Millennials and Gen Z need to be sensitive to those unique preferences that distinguish the younger generations from past generations. However, there is often a contrast between what members of these generations say they want in an employer and the factors they actually take into account when accepting a job offer (PwC, 2012). 55% of Millennials in the financial sector acknowledged that they compromised on their preferences when taking up their current job. In the insurance sector, 48% stated that they compromised by accepting a lower salary than they had planned (p. 7). Hence, readers should take this into account when following the results about Ecuadorian Millennial/Gen Z university students. The preferences of students do not necessarily follow through into the real world.

Results of the 2018 National Millennial/Gen Z University Student Survey (Ecuador)

Work Status

It is not uncommon for people to be unemployed while undertaking formal education. However, in Ecuador the economic situation certainly plays a major role in the employment status of students. According to a 2019 study by employment agency Adecco, reported on by El Comercio, only 28% of Ecuadorians aged eighteen to thirty had a job ("1 y 6 meses tardan los jóvenes", 2019). However, the majority of these people held at least a bachelor's degree, with 2.4% having a postgraduate degree, and 20% currently studying a postgraduate degree. The number of youth employed with a fixed employment contract has more than halved since the previous year, from 56% in 2018, to 25% in 2019. Also, it took six months or more for 61% of youth to find a job ("1 y 6 meses tardan los jóvenes", 2019). Of those that were employed, 68% stated that they did not believe they had a possibility for future growth and development with their current employer, making the outlook for this generation less than optimal.

The employment status of the sample population in this survey revealed that 69% were unemployed, 12% had a part time position, 9% worked for a family business, and 7% had a full-time job (*Figure 1*).

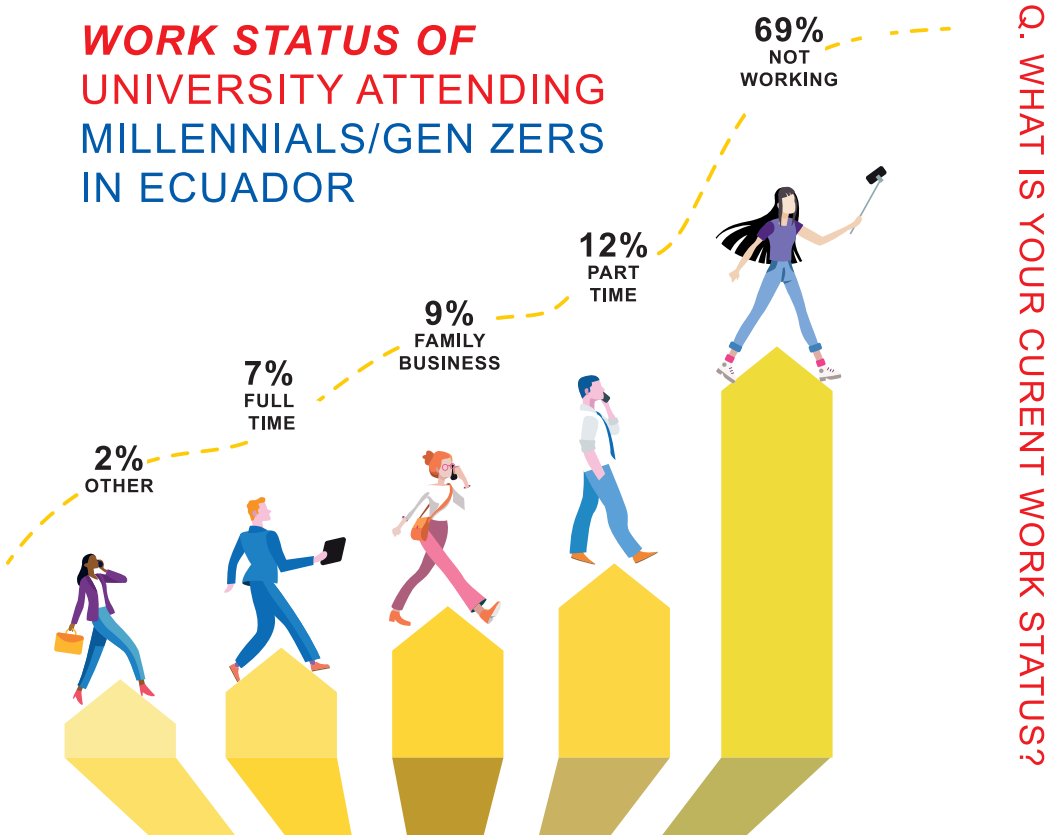


Figure 1. Sample population and current work status

Note: *Other* includes casual work and volunteer duties amongst other activities.

The labour market is highly competitive across Ecuador. The statistics for youth unemployment are grim. If current trends hold, the majority of Millennial/Gen Z graduates will be fighting for the few positions that exist. However, the students that participated in this survey will have an advantage over other members of their generation, as they will have a higher education degree.

Reaching Millennials/Gen Z

Students selected their top two full time job-search preferences from the options seen in *Figure 2*. The four most frequent selections were friends and family contacts, employment agencies, company websites and university databases. The least chosen methods were job search engines, social media, job fairs and newspapers.

How to reach graduate students entering the workplace

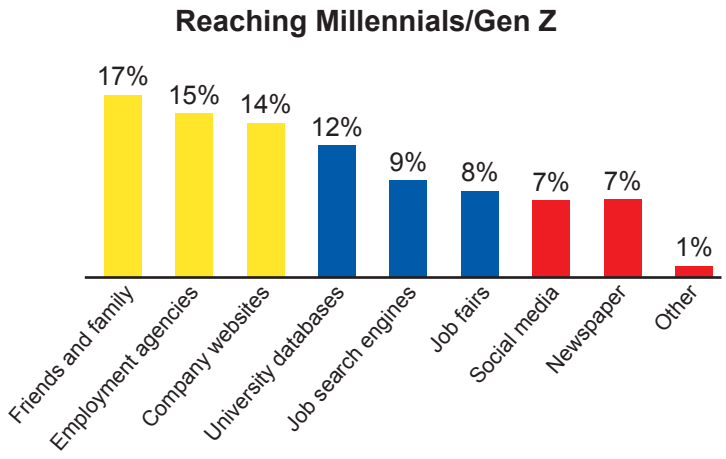


Figure 2. The methods students use to search for a full-time job
Q. How would you look for a full-time job? Select 2 options.

These results may be usefully compared with a study by Marconi and Ramirez Valarezo (2017) which also looked at how businesses from across Ecuador attracted Millennials. The most popular method cited in that study was ad placements via employment portals (47%), followed by job fairs and university visits (20%). These methods are also prominent in *Figure 2*. However, the data in *Figure 2* provides more avenues that businesses should take note of. In particular, networks of family and friends and company websites should be considered by organisations. Organisations ought to use their current networks of employees and suppliers to advertise positions to Millennials/Gen Zers, spreading offers by word of mouth. Also, organisations should seek to maintain an updated website where positions may be easily accessed by younger candidates.

In another study, by Gutierrez-Rubí (2016), a detailed review of job search channels favoured by Millennials from Latin America, as well as within Ecuador, was conducted. Here, job portals were found to be the most popular method for Millennials from across Latin America. In Ecuador, Multitrabajos.com and Porfinempleo.com were listed as examples. In terms of social networks, LinkedIn was a popular method of job searching by social media, with more than 1.2 million people registered (p. 59). The Gutierrez-Rubí survey showed 44% of respondents used this platform. Another popular method that Millennials used to search for work was through university databases and programs. Gutierrez-Rubí cited the example of ESPOL's attempt to become the official bridge between university students and employers, publishing job offers as well as facilitating internships. Hence, employers have a wide spectrum of channels through which to attract their future professionals.

1.1 Workplace Preferences and Attitudes

- JOB SECTOR
- MOBILITY
- WORKPLACE PREFERENCES
- SALARY EXPECTATIONS
- OVERTIME
- PROMOTION
- RESIGNATION

Preferred Job Sector

Students were asked to select the organisation type or sector they would prefer to work for, from a set list of options (*Figure 3*). The option to be self-employed was deliberately left out, as this preference is dealt with

separately in another section of this chapter (*Section 1.3. Life Goals and Priorities)*. From the preselected options, the majority selected a multinational company (35%). In Ecuador, the reputation and resources of multinationals clearly engage the attention of university students. The second most popular choice was the public sector (15%). Since the Correa government came to power in 2007, there has been an exuberant expansion of public sector jobs, often with good wages and work conditions. The third most selected employer type was family business (11%). Latin America, Ecuador included, is well known for having family owned enterprises that are passed from generation to generation. It may be natural for students to feel that their obligation after completing their studies is to join their family members in the business. Education was a close fourth choice for students (10%). Most of the students that selected education were studying pedagogy, so their career choice naturally fell in that domain. There was a low response for the final option, NGOs (4%). Finally, 25% of students chose no preference. This may reflect uncertainty, or the absence of their preference in the listed options: This might be an oversight of the questionnaire. For example, many medical students selected no preference. It may be assumed that most will have chosen to work in the healthcare sector, which was not offered to them as an option.

Students have a clear preference for multinational organisations

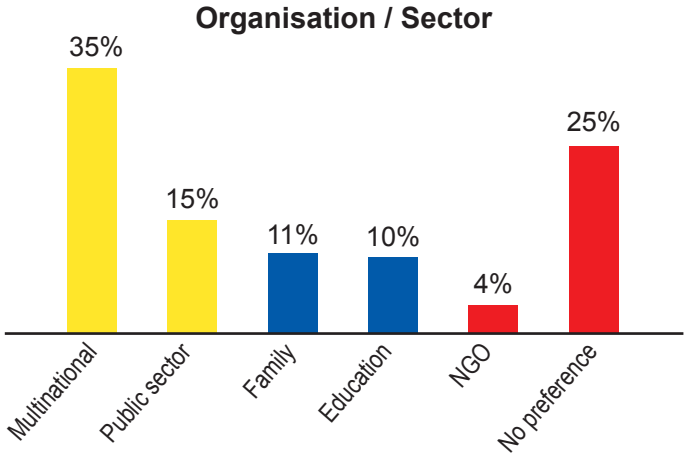


Figure 3. The organisational type, or sector, students would like to work in

Q. From the following list, select the type of organisation that you would most like to work for: Government agency; Educational institution; Non-profit organisation; Family business; Multinational corporation; No preference.

A national study by CEDESMA (2015) similarly looked at Millennials' workplace preferences. 13% selected that they wanted to work for the government or public sector, 12% private organisation, 10% NGO, and 7% family business (p. 27). The results in CEDESMA give a similar preference for the public sector to *Figure 3*. However, in *Figure 3* the preference for a family business is slightly higher than the CEDESMA study, by 4%. Also, NGOs are far less popular among the student population polled in *Figure 3* than among the CEDESMA population. In a Deloitte (2015) survey, most Millennials, from developing countries, selected multinationals or large organisations, with 51% of responses (p. 20). Similarly, Gen Z students in a Romanian study selected multinationals as the most popular choice, with 44.9% (Iorgulescu, 2016).

Employment Mobility

The majority of students stated that they were willing to move to another city within Ecuador for a job (*Figure 4*). The two largest cities in the country, Guayaquil and Quito, offer the majority of employment opportunities, but the data suggests that graduates may also be attracted to positions in smaller cities such as Cuenca, Loja or Manta. Employers may therefore benefit by extending their recruitment strategies to include prospective graduates from areas outside of their city, in order to attract the best talent to their organisation. It is worth noting that this high acceptance of mobility was supported in the Gutierrez-Rubí (2016) study. Here, more than 84% of students responded affirmatively that they would like to work or study outside the country. The main reasons they gave included getting to know another culture (66%) and to become a global citizen (47%) (p. 66).

Students are willing to relocate for work

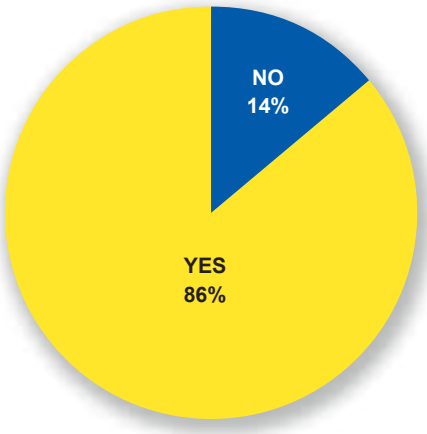


Figure 4. The percentage of students willing to move cities for work

Q. Would you be willing to change cities for a better job?

Workplace Preferences

Students were asked to rate eight workplace-related factors on a five-point scale from *not important* to *essential*. Some clear patterns emerged in their selections, as seen in Figure 5. Overall, importance was assigned in the following order, from highest to lowest: job stability, friendly atmosphere, good salary, ongoing training, private healthcare, promotional opportunity, corporate social responsibility (CSR) and flexible hours.

Job stability and friendly environment.

Students in Ecuador selected job stability and a friendly environment with the highest frequencies of *essential* and *very important*. These two factors form the basis of what students expect and are looking for in a professional workplace. Employers would be wise to take note of this and emphasise these qualities when recruiting Millennials/Gen Z. Gutierrez-Rubí (2016) also concluded that a friendly environment was important for Ecuadorian Millennials. In the focus group and interviews he conducted, this came up as an important factor for Millennials.

Good salary and ongoing training.

The next two factors that were rated at the higher end of *essential* were a good salary and ongoing training. This is in accord with the results in Figure 6, *Salary Expectations*. Ecuadorian students are looking for a well-paid job. Ongoing training is a factor that students clearly value. This is not a surprise, as many other Millennial/Gen Z studies have come to the same conclusion. They are looking for a workplace where they can enhance their knowledge and become multi-skilled.

Opportunity for promotion and private healthcare.

Opportunity for promotion and private healthcare received the next most frequent responses for *essential* and *very important*. Promotional opportunity is a variable that has come up in other studies regarding Millennials/Gen Z. This is in line with studies that have suggested that Millennials get bored quickly and are impatient. This factor indicates that they are ambitious, but it also suggests that they may want a promotion for the increased salary that accompanies it. Private healthcare received the next highest count of *essential* and *very important* responses. Although this benefit is not commonly offered in Ecuador, Millennials/Gen Z still find it to be of importance to them. Workplaces in Ecuador are already mandated to pay for employees' public social security healthcare, which is costly. Unfortunately, many employers may find it financially prohibitive to additionally offer private healthcare in their packages for employees. However, medium and large organisations that are in a position to bargain for corporate rates for private healthcare may consider offering this as an additional incentive.

CSR - an organisation that helps the community.

The factor listed that received the second least responses for *very important* and *essential* was CSR. This factor has been the object of hype amongst Millennial studies in recent years, suggesting that Millennials and Gen Z are looking for a workplace that is socially responsible. PwC (2012) found that 61% of Millennials would actively look for an employer whose CSR values were similar to their own (p. 13). In a Deloitte survey (2013), Latin American Millennials expressed a belief that businesses should be socially responsible. When asked what they believe businesses are for, *to improve society* was the second highest phrase selected (36%), just behind the phrase *to drive innovation*. In the 2018 Deloitte survey, a similar figure emerged for improving society, 39%, second behind creating jobs (Deloitte, 218). Furthermore, 84% of Millennials stated that the success of businesses should be measured by more than just their financial performance. In fact, the top non-financial measure selected by Millennials was *contribution to local communities* (68%) (Deloitte, 2013, p. 10).

The results in *Figure 5* confirm that the majority of Ecuadorian Millennials/Gen Zers also consider this factor important. However, they did not rate it as highly as most other factors. Nevertheless, employers should take note that 70% of students from across Ecuador selected *very important* or *essential* for a workplace that helps the community.

Some organisations in Ecuador, such as Unilever, have already implemented a commitment to give back to the community in the geographical area where they operate. Having employees volunteer or contribute to small charitable projects sponsored by the organisation is a good way to create long term commitment and a favourable relationship with Millennials/Gen Z entering the workforce.

Flexible hours.

Finally, 60% of students in the study stated that a flexible work timetable was very important or essential to them. Current technology affords employers, in many cases, the possibility of catering to this requirement. Offering young employees the option to start late or finish early on given days may be feasible if they can work from home on an online platform. Deloitte (2017) identifies both a desire among Millennials for flexible work hours and a high rate of employers that offer such flexibility. In 2017, 69% of Millennials responded that they, within limits, could choose what time they start and finish work. Deloitte finds strong evidence to suggest that flexible work environments have led to greater performance and retention rates. Millennials in flexible organisations had a much higher positive response for work-life balance, productivity, morale and motivation, meeting organisational objectives, financial performance and engagement with work, among other positive factors (p. 21).

When asked about their desired term of employment in a single organisation, between leaving within two years and staying beyond five years, Millennials that worked for an organisation that gave them more flexibility with hours and location were much more likely to want to stay beyond five years (55%). In contrast, of the Millennials who identified their workplace as not having changed their stance on flexibility, only 27% wanted to stay beyond five years (Deloitte, 2018, p. 20). There is a clear indication that flexible work hours and location can help increase retention amongst millennial employees.

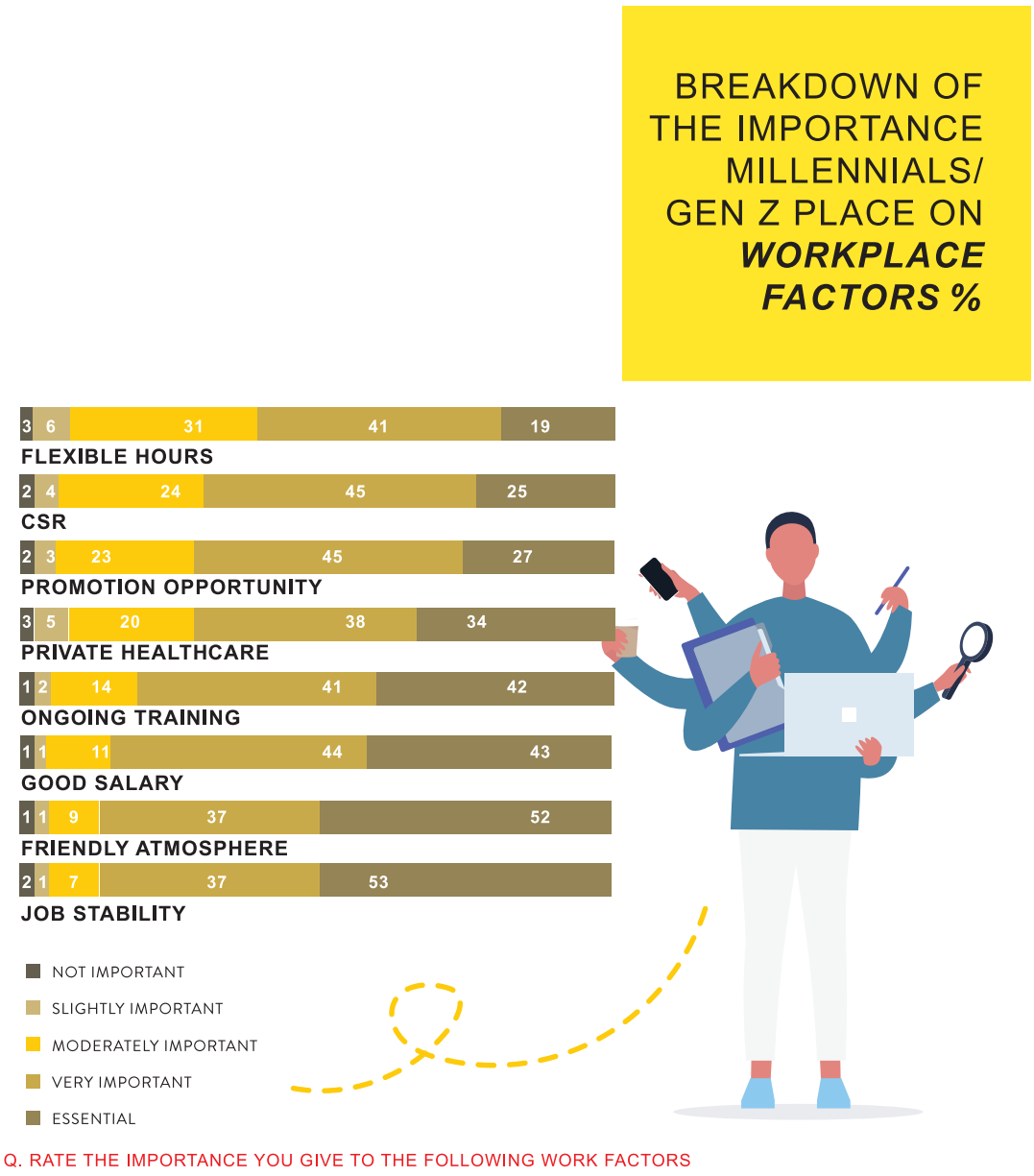


Figure 5. Breakdown of the importance Millennials/Gen Z place on workplace factors

Note. CSR = The option presented in the survey was stated as "*An organisation that helps the community*".

The results in Figure 5 merit comparison with a study by Marconi and Ramirez Valarezo (2017) inquiring into what businesses currently do to attract Millennials in Ecuador. In that study, businesses stated that they placed higher emphasis on corporate culture (33%) and work flexibility (33%), followed by job security (24%), when it came to attracting Millennials. The lowest emphasis was placed on CSR (10%). The results from the students surveyed (Figure 5) partly contradict these perceptions of what Millennials want. In Figure 5, we might correlate "corporate culture" with the option "a friendly atmosphere", which was the second highest preference of students, closely matching the Marconi and Ramirez Valarezo study. However, for all other workplace areas there is a mismatch. Students from across the country clearly hold job security as the most important factor, with work flexibility7 being relegated to the lower end of the spectrum. This comparison indicates that business managers may be misreading what young Ecuadorians value in the workplace.

In the same Marconi and Ramirez Valarezo (2017) study, managers from across Ecuador were also asked which aspects of working conditions they believed should be emphasised in order to retain Millennials. Managers linked employee retention primarily to work-life balance (work from home, flexible hours, virtual office) in 43% of managers` responses, followed by career development with 31%, and remuneration and

[7] In Marconi and Ramirez Valarezo (2017), *work flexibility* was stated as "open to alternative work models, projects and travel". In the national survey of students, it refers to flexible work hours only.

benefits with 16%. These appear to be misaligned with the responses given by the students. In *Figure 5*, students chose a good salary over ongoing training and promotional opportunity. Also, the emphasis managers placed on flexibility seems to be overstated. Students rated flexible hours lower in importance than most other options available. Again, there is good evidence to suggest that managers are misreading Millennials/Gen Z.

There are numerous further studies that look at the workplace preferences of Millennials and/or Gen Z. These include CEMDES (2015), Deloitte (2018), Manpower (2016), PwC (2012), Bencsik et al. (2016), Iorgulescu (2016), and Ernst and Young (2015). A similar study was conducted in Ecuador by CEMDES (2015) called *Millennials in Ecuador*. One question asked, "what should the workplace of your choice look like"? Multiple answers were allowed. The responses *a good atmosphere* and *fair salary* were the top two given with 69% and 53% of respondents accordingly. *Stability* was rated lower, with 26% of respondents, and even lower were flexible agreements and work hours with 26% and *personal development incentives* with 21%. Most of the results in this study are consistent with student responses in *Figure 5*, except for *stability*.

The 2018 Deloitte Millennial Survey asked university educated, and employed, Millennials and Gen Z people, from over 15 countries: "*In general, how important are the following aspects when you are considering working at an organization?"* In the Deloitte study, respondents ranked the preselected items. Five of the factors were similar to the ones in *Figure 5*. The order selected for Gen Z from most important to least were *positive workplace culture, financial rewards/benefits, flexibility (hours and location), opportunities for continuous learning and r*eputation for ethical behaviour (p. 18). In *Figure 5*, students had the same order, except for choosing financial rewards ahead of workplace culture.

Manpower published a Millennial study (2016), listing Millennials' top five priorities when looking for a job. The results showed money (92%) was the highest priority, followed by security (87%), holidays/time off (86%), great people (80%) and flexible hours (79%). Ecuadorian students differed in their order of importance for these workplace preferences. Ecuadorian students appear to have differences in workplace preferences.

In a PwC (2012) study, Millennials rated the things they most desired in an employer. Opportunity for progression was consistently rated number one. The second most desired item was financial compensation. These were followed by training and development, flexible work, and corporate ethics (p. 10). Students from Ecuador had notable difference to the Millennials in the PwC study.

A comparative study of Millennials in Hungary (Bencsik et al., 2016) listed their preference for incentives in the workplace. The incentives that were most likely to make Millennials stay in Hungary were money, followed by career opportunities. This is similar to the findings in the PwC (2012) population. In Hungary the order of incentives continues with a good atmosphere.

Another study in Romania (Iorgulescu, 2016) conducted a national study on Gen Z and its perception of work in Romania. The factors tested were similar to those in *Figure 5*. The workplace preferences they listed in order of importance were: opportunity for advancement (87%), pay (60%), job security (44%), flexible hours/ work from home (27%), positive impact on society (CSR) 18%, and healthcare 8%. The Romanian students appear to have different value preferences in workplace factors to Ecuadorian students. For example, the results for Ecuador saw job stability as the highest rated item, whereas Romanian Gen Zers had this third, after opportunity for promotion, which was much lower in importance for Ecuadorian students.

Finally, an Ernst and Young (2015) study listed the top five reasons Millennials quit, in Mexico. The top reason was a lack of opportunity to advance (84%). Three of the remaining four reasons had to do with a lack of flexibility: a boss that doesn't allow you flexibility (83%), flexibility stigma (82%), and lack of workplace flexibility (80%) (p. 12). In Ecuador, flexibility did not feature as a high preference for students.

Salary Expectations

Students in Ecuador were asked what they expected to be a fair wage in their field for a graduate employee: the majority (40%) selected between $400 and $800 dollars (*Figure 6*). This was closely followed by the next highest bracket offered, $800 to $1200 (35%). 12% of students selected between $1200 and $1600. It appears that many students may have an unrealistic expectation for a starting salary. According to Adecco (1 y 6 meses tardan los jóvenes, 2019), 86% of 18-30 year olds employed in Ecuador received between $394 and $800 a month. Only 13% received a salary between $800 and $1200, far less than the expectation of 35% of students. Also, a mere 1% of youth had a wage between $1200 and $1600. In special cases employers may be willing to offer a higher starting salary. However, the Adecco study did not specify salaries by education level. It is reasonable to speculate that 18 to 30 year olds with a higher education degree earn a higher income on average than people without one.

Many students have higher than realistic salary expectations

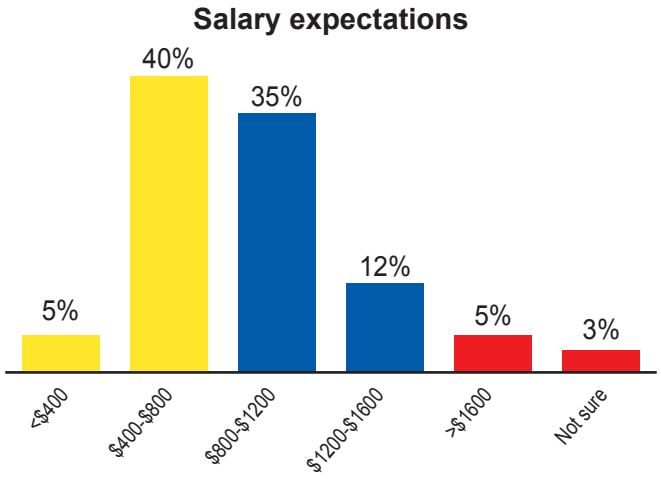


Figure 6. Salary expectations

Q. What do you consider to be a fair starting salary in your field?

There is clear evidence that students have an unrealistic expectation for a starting salary. Once hired, graduates are usually put on a probation period and undergo training by an organisation in order to prepare them for their position. During this time, which may last up to a year, employers are likely to offer a salary that is below $800 a month. The major of graduates is likely to be a key determinant for starting salary (see Chapter 5 – Comparison by major). This was supported by the Adecco study (1 y 6 meses tardan los jóvenes, 2019).

In comparison, a study of Romanian Gen Zers revealed that they had a realistic expectation for a starting salary. The average wage in Romania is 404 Euros per month. The majority of students (75.6%) surveyed responded with an expected salary of 445 Euros or less per month (Iorgulescu, 2016).

Voluntary Overtime

Just over half of students surveyed stated that they would be willing to work overtime for no extra pay (*Figure 7*). However, 43% stated that they would not be willing to do so. This is not to say that Millennials/Gen Zers are not willing to work long hours. In fact, a study by Manpower (2016) surveyed 19,000 Millennials from over 25 countries and found that they work as hard if not harder than other generations. 73% reported working more than 40 hours per week, with nearly 25% working more than 50 hours. Mexican Millennials averaged 48 hours a week, and Brazilian Millennials averaged 45 (p. 6). There is no comparative data for Ecuadorian youth.

There is a mixed attitude towards volunteering to stay after hours without extra pay

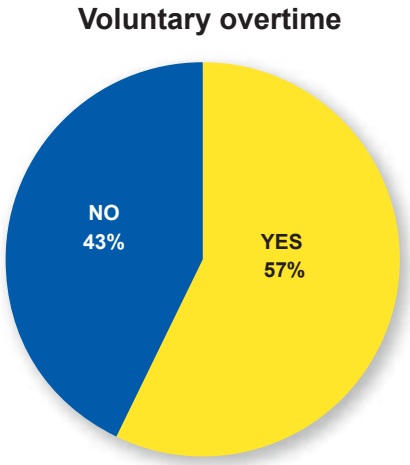


Figure 7. Percentage of students that would voluntarily work extra hours for no additional pay
Q. Would you be willing to work overtime without additional pay?

As seen in *Figure 8*, the majority of students that answered that they would work overtime for free stated that they would work for up to one hour extra a day (66%) or two hours (27%) extra per day.

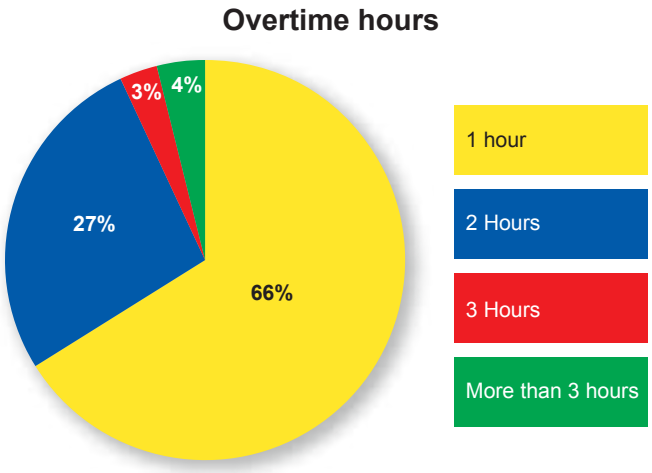


Figure 8. Number of hours students are willing to work overtime with no extra pay
Q. Would you be willing to work overtime without additional pay?
Options available to students: *yes, up to one hour per day*; *yes, up to 2 hours a day*; *yes, up to 3 hours a day*; *yes, more than 3 hours a day*

Promotion Expectations

Most students surveyed stated that they expected to be promoted between six and twelve months after starting a new job (*Figure 9*). A sizeable number expected to be promoted between one and two years of starting a new job. An international Millennial study by Universum (2014) found that 70% of Millennials believe that achieving a leadership or manager role is important to them. Similar to the results in Ecuador, Universum found that 60% of Millennials from across the globe valued a fast-tracked career. Ernst & Young (2018) reported on a Time study in the US, finding that 40% of Millennials believed they should be promoted every two years regardless of performance.

Ecuadorian students expect to be promoted soon after starting a new job

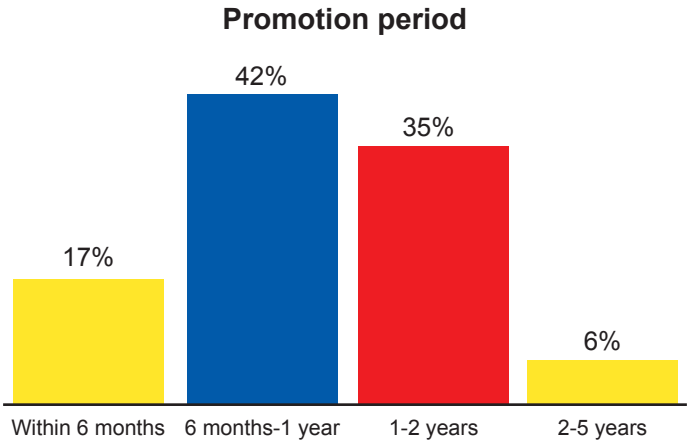


Figure 9. Period Millennials/Gen Zers expect to be promoted after starting a new job

Q. After starting a new job, within what time period do you expect to be promoted?

Resignation Notice

Students were asked how long they would wait before resigning from a job they did not like. The majority stated within three months (38%) and within six months (31%) (*Figure 10*). The results seem to confirm generalisations about Millennials/Gen Zers being impatient and their tendencies for job hopping.

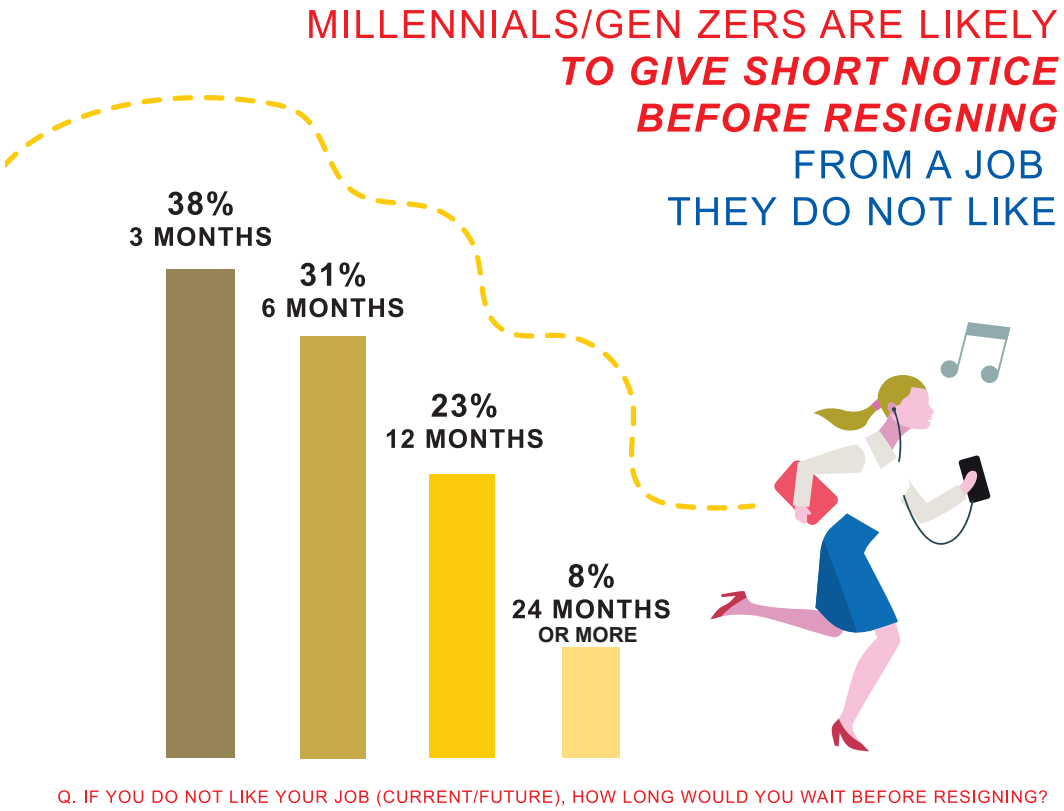


Figure 10. Period that students would wait before resigning from a job they do not like.

Rodriguez et al. (2017) also looked at Millennials'/Gen Zers' loyalty and how to recruit this generation while maintaining low turnover. Employee turnover has been a challenge for managers and organisations, especially with Millennials. It is expected to become an ever-greater problem with the introduction of Gen Z into the mix (Rodriguez et al., 2017). Rodriguez et al. suggest that managers will need to balance hiring Millennial/Gen Z graduates for their entrepreneurial skills and hiring applicants that demonstrate "grit" (long term vision, stamina), as entrepreneurial candidates are likely to quit and go out on their own in stressful times,

whilst Millennials with grit are more likely to be loyal. Turnover is a bigger problem today than it was 20 years ago, and will potentially grow with Gen Z. After interviewing 512 managers, the study concluded that grit is most needed in recruits for the purpose of lowering turnover. On the other hand, the youth that have greater entrepreneurial orientation are more likely to leave when they get the opportunity.

PwC (2012) suggested that Millennials are "loyal while it suits them". In their 2012 study, only 18% of Millennials planned to stay in their current role. In the financial sector, this was even lower, with 10%. Most Millennials in the financial sector planned to have between two and five employers during their career (52%), with 23% stating six or more (p. 9).

Studies by Deloitte (2016; 2017; 2018) have addressed this question with employed Millennials from across the world. The results indicate a far less dramatic scene than the results in Ecuador. In 2016, 44% of Millennials said they would leave their current job within 2 years, compared to 27% that would stay beyond five years. This dramatically decreased in the 2017 results, with fewer Millennials stating they would leave within two years (38%), versus 31% stating they would stay beyond five years (p. 18). The 2018 Deloitte survey showed similar results to 2016: 43% would leave within two years, and 28% stated they would remain beyond five years. For the first time Gen Z was included in the 2018 Deloitte survey. Here, Gen Z seemed to be more likely to leave within two years. 61% stated they would leave within two years, with only 12% saying they would stay beyond five years (Deloitte, 2018). The results in the Deloitte studies seem to indicate that Millennials born after 1994, or Gen Z, seem to be less loyal than the previous generations of Millennials, supporting the data in the Ecuador results (*Figure 10*). Perhaps offering flexible work hours may result in a higher retention rate amongst these generations. Additionally, Adecco (2015) stated that in order to entice Generation Z to stay, organisations need to provide opportunities for growth, let them experience new things and achieve leading roles.

Power Distance

The question described in *Figure 11* asked students how they would normally address a superior. The two options offered were by official *title* or by *first name*. Ecuador is classified as a high power distance society, according to the definition and study conducted by Geert Hofstede (n.d). Ecuador scores a 78 over 100 for power distance index (PDI). "At 78 Ecuador sits in the higher rankings of PDI – i.e. a society that believes that inequalities amongst people are simply a fact of life" (Hofstede, n.d). It appears that this generation may adhere to that generalisation. However, there is not enough evidence to support this based solely on the answers given in this question.

Professional hierarchy is a cultural value that is maintained amongst students

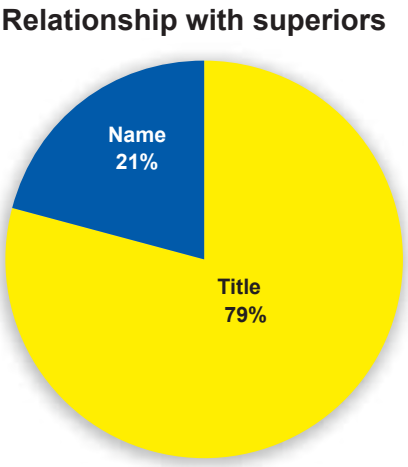


Figure 11. The percentage of Millennials/Gen Zers that would use a superior's title

Q. How would you usually address a superior? By their name; by their title; for example, Engineer, Doctor etc.

Individualism

Students were asked how they work better. The majority stated always alone (10%) or mostly alone (47%) (*Figure 12*). In contrast, a combined 43% stated either always in groups or mostly in groups. This is an indicator of the Hofstede measure of individualism. At a score of 8 over 100, Ecuador is amongst the most collectivist societies in the world (Hofstede, n.d). However, the result appears to signal a change in Ecuadorian society away from a traditionally collectivist culture. A collectivist society usually takes the group into account when making decisions, and such societies often favour working in groups to achieve desired outcomes. The majority of the Millennial/Gen Z generation in Ecuador appear to have a preference for individual oriented tasks.

Figure 12. Percentage of Millennials/Gen Zers that work better in groups versus alone

Work-life Balance

Students were asked if they would quit a well-paid job for more time in their personal life. The responses were about equal with slightly over half stating one of the two negative answers (52%), *probably not* or *certainly*

not (*Figure 13*). This question was made in a hypothetical manner, as most students are not currently working. However, what can be taken from this result is that students are likely to at least entertain the idea of quitting a job in exchange for more personal time. Employers should be cautioned to offer some flexibility for these generations when it comes to after-work activities and vacation time.

Millennials/Gen Zers narrowly choose prioritising work over their personal lives

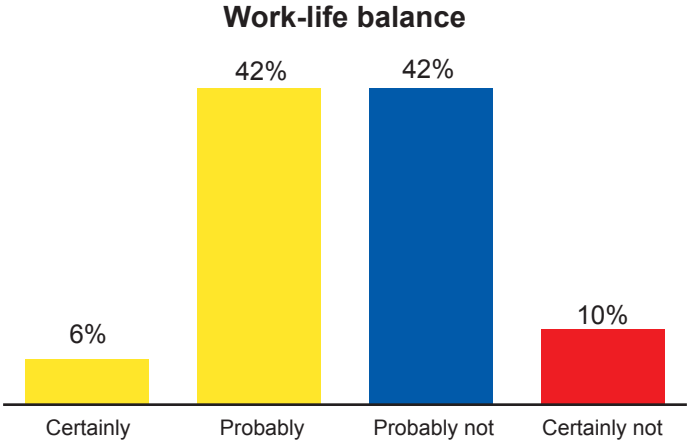


Figure 13. Millennials/Gen Z and their attitude towards work and their personal life
Q. Would you give up a well-paid job to have more time for your personal life?

Universum (2014) conducted a global study asking a similar question: "Would Millennials consider giving up a well-paid and prestigious job to gain better work-life balance?" (p. 10). The results were in favour of work-life balance, with 44% of Latin American Millennials agreeing and 19% against. The remaining responses were neutral. Latin American Millennials had a slightly lower affirmative response than the global average of 47%. The results in the Universum study are similar to the percentage of Ecuadorian students that answered affirmatively. Unfortunately, there was no neutral option in the Ecuador survey, so a direct comparison cannot be made. Universum followed up by asking about the personal priorities of Millennials: spending time with family was number one, followed by self-growth and learning new things. In the Manpower (2016) international Millennial study, 84% of Millennials stated that they were planning to take significant career breaks throughout their lives. They are not looking at the traditional career ladder model, but something more like a career wave. Millennials stated that they planned to prioritize "me-me-me time" (p. 7). Four out of ten Millennials stated that they planned significant breaks for relaxation, travel and vacations. In the PwC (2012) study, 94% of Millennials in the financial services sector stated that work-life balance was important to them.

Happiness

Many studies have looked at the happiness or well-being of populations. The results of such studies can impact the policy implementations of local and national governments in areas such as income distribution and public works projects. Also, such information can help employers gauge the social mood of the community and potential employees. Most studies on happiness approach this with a question like *how happy are you in your life?* Or, *how satisfied are you in your life?* Responses are often on a five point Likert scale with a middle point for neutral (Graham & Felton, 2005). In accordance with this trend, and with a slight variation, this survey asked students "*In general, how often are you happy"?* The response options were on a five point Likert scale (*always, mostly, sometimes, rarely, never*).

The majority of Millennials/Gen Zers were always happy or mostly happy (*Figure 14*). This is a healthy measure as employers should strive to recruit emotionally stable employees that add a positive vibe to their workplace.

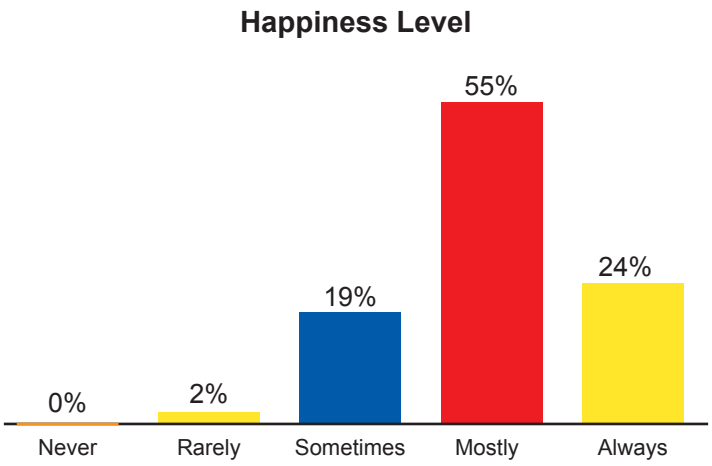


Figure 14. The happiness level of Millennials/Gen Zers

Q. In general, how often are you happy?

Economic Optimism

Students were asked what they thought the economy would be like in the next two years. This question was not intended to provide an economic forecast, as students are not likely to have reliable expertise. Rather, the question was included as a measure of the optimism and pessimism of students regarding the status of the economy. Such a measure may be used to interpret possible spending patterns of Millennials/Gen Zers as well as their level of commitment to an organisation. Logically, if people expect the economy to get worse, they will be less likely to quit a position. On the other hand, if people expect an increase in economic activity, they may be more flexible with their commitment to an employer.

Most students expect the economic situation to remain the same

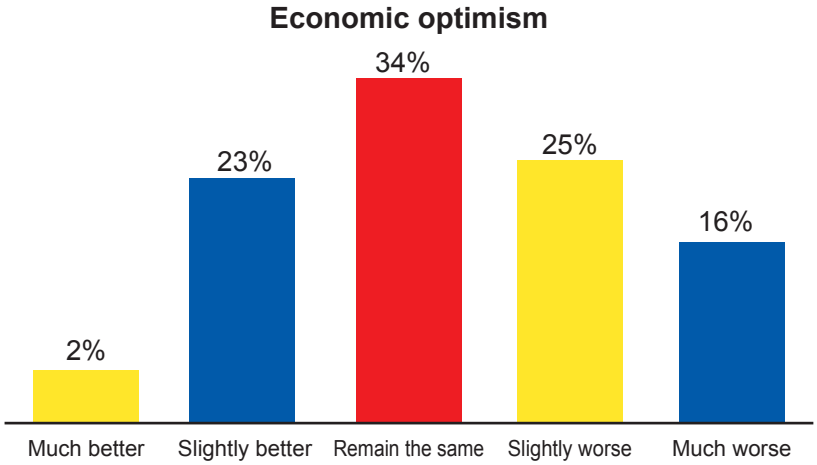


Figure 15. Percentage of students that expect the economic situation to improve/get worse

Q. What do you expect the general economic situation of Ecuador to be like over the next 2 years?

The results in *Figure 15* show that 25% of students in Ecuador expect the economy to improve over the next two years; 34% believe it will remain the same and 31% stated it would get worse. In contrast, a study by Deloitte (2017) has demonstrated a different trend in economic expectations by Millennials from across 15 developing countries. Since they started surveying Millennials on this question in 2014, the percentage that expects the economy to improve has been significantly higher than what was stated here by Ecuadorians. In 2014, the Deloitte study revealed 47% of Millennials expected an improvement in the economy, 49% in 2015, 43% in 2016 and 57% in 2017 (p. 4). The 2018 survey stated that 78% of Millennials from emerging markets expected the economy to improve over the next year (Deloitte, 2018, p. 14). This trend shows that Ecuadorian Millennials/Gen Zers appear to be less optimistic about the economic outlook than the average trend amongst Millennials in emerging markets.

Life Goals

Students were asked to select the importance they placed on seven life goals, from a five point scale between "not important" to "essential" (*Figure 16*). Some clear patterns emerged in their selections. There is a trend that indicates importance was placed in the following order, from highest to lowest: making their family happy, making a positive social contribution, having an active social life, religion/spirituality, being wealthy, having children, and getting married.

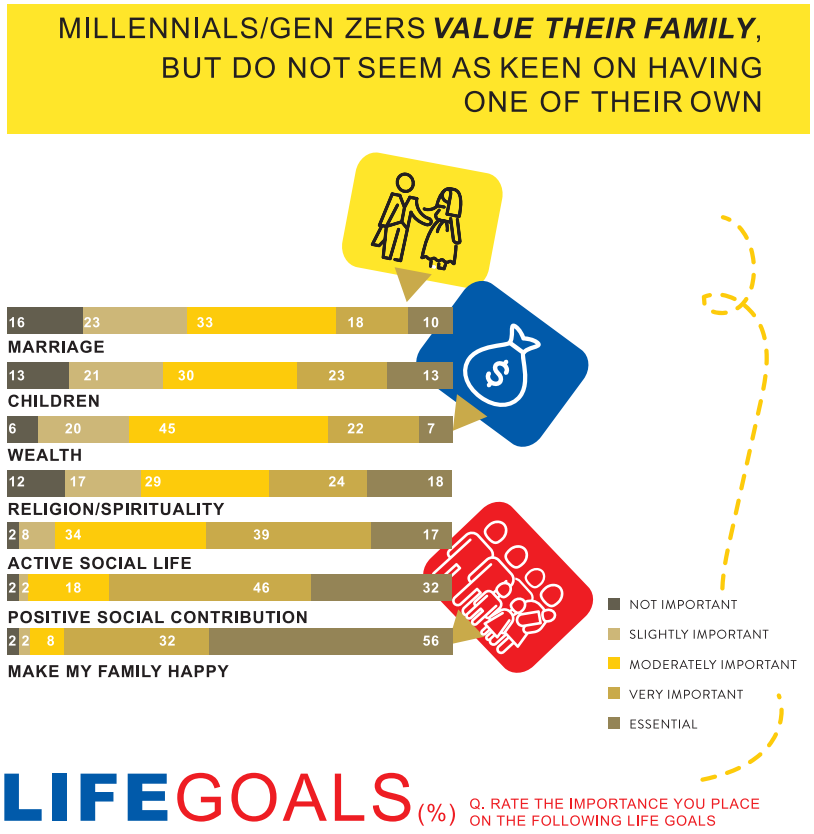


Figure 16. Breakdown of the importance Millennials/Gen Zers placed on a list of life factors
Positive social contribution = Make a positive contribution to society; Religion/Spirituality = To have an active religious or spiritual life; Wealth = to be rich

Family.

The highest responses of *essential* and *very important* were given for the life goal *making my family happy* (88%). Ecuador has traditionally held the family as the most important institution in its society, and it appears that the younger generations maintains this priority.

Social contribution.

In line with results from other studies of Millennials in Latin America, making a social contribution seems to be one of the aspirations that Millennials/Gen Zers in Ecuador have. They have been tagged as a cohort that seeks to change the world for the better. The results in Ecuador support this, with 78% stating this was *essential* or *very important* to them.

Active social life.

The life goal that received the third most selections in *very important* and *essential* was an active social life (56%). This may indicate a generation that would like to have some work life balance. The responses in *Figure 13*, work-life balance, support this.

The following four life goals presented to the students scored notably less *very important* and *essential* selections, indicating that they are less important than the life goals already mentioned.

Religion/spirituality.

The importance of having a religious or spiritual life was *essential* or *very important* to 42% of students. Ecuador has traditionally been a religious society with the latest statistics showing 93% (INEC, 2012) and 92% (Pew Research Centre, 2014) of Ecuadorians identifying as Christians. However, this younger cohort appears to differ with regard to traditional beliefs. This was supported in the worldview study by Tusev (2017). In the chapter titled *Ecuador: a generation with a different worldview*, Tusev found that only 68% of the Ecuadorian Millennials surveyed had responses that correlated with a religious or spiritual worldview (Tusev, 2017, p. 168). This trend is in line with youth around the world, having less emphasis on religion in their lives (Tusev, 2017).

Wealth.

Being wealthy was also seen as less important by the majority of students. Here, only 29% of students stated this was *essential* or *very important* for them, whereas 26% stated that it was *not important* or *slightly important*. However, the majority stated it was *moderately important*. Hence, it appears that being wealthy is not a top priority for this cohort, but still remains somewhat important.

Children and marriage.

The least responses of importance were given to the life goals of having children and getting married. There was an almost even split between affirmative and negative options on either side of moderately important. The life goal of having children saw 36% of students select *very important* or *essential*, and 34% selecting *not important* or *slightly important*. Marriage scored even fewer high end responses, with 28% of students stating it was *very important* or *essential*, whilst more students stated *not important* or *slightly important*, at 39%.

The relatively low preferences for having children and getting married are an indicator of shifting values in what young Ecuadorians want in terms of a traditional family unit. However, there are a number of factors that may contribute to these lower ratings. The age factor and life stage of the respondents are likely to contribute to a lower preference for having children and getting married. The average age of the respondents in the survey was 22, and all respondents were currently enrolled in a course of study at university. University students are likely to be focused on finishing their studies and building a career, and to defer having children and getting married. However, these results could also indicate an overall lower desire to have children and get married, as is the case in many parts of the world. Younger generations across the globe have different priorities regarding children and marriage from older generations. For example, the Pew Research Centre highlighted a decrease in Millennial women having children in the US. In 2016, 48% of Millennial women were mothers, compared to 57% of generation X at the same age, in 2000 (Livingston, 2018). Similarly, in the US, men and women are having children at a later age than past generations, about seven years later in 2016 than their predecessors in 1960, at the age of 27.4 for women and 27.5 for men (Ernst & Young, 2018). Amongst Hispanics in the US, the number of married adults aged between 25 and 34 declined, falling from 70% in 1980 to 61% in 2000 and

44% (approximately) in 2015 (Frey, 2018, p. 12). This has been a trend since at least 1970, and may be due to a number of factors including more participation of women in the workforce, higher education attainment and a cultural shift away from marriage. In the US study, there was little difference in the importance placed on having children between Millennials, generation X and baby boomers.

A Pew Research Centre study showed that 58% of US Millennials stated that being a parent was one of their most important life goals, while getting married was seen as important by only 30% of Millennials (Livingston, 2018). In the sample in Ecuador a much lower 36% stated *very important* or *essential* for having children, and a similar 28% for getting married. Here, it appears that having children is significantly less important for the sample of Millennials/Gen Zers in Ecuador than in the US. This may have something to do with the differences in the populations studied. The US study looked at all Millennials, whilst the Ecuador population is exclusively comprised of university enrolled students, a group mainly composed of younger Millennials and Gen Zers.

Postgraduate Study

There is an overwhelming majority of students, 96%, that intend to go on to postgraduate studies (*Figure 17*). Students were also asked when they intended to begin such study, with options ranging from immediately to within five years. The results indicate that most undergraduate students do not plan to take a prolonged break, between graduating and continuing with postgraduate studies. The results are not in accord with actual statistics of how many students continue with postgraduate study. In 2016, there were 22,226 students enrolled in a postgraduate course, of a total 594,106 students enrolled in higher education (this equates to 3.74% of the student body) (SENESCYT, 2018) Nevertheless, the responses from students clearly signal that if they were afforded the opportunity they would pursue such an endeavour. Employers may consider providing some form of postgraduate study support to Millennial/Gen Z graduates in order to attract the best talent.

Millennials/Gen Z expect to continue with postgraduate study

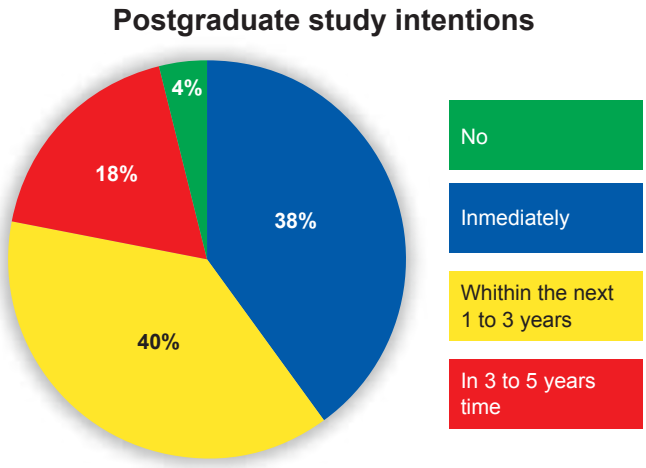


Figure 17. Percentage of students that plan to continue with postgraduate study

Q. Do you intend to study a postgraduate degree? (Masters, PhD).

Entrepreneurialism

Most students (80%) stated that they plan to start their own business at some point in time (*Figure 18*). This is in line with trends that show Ecuador leading Latin America with young active entrepreneurs. CEMDES (2015), found that 51% of Millennials preferred to work for themselves. This is similarly supported by a study of US Millennials, where 58% stated that they had thought about starting their own business (Ernst & Young, 2018, p. 31). In addition, the CEDESMA study asked Millennials about the level of difficulty of becoming an entrepreneur in Ecuador. The responses were split, with the “difficult” and “very difficult” responses slightly higher than the “very easy” and “easy” responses - 31% to 25%. The majority answered the middle option, “not difficult nor easy”, which drew 34% of all responses (p. 26). This indicates that although Millennials/Gen Zers are keen to own their own business, they may face challenges in attempting to realise this ambition. The

CEDESMA study also asked Millennials the main reasons for starting their own business; 45% stated it was due to their unemployment status, 29% said finances and 25% stated that they wanted the responsibility (p. 27).

Most Millennials/Gen Zers plan to start their own business

Business start-up plans

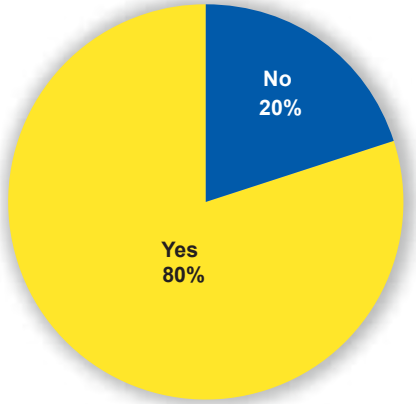


Figure 18. Percentage of students that plan to start their own business

Q. Do you have plans to start your own business?

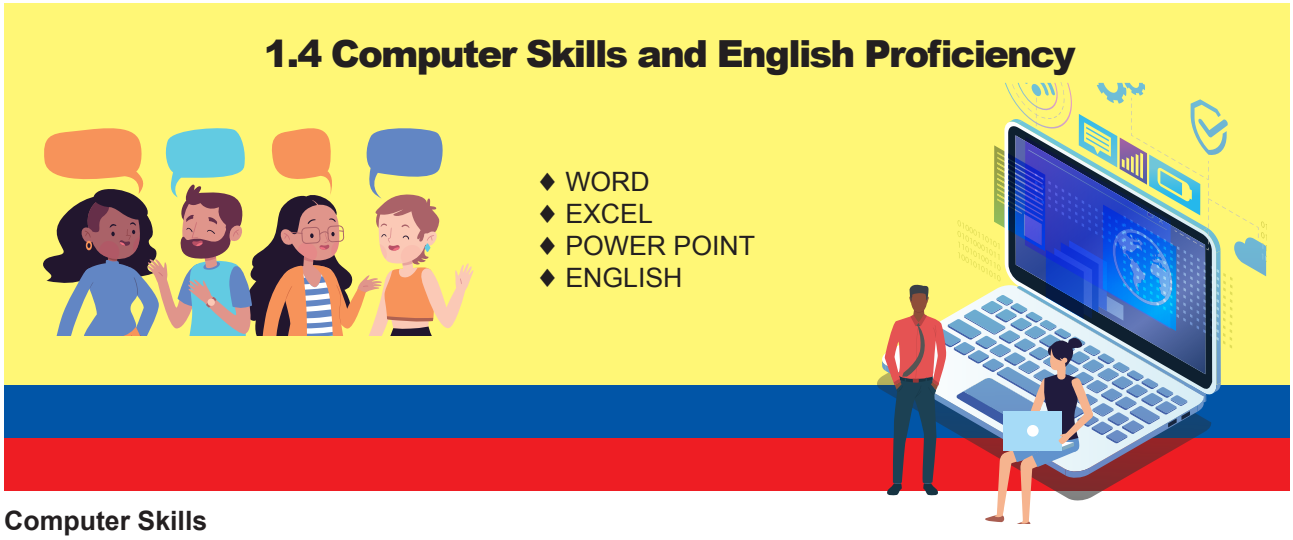
In addition, an Adecco study, on employment of Millennials in Ecuador, indicated that the intention of Millennials to start their own business does not necessarily correlate to their actions. Even though only 28% of Millennials had a job, leaving a majority without work, only 26% had actually started their own business ("1 y 6 meses tardan los jóvenes", 2019). This is a sizeable share of youth with their own business, but it is far shorter than the 80% of students that answered that they plan to start their own business.

The global entrepreneurship monitor, Ecuador Report of 2017, confirms Ecuador as the highest rated entrepreneurial nation in Latin America, for the past six years in a row (Lasio, Ordeñana, Caicedo, Samaniego, & Izquierdo, 2018). In 2017, an estimated three million Ecuadorians were either starting or running their own business. This gave Ecuador a total entrepreneurial activity (TEA) rate of 29.6%, leading Latin America, followed by Peru and Chile (p. 11). Ecuador scored highest in commercial and legal infrastructure, physical infrastructure, cultural and social norms and education. The main weaknesses were public policies and access to financing (p. 11). On average, the Ecuadorian entrepreneur is 36, and has 11 years of schooling. Overall, 33.4% of entrepreneurs are also employees, 50.2% are fully self-employed; In terms of income, 48.8% have a family income between $375 and $750 per month (Lasio, et al., 2018). The age of entrepreneurs in 2017 were broken down: Millennials/Gen Zers accounted for 52.8% (18 - 34) (p. 31). 15.9% had a university degree, and 0.8% had a Master's or Ph.D. (p. 32).

The trend for Millennials and Gen Z to want to have their own business is evident in other studies too. The Association of Young Entrepreneurs of Ecuador (AJE Ecuador) is an organisation that helps promote young entrepreneurship in Ecuador, with 150 members who are between the ages of 22 and 45 years old (AJE Ecuador, n.d.). In 2016, the president stated that 90% of its members, then 134 people, were under the age of 35 ("La generación de los 'millennials'" 2016, section Andre Briones/Presidente de AJE). In addition, the digital agency Deep Focus (2015) conducted a study on Gen Z, titled Cassandra Report: Gen Z study, focusing on consumers born between 1998 and 2008. They revealed that 62% of Gen Z have a desire to start their own companies instead of working for an established company (para. 5).

Professors at university campuses are aware of the strong entrepreneurial preference of Millennial/Gen Z university students. In an article titled *The generation of Millennials in Ecuador, behind business ventures* (2016), the director for the Centre for Entrepreneurs of ESPOL explains that the youth of today are realising that they can start a business with less initial investment, and once they grow, they can seek greater capital

investments (para. 4). Professor Boris Lascano, of the Faculty of Administration and Political Science at Casa Grande University, stated that 64% of Ecuadorians believe that self-employment is as possible an income source as any and that this option stimulates young people (para. 7). Furthermore, Lascano believes that Millennials are out to make a name for themselves, and look for alternatives for employment and ways to start their own business.



Computer Skills

Students were asked to rate their skills in the three most common Microsoft applications, Word, PowerPoint and Excel (*Figure 19*). The highest self-rated computer competency was in Microsoft Word, with 63% of students rating themselves as either high or very high, followed by Microsoft PowerPoint with 55% (high and very high). Microsoft Excel had the lowest score recorded with 31% (high and very high).

Students' best self-evaluated skills are in Word and Power Point, with lower skills in Excel

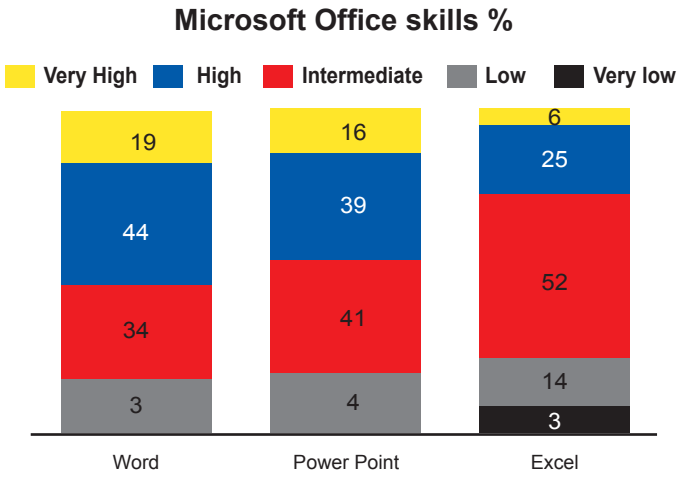


Figure 19. Self-evaluated skill level across the Microsoft applications of Word, Power Point and Excel

Q. Rate your general computer skills.

English

Finally, students were asked to rate their English competency. Millennials/Gen Zers had a mixed level of English proficiency. There is an alarming 41% that gave their level as either basic or lower intermediate. On the higher end, only 27% of students selected advanced or upper intermediate. 31% estimated that they had an intermediate level of English (*Figure 20*). Considering the modern workplace is ever more global, English has become virtually a must for many organisations across industries. Ecuadorian educational institutions have tried to address this trend by mandating English as a second language across all levels of education, including higher education. By the time students graduate from university they are supposed to have at least an intermediate level of English, if not higher.

Millennials/Gen Zers have some improving to do in their English proficiency

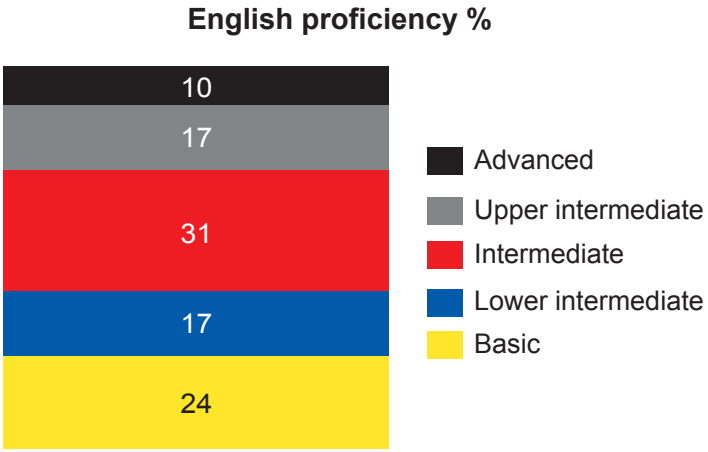


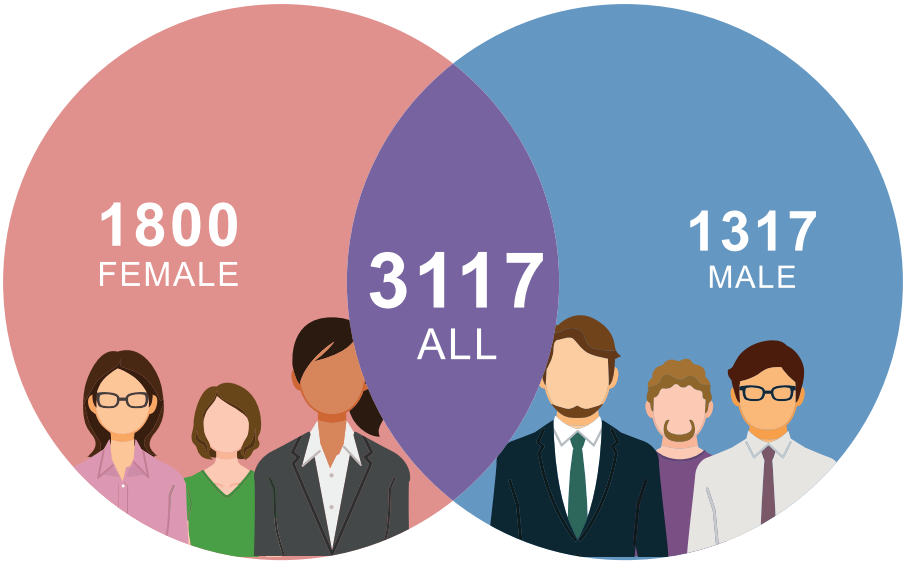
Figure 20. English level

Q. What is your English level?

Note. Due to rounding the sum is 99%.

Chapter 2

Gender Differences in Ecuador



SAMPLE POPULATION BY GENDER

Historically, men and women have been seen as clearly distinct from one another in terms of personality, physical appearance, capabilities and inherent nature. Since the enlightenment, particularly the scientific revolution of the seventeenth and eighteenth centuries, such traditional beliefs in immutable differences have been increasingly challenged. Nevertheless, aggregate differences between the sexes (however accounted for) are regularly observed in many of the areas explored in the present study, particularly those involving preferences, attitudes and aspirations.

Chapter 2 adds to the results presented in Chapter 1 by comparing the survey responses of male and female university students from across Ecuador. The results are compared in charts, and some commentary is provided for each result based on academic studies on gender. Certain questions that were presented in the national results in Chapter 1 are omitted here, on the basis that there was no significant difference in responses by gender. Notwithstanding, it is hoped that readers of this chapter will gain a better understanding of the similarities and differences between the genders.

It should be understood from the outset that any aggregate gender-based differences uncovered should not be used as a basis for discriminatory practices directed at individuals. Rather, readers should see the results as a tool to better understand the differences and similarities between male and female Millennials/Gen Zers in Ecuador. By presenting these results, it is hoped that communication will be improved and misunderstandings reduced, especially in the workplace environment. To this end, a brief overview of literature regarding gender will be presented, in order to provide some background for interpreting the results.

Differences Between Men and Women

There are two main fields of study that compete to explain the differences and similarities between men and women today. These are *evolutionary psychology* (the traditional view) and *social role theory (*the progressive approach).

To begin with, there are clearly biological differences between men and women, primarily in their reproductive functions. According to the *evolutionary psychology* view, the main differences between men and women can be attributed primarily to the historic social and biological evolution of the species. The theory acknowledges

that there are more similarities than differences between men and women, such as they both prefer safe and rich environments, invest in reproduction and bringing up children, and avoid hostile environments including predators (Eagly & Wood, 2016). With regards to the differences between genders, the theory states that these are genetically coded, through evolutionary mechanisms, in the human species over a period of millions of years, and continue through to today (Eagly & Wood). For instance, women have historically always been the prime caretaker of infants; they go through pregnancy, give birth, breastfeed and perform other child rearing duties. This has led them to naturally become more invested in such duties from the beginning. As a result, it has been argued that women have been biologically programmed to have heightened communal traits (e.g. caring, nurturing, etc.) (Buss & Schmitt, 2011). On the other hand, men have been less directly involved in child rearing duties owing to the need to provide for and protect women and infants, leading to them acquiring heightened agentic traits (e.g. competitiveness, aggressiveness, etc.). This explanation for gender differences has been challenged and criticised, particularly since the second half of the twentieth century.

Since at least the 1920s, women's role in society has been shifting dramatically. Women have gradually transitioned from the traditional role of household caretaker, full time mother and supportive wife to new roles as factory workers, professionals and self-dependent women. This social shift has led to increased questioning of traditional notions of immutable differences between men and women. In the 1950s, psychologists began to look at stereotypes of men and women. Such research intensified in the 1970s, and by the 1980s researchers tested the accuracy of such stereotypes, through statistical analysis, to ascertain patterns of actual behaviour and personality between men and women. Surprisingly to researchers, analytical studies corroborated many of the stereotypical differences established in prior research. While small, the differences were significant (Eagly, Wood, & Diekman, 2000; Heilman, 2012).

A new theory emerged to try to explain the differences and similarities between genders, *social-role theory*, which has been studied across numerous social fields (Archer, 1996; Franke, Crown, & Spake, 1997; Eagly et al., 2000; Koenig & Eagly, 2014; Eagly & Wood, 2016). Social-role theory suggests that communal traits are higher in women than men due to the historic roles women have played in society, and the patriarchal hierarchy that persists. Furthermore, people's assumptions (stereotypes) of gender roles are based on observations of men and women in their traditional roles, which lead to this behaviour being replicated across societies. There are three primary mechanisms to social-role theory, which attempt to explain the behavioural differences between genders (Eagly & Wood, 2016): First, *behavioural confirmation* suggests that people will respond to the expectations society places on their behaviour (Snyder & Swann, 1978), confirming the stereotypical gender roles society places on individuals. Second, men and women will adopt the expected behaviours to self-judge, or evaluate themselves, so as to conform to the gender behaviour stereotypes, unknowingly. And finally, hormonal differences will also influence the behaviour of men and women in particular situations (testosterone for men and oxytocin for women).

The roles of men and particularly women have changed dramatically over the past century, and continue to do so. Social-role theory suggests that as a result of these changes the differences in personality and behaviour between genders are becoming less prominent and less predictable. Abele (2003) confirmed an increased level of similarities between genders in recent years, attributed in part to women gaining greater access to higher education and professional job roles. Social-role theory predicts that as women and men are perceived as being more equal, traditional differences will continue to diminish.

Stereotyping

As this chapter reports on some clear differences in responses of men and women in Ecuador, it is worth stating the dangers of gender stereotyping, especially in the workplace. Heilman (2012), in her paper *Gender stereotypes and workplace bias*, explains how stereotypes for women and men seem to be similar across cultures. Such stereotypes take the form of descriptive stereotypes, describing how men and women behave, as well as prescriptive, laying out how men and women should behave. Often, both descriptive and prescriptive stereotypes overlap. In the workplace, particularly when recruiting candidates, assessors often

play into such stereotypes, awarding and punishing candidates based on such stereotypes. Heilman mentions that assessors from both genders seem to equally demonstrate such behaviour, reinforcing the expectations that these stereotypes place on each gender. Furthermore, men and women are likely to be influenced by these stereotypes and this may be reflected in the responses given by students in the national survey, which are reported in this chapter.

Generalisations: Communal/Agentic

When it comes to answering surveys like the one in this book, women may tend to self-evaluate or characterise themselves in parallel with the gender stereotypes that exist. For example, women's self-characterisations would tend to be more communal and less agentic than men`s (Heilman (2012). If this is true, the responses from students in this chapter will likely also reflect such a distortion. That is, responses from women may be influenced by the expectations Ecuadorian society at large places on women, and the same will show for men. In order to provide readers with a clear sign of such stereotypes, a list of communal (female stereotypes) and agentic (male stereotypes) personality traits are listed in Table 1. The generalisations in Table 1 will be addressed when discussing the results throughout this chapter, especially in Section 2.1 (workplace preferences and attitudes).

Agentic and communal traits have been shown to predict certain social phenomena, including values and life goals (Trapnell & Paulhus, 2012). There are a number of published studies that connect agentic and communal factors to personality including Abele (2003), Trapnell and Paulhus (2012) and Eagly and Wood (2016). These are listed in Table 1. Some examples of communal traits, associated with female personalities, include being caring, emotional, compassionate, and harmonious. Some agentic traits, associated with male personalities, include being decisive, assertive and competitive.

Table 1

Communal and Agentic Personality Traits

Communal traits	Agentic traits
Caring	Active
Emotional	Decisive
Friendly	Mastery
Unselfish	Assertiveness
Concerned with others	Instrumental competence
Expressive	Status
Compassion	Superiority
Altruism	Achievement
Honesty	Influence
Loyalty	Competence
Trust	Pleasure
Tradition	Wealth
Equality	Autonomy
Harmony	

Note. Adapted from Abele (2003); Trapnell & Paulhus (2012); Eagly & Wood (2016).

Trapnell and Paulhus (2012) associate life goals with communal and agentic personality traits. These are listed in Table two. Communal life goals, associated with females, include a higher emphasis on religion, tradition, seeking purpose in life, sacrificing for others, and conformity. On the other hand, agentic leaning life goals, associated with males, include a higher preference for power, success, economic interests, entrepreneurialism, and self-indulgence. Certain life goals appear to be neutral of personality. For example, the life goal for having relationships does not appear to be related to either communal or agentic personality type. Rather, as evolutionary psychology theory states, the goal to reproduce and have children is shared by both genders (Eagly & Wood, 2016). These generalisations will be compared to the responses given by Ecuadorian male and female students, especially in section 1.3: Life goals and priorities.

Table 2

Life Goals and Agency/Communal Factor Correlations

Communal-leaning life goals	Agentic-leaning life goals
Seeking purpose in life	Leadership
Sacrificing for others	Power
Social	Expertise
Relational	Success
Religious	Economic interest
Aesthetic	Hedonism (self-indulgence)
Benevolence	Political goals
Universalism	Stimulation
Security	Self-direction
Conformity	Entrepreneurial
Tradition	

Note. Adapted from Trapnell & Paulhus (2012, pp. 40-41).

The agentic/communal male/female relationship is somewhat confirmed in the results of a Deloitte (2015) study on Millennials. Deloitte surveyed 7,806 university-educated Millennials (48% male, 52% female) from across 29 countries regarding personal skills and attributes. They were asked which skills and attributes they felt were their strongest. When the results were analysed (see *Figure 1*), they found women and men, overall, responded in accordance with their corresponding communal/agentic traits. Females had significantly higher responses for professionalism, academic knowledge, flexibility, personal traits, and communication skills. On the other hand, men self-rated higher on analytical, IT and leadership skills. Most of these results reflect the predictors of agentic and communal traits between genders. However, in communication skills, women had a higher response for assertiveness than men, even though this is generally an agentic trait, indicating that there are limitations of generalising based on communal/agentic association. Also, today gender differences are likely becoming less predictable, as the roles of women in society continue to change. This is confirmed in a University of Erlangen study from Germany. The study revealed that graduates that entered the workforce from the fields of engineering, science, law and economics did not show significant gender differences in agentic nor communal personality traits (Abele, 2003). The study explains that these are considered non-traditional professions for women, and that in these fields women matched the generally higher agentic traits of men (p. 775).

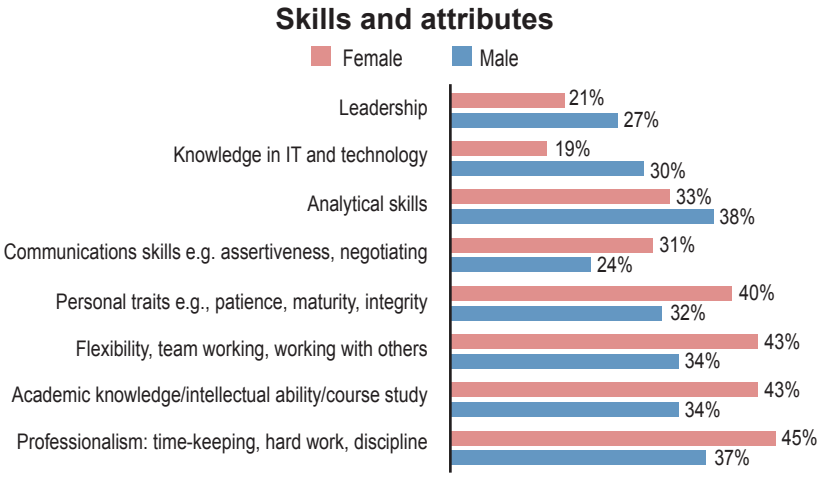


Figure 1. Skills and attributes self-identified by Millennials

Source: Adapted from Deloitte (2015, p. 16).

It is expected that there will be some correlation between the communal/agentic labels listed in Tables 1 and 2 and the responses from male and female students in this chapter. Overall, it is expected that males will be aligned closer to the agentic-associated responses and females will be more aligned with communal

responses. Hence, many of the differences that emerge in this chapter may be explained in part by respondents self-evaluating in line with stereotypes: the agentic and communal characteristics associated with each gender.

Also, from Holland's vocational theory (1985), the *big five personality traits* were tested for differences between males and females. The big five traits are neuroticism (emotional stability) - the level of calmness and tranquillity; agreeableness - the level of friendliness and kindness; conscientiousness - the level of organisation and work ethic; extraversion - a state of being where someone draws energy from being with other people; and openness - denotes receptivity to new ideas and new experiences (Vedel, 2016). Vedel found some trends in personality traits and gender (Table 3). Females had higher neuroticism, agreeableness, and conscientiousness traits than males. There was no difference noted for extraversion. And, results were contradictory for opennes.

Table 3

Summary of the Big Five Personality Traits and Gender Differences

	Neuroticism	Extraversion	Agreeableness	Conscientiousness
Female	Higher	No difference	Higher	Higher
Male	Lower	No difference	Lower	Lower

Note. Adapted from Vedel (2016, p. 7).

There is also evidence that suggests people tend to choose to study different majors based on their gender (Vedel, 2016). Females were more likely than males to major in psychology, while males were more likely to study a major related to the hard sciences. Comparisons of majors are addressed in Chapter 5.

Ecuadorian National Statistics and Sample Population

In Ecuador, certain majors are dominated by female student enrolment, while others are dominated by males (*Figure 2*). For example, there are more females enrolled in education, health and well-being and social sciences. Males dominate engineering and IT fields.

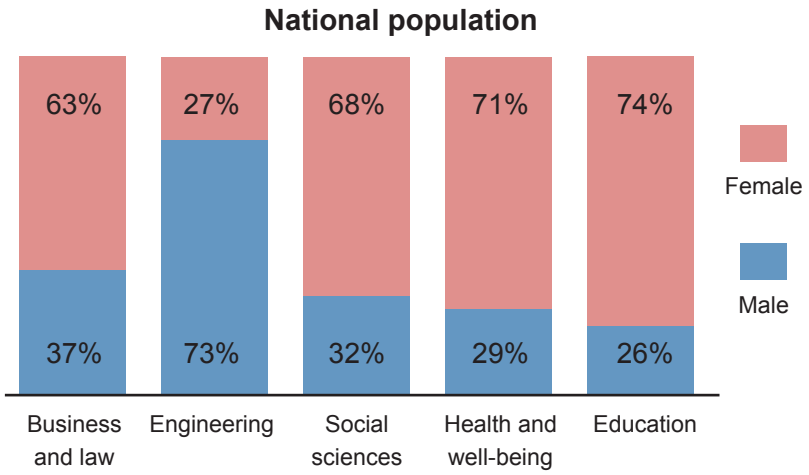


Figure 2. Gender by field of study - National university enrolment

Source: Adapted from SENESCYT (2015).

Also, females enroll in higher education in slightly higher numbers than males. According to the latest available statistics on total enrolments, 53% were female students and 47% were male students (SENESCYT, 2015). The sample population of the study is overrepresented by female students. The sample population is comprised of 58% female students and 42% male students (Table 4).

Table 4

Total Enrollment of University Students by Gender

Gender	National Population (2015)		Sample population	
	Number	%	Number	%
Female	311,085	53%	1,800	58%
Male	276,714	47%	1,317	42%
Total	**587,799**	**100%**	**3,117**	**100%**

Note. From SENESCYT (2015); Personal communication, author`s original study (2018)

Results of the 2018 National Millennial/Gen Z Survey – Gender Differences

Work Status

There are significant differences between the percentage of male and female students that work. 10% more male students had some form of employment than females (*Figure 3*). 4% more males held a part time job, and 5% more males worked in a family business. The same percentage of male and female students had a full time job.

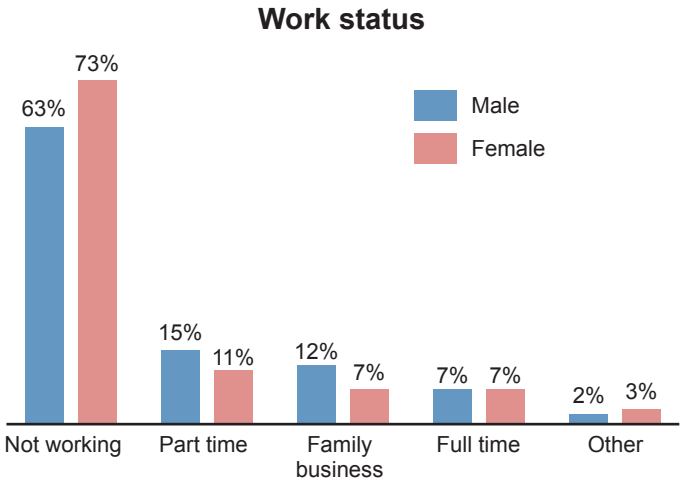


Figure 3. Sample population and current work status by gender

Note: Other includes casual work and volunteer duties amongst other activities.

Q. What is your current work status?

Reaching Millennials/Gen Z

The main differences between genders in job search preferences were in the areas of employment agencies and company websites (*Figure 4*). Females tended to prefer employment agencies more than males, and males preferred company websites more than females. All other trends seem to be similar between the two genders.

The main differences between genders in job search preferences were in the areas of employment agencies and company websites

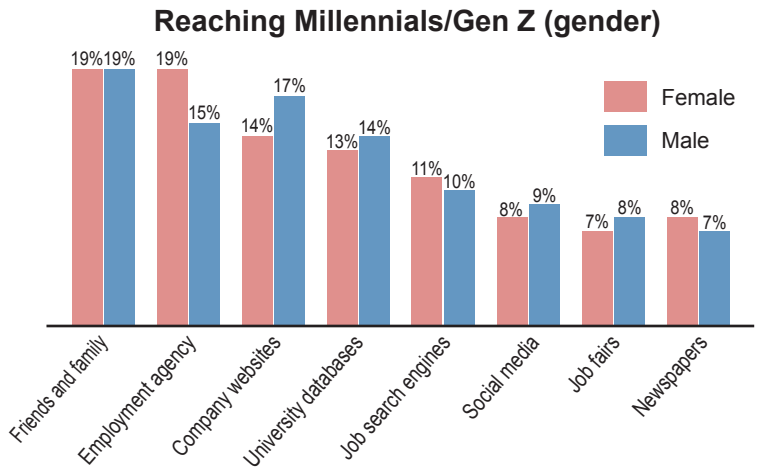


Figure 4. The avenues Millennials/Gen Zers, by gender, would use to search for a full time job

Q. How would you look for a full time job? Select 2 options.

2.1 Workplace Preferences and Attitudes

- JOB SECTOR
- WORKPLACE PREFERENCES
- SALARY EXPECTATIONS
- OVERTIME

Preferred Job Sector

The major differences between genders, regarding their preferred workplace or sector, are evidenced in two main areas, multinational companies and education (*Figure 5*). Males had a significantly greater preference for multinational companies, whilst females dominated in the employment preference for the education sector. When it comes to working in a family business, males showed a 3% higher preference than females. With regards to the higher preference of females for working in education, the communal trait of caring for others may be causally implicated. Also, there is a bias in the sample population that studies education, the majority of which were female (82%). This is in line with the actual percentage of females that were enrolled in education, 74% (SENESCYT, 2015). It may be that more females choose to major in education due to the inherent communal traits associated with teaching.

Male Millennials/Gen Z have a significantly higher preference to work for a multinational organisation than females

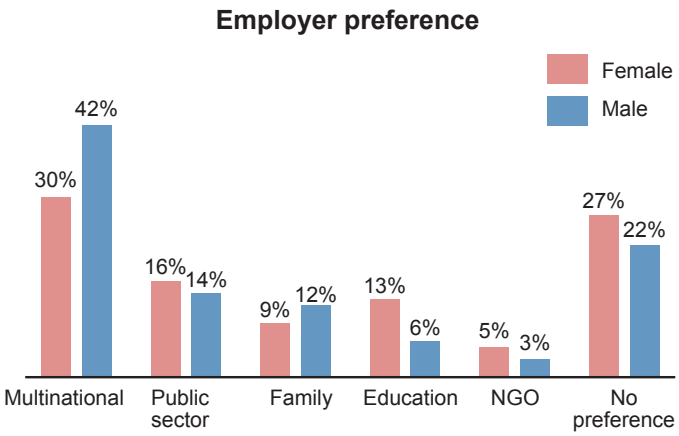


Figure 5. The organisational type or sector Millennials/Gen Zers, by gender, would like to work in

Q. From the following list, select the type of organisation that you would most like to work for.

Workplace Preferences

Workplace factors and preferences, such as industry choice, rewards, promotion, work-life balance, commitment and desired atmosphere have been demonstrated to be affected by gender. For example, research has shown that men place more importance on rewards such as pay and promotion than women do. Women are found to have a greater preference for a workplace with good co-worker relations, interesting tasks, work-life balance and self-development opportunities (Scott et al., 2015).

With regard to Millennial/Gen Z students that rated the workplace factors, seen in *Figure 6*, as either *very important* or *essential*, females had a higher preference for a number of factors. These include friendly atmosphere, ongoing training, CSR and flexible hours. Males had a slightly higher preference for promotional opportunity. There is a clear connection with the areas females found to be more important than males and communal traits, specifically a friendly atmosphere and CSR. In terms of ongoing training, females have tended to be more interested in studying. By looking to the big five personality trait differences (Vedel, 2016) females had higher conscientiousness (work ethic) than males. As for the higher preference for flexible hours, this may be speculatively linked to females being more mindful of caring for others, such as children and relatives. The higher preference of males for promotional opportunity may be linked to agentic traits such as economic interest, power and leadership.

Females have a higher preference for a number of factors including a friendly atmosphere, ongoing training, CSR and flexible hours

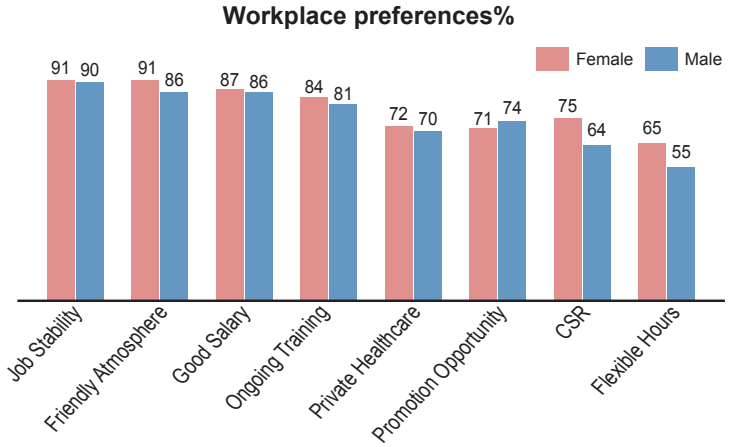


Figure 6. Main differences in workplace preferences by gender

Q. Rate the importance you give to the following work factors

CSR (Corporate social responsibility) = the response seen by students was *An organisation that helps the community*

Note. Responses in *Figure 5* are the sum of *very important* and *essential* responses.

Salary Expectations

Overall, males had a higher starting salary expectation than females (*Figure 7*). In summary, 57% of male university students believe a fair starting salary is $800 or above. In comparison, 48% of females stated a salary of $800 or above. The most popular choice for females was a salary between $400 and $800. The most popular choice for males was a salary between $800 and $1200. This result corresponds to the agentic traits associated with men, particularly economic interest and wealth.

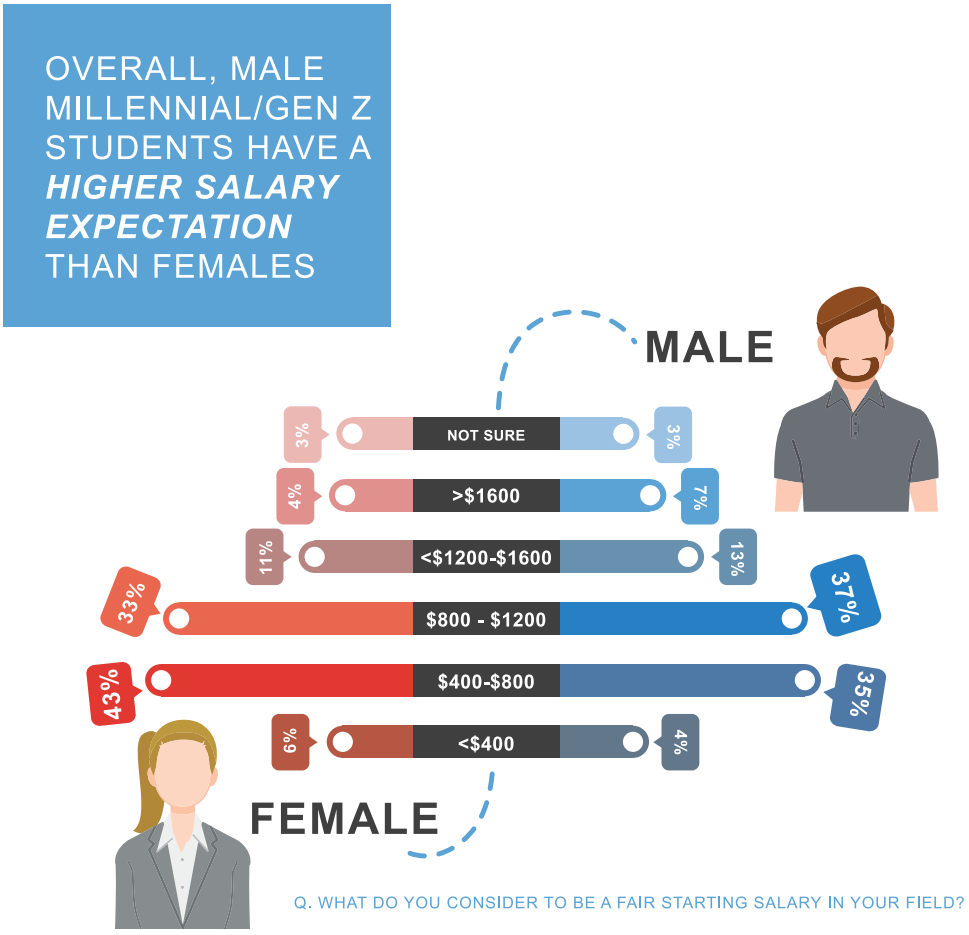


Figure 7. Comparison, by gender, of starting salary expectations

These results are supported by other studies that obtained similar findings. Reuben, Wiswall, and Zafar (2017) found that overall men tend to be more competitive and confident than women, and hold a higher overall wage expectancy. The impact of this is likely to account for a significant portion of the actual gender gap, or wage ceiling, which is found in industries around the world. People are likely to take their competitiveness and confidence with them into the workforce, playing a significant role in their ability and desire to bargain for a higher wage throughout their careers. Additionally, Scott et al. (2015) concluded that men preferred variable pay over women by a slight amount. This suggests that men are more willing to take risks in order to obtain a higher salary, in the long term, than females.

Voluntary Overtime

Four percent more males than females gave an affirmative response to the question regarding willingness to work overtime for free (*Figure 8*). Nevertheless, the majority of both genders selected an affirmative response, with 59% of males and 55% of females stating yes.

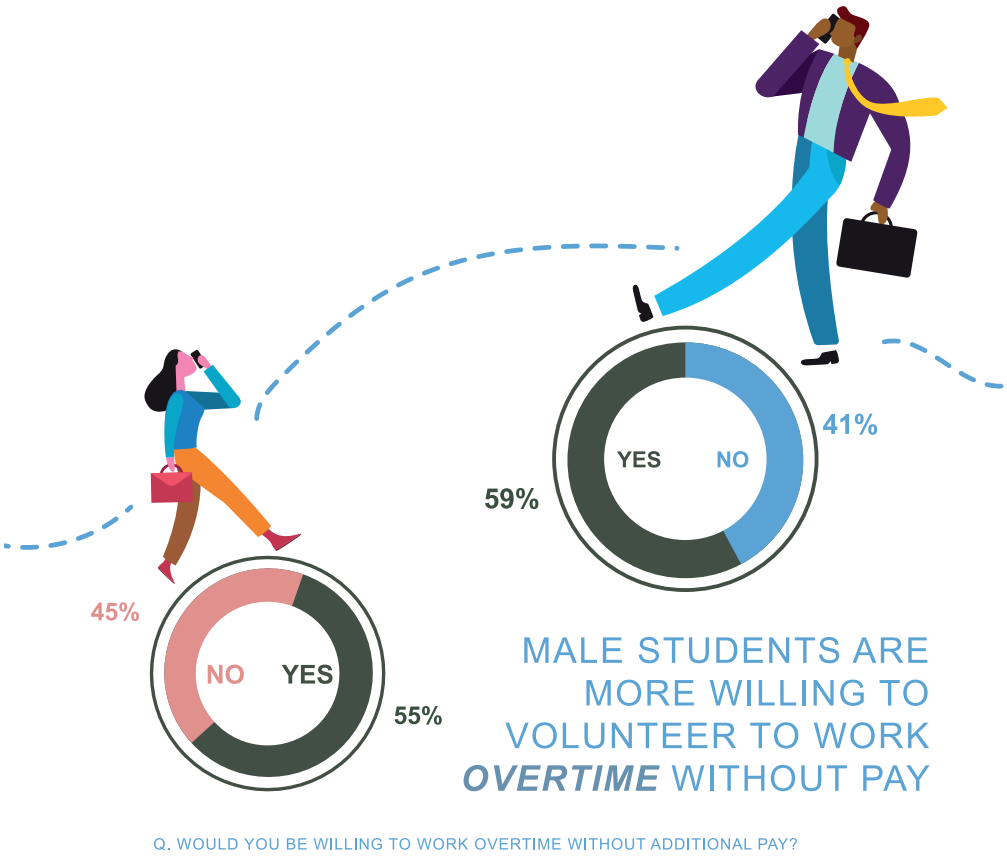


Figure 8. Gender comparison for percentage of Millennials/Gen Zers that would voluntarily work extra hours for no additional pay

Of the respondents that were willing to work overtime for free, males stated a willingness to work longer unpaid hours than females (*Figure 9*). The majority of both genders were only willing to work unpaid for one extra hour per day. However, 6% more males chose two hours or more per day than females. Again, this is indicative of males being more agentic than females. Some traits that help discern this result include achievement, status, and mastery. Also, the willingness to work more in the short term may be associated with long term rewards, such as economic rewards, power, and political goals (all agentic traits).

Males are willing to work longer than females for no extra pay

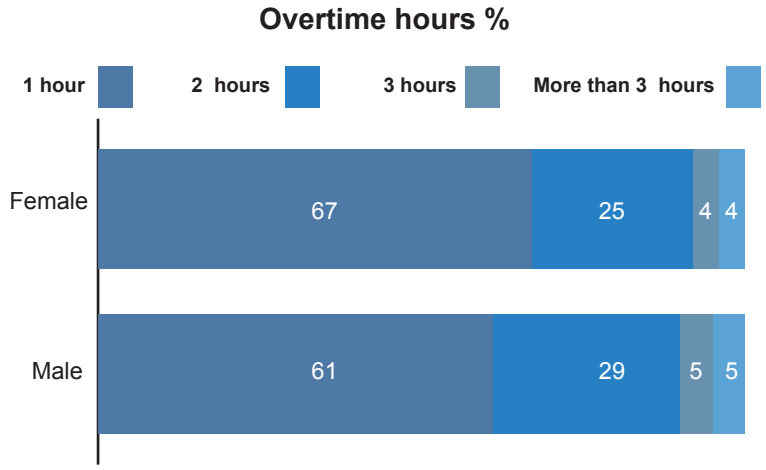


Figure 9. Gender comparison of the number of overtime hours students are willing to work, per day, for free
Q. Would you be willing to work overtime without additional pay?

2.2 General Personality

- POWER DISTANCE
- INDIVIDUALISM
- HAPPINESS
- ECONOMIC OPTIMISM

Power Distance

80% of female students stated that they would address a superior by their formal title, rather than their name, while 76% of male students stated this response. This suggests that females are slightly more formal than males when it comes to addressing superiors (*Figure 10*). Perhaps the communal trait of tradition is a factor for females being more formal than males. Traditionally, Ecuador is a high power distance country, where respect for superiors and elders is a norm. Hofstede (n.d) shows Ecuador with a relatively high 78 over 100 power distance score, indicating a hierarchical society. The younger generations in Ecuador are becoming less traditional overall (Tusev, 2018), and perhaps females are trending slightly slower than males with regards to these cultural changes.

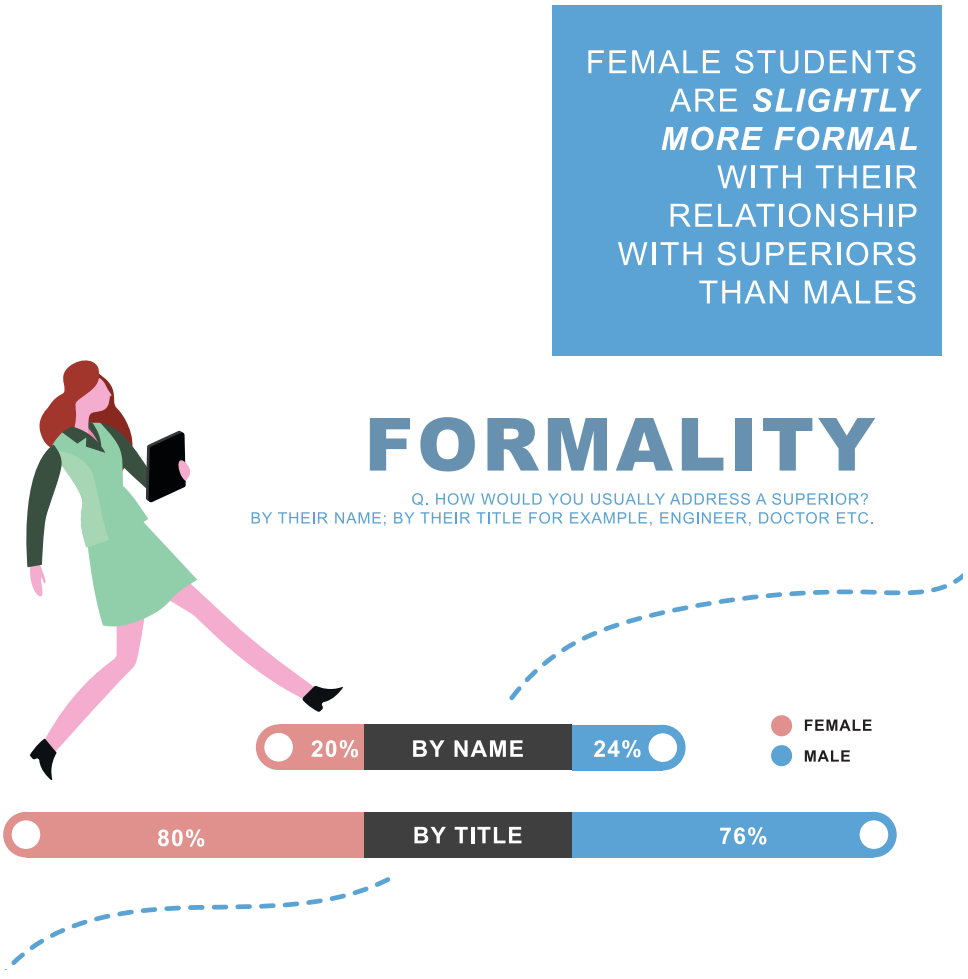


Figure 10. The percentage of Millennials/Gen Zers, by gender, that would use a superior's title

Individualism

Female Millennials/Gen Zers have a higher preference for working alone than males, 59% to 54% (*Figure 11*). This result is somewhat counterintuitive given that communal traits include harmony and agentic traits include autonomy. Over half of both genders believe they work better alone, yet there is a higher number of females than males in that category. Perhaps females are becoming more independent than males in Ecuador.

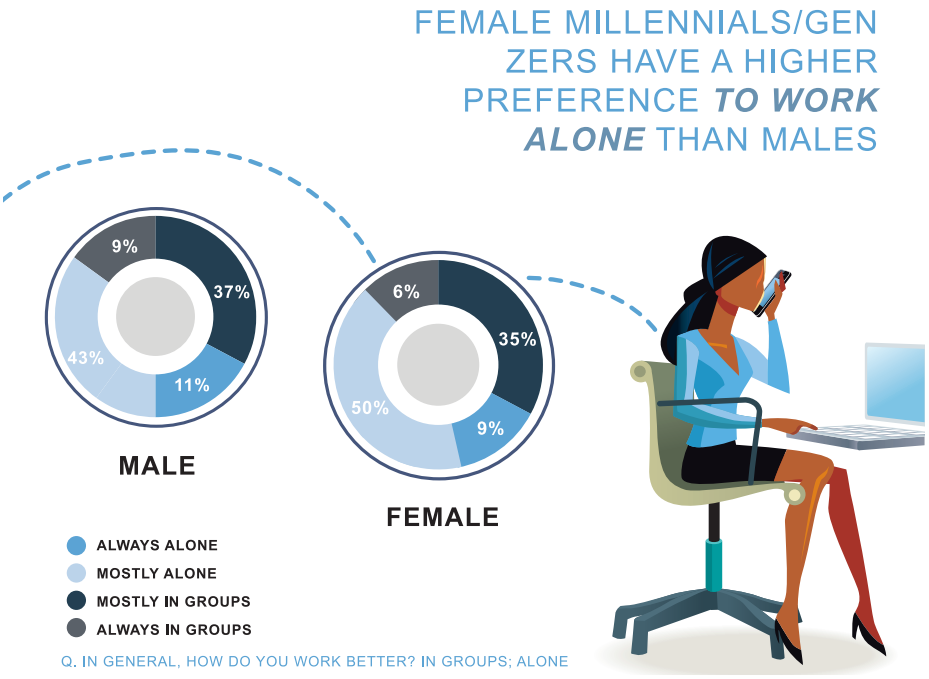


Figure 11. Percentage of students, by gender, that work better in groups versus alone

Happiness

Females self-evaluated as being happy at a higher frequency than males, with 80% of females choosing *mostly* or *always* happy, compared to 75% of males (*Figure 12*). This is contrary to findings in a study across Latin America which found that men self-evaluated as happier than women (Graham & Felton, 2005, p. 111). The same study found that in the United States women self-evaluated as happier than men. A possible explanation for the difference may be generational. That study was published in 2005, having a large sample of Generation X respondents.

Female university students self-evaluated as happier than male university students

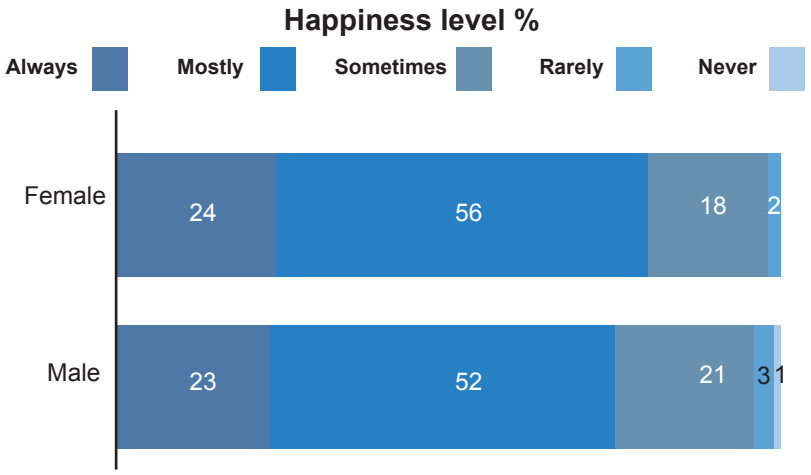


Figure 12. Happiness level of Millennials/Gen Zers by gender

Q. In general, how often are you happy?

Economic Optimism

Overall, both genders have a neutral to pessimistic view of the future of the economy (*Figure 13*). However, female students had a slightly more pessimistic response than males; 43% of females selected *slightly worse* or *much worse* versus 38% of males. There is no obvious reason to explain the difference here. This result requires further study.

Female Millennials/Gen Zers are more pessimistic about the economy than males

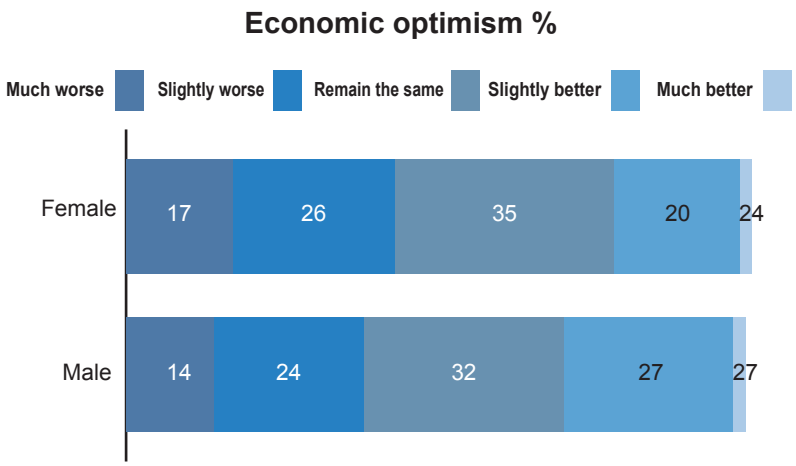
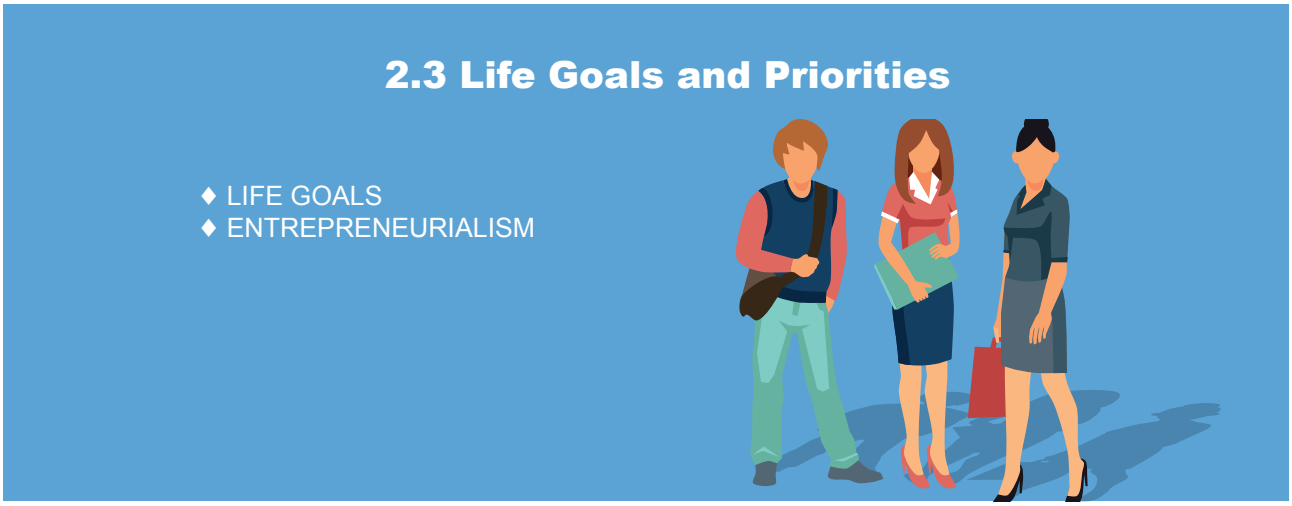


Figure 13. Expectation, by gender, that the economic situation will improve/get worse

Q. What do you expect the general economic situation of Ecuador to be like over the next 2 years?



Life Goals

Female Millennials/Gen Zers had different preferences for a number of life goals (*Figure 14*). Females showed a higher preference than males for religion/spirituality and having a positive social contribution. Male students showed a higher preference for wealth. Also, there was a slightly higher preference among males for having children and getting married. There were no significant differences for the life goals of making their family happy, making a positive social contribution, and having a social life.

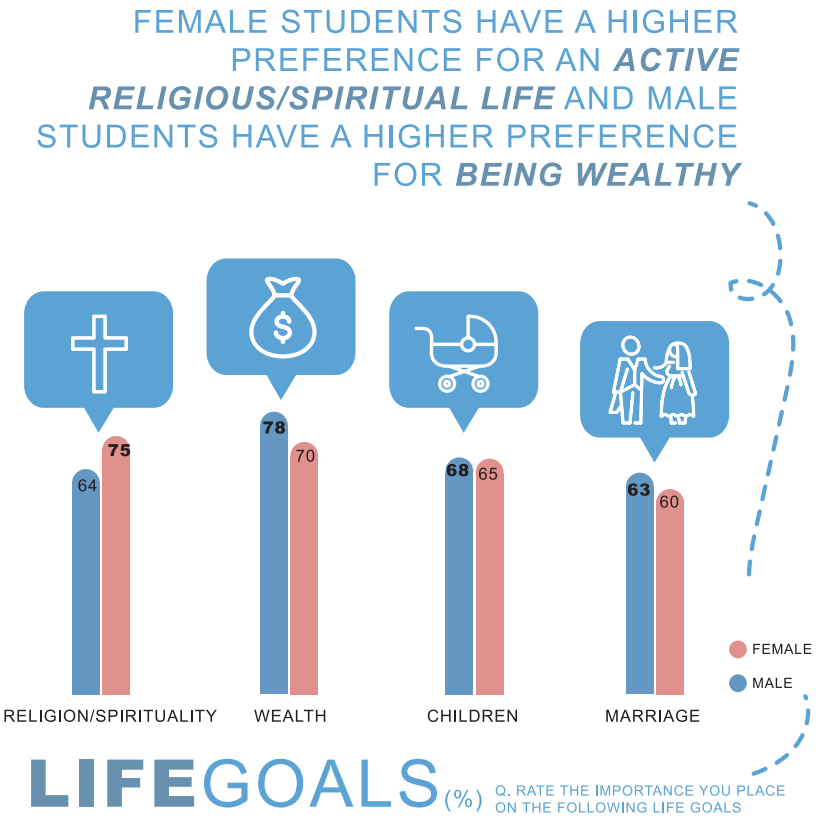


Figure 14. Gender comparison for life goals

Note. Responses in *Figure 14* are the sum of *moderately important, very important* and *essential*. Religion/Spirituality = To have an active religious or spiritual life; Wealth = to be rich

Religion/spirituality and wealth.

Female Millennials/Gen Zers had a significantly higher preference for a religious or spiritual life than males. On the other hand, male Millennials/Gen Zers showed a significantly higher preference for being wealthy. The results here are classically aligned with the communal/agentic traits associated to each gender. In accord with Trapnell and Paulhus (2012), from Table 2, the life goal of religion was associated with communal traits, and the life goal of economic interests was associated with agentic traits.

Children.

The difference in preferences for children between male and female students were surprising. Abele (2003) showed evidence that men and women showed similar desires to have children, except for when both men and women had high agentic scores; here, men with higher agency had a more pronounced desire for children than the women (p. 773). In the sampled population across Ecuador, men had a higher preference for children than women, with 38% of men stating it was either *very important* or *essential*, versus 35% of women. This may indicate that there is a significant number of women that have high agentic traits, in which case, overall, these women have a less pronounced desire for children than men. However, this data is speculative and requires more investigation, especially as agentic measures were not obtained for this population, nor is there available data on such measures.

Entrepreneurialism

Slightly more male students stated that they planned to start their own business, with 82% compared to 78% of females (*Figure 15*).

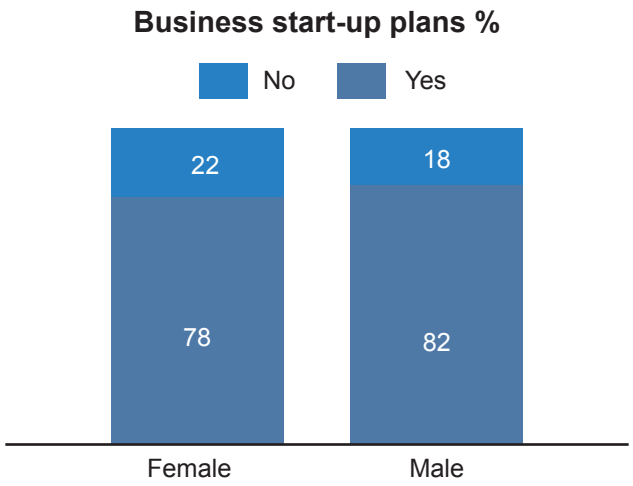
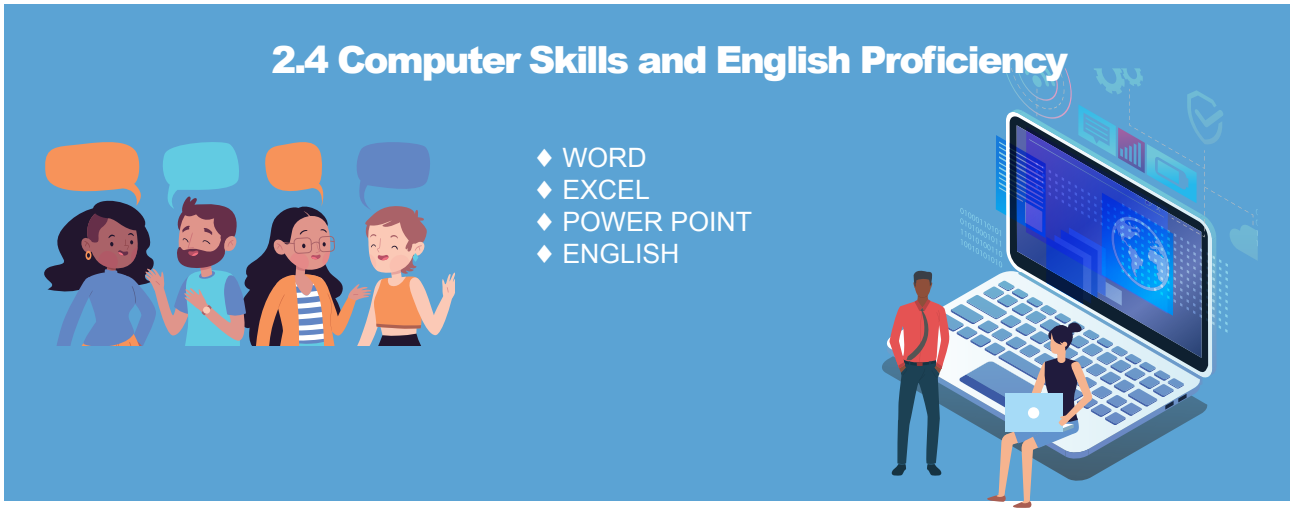


Figure 15. Plans to start a business by gender

Q. Do you have plans to start your own business?



Computer Skills

As shown in *Figure 16*, males self-selected higher skill levels in Microsoft Excel than females. However, the majority of both genders selected an intermediate level. The self-evaluated skill levels of both genders were about the same in Word and Power Point. Excel is arguably a more technical application than Word and Power Point. As various studies have shown, overall, males seem to be more interested in IT, and hard sciences such as mathematics (Rosenbloom, Ash, Dupont, & Coder, 2008; Vedel, 2016). Furthermore, males scored slightly higher than females in the 2017-2018 university entrance exam in the mathematics section, 7.48 compared to 7.46 (INED, 2018, p. 147).

Males self-rated higher skills in Microsoft Excel than females

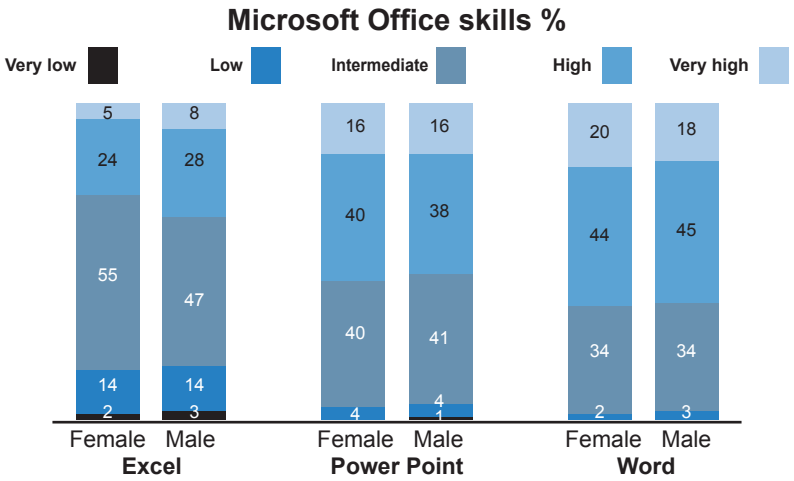


Figure 16. Skill level across the Microsoft applications of Word, Power Point and Excel by gender

Q. Rate your general computer skills.

English

Male Millennials/Gen Zers rated their level of English higher than females (*Figure 17*). 31% of males gave their level of English as *advanced* or *upper intermediate*. In comparison, 26% of females chose these higher levels. On the bottom level, 45% of females stated a level of *basic* or *lower intermediate*, versus 37% of males. There is no obvious explanation for this. Communal/agentic traits do not appear to be related to the ability or desire for students to learn English as a second language.

Female Millennials/Gen Zers self-rated lower levels of English than males

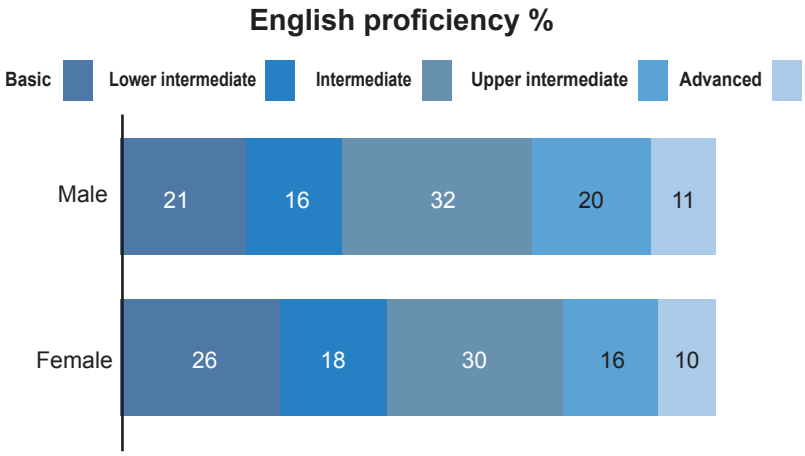
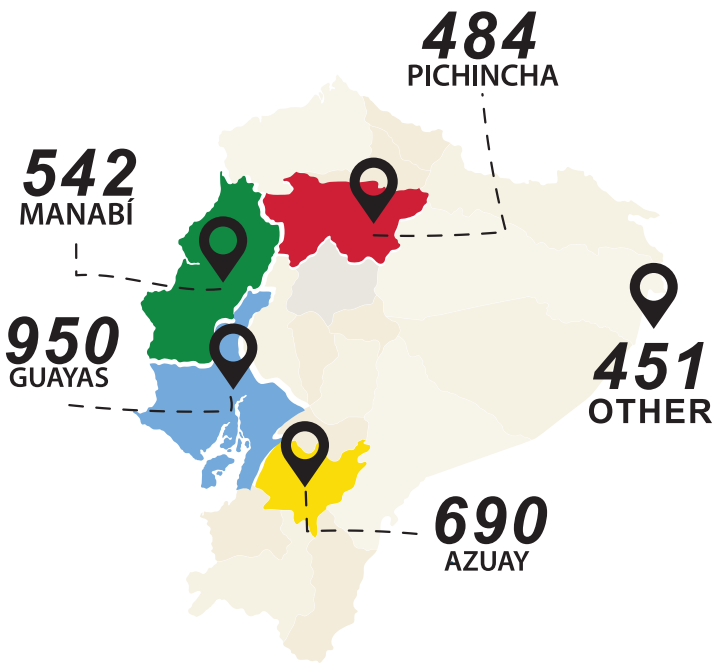


Figure 17. English level by gender

Q. What is your English level?

Chapter 3

Provincial Profiles: Pichincha, Guayas, Azuay and Manabí



SAMPLE POPULATION BY HOME PROVINCE

Q. WHICH PROVINCE HAVE YOU SPENT THE MAJORITY OF YOUR LIFE IN?

"Ecuadorian culture includes a … mix of indigenous practices along with European colonial influence. Almost everyone in Ecuador has a mixed-race background, which has resulted in tremendous cultural diversity as well as unique customs and traditions across the whole country." (Adventure Life, n.d, para. 1). Ecuador is a relatively small nation, the fourth smallest in South America, yet it consists of a wide range of geographic and climatic diversity. It is considered amongst one of the 17 countries in the world with the highest levels of biodiversity (United Nations Development Programme, 2008, p.10). The Western coast of Ecuador runs along over 2,000km of the Pacific Ocean. Within four hours' drive from the coast sit the central highlands (Andes), which host the capital city of Quito, at an altitude of 2850m. From the capital, in a few short hours one can find themselves in the Amazon basin. Considering this geographic diversity, it is not surprising to find measurable differences in cultural values, beliefs, behaviours and attitudes among the regional populations across the country. Thus, it would be overly simplistic to analyse Ecuadorian Millennials/Gen Z in a mono-cultural context.

This chapter explores the potential differences among Millennials/Gen Z, based on the province they come from. It is expected that there will be identifiable differences between students from the four targeted provinces of Pichincha, Guayas, Azuay and Manabí. The scope of this chapter is limited to providing descriptions of the results from each province. It is not intended to draw conclusions or analyse the results in depth. It is exploratory in nature, with the aim of providing a basis for future study on the topic of cultural differences amongst Ecuador`s provincial populations.

Before presenting the survey results, some background information and statistical data is presented on each of the four provinces. Each of these provinces is unique, with distinct geographic, economic, and cultural differences. A brief overview is presented on each province in order to highlight their uniqueness. Much of the information is sourced from INEC and the Central Bank of Ecuador, with a focus on industries, employment and socio-economic indicators.

There are 24 provinces across Ecuador, grouped into four regions: Costa (coast), Sierra (Andean highlands), Oriente (Amazon jungle), and Insular (Galapagos Islands). Since the country's foundation, Ecuador has been divided into provinces defined by their geographic location and economic potential (Soria & Tamayo, 2011). *Figure 1* numbers all provinces, and colour codes the regions. From *Figure 1*, the four provinces that are targeted in this book are identified as number 9, Pichincha; number 4, Guayas; number 2, Manabí; and number 16, Azuay.

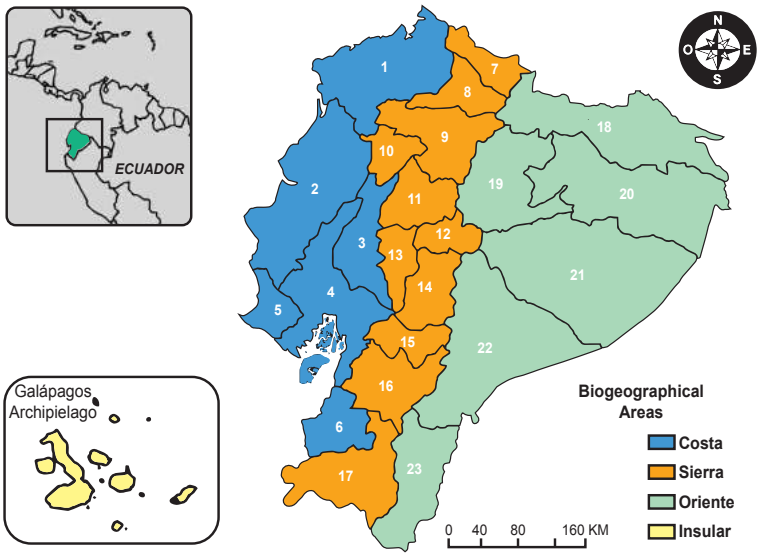


Figure 1. Political provinces of Ecuador and bio geographical regions encompassing such provinces. "Costa" region: (1) Esmeraldas, (2) Manabí, (3) Los Ríos, (4) Guayas, (5) Santa Elena, (6) El Oro. "Sierra" region: (7) Carchi, (8) Imbabura, (9) Pichincha, (10) Santo Domingo de los Tsáchilas, (11) Cotopaxi, (12) Tungurahua, (13) Bolívar, (14) Chimborazo, (15) Cañar, (16) Azuay, (17) Loja. "Oriente" región: (18) Sucumbíos, (19) Napo, (20) Francisco de Orellana, (21) Pastaza, (22) Morona Santiago, (23) Zamora Chinchipe. "Insular" region: Galapagos Islands

Note. From Brito and Borges (2015, p. 4).

Acosta (2012) further differentiates three main regions of Ecuador: the coast, the central-northern Sierra, and the southern Sierra. These three regions are where the majority of the population resides, and the source of most of the economic activity of the country. The central-northern Sierra, centred around Quito, is supported by the central government, with many national taxes being diverted to the region. The Coast, especially the area of influence of Guayaquil, and to a lesser extent Manabí, is known for their agricultural and fishing industries, housing large plantation estates and many smaller agricultural properties, linked to exports. Large ports include Guayaquil, in Guayas, and Manta, in Manabí. The third region, the southern Sierra, centred around Cuenca, has traditionally been represented by the predominance of small agricultural properties and local handicraft businesses. Today, Azuay is strong in many manufacturing industries and has the largest hydroelectric plant in the nation. Its capital Cuenca is a UNESCO heritage site.

2010 Census (INEC, 2010) – Pichincha, Guayas, Azuay and Manabí

Table 1 summarises selected facts from the last national census of 2010, on each of the four provinces (INEC, 2010; 2010a; 2010b; 2010c; 2010d). These include total population size, urbanisation data and higher education enrolments; self-identified race percentages; divorce and separation rates; home type; and home ownership status. The differences between each province in these areas are described below. 2010 was the last national census conducted, with the next one scheduled for 2020. Although the data is dated, it continues to provide a good basis for comparisons between provinces.

Population Numbers

The projected populations for each province for 2018 are as follows: Guayas was projected as the most populated province with approximately 4.2 million people, followed by Pichincha, 3.1 million, Manabí, 1.5

million and Azuay, 853,000 (INEC, 2010). The urban/rural breakdown of each province shows that Guayas is the most urban, with 85% of the population living in large cities or towns, followed by Pichincha, with 64%. In comparison, Manabí and Azuay are provinces where the population is more scattered across small rural towns, resulting in a lower percentage of urban population: 60% in Manabí and 55% in Azuay.

Table 2, located directly after Table 1, describes the number of higher education enrolments, institutions, and relative student population for each province. Higher education enrolments for 2015 saw Pichincha in first place with approximately 158,000 students; followed by Guayas with 135,000 students; Azuay with 64,000 students; and Manabí with 44,000 students (SENESCYT, 2015). Pichincha has the largest number of higher education institutions in the nation, with 16 universities; followed by Guayas, with 14; Manabí, with 5; and Azuay, with 4. Combined, the four provinces represent 38 of the total 60 institutions from across the country. 27% of all students in Ecuador were enrolled in one of the universities located in Pichincha, in 2015; a further 23% of all students were enrolled in Guayas; 11% of students were enrolled in Azuay; and 7.6% of students were enrolled in Manabí (SENESCYT, 2015). In total, this represents approximately 68.6% of all students across Ecuador. The student population in each province, relative to the total provincial population was greatest in Azuay, with 8%. Relatively, Pichincha had 5.4% representation, followed by Guayas with 3.3% and Manabí with 3% (see Table 2).

Self-identified Race

Self-identified race saw differences between the coastal and sierra provinces. Guayas and Manabí differ from the sierra provinces with their populations of Montubios, where 19.2% of people from Manabí and 11.3% of people from Guayas identified as such (INEC, 2010b; 2010c). In the Sierra provinces, there was an insignificant percentage of Montubios.

Montubios are a diverse cultural group, mainly from the coast of Ecuador. They are seen as being proud of their hometowns, and typically involved deeply in agriculture (Contreras, 2018). Also, they are known for having exceptional skills in horse taming, and enjoying the rodeo. They are known for their storytelling through musical *amorfinos*. Contreras (2018) confirms that Montubios are a unique cultural people in Ecuador: "The contribution of the Montubio people to the economic and social development of the country and to the cultural enrichment of Ecuador has been significant, to the point that since 2008 the Montubios were recognized in the Constitution of the Republic as an ethnic group or culture of the Ecuadorian State" (para. 4).

Continuing with race, self-Identified whites were most common in Guayas, with 9.8% of the population, compared to between 4.7% and 6.3% in the other three provinces (INEC, 2010a; 2010b; 2010c; 2010d). Afro-Ecuadorians were least populous in Azuay, with 2.2%, compared to 9.7% in Guayas, the most populous province of Afro-Ecuadorians (INEC, 2010c; 2010d). The highest indigenous population was from Pichincha, with 5.3%, compared to a lesser population in the coast, 1.3% in Guayas and 0.2% in Manabí. The indigenous population of Azuay was 2.2%. In all provinces, the majority racial self-identification was mestizo.

Divorce and Separation

The divorce and separation rates in Ecuador vary by province. In the 2010 census, statistics for the four provinces were provided. The highest combined rates were seen in Guayas, with 8.7% of people describing themselves as divorced or separated. This was followed by Manabí, with 6.8% combined. Pichincha had the third lowest combined rate of 6.6%, and Azuay had the lowest rate with 5.3% combined (INEC, 2010a; b; c; d).

Home Type

According to INEC (2010a; 2010b; 2010c; 2010d) there were notable differences amongst the four provinces with regard to the types of homes people lived in. Most people live in a house or villa. However, in Pichincha the rate was considerably lower, with 56.5%, compared to between 72.3% and 76% for the other three provinces. Pichincha had a much higher rate of people living in apartments, with 29.4% of the population, compared to between 6.3% and 9.5% for the other three provinces. One type of home – a *ranch* - was

exclusively mentioned by people from the coastal provinces: 13.1% of people in Manabí and 7.4% of people from Guayas used this term to describe their home. People who lived in a room (shared housing), were more numerous in the Sierra than the coast. In Pichincha 8% of people said they lived in a room, and 6.6% did so in Azuay. This was less common in Guayas (3.8%) and even less so in Manabí (1.4%). A low number of people selected shared living quarters for all provinces except for Azuay.

Ownership Status

Home-ownership statistics were provided for the four provinces (INEC, 2010a; 2010b; 2010c; 2010d). The main categories stated by the populations included 100% paid and owned, mortgaged, renting, and other. For other, there were two main categories: *ownership without paying* and a *borrowed* home. Ownership without paying includes a home that was a gift, donation, inherited, or possession was taken without being paid for. And, a home that is borrowed included one that is either being borrowed, or was given without payment, but not owned.

The highest proportion of homes owned and fully paid for was seen in the coastal provinces: Guayas, 51.2% and Manabí, 48.1%. For the Sierra, Azuay had 45.9% paid up ownership and Pichincha had the lowest rate with 34.4%. Mortgaged homes ranged between 4.1% (Manabí) to 8.1% (Pichincha). More people were renting in the Sierra than the coast. In Pichincha the rate was 26.9%, and in Azuay it was 26.2%. In Guayas it was 17.7% and in Manabí it was 12%. Ownership by gift, donation, inheritance or possession taken without pay was highest in Manabí, with 15.5%. It was lowest in Azuay, with 6.4%. People that had borrowed a home numbered higher in Manabí (18%), followed by Azuay (13.1%), Guayas (11%) and Pichincha (10.1%).

Table 1

Comparing Statistics Across the Four Provinces

	Pichincha	Guayas	Azuay	Manabí
Projected population 2018	3,116,111	4,267,893	853,070	1,537,090
Urban population	64%	85%	55%	60%
Rural population	36%	15%	45%	40%
Higher education student enrolment	158,932	135,762	64,628	44,704
Self-identified Race	%	%	%	%
Mestizo	82.1	67.5	89.6	69.7
White	6.3	9.8	5.1	4.7
Afro-Ecuadorian	4.5	9.7	2.2	6
Indigenous	5.3	1.3	2.5	0.2
Montubio	1.3	11.3	0.4	19.2
Home type				
House/Villa	56.5	74	76	72.3
Apartment	29.4	9.5	8.8	6.3
Room	8.1	3.8	6.6	1.4
*Shack	5	3.2	-	2.1
Ranch	-	7.4	-	13.1
Home ownership				
100% paid home	34.4	51.2	45.9	48.1
Mortgaged home	8.1	7.7	6.4	4.1
*Owner	8.8	11.2	6.4	15.5
*Borrowed or given	10.1	11	13.1	18
Renting	36.9	17.7	26.2	12
Divorce and sepration rate				
Divorced	2.9	1.5	2.7	1.2
Separated	3.7	7.2	2.6	5.6
Combined	**6.6**	**8.7**	**5.3**	**6.8**

Note. Adapted from INEC (2010a; 2010b; 2010c; 2010d); for higher education student enrolment data was adapted from SENESCYT (2015). *Owner = (Gift, donated, inherited or possession taken). *Borrowed or given = not paid for.

Table 2

Higher Education Enrolment by Province (2015)

	Pichincha	Azuay	Guayas	Manabí	National
Number of institutions	16	4	14	5	60
*Percentage of national student population enrolled	27%	11%	23%	7.6%	68.6%
*Student enrolment to total provincial population	5.4%	8%	3.3%	3%	

Note. Adapted from INEC (2010); SENESCYT (2017). * National student population enrolled: Calculations were based on the reported total higher education student enrollments for each province (a) and the total national enrolment of higher education students (b) for 2015. E.g. (a/b)*100; Student enrolment to total provincial population: Calculations are based on the reported total higher education student enrolments for each province (a) and the projected total provincial population (c) for 2015. E.g. (a/c)*100. Pichincha: (158932/2947627)*100= 5.4% rounded. Guayas: (135762/4086089)*100=3.3%. Azuay :(64628/810412)*100=8%. Manabí: (44704/1496366)*100=3%.

Key Industries

According to Banco Central del Ecuador (2017), Ecuador's top 10 revenue generating industries for 2017, in order of largest to smallest, were construction, repairs to motor vehicles, transport and storage, professional activities, oil extraction, public administration, real estate activities, teaching, social and health services, and financial services and activities (see *Figure 2*). These ten industries accounted for 56.1% of all revenues generated. The remaining 43.9% of revenues were divided across an additional 42 industries.

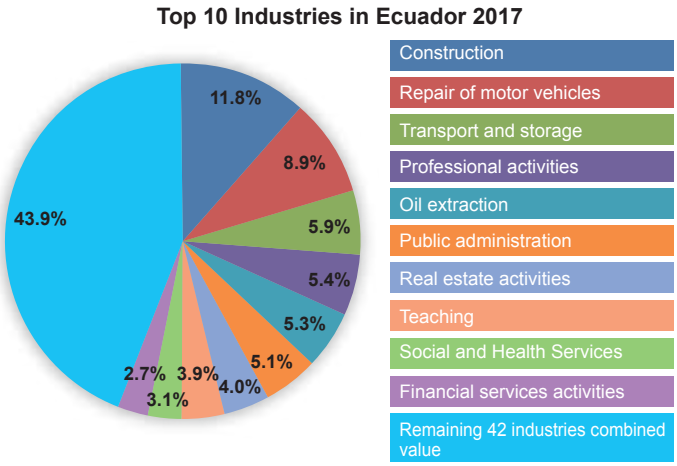


Figure 2. Top 10 industries in Ecuador by revenue generation

Note. Repair of motor vehicles = Wholesale and Retail; and repair of motor vehicles and motorcycles; Professional activities = Professional, technical and administrative activities; Oil extraction = Oil extraction, natural gas and related service activities; Public administration = Public administration, defence; mandatory social security plans

Adapted from Banco Central del Ecuador (2017).

Furthermore, certain industries are stronger in certain provinces (Banco Central del Ecuador, 2017). Guayas contributes more than a quarter of all the production in Ecuador (Banco Central del Ecuador, 2017). This is in part due to its port, which channels major international imports and exports. Among the most important industries in Guayas, seven make up almost 48% of all production in the province. These include construction (11.3%), wholesale and retail activities related to repairing of vehicles (10.7%), professional, technical and administrative activities (6.5%), processing shrimp (6.3%), real estate (4.8%), transportation and storage (4%), and teaching (3.8%). Guayas also makes a strong proportional contribution to national industries: it accounts for 77% of all shrimp processing, 64.8% of all sugar production, 62.2% of all shrimp farming, 58.9% of all fish farming (excluding shrimp), 57.8% of all the beverage and tobacco industry, 56% of all paper production, and 50.6% of all chemical products, in Ecuador (Banco Central del Ecuador, 2017).

Pichincha is responsible for over a quarter of all industry revenues in Ecuador (Banco Central del Ecuador, 2017). A number of its main industries are related to public administration, most likely due to Quito being the seat of government. Seven industries make up approximately 53% of revenues for the province. These include Public administration, defence, and managing social security plans (10.9%), construction (9.8%), professional and technical and administrative activities (9.7%), wholesale and retail activities related to repairing of vehicles (6%), real estate (5.2%), transportation and storage (5%), and financial services (4.3%). With regard to its contribution to national production, Pichincha contributes much of the total national revenues in at least seven areas. These include the production of cocoa, chocolate and confectionery products (90%), transport and storage (86.9%), flower crops (75.6%), production of wood and wood products (65%), public administration, defence, and managing social security plans (54.6%), private insurance services (55.1%), and manufacturing textiles, clothing and leather goods (53.6%) (Banco Central del Ecuador, 2017).

In Azuay, six industries make up 49.5% of the total production value for the province. These are construction (15.9%), wholesale and retail activities related to repairing of vehicles (9.4%), electricity supply (8.2%), transportation and storage (6.4%), financial services (5.1%) and meat processing (4.5%). Azuay makes a significant contribution to national industries, greater than its relatively small population. On a national level, in terms of revenue generated, Azuay is responsible for 27.9% of all furniture manufacturing, 20.8% of machinery and equipment, 15.8% of the rubber and plastic industry, and 12.9% of all mining.

In Manabí, six industries make up about 60% of economic activity in the province (Banco Central del Ecuador, 2017). These are construction (16.5%), processing of fish products (11.3%), wholesale and retail activities related to repairing of vehicles (10.2%), transportation and storage (10.19%), processing shrimp (6.3%) and teaching (4.9%). On the national level, Manabí contributes substantially to the revenue generation in a number of industries. These include 61.4% of fish processing, 30.7% of manufactured oils and fats (vegetable and animal), 24.2% of fish cultivation, 18.3% of shrimp processing, 13.6% of all cereal crops, 12.8% of animal husbandry and 11.1% of transportation and storage services (Banco Central del Ecuador, (2017).

Agriculture and Livestock

In Ecuador, agriculture, farming and forestry related industries are a significant part of the economy, generating approximately 9.4% of all revenues (Banco Central del Ecuador, 2017). The main industries in this area include the following: Banana, coffee and cocoa cultivation; cultivation of other crops; animal husbandry; Aquaculture and shrimp fishing; Forestry, logging and related activities; Flower growing; Cereal cultivation; and Fishing and aquaculture (except shrimp) (see Table 3).

Table 3

Major Agriculture, Farming and Forestry Related Industries and their Relative Contribution to Total Industry Revenues in 2017

Industry	%
Banana, coffee and cocoa cultivation	2.1%
Other crops	2.0%
Animal husbandry	1.5%
Aquaculture and shrimp fishing	1.0%
Forestry, logging and related activities	0.9%
Flower growing	0.7%
Cereal cultivation	0.5%
Fishing and aquaculture (except shrimp)	0.5%
Total (% of total national industry revenue)	9.4%

Note. Adapted from Banco Central del Ecuador (2017).

Corporations and Enterprises

Mogro, Barrezueta, Aucaquizhpi and Vera (2018) reported the total sales revenue combining large with micro, small and medium enterprises (MSMEs) that filed financial reports in 2017, in each of the four provinces under discussion, plus the province of El Oro (p. 13). As shown in *Figure 3*, Pichincha had the highest reported revenue sales from large and MSMEs, with $45.416 billion. Second was Guayas, with $41.151 billion; third was Azuay with $4.224 billion; fourth was Manabí, with $3.840 billion. The fifth province mentioned was El Oro, with $2.198 billion. The five provinces here represent 94% of total national sales reported in 2017, by 66,376 registered businesses (77.4% of all active businesses in the country).

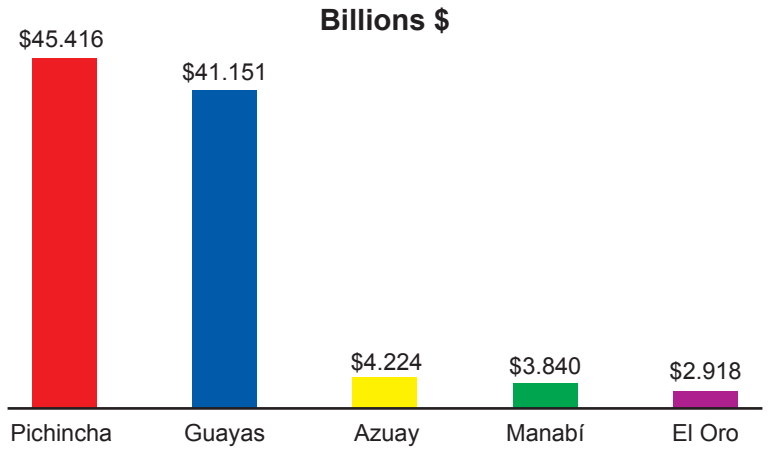


Figure 3. The top five provinces with the highest reported business sales revenues for large and MSME businesses for 2017

Note. Adapted from Mogro et al. (2018, p. 13).

Employment Statistics

Table 4 summarises the employment statistics for each province, presented for comparative purposes. According to INEC (2018), the employment rates of each province show that for "adequate" employment Pichincha had the highest rate (57.9%), followed by Guayas (46.5%), Azuay (42.6%) and Manabí (32.8%) (INEC, 2018). With regard to underemployment, Manabí recorded the highest rate (24.2%), followed by Guayas (21.7%). Azuay (13.4%), and Pichincha (9.9%).

Table 4

Employment Statistics 2018 – Pichincha, Guayas, Azuay and Manabí

Employment type	Pichincha	Guayas	Azuay	Manabí
*Adequate employment	57.9%	46.5%	42.6%	32.8%
*Underemployment	9.9%	21.7%	13.4%	24.2%

Note. Adapted from INEC (2018); employment definitions for adequate and underemployment from INEC (2016, pp. 14-15).

* Adequate employment: Works at least 40 hours a week and earns above or equal to the minimum wage (INEC, 2016, p. 14). Underemployment: Worked less than 40 hours a week, and made less than the minimum wage, but are willing and available to work at least 40 hours a week (INEC, 2016, p. 15).

Employer Type

The 2010 national census listed the employer type of people from across each province (INEC, 2010a; 2010b; 2010c; 2010d). The main types listed included private employment (employed by a private business), government (employed by a national, provincial or local government organisation or institution), domestic worker (employed to conduct domestic duties such as a maid or gardener), self-employed, manual labourer (hired hand for duties such as agricultural work or construction work), and business owner and investor. Table 5 lists the statistical representations for each employer type and province.

Some differences can be observed for these types of employment across the four provinces. Being employed by a private employer was highest in Pichincha and Guayas, the provinces with the most populous cities, with 48.2% and 39.7% respectively. Azuay registered 35.4% of its employed population and Manabí had the lowest rate of privately employed people with 24.6%. For manual labourers, Manabí had the highest rate with 21.8% of the working population, followed by Guayas, with 11.2% and Azuay, with 9.2% of the population. In contrast, Pichincha had a much lower rate of labourers, with 5.1%. Government jobs were highest in Pichincha (12.5%) and lowest in Guayas (8.9%). Self-employed people were highest in Azuay (32.1%), followed by Manabí (26.4%) and Guayas (25.3%). They were lowest in Pichincha, with 19.2% of people employed. Business owners were higher in the highland provinces, with 4.3% of Pichincha and 3.8% of Azuay workers. Domestic workers were more prominent in the two provinces with the larger city populations, Pichincha and Guayas, with 5% and 4.5% respectively. Investors were a small group in all four provinces, with slightly higher numbers for the Sierra provinces, with 1.5% in Pichincha and Azuay.

Table 5

Employer Type – Pichincha, Guayas, Azuay and Manabí

Employment type	Pichincha %	Guayas %	Azuay %	Manabí %
Private employer	48.2	39.7	35.4	24.6
Government	12.5	8.9	10.4	11.2
Domestic worker	5	4.5	3.4	3.4
Self-employed	19.2	25.3	32.1	26.4
Manual labourer	5.1	11.2	9.2	21.8
Business owner	4.3	2.3	3.8	2.8
Investor	1.5	0.8	1.5	0.9

Note. Adapted from INEC (2010a; 2010b; 2010c; 2010d).

The columns do not sum to 100% due to the response *n ot declared* being omitted in this table.

Employment Type

The INEC (2010a; 2010b; 2010c; 2010d) national census asked employed residents of each province what type of job they held. The responses are categorised in Table 6 for each province. In the table, the job types are divided into two groups, *professional jobs* (jobs that are likely to be held by many university graduates), and *non-professional jobs* (positions that are less likely to be occupied by university graduates). The professional jobs include professionals, scientists and intellectuals; administrative support staff; middle level technicians and professionals; and directors and managers. The census statistics provided statistics by percentages and by gender, but did not give the combined totals for each province. Hence, they are presented in Table 6 by percentages of each gender for each job type.

Professionals, scientists and intellectuals.

For the jobs included in professionals, scientists and intellectuals, women were more prominent than men in each province. Manabí had the highest percentage of female workers with these types of professional jobs, 15% of all employed females; followed by Pichincha, 13% of employed females; Guayas, 12%; and Azuay, 11%. With men in this field, Pichincha had the highest percentage of workers, with 10% of all employed males being in a professional position; followed by Azuay, 7%; Guayas, 5%; and Manabí 4% (INEC, 2010a; 2010b; 2010c; 2010d).

Administrative support staff.

Women held a higher percentage of administrative support staff jobs than males. Overall, Pichincha had the highest percentage of workers in this area, with 8% of males and 12% of females; Guayas and Azuay had a similar percentage of workers in this category, with Guayas having a slightly higher percentage, 6% of males and 10% of females, compared to Azuay`s 5% of males and 9% of females. Manabí had the lowest percentage of employees in this category, with 3% of males and 9% of females (INEC, 2010a; 2010b; 2010c; 2010d).

Middle level technicians and professionals.

Middle level technicians and professionals, and directors and managers positions had lower disparities between men and women overall, and between provinces. For middle level technicians and professionals, Pichincha had the highest percentage of these workers, with 7% for both men and women. Guayas had the second highest percentage of workers in this field with 4% of men and 6% of women. Then, Azuay had 4% for both men and women. Finally, Manabí had the lowest percentage of workers in this category with 12% of men and 4% of women (INEC, 2010a; 2010b; 2010c; 2010d).

Directors and managers.

Similarly for directors and managers, Pichincha had the highest percentage of both males and females, 5% and 4% respectively; followed by Guayas, 3% for both males and females; followed by Azuay, 3% males and 2% of females; and finally Manabí, with 2% for both males and females (INEC, 2010a;b;c;d).

Conclusions.

Overall, Pichincha seems to have the highest percentage of people working in professional related jobs, with 30% of all males and 36% of all females employed. Guayas seems to have the second highest overall professional employment percentage, with 18% of all males and 33% of all females. In professional jobs, Azuay had a higher percentage of male employees than Manabí, but fewer females, with 19% males and 25% females, compared to Manabí's 11% males and 30% of females (INEC, 2010a;b;c;d).

Non-professional jobs.

With regards to the jobs that are categorised as non-professional jobs in Table 6, the jobs include *official operators and artisans*; *service workers and vendors*; *elementary occupations*; *farmers and skilled workers*; and *facility and machinery operators*. In addition, there were a number of people that did not declare their job type, referred to in the *undeclared* category. These job numbers are less relevant to the study described in this book, as they are unlikely to be jobs of interest for university students once they graduate. Nevertheless, the breakdown by province and gender of each type is provided in Table 6.

Table 6

Job Positions by Province and Gender

Jobs	Pichincha		Guayas		Azuay		Manabí	
Professional jobs	Male	Female	Male	Female	Male	Female	Male	Female
Professionals, scientists and intellectuals	10%	13%	5%	12%	7%	11%	4%	15%
Administrative support staff	8%	12%	6%	10%	5%	9%	3%	9%
Middle level technicians and professionals	7%	7%	4%	6%	4%	4%	2%	4%
Directors and Managers	5%	4%	3%	3%	3%	2%	2%	2%
Total professional jobs	**30%**	**36%**	**18%**	**33%**	**19%**	**25%**	**11%**	**30%**

Non-professional jobs								
Officials, operators and artisans	21%	7%	17%	5%	28%	14%	14%	5%
Service workers and vendors	17%	26%	18%	29%	13%	25%	12%	22%
*Elementary occupations	11%	20%	23%	20%	10%	14%	33%	22%
Farmers and skilled workers	4%	4%	5%	1%	14%	15%	14%	2%
Facility and machinery operators	12%	2%	11%	1%	13%	2%	8%	1%
Total non-professional jobs	65%	58%	74%	56%	77%	70%	80%	53%
Undeclared	5%	6%	8%	11%	3%	5%	9%	17%
Total professional, non-professional and undeclared jobs	**99%**	**100%**	**100%**	**100%**	**99%**	**100%**	**100%**	**100%**

Note. Adapted from the national census by INEC (2010a; 2010b; 2010c; 2010d).
* Elementary occupations= cleaners, domestic assistants, street vendors, agricultural labourers, fisheries or mining workers, etc.

Poverty

According to INEC (2018), Pichincha had the lowest poverty rates, both in poverty by income (12.7%) and extreme poverty by income (3.5%). On the other hand, Manabí had the highest poverty rates of the four provinces (poverty, 27.2%, and extreme poverty, 7.6%). Guayas and Azuay had similar poverty rates. For poverty by income, Azuay had a slightly lower level than Guayas with 15.8%, compared to 16.7%. However, in extreme poverty by income, Guayas was slightly lower than Azuay with 3.5% compared to 4.2% (Table 7).

INED (2018) categorised the average socio-economic level of each province, with relation to the background of all high school students that completed the 2017-2018 university entrance exam in that province. They classified Manabí lower than the other three provinces, with a *medium-low* level, compared to *medium* for all other three provinces (p. 149).

Table 7

Poverty Rates by Province (2018)

Province	Poverty by income	Extreme poverty by income
Pichincha	12.7%	3.5%
Guayas	16.7%	3.5%
Azuay	15.8%	4.2%
Manabí	27.2%	7.6%

Note. Adapted from INEC (2018).

High School Graduate Exam Scores by Province – 2017/2018

The INED (2018) national education study provided the average results of the 2017-2018 high school graduation exam, used for university entry scores, by province. The results showed that students from Pichincha had a higher percentage of students scoring in the top two grading quartiles of *satisfactory* and *excellent* combined (40.2%), followed by Azuay students (34%), and Manabí (33.6%). Guayas had the lowest percentage of students in this category with 25.8%. Regarding the lowest quartile (*insufficient*), Guayas and Manabí students performed much poorer than students in Pichincha and Azuay (see Table 8).

Table 8

High School Graduate Exam Scores by Province (2017-2018)

Score	Pichincha	Azuay	Manabí	Guayas	National
Insufficient	13.8%	18%	27.2%	32.3%	25.6%
Elementary	46%	48%	39.2%	41.9%	42.8%
Satisfactory	38.1%	31.5%	31.6%	24.4%	29.5%
Excellent	2.1%	2.5%	2%	1.4%	2.1%

Note. Adapted from INED (2018, p. 152).

National Survey Sample Population - Limitations

Higher Education Enrolment Data by Province

The representation of students from each of the four provinces in the results is not proportional to the actual student populations in each province. There is an inherent reason for this. Only students studying in the four provinces were targeted. Also, some students were studying in a province that was different to the province that they had spent most of their lives in (see Appendix C for provincial populations of students). *Figure 5* shows the home provinces of the students in the sample population. The largest sample considered Guayas their home provinces, with 31% of the total sample; followed by 22% from Azuay; 17% from Manabí; and 16% from Pichincha. 15% of students came from a province that was not one of these four. When comparing relative percentages of students enrolled, *Figure 4* indicates that, in 2015, Pichincha had the highest student enrolment with 27% of all students, followed by Guayas, 23%, Azuay, 11%, and finally Manabí, 8%. Overall, it seems that the sample populations of Guayas, Azuay and Manabí are overrepresented, and Pichincha students are underrepresented.

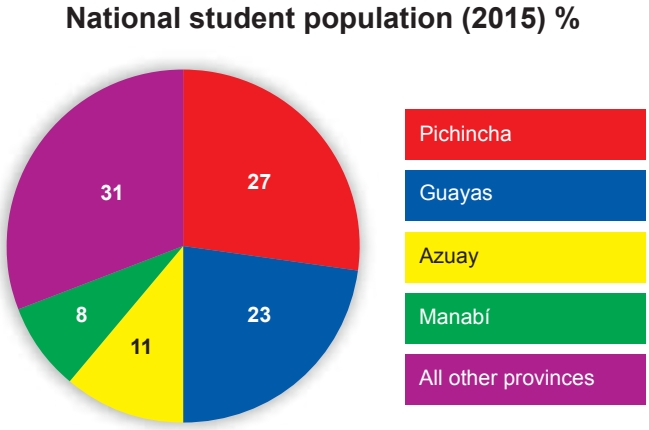


Figure 4. *National student population by province*
Note. *Data adapted from SENESCYT (2015).*

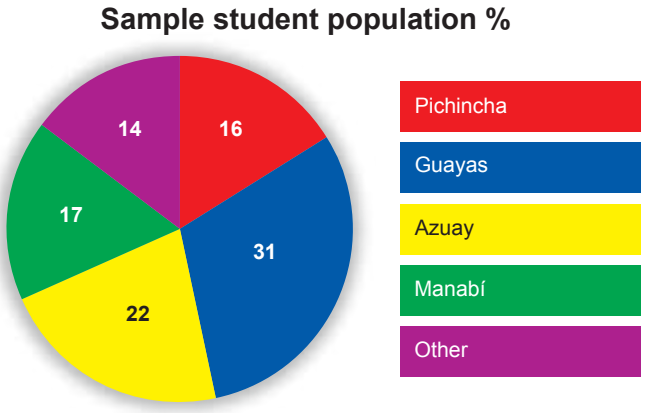


Figure 5. *Sample population by province of origin*

Q. Which province have you spent most years of your life in?

Note. *Data obtained by author from the national survey.*

Student Mobility by Province

Students were asked which province they had spent most of their lives in, in order to ascertain what portions of students were actually from each province. As presented in *Figure 6*, between 10% and 21% of students sampled were studying outside of their home province. In Pichincha, 21% of students came from outside of Pichincha. For Azuay, 17% of students were from another province. In Guayas, 19% of students were from outside of Guayas. In Manabí, 10% of students were not from Manabí.

From the total number of students that participated in the national survey, 94% stated that they were from one of the four provinces targeted. The remaining 6% of students stated a province of origin that was other than one of the four. Those 6% of students are omitted from the results and analysis of this chapter, which focuses on groups from each of the four provinces exclusively.

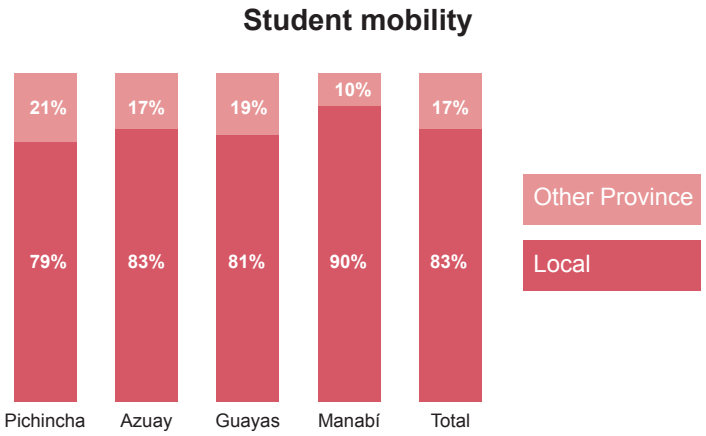


Figure 6. Sample population mobility

Note. The percentage of students that selected the same home province as the province they were studying in.

Public and Private University Enrol ment by Province

Table 9 lists the breakdown of private and public university enrolment by province, and compares the sample populations to the actual populations (SENESCYT, 2017). The national population of public university students in Pichincha was 50% of all students. In the sample this is slightly higher with 56%. For Guayas, the national population of public university enrolled students was 66%; the sample population is considerably lower with 40%, leaving an overrepresentation of private university students for that province. In Azuay 74% of students were enrolled in a private university; the sample population is slightly lower with 65% of students being enrolled at a private university. Finally, Manabí province is mainly comprised of public university students, with

94% of all enrollments; the sample population is similar, 91% of students were enrolled in a public university. Overall, the sample is fairly representative of the populations, except for the case of Guayas where private universities were overrepresented.

Table 9

Population Breakdown of University Types in each Province (National Population Compared to Sample Population)

	National population%	Sample population %	National population %	Sample population %
	Public		Private	
Pichincha	50	56	50	44
Guayas	66	40	34	60
Azuay	26	34	74	65
Manabí	94	91	6	9

Note. Adapted data from SENESCYT (2017) and author`s results from the national survey.

Student Populations by University in each Province

The sample populations are concentrated in particular universities from each province (*Figures 7-10*). In Manabí, most students, 85.2% attended Universidad Técnica de Manabí (UTM). In Guayas, there was a well distributed sample attending four universities, two public and two private. The largest sample attended UEES, 34.8%; followed by ESPOL, 27.5%; ECOTEC, 20%; and Universidad de Guayaquil (UG), 9.1%. Most of the Pichincha student sample also attended four universities, with 34.4% from Escuela Politécnica Nacional (EPN); 18.4% from Universidad de las Fuerzas Armadas (ESPE); 18% from Universidad De Las Américas (UDLA); and 14.5% from Pontificia Universidad Católica del Ecuador (PUCE). Azuay`s population primarily attended two largest universities in the province, with 55.4% from Universidad de Azuay (UDA) and 34.2% from Universidad de Cuenca (U. Cuenca) and 7.5% attending Universidad Politécnica Salesiana (UPS), Cuenca campus. (see Appendix D for the University attended by students from the top six provinces).

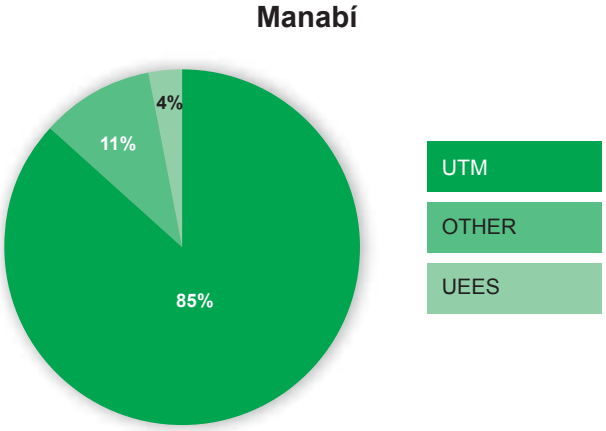


Figure 7. *Manabí sample by university*

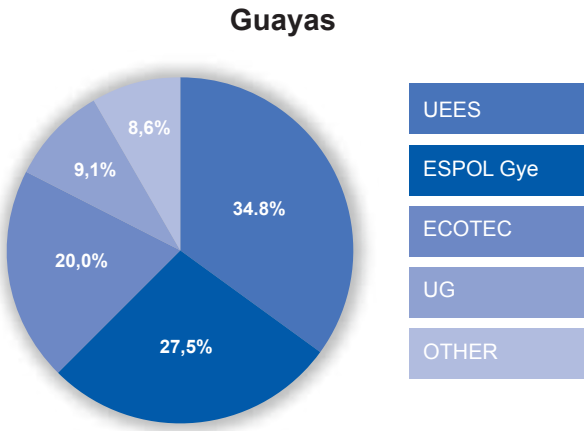


Figure 8. *Guayas sample by university*

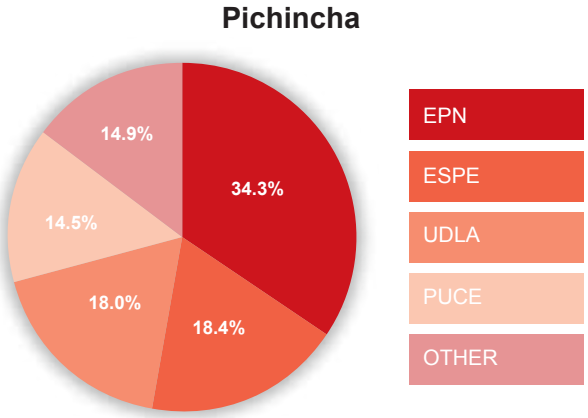


Figure 9. *Pichincha sample by university*

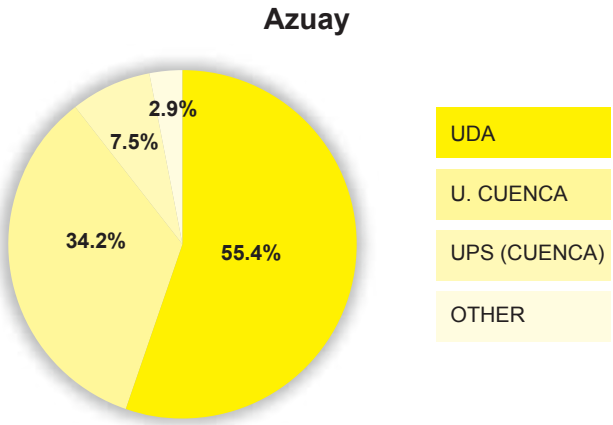


Figure 10. *Azuay sample by university*

Gender Composition by Province

The gender composition of the sample populations and the national population of students, by province are depicted in Table 10. According to SENESCYT (2015), Pichincha had 51% female and 49% male students, Guayas had 54% female and 46% male students, Azuay and Manabí had a 50% - 50% split. The sample population has a slight overrepresentation of male students in Pichincha. In Guayas, there is a slight overrepresentation of female students. For both Azuay and Manabí, there is a considerable overrepresentation of female students, with about 16%.

Table 10

Population Breakdown of Gender in Each Province (National Population Compared to Sample Population)

	National population%	Sample population %	National population %	Sample population %
	Male		Female	
Pichincha	49	55	51	45
Guayas	46	42	54	58
Azuay	50	36	50	64
Manabí	50	36	50	64

Note. Adapted from SENESCYT (2015) and author`s results from the national survey.

Results of the 2018 National Millennial/Gen Z Survey – by Province

Work Status

As seen in *Figure 11*, the highest percentage of students that were not working was from Manabí, with 74%; followed by Pichincha (70%); Azuay (68%); and Guayas (62%). For students that were working full time, Guayas had the largest percentage with 12%, followed by Pichincha (7%), Azuay (5%) and Manabí (3%).

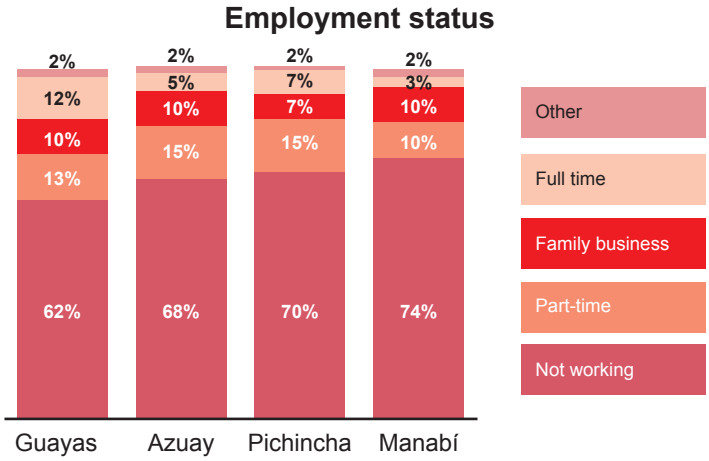


Figure 11. Employment status by province

Reaching Millennials/Gen Z

The top four avenues for job searching were the same across all four provinces. These include friends and family, employment agencies, company websites and university databases, in a different order depending on the province (*Figure 12*). Some of the main differences between the provinces include Manabí students having a higher preference than any of the other three provinces for employment agencies (27%). Also, newspapers were significantly more popular in Azuay and Manabí than in the larger province of Guayas and Pichincha.

How to reach graduate students across the provinces Guayas, Pichincha, Azuay and Manabí

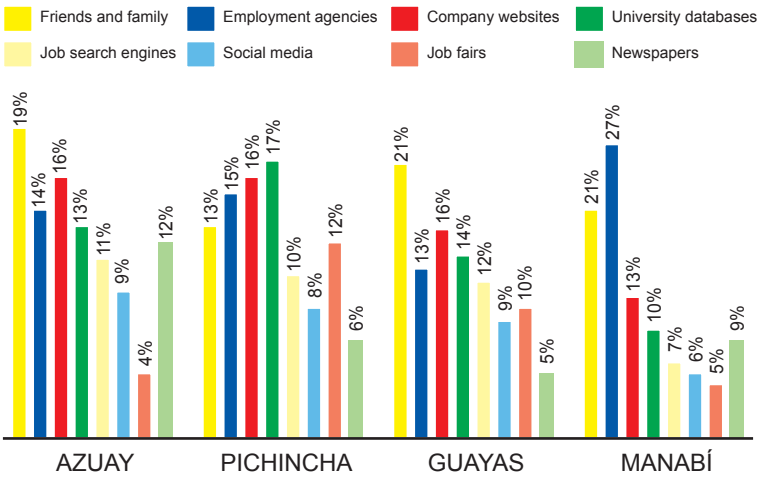


Figure 12. The methods university students, by province, use to search for a full time job

Q. How would you look for a full time job? Select 2 options.

3.1 Workplace Preferences and Attitudes

- JOB SECTOR
- MOBILITY
- WORKPLACE PREFERENCES
- SALARY EXPECTATIONS
- OVERTIME
- PROMOTION
- RESIGNATION

Preferred Job Sector

The major differences between provinces and workplace preference were in the categories of *multinational* companies and *education* (*Figure 13*). Students from the larger provinces of Guayas and Pichincha had a significantly higher preference for multinational companies than students from the smaller provinces of Azuay and Manabí. On the other hand, students from the smaller provinces had a higher preference for the education sector than students from the larger provinces.

University students from the bigger provinces have a higher preference for multinationals, whilst the students from smaller provinces have a higher preference for education

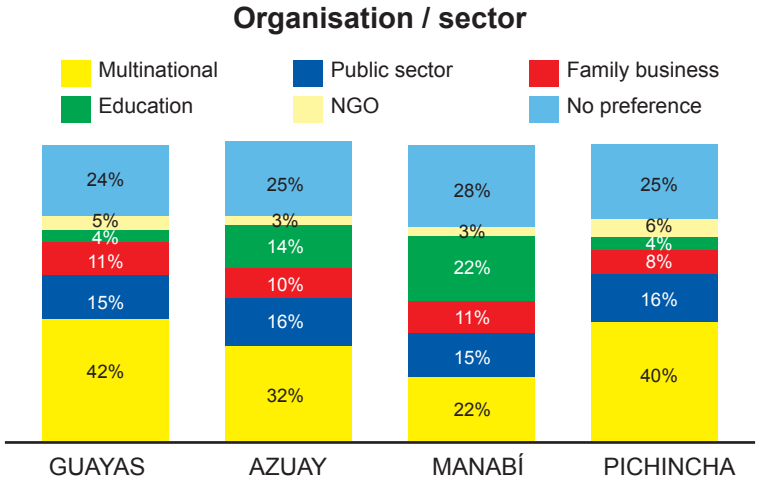


Figure 13. The organisational type or sector students, by province, would like to work in

Q. From the following list, select the type of organisation that you would most like to work for.

Employment Mobility

As can be seen in *Figure 14*, the majority of students across all provinces showed a willingness to move to another city for a better job. However, there was a slightly higher rate amongst students from Manabí (90%) and Pichincha (88%), compared to Azuay, 83%, and Guayas, 83%.

Students from across all four provinces are willing to move to other cities for work

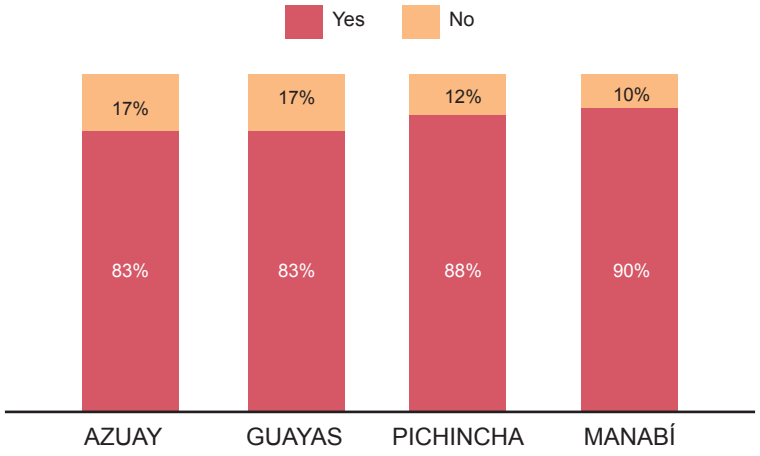


Figure 14. The percentage of students that are willing to move cities, by province

Q. Would you be willing to change cities for a better job?

Workplace Preferences

Regarding workplace preferences, *Figure 15* shows some differences in preference across the four provinces. Students from Manabí deviated from the other three provinces most with their selection of workplace preferences. Manabí Millennials/Gen Z had significantly lower importance ratings for *job stability* and *good salary*. In addition, Manabí students had a significantly higher importance rating for *flexible hours*, *private healthcare* and *CSR*. Regarding *promotional opportunity* Azuay had a notably lower rating (67%), whilst Pichincha had a notably higher rating (79%) than the other provinces. Finally, Guayas students had a significantly lower *CSR* rating than the other three provinces, with 63%, compared to 71% and 72% for Azuay and Pichincha students.

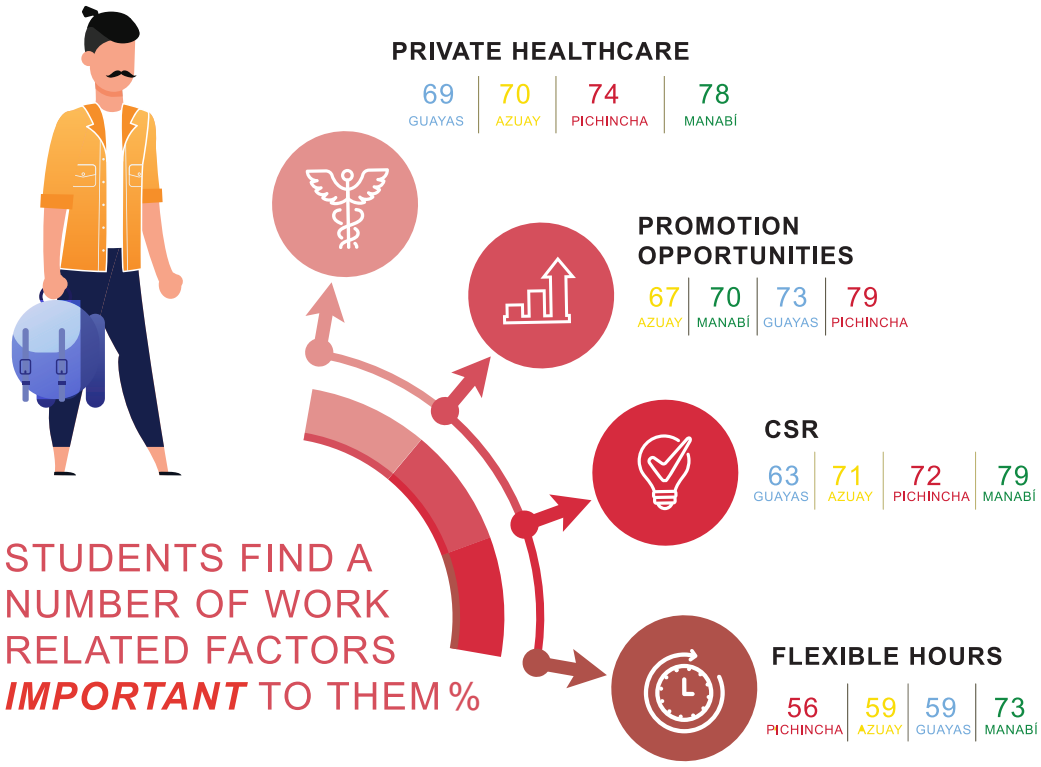


Figure 15. Main differences in workplace preferences by province

Note. Responses in Figure 15 are the sum of *very important* and *essential* responses.

Salary Expectations

From *Figure 16*, it can be seen that Pichincha students had the highest salary expectations, with 63% choosing an option of $800 or higher. In Manabí, 48% of students selected an option of $800 or more, whilst 44% specified a salary of $800 or less. Students from the other two provinces had notably lower salary expectations. Both Azuay and Guayas students had a near even 50% - 50% split of students stating $800 or less and $800 or higher.

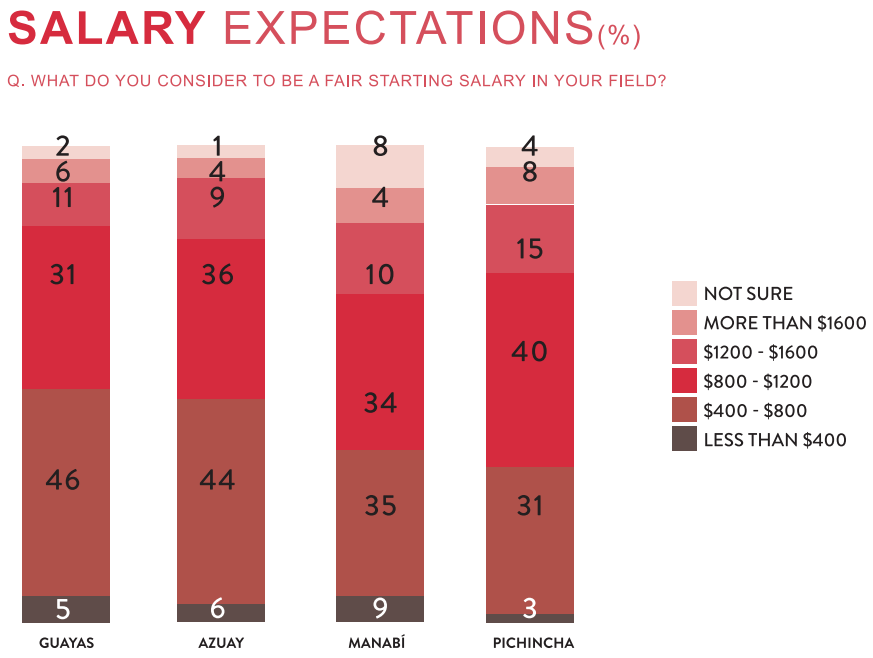
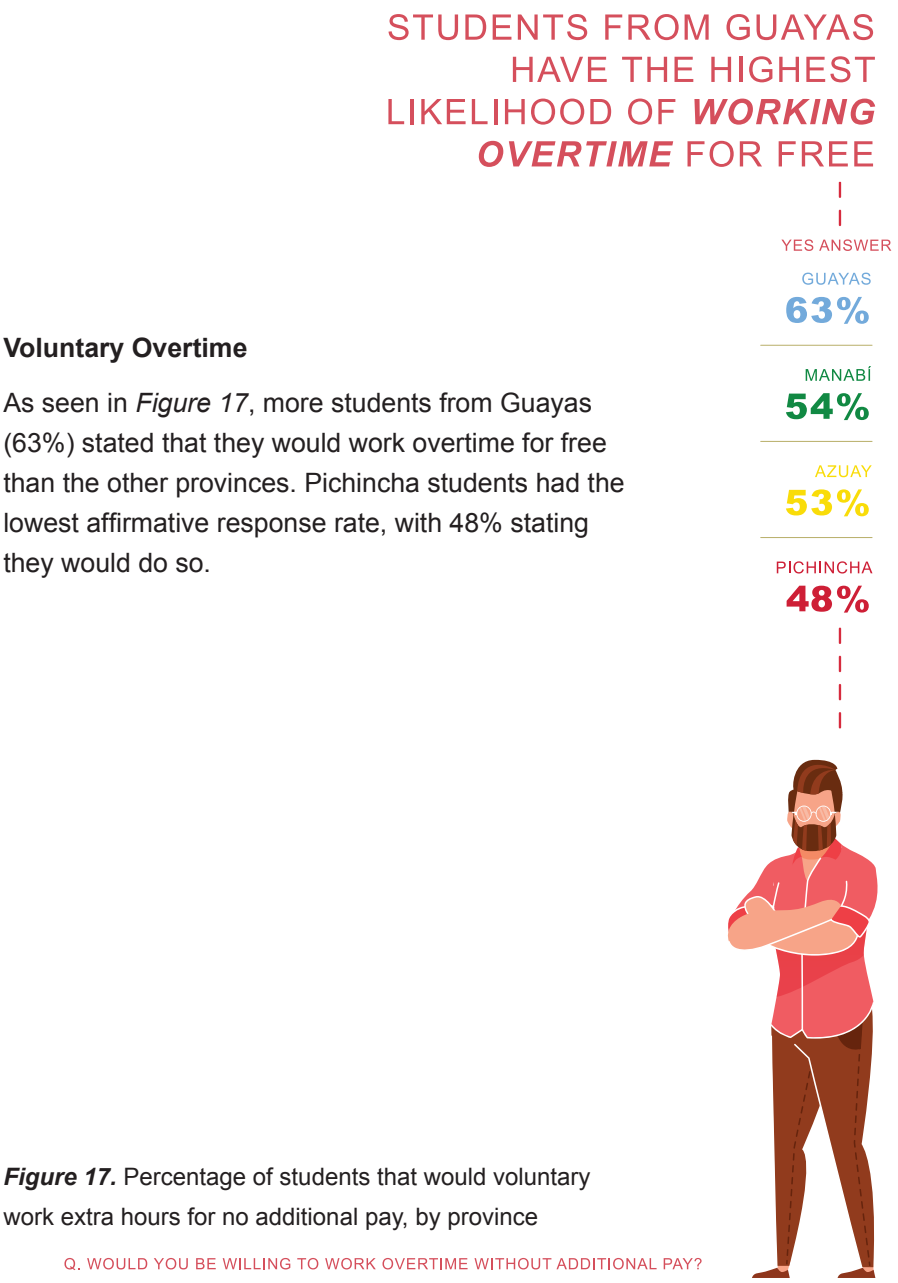


Figure 16. Comparison of salary expectations across the four provinces



Voluntary Overtime

As seen in *Figure 17*, more students from Guayas (63%) stated that they would work overtime for free than the other provinces. Pichincha students had the lowest affirmative response rate, with 48% stating they would do so.

Figure 17. Percentage of students that would voluntary work extra hours for no additional pay, by province

Q. WOULD YOU BE WILLING TO WORK OVERTIME WITHOUT ADDITIONAL PAY?

Of the students that were willing to work overtime, the majority across all four provinces selected up to one hour a day (*Figure 18*). However, Guayas students stated a willingness to work longer unpaid hours than students from the other three provinces, with 40% willing to work 2 or more unpaid hours. In comparison, 34% of Pichincha, 29% of Azuay and 28% of Manabí students selected an option of two or more unpaid hours a day.

Students from Guayas are willing to work the longest unpaid overtime hours, followed by Pichincha students

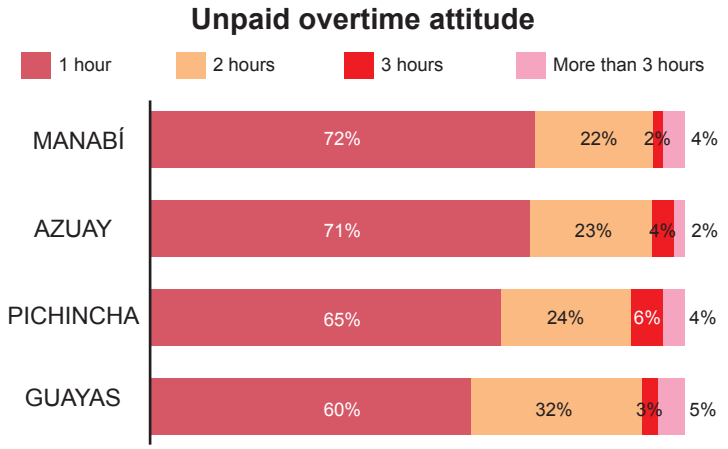


Figure 18. Provincial comparison for unpaid number of extra hours willing to work
Q. Would you be willing to work overtime without additional pay?

Promotion Expectations

The majority of students from across the four provinces expect to be promoted within a year of starting a new job (*Figure 19*). However, students from Pichincha had a higher percentage of students that expected such a quick promotion, with 66%. In comparison, 60% of Azuay students, and 58% of Manabí and Guayas students had this expectation.

Students from Pichincha are slightly more optimistic regarding the possibility of rapid promotion

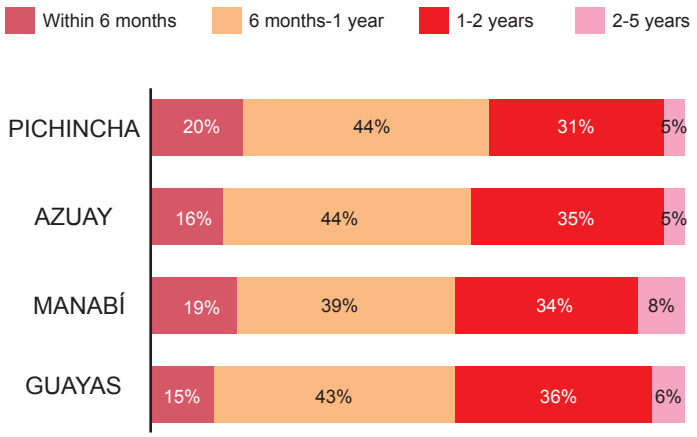


Figure 19. Period students, by province, expect to be promoted after starting a new job
Q. After starting a new job, within what time period do you expect to be promoted?

Resignation Notice

According to the results in *Figure 20*, more than half of the students from each of the four provinces would resign from a job they did not like within six months of starting. However, the results indicate that students from Manabí are least likely, of the four provinces, to resign before six months, with 38% stating a period greater than six months. On the other hand, of the four provinces, students from Azuay are the most likely to resign within six months, with 74% stating so.

Azuay province has the highest percentage of students that would resign within six months of a new job, whilst Manabí has the lowest percentage

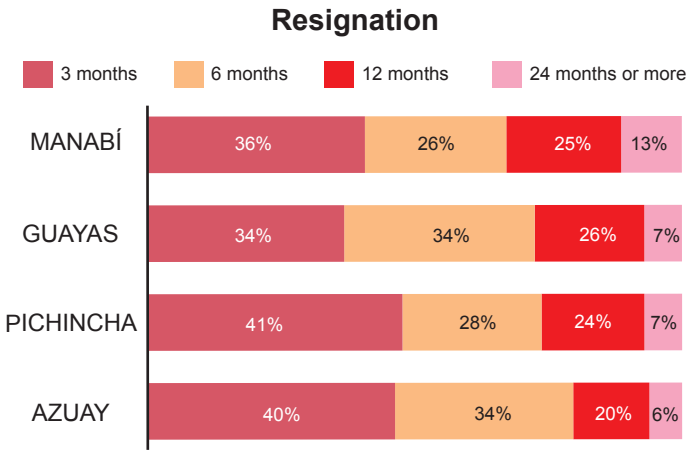


Figure 20. Period that students, by province, would wait before resigning from a job

Q. If you do not like your job (current/future), how long would you wait before resigning?

3.2 General Personality

- POWER DISTANCE
- INDIVIDUALISM
- WORK-LIFE BALANCE
- HAPPINESS
- ECONOMIC OPTIMISM

Power Distance

As shown in *Figure 21*, the clear majority of students from all four provinces are formal in addressing their superiors. However, Manabí students stood out. Manabí had the highest percentage of students stating that they would address a superior by their title (88%), rather than by their name. In comparison, 77% of Guayas, 75% of Azuay and 73% of Pichincha students had the same response.

Students from Manabí are the most formal of the four provinces

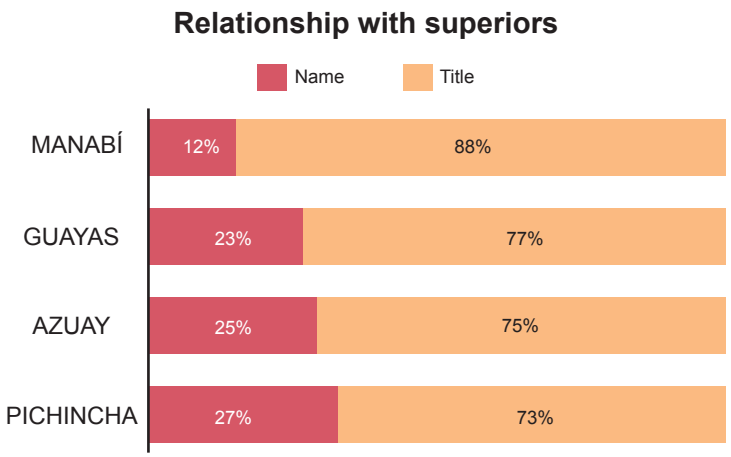


Figure 21. The percentage of students, by province, that would use a superior's title or name

Q. How would you usually address a superior? By their name; by their title, for example Engineer, Doctor etc.

Individualism

From *Figure 22*, it can be seen that more than half of the students from all four provinces said they work better alone, rather than in groups. However, Azuay students stand out as the group with the highest percentage of individualism in this context (61%). 56% of Guayas and Azuay students and 55% of students from Pichincha chose *always alone* or *mostly alone*.

Azuay students are the most individualistic, when it comes to working better alone versus in groups

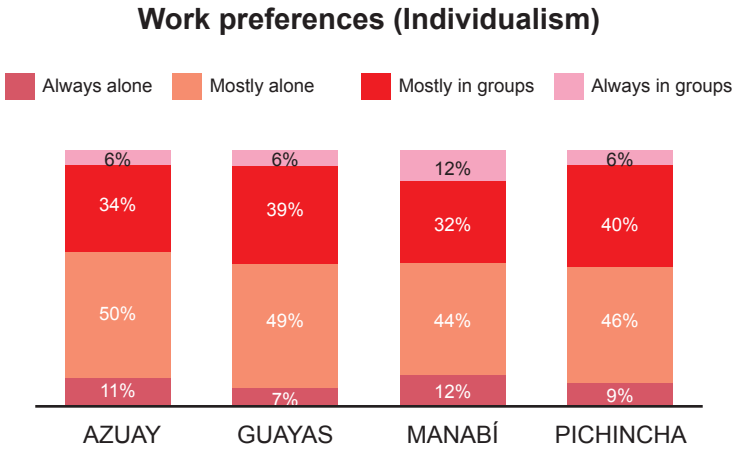


Figure 22. Percentage of students, by province, that work better in groups versus alone

Q. In general, how do you work better?

Work-life Balance

Students from all four provinces had a higher willingness to quit a job they did not like for more personal time (*Figure 23*). However, Guayas and Azuay students were slightly less likely to quit in such a predicament, with 17% stating *probably not* or *certainly not*, compared to 13% of Pichincha students and 10% of Manabí students.

Guayas and Azuay students are less likely to quit a job in favour of more personal time

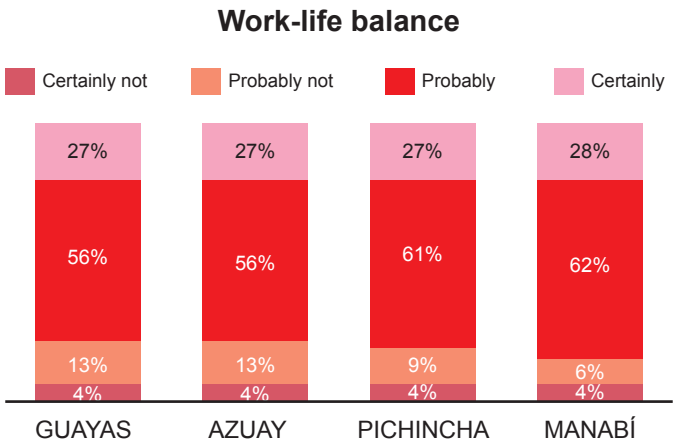


Figure 23. The attitude of students, by province, towards work and their personal life

Q. Would you give up a well-paid job to have more time for your personal life?

Happiness

As stated in *Figure 24*, Azuay students had higher selections of *mostly* or *always* happy than the other three provinces. The combined happiness responses for *mostly* and *always* happy were 82% for Azuay, 79% for Manabí, and 77% for both Guayas and Pichincha. Although speculative, these results conform to the conclusions made in Graham and Felton's 2005 study, *Inequality and happiness: Insights from Latin America*. Here relative differences in wealth were significant factors on reported happiness levels. Graham and Felton concluded that in Latin America, people in small cities are generally happier than people in big cities (p. 114). The rational is that in big cities, people are often more aware of their relative wealth position compared to the wealthiest group in their surroundings, leading to lower happiness ratings.

Azuay and Manabí students appear to be the happiest of the four provinces

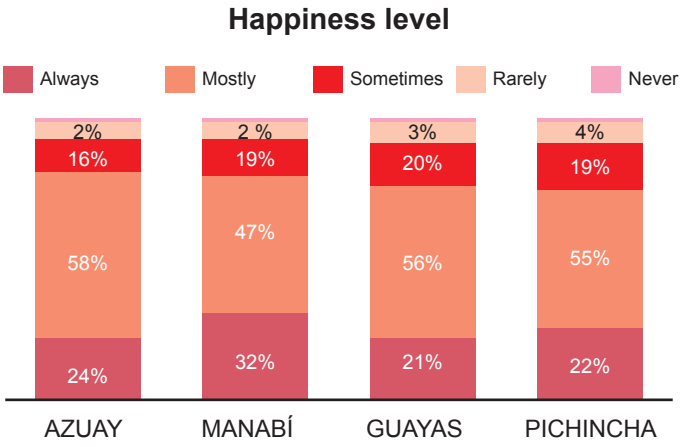


Figure 24. The happiness level of students by province

Q. In general, how often are you happy?

Economic Optimism

Figure 25 states the results students gave for their expectations about the future of the economy. Students from Guayas were most optimistic about the economic outlook with 32% stating it would get better. This was compared to 25% of Manabí, 23% of Pichincha and 14% of Azuay students. On the opposite end, the most pessimistic students were from Azuay, with 48% stating it would get worse, followed by 42% of Pichincha, 25% of Manabí and 23% of Guayas students.

Students from Guayas had the lowest response for the economy to get worse in the next two years

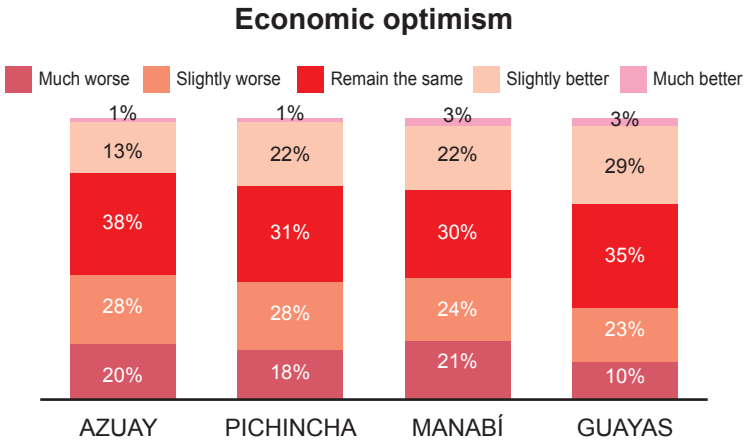


Figure 25. Percentage of students, by province, that expect the economic situation to improve/get worse

Q. What do you expect the general economic situation of Ecuador to be like over the next 2 years?

3.3 Life Goals and Priorities

♦ LIFE GOALS

Life Goals

There are some notable differences in the percentage of students from each province that selected *moderately important*, *very important* or *essential* to a number of life goals. The top two priorities stated were *make my family happy* and to *make a social contribution* for students from all four provinces. For an active social life, Manabí students had a slightly higher preference, with 93%, compared to the lowest responses coming from students from Pichincha with 88%. The greatest disparities are seen for the remaining life goals (*Figure 26*).

Higher preferences were selected for *Religion/spirituality* by students from Manabí, with 78% selecting either *moderately important, very important or essential*, followed by Guayas (73%), Azuay (70%) and Pichincha (58%). A larger percentage of students from Guayas selected *moderately important*, *very important* or *essential* for the life goal of *being wealthy* (81%), compared to students from Manabí (66%), Azuay (70%) and Pichincha (74%). For the life goal of having *children*, Manabí students seem to rate this higher than students from the other provinces, with 77% selecting either *moderately important*, *very important* or *essential*, compared to 55% of students from Pichincha, 65% from Azuay and 69% from Guayas. Finally, getting married appears to be a higher preference for Manabí students, with 69% selecting either *moderately important*, *very important* or *essential*, followed by Guayas students (68%). 48% of students from Pichincha rated *marriage* either *moderately important, very important, essential*, and 57% of Azuay students did so.

To sum up, students from Pichincha had the lowest rating for the life goals of *religion/spirituality*, *children* and marriage. In contrast, students from Manabí had the highest rating for the same three life goals.

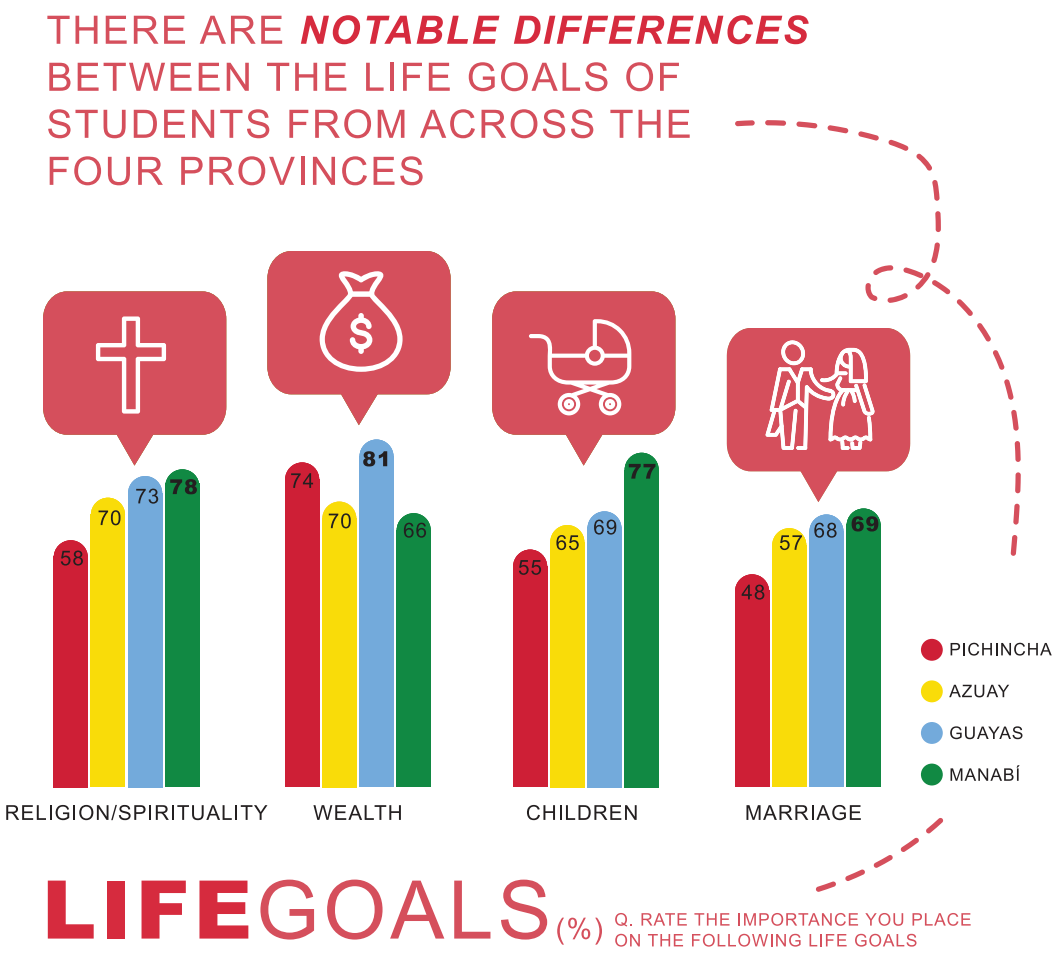
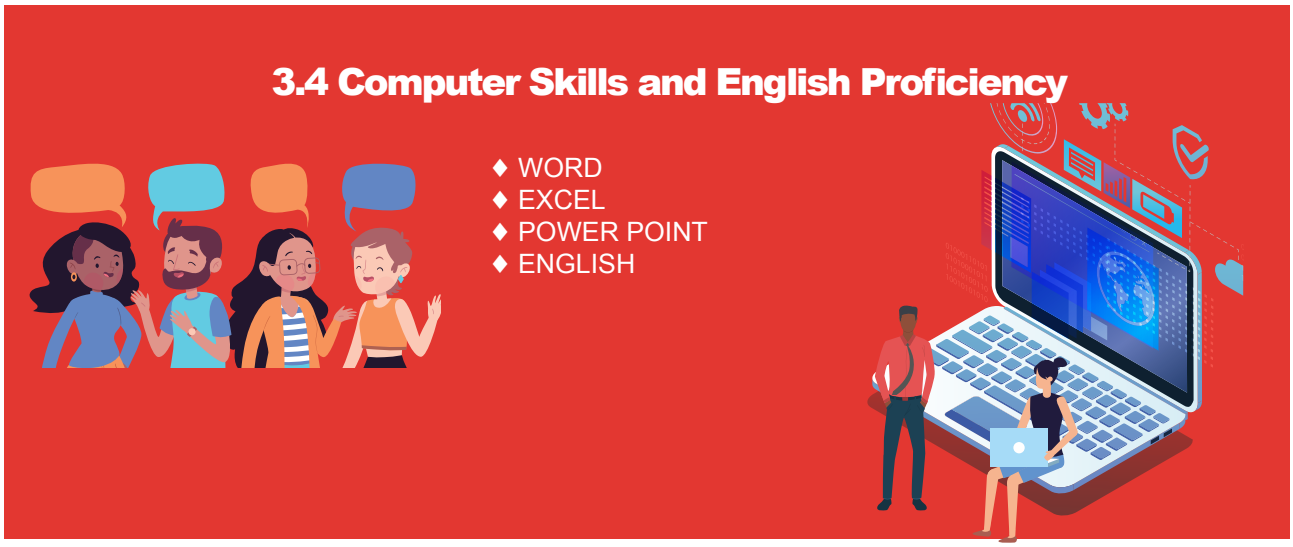


Figure 26. Major provincial differences in life goal preferences

Note. Responses in Figure 26 are the sum of *moderately important, very important* and *essential*. Family = Make my family happy; Positive social contribution = Make a positive contribution to society; Religion/Spirituality = To have an active religious or spiritual life; Wealth = to be rich



Computer skills

Students from Manabí had the lowest self-ratings for each of the three Microsoft Office applications listed (*Figures 27, 28, 29*). The other three provinces had relatively little differences between them, except for in Power Point skills. Here, Pichincha students rated themselves as *very high* or *high* with 62% of respondents. In comparison, Guayas had 57% of students and Azuay had 56% of students stating these options.

Manabí students self-rated their Microsoft Office skills lower than all other students

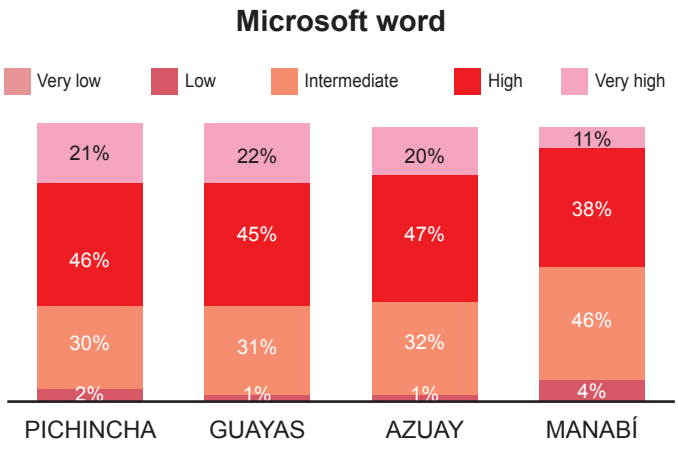


Figure 27. Skill level across Microsoft Word by province

Q. Rate your general computer skills.

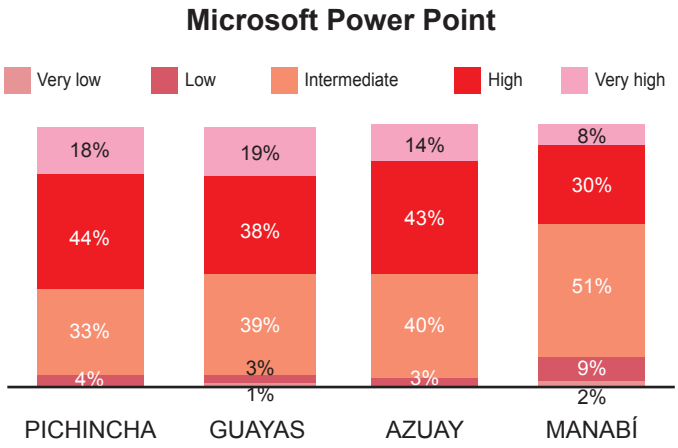


Figure 28. Skill level across Microsoft Power Point by province

Q. Rate your general computer skills.

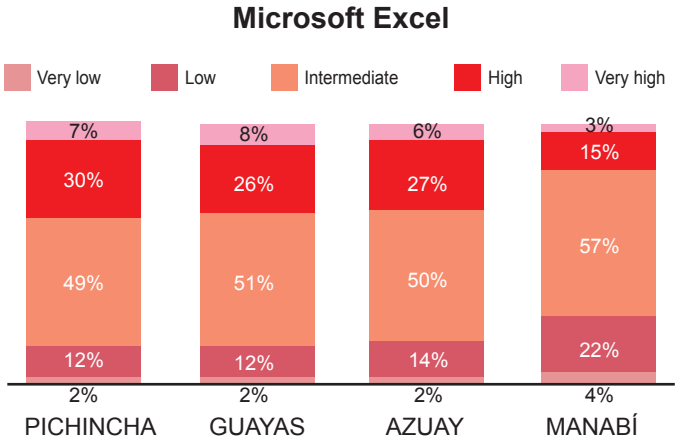


Figure 29. Skill level across Microsoft Excel by province

Q. Rate your general computer skills.

English

From *Figure 30*, the English self-rated proficiency of students seems to be tied largely to the province they come from. According to students' self-ratings, Manabí students had the lowest proficiency, with 67% stating a *lower intermediate* or *basic* level. This is compared to only 45% of Azuay, 35% of Pichincha and 24% of Guayas students rating themselves at *lower intermediate* or *basic.* On the other hand, students from Guayas self-rated their English proficiency highest, with 47% stating a level of *upper intermediate* or *advanced*, compared to 24% of Pichincha and Azuay students, and a mere 8% of Manabí students.

There appears to be a large difference in English proficiency based on the province students come from

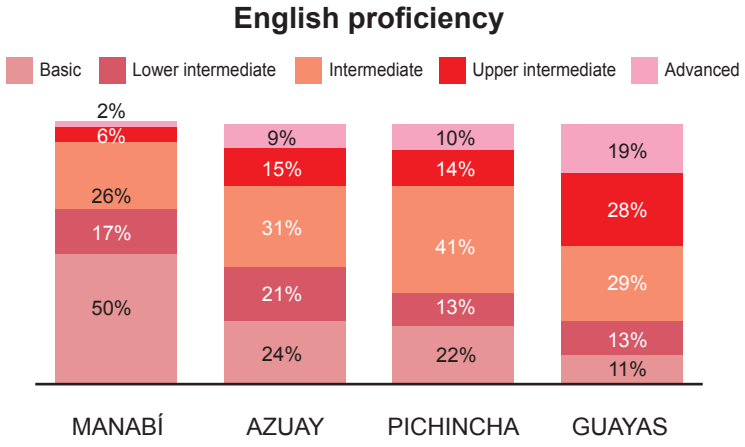


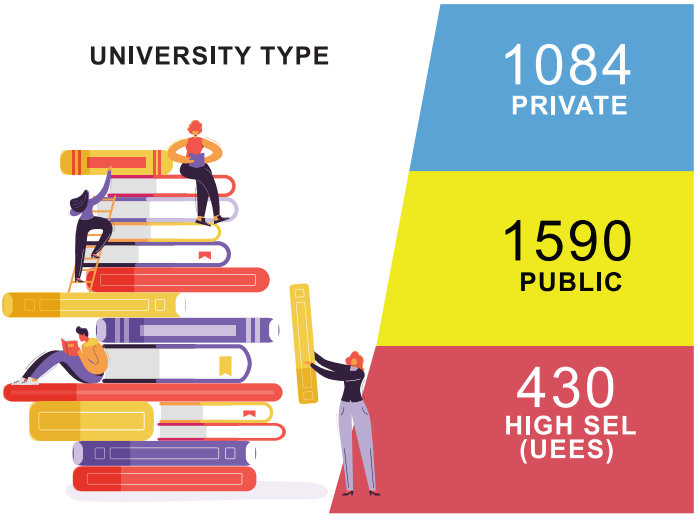
Figure 30. English proficiency by province

Q. What is your English level?

Chapter 4

Comparing Private and Public Universities, and Socio-Economic Levels of Students

"Ecuador is an unequal country" (Gachet, Grijalva, Ponce & Rodríguez, 2017, p. 862). Like most Latin American countries, Ecuador continues to deal with the "remnants of colonial constructions of power and difference" (Roitman & Oviedo, 2016, p. 2768). The extent that these differences persist amongst the younger generational cohorts of Millennials and Generation Z today remains unclear.



Student sample population by university type

In Ecuador, all universities fall into one of three categories: public, private co-financed, or private non-financed. Given the different financial commitments involved in attending each type, there tends to be a correlation between university type and the socio-economic level (SEL) of students that attend, at least in the public's perception: lower SEL is associated with public university enrolment, middle and high SEL is associated with private co-financed and non-financed universities. These differences reflect the reality that public universities are mostly cost-free to students, while co-financed universities offer limited financial assistance for student tuition, and private universities charge full fees (except to scholarship students), and therefore involve considerable economic commitments.

This chapter explores the differences in attitudes, personalities, goals and general skills of Millennial/Gen Z Ecuadorian students, based on the type of university they attend, namely private universities and public universities. Additionally, a representative sample of self-identified high SEL students was also included for analysis. The collective responses from these three university groups are presented and compared in the results of this chapter. Understanding the differences between socio-economic groups can lead to greater social cohesion overall.

Today, most universities across Ecuador, both public and private, generally have a mix of students from different SEL. However, there are at least two exceptions: Universidad de Especialidades Espíritu Santo (UEES) in Guayas and Universidad San Francisco de Quito (USFQ) in Pichincha. These two universities are associated with the wealthy sectors of society in the coast and Sierra, sporting immaculate facilities, superior funding, and hefty course fees. For these reasons, this chapter will present the national survey results in three groupings: private university students, public university students and high SEL students. Ideally, for the category of high SEL students it would have been ideal to analyse responses from both UEES and USFQ, in order to eliminate any provincial bias. Unfortunately, there was not a sufficient sample population from USFQ. Hence, UEES student responses will represent the high SEL population. It is worth mentioning that the results regarding the high SEL segment of the population (UEES students) are particularly unique, as few studies offer information on the high SEL groups in Ecuador (Gachet et al., 2017). Some of these students are likely to end up in positions of power, and shape the future of the nation.

In summary, this chapter provides a basis for exploring two questions: what, if any, differences are there between private and public university students? And, what, if any, differences are there between high SEL students (UEES) and all other students? The chapter aims to draw attention to these areas of inquiry, providing data for future analysis. As this chapter is exploratory in nature, the results are mainly descriptive.

Before proceeding, an analysis of the historic debate over private versus public education institutions is presented, providing a background to the main topic in this chapter. In addition, a historic account of private and public education in Latin America and Ecuador and the sweeping education reforms undertaken in Ecuador in the past few decades are examined. This is followed by an overview of SEL and its influences on personality and achievement. Finally, the method for calculating SEL for students and groups of students is presented in detail, along with the limitations of the method.

Private and Public Education

The Debate over Private Versus Public Education

The long-standing debate over how best to administer education in society continues today. In recent decades, the main focus has been on whether the state should be the key provider of education, as a public good, or whether private institutions are better placed to administer education. In addition, there is an issue over whether parents and students should decide for themselves between private and public institutions.

A World Bank publication discussed the advantages of private schools over public schools in developing countries, in *"Public and private secondary education in developing countries: A comparative study*" (Jimenez & Lockheed, 1995). Some obvious advantages of private institutions over public ones include the generally higher funding private institutions enjoy by way of tuition and private donations. This was confirmed by Jimenez & Lockheed (1995); they found a number of factors accounted for the advantages of private schools, including better physical and human resources, giving students an edge over their peers from public institutions (107). Wolff and Castro (2001) summarised the key arguments for both sides to this debate, with a focus on Latin America.

In favour of public education institutions, Wolff and Castro (2001) adduce the view that it is the responsibility of the state to provide education to its citizens. Moreover, private institutions do not always serve social needs, but rather tend to focus on profit, which could conceivably lead to the quality of education being sacrificed for greater financial returns. Additionally, where private institutions are granted a monopoly-like status within an education system, they will be in a position to charge exorbitant fees. Another common argument against private institutions is that they encourage social segregation by skimming resources that would otherwise be available to public institutions - including teachers and students - leaving public institutions with the leftovers. In response to this, the middle class are induced to favour private institutions along with the elite, leading to fewer resources being allocated to public schools, which, in turn, produces greater economic inequality and intractable social divisions. In Latin American countries, where a large majority of the population is unable to choose private education as an option, this may be viewed as an unjust system that leads to cyclical inequalities (Wolf & Castro, 2001).

Wolf and Castro (2001) also provide the counterarguments to the above points. Private institutions can be seen as demonstrably more efficient and cost-effective than public institutions. According to this view, if private institutions were to prioritise short term gain over quality, they would simply go out of business. In addition, proponents of private institutions claim that public institutions are overly bureaucratic, and point to the phenomenon of "politicized" education, where conformity to a government-imposed ideology is valued more than the quality of education received. As for the danger of social division, private institutions proponents argue that they circumvent this by allocating scholarships and loans for needy students (Wolff & Castro, 2001).

The issues over school choice have been foremost in Latin America, including Ecuador. This debate is centred around whether parents should have the freedom to choose where their children study, especially in primary and secondary education. The Inter-American Development Bank funded a report discussing private schooling in Latin America, including a profile of Ecuador (Elacqua, Iribarren, & Santos, 2018). The report presents the sentiments of pro-choice and anti-choice voices in secondary education. A key argument pro-choice campaigns make is that more choice for parents and students leads to more competition in attracting and retaining students, resulting in an overall improved quality of education across all institutions, private and

public. On the other hand, opponents of school choice highlight the dangers of increased social inequality. In their view, families with higher SEL, and higher performing students, will opt to attend schools that are better performing (or at least appear to be), leaving lower SEL students and lower performing students in disproportionate numbers in lower performing schools, increasing the issues that come with social stratification. This often leads the best students towards private institutions that have better marketing operations than public institutions.

SEL, Schooling and Family Background

It is common for people to stereotype students, and organisations to stereotype potential employees by the type of university they attend or attended. For example, employers may be tempted to believe that students from prestigious universities are better performers, versus students from poorly funded universities. In Ecuador, many employers may be tempted to believe that students from wealthy private and co-financed universities are better prepared than graduates that attended poorly funded public universities. However, although there are studies that show a link between student performance and the resources of the institutions they attend, it is more likely that student performance can be better predicted by the background of each student, not the institution they attend. Many studies support this view.

A US based study by the Centre on Education Policy (Wenglinsky, 2007) suggests that parental attitudes, rather than the type of school students attend, is the main determinant in observable differences in academic outcomes and related future advantages of education. Students with parents that showed involvement and concern in their education were at an advantage over those with less involved parents, regardless of whether they attended a private, public or religious school: "… it was the family, not the type of school, that really mattered" (Wenglinsky, 2007, p. 7). Wenglinsky found that, after accounting for family background, students that attended private high schools had no significant advantage over students that attended public high schools in academic performance, college attendance rates, job satisfaction levels, or engagement in civic activities (p. 2). However, there was one exception to this: private high schools seem to provide better exam training techniques to students, leading to higher SAT scores, and are more likely to attract students with higher IQs, leading to greater representation in elite colleges. Even so, the study claims that when accounting for students whose family has a positive attitude towards education, there was no difference in outcome based on high school type. Rather, it is more likely that these types of parents tend to send their children to private high schools, leading to the false conclusion that private schools achieve better results than public schools. Furthermore, Elacqua et al. (2018) concede that there may be no significant difference, or at most a slight advantage for private schools, when it comes to student performance in standardised tests, after controlling for SEL and selection bias. As such, employers would be advised against being biased towards applicant based on the type of institution they attended. The merits of each student should be assessed based on their individual qualities.

Latin America and Ecuador – Private School Enrolment

Latin America and the Caribbean (LAC) is one of the regions with the most private sector choice in the world, and has been for some decades (Elacqua et al., 2018). Globally, at least since 1999, enrollment of students in private primary institutions in LAC placed second, behind South and West Asia, outstripping other regions by a significant margin. For example, "in 2013, 18% of LAC students attended private primary schools compared to 11% in North America and Western Europe, and 8% in East Asia and the Pacific" (Elacqua et al., 2018, p. 4). Similarly, LAC has a higher than average student attendance in secondary institutions. " In 2013, 18% of LAC students were enrolled in private secondary compared to 17% in North America and Western Europe, and 16% in East Asia and the Pacific" (Elacqua et al., 2018, p. 6).

In Ecuador, there is a higher than average enrolment rate for students in primary and secondary private schools. The global average for private primary school enrolment was 17% in 2016 and 2017 (UNESCO, 2019a). In Ecuador, it was 23.6% in 2016 (INED, 2018, p. 92) – a slight drop from the previous decade. At its peak, in 2005, 29% of students in Ecuador were enrolled in private primary schools (UNESCO, 2019b). However, this is still significantly higher than the 18% of enrolment in 1996 (Wolff & Castro, 2001, p. 3). As for secondary education, the world average for 2016 and 2017 for secondary enrolment in private schools was 27%. Ecuador has seen a steady decline from its peak period (2003-2011) of 33% (UNESCO, 2019b) enrolment to 28.6% in 2016-2017, just above the world average (INED, 2018, p. 96).

The enrolments of students in private primary and secondary schools in Ecuador, as in many other countries in Latin America, are concentrated in the major cities. In Ecuador, Quito and Guayaquil have traditionally had a much higher private enrolment rate than the national average. For example, in 2012, 44% of all students in Guayaquil and 39% in Quito enrolled in a private institution (Elacqua et al., 2018).

Educational Reform in Ecuador from 2008 to 2017

Ecuador's education system has rapidly transformed since its degraded state in the early 2000s. Prior to this, there was already a significant increase in student enrolments to private tertiary education institutions. Private university enrolment increased from 24% in 1994 (Wolff & Castro, 2001, p. 3) to 37% in 2000 (Benavides et al., 2018). Perhaps a contributing factor was that Ecuador was the only country in Latin America where education spending fell from 1990 to 2000, down from almost 3% of GDP to close to 1% (Schneider, Estarellas, & Bruns, 2019).

Ecuador was one of the poorest performing countries in education in the region, with some of the lowest test scores (Schneider et al, 2019). Prior to 2005, Ecuador experienced a destructive period of political instability, with seven Presidents and nine Ministers of Education succeeding one another over a single decade. The effects of weak government during this period compounded a longstanding structural problem of under-enrolment in rural areas, associated with illiteracy and economic under-achievement. The reforms in Ecuador, led by populist President Rafael Correa (2008 - 2017), were essentially state-led, side-lining teachers' unions, the private sector and other groups (Schneider et al,. 2019).

In the decade prior to the Correa government, Ecuador underwent a period of instability. It was during this period of instability that the university system expanded by 273% over 14 years (Benavides et al., 2018). Benavides et al. (2018) summarise the situation in Ecuador. In 2008, there were a total of 216 universities and polytechnic schools. There was scant regulation or oversight of these institutions, leaving many centres free to award degrees with little regard for study loads or compatibility between the degree and the subjects taught. Additionally, many post-graduate courses lacked minimal standards of teacher quality, research requirements and infrastructure. Importantly, this period saw a concentration of universities in the two major cities of Guayaquil and Quito, and widening inequality in access to higher education. 80% of the universities that received the lowest scores in a 2009 evaluation were created during this decade. The evaluation in question was undertaken by CONEA, the body that was set up to oversee the accreditation and evaluation of higher education institutions in Ecuador, and involved a classification of universities in Ecuador into five categories, from A (highest) to E (lowest), subject to periodic assessment. If a university is classified with the lowest level of E, it has 18 months to improve, or face closure. During Correa's period of office, 14 universities were closed (Benavides et al., 2018).

The reforms of higher education in Ecuador were seen by many as being ideologically-driven. The period of Correa's government saw the introduction of a new Constitution, accompanied by a number of referendums on matters of public controversy. In the new Constitution, article 28 states that "education will respond to the public interest and will not be in the service of individual and corporate interests". It also states that "universal access will be guaranteed", and that public education will be universal and free up to the third level (bachelor's degree) (Constitution of the Republic of Ecuador, 2008). In passing this into law, the Correa government was able to

sidestep opposition from universities, teachers' unions and the public in general. This was made possible in large part due to the overwhelming support he received from voters in all his elections and referendums, with the exception of the local elections of February 2014 (Benavides et al., 2018). The broad social reforms were confirmed with strong public support for the 2006 national referendum on education reform. Education reform was also a key campaign policy. Correa's re-election in 2009 confirmed the support for the president and his policies. During Correa's reign, public officials in the Ministry of Education served for long periods, and had the support of the president, allowing for deep rooted reforms to take hold (Schneider et al., 2019). As a result of this process, the higher education system in Ecuador is still, post-Correa, subject to stringent constitutional restraints, with a stated emphasis on social needs and equity. Private institutions are restricted in terms of their intake and the fees they are allowed to charge, and have a legal obligation to provide scholarships (Benavides et al., 2018).

Just prior to Correa being elected, reforms were already underway. In 2006, interim president Alfredo Palacio appointed Raul Vallejo as Education Minister and Gloria Vidal as Vice-minister for Education. Vallejo and Vidal helped push the Ten-Year Plan for Education (El Plan Decenal de Educación [PDE], Schneider et al, 2019). When Rafael Correa came to power, he fully endorsed the PDE and nominated Vallejo and Vidal to implement it. The PDE was a strategic management tool set up to reform education by promoting the modernisation of the education system, improve educational quality and reduce social inequality (Educiudadania, 2014). The PDE was ratified with the national referendum that approved the new 2008 Constitution of Ecuador.

Education enrolments dramatically increased under these reforms, with secondary education increasing from 73% in 2009 to 88% in 2016 (UNESCO, 2017). With regards to tertiary education, UNESCO (2017) reported an increase in gross enrolment from 39.86% to 45.55%, in the period 2012 to 2015. Since 2009, spending on education also increased to levels above 4% (4.3% in 2009, 5% in 2015). Education spending was close to 1% of GDP in 2000, and almost 3% by 2005. Government expenditure (per student) in tertiary education also increased, from $4,533 in 2012, to $6,004 in 2015 (UNESCO, 2017). Much of this funding went to public institutions.

In response to the new regulatory framework, enrolment trends in Ecuador have been contrary to the overall trend in Latin America. In Latin America, there has been an increase in private enrolment. Following the election of Rafael Correa, Ecuador, unlike most other nations of the LAC, embarked on a government led campaign to take control of all education in the country. This led to significant changes to existing private schools, and a significant expansion and greater investment in public institutions, bucking the Latin American trend.

Private education institutions.

Under the reformed system, the private school system in Ecuador covers two distinct types of schools, known as fiscomisionales (private co-financed) and particulares (private unsubsidised).

According to the Organic Law of Intercultural Education (Ley Orgánica de Educación Intercultural or LOEI), private co-financed schools are defined as non-profit religious or secular schools that can include congregations, religious orders, or any other religious or secular organisation (Elacqua et al., 2018). They have an agreement with the government and receive subsidies to pay their teachers. To qualify for public subsidies, full or partial, they must not have entry exams as part of their admissions policy. Also, like all schools in Ecuador, they must follow the national curriculum. Other regulations cover minimum requirements for the establishment of new schools including location, infrastructure, curriculum, legal status, pricing (e.g. maximum tuition fees), financial accountability, school quality accountability, working conditions of teachers (e.g. minimum wages), and teacher evaluations (Elacqua et al., 2018).

The second group of private schools, private unsubsidised, are private not-for-profit schools that do not receive subsidies from the government. In article 352 of the Constitution, for-profit higher education institutions are prohibited (Constitution of the Republic of Ecuador, 2008). Ecuadorian law also stipulates that any schools

that charge tuition fees must provide scholarships for low SEL students of at least 5% of their annual fees (Article 134, Reglamento LOEI) (Elacqua et al., 2018).

The amount schools can charge in fees and additional expenses is also regulated, being mainly determined by the cost structure of the school. The maximum permissible increase in fees from one school year to another is a function of total expenditure on staff and management and on whether the school year generated a surplus. Schools are permitted to charge higher fees to new students on the condition that they invest in infrastructure and equipment or increase teachers´ salaries by more than 10% (Elacqua et al., 2018).

Summing up.

Overall, the Correa government led reforms in education, radically increased rewards for teachers as well as accountability based on performance (Schneider et al., 2019, p. 8). In addition, funding was increased dramatically, and student enrolment increased significantly. Ecuador's education reforms are appraised by Schneider et al. They conclude that there are commendable improvements in the quality and quantity of education in Ecuador. One statistic they cite is the UNESCO Latin American regional test of sixth graders between 2006 and 2013 – a population which coincides with much of the sample in the national study that is the basis of this book – in which Ecuador made the highest gain in reading scores, and the second highest in math, out of the 15 countries tested. Ecuador emerged from amongst the lowest scores in the region to average or above average. During the same period, enrolment in secondary schooling rose from 53% to 87% (Schneider et al., 2019).

Despite these reforms, the perception of most parents, especially those that make up the middle and upper classes, is that public education in Ecuador is of lower quality and has poorer resources than private institutions, both at secondary and university level (Haney, 2014). Haney (2014) hints at another benefit that parents and students see in private high schools: the college counsellor resource, which can better steer committed graduates towards scholarships and entry to more prestigious universities both in Ecuador and abroad. Enrolment in private institutions is a tradition amongst many families in Ecuador, where family members across generations, as well as siblings and cousins, often attend the same institution. The perception described may well involve some confirmation bias: parents who care about their child's education, as already discussed, positively influence their child`s performance (Wenglinsky, 2007). In Ecuador, many parents that have the economic means and concern themselves with their child's education, opt to steer them into private institutions.

National Population and Sample Population

In Ecuador, there are a total of 60 universities and polytechnic schools. Of these, 33 are public institutions, 8 are co-financed and 19 are private (SENESCYT, 2018). In 2016, the total number of higher education students enrolled in public university institutions stood at 57.85%, followed by 42.15% for private co-financed and private non-financed institutions (SENESCYT, 2018). The split between private co-financed and private non-financed were not given for 2016. However, in 2015, private co-financed enrolments were 28.68% compared to a lower 12.8% for private non-financed enrolments (see Table 1). The sample population of students that completed the 2018 national survey demonstrate a similar breakdown of enrolment. However, private non-financed university students are overrepresented in the sample. Figure 1 illustrates that students from public universities compose 51.24% of the sample population, students from private co-financed universities make up a further 22.27%, and the remaining 26.49% attended private non-financed universities (see appendix 4B for total students by individual university).

Table 1

National Enrolments of Students by University Type

University type	enrolments	percentage
Public	343132	58.52%
Private	75057	12.80%
Co-financed	168187	28.68%

Note. Adapted from SENESCYT (2015).

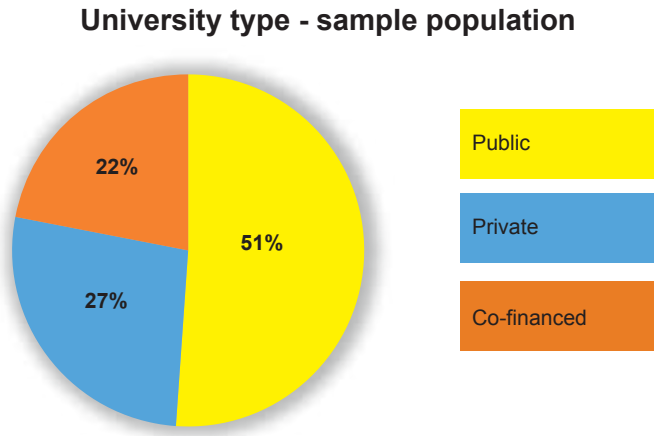


Figure 1. The sample distribution by type of university

Note. Figures are rounded. Original results from author´s 2018 national survey.

Socio-Economic Level (SEL)

Cultures generally include groups of people with similar views of acceptable and familiar values, beliefs, attitudes and behaviours. Today, most people think of nations as constituting a singular culture. However, within nations, there are layers of distinct cultures, known as sub-cultures, or co-cultures. According to Brislin (1988), SEL, or social class, can form the basis for such a sub-culture. These differences can be seen between high SEL and low SEL sub-cultures. The basis of such differences includes the neighbourhoods they live in, the schools they attend, belonging to different social clubs, and eating different kinds of food (Kraus, Piff, & Keltner, 2011).

Kraus et al. (2011) point out that understanding social class, from both an objective standpoint (e.g. with reference to resources) and subjective considerations, such as rank or status, is important in order to properly comprehend people's thoughts and actions. "Together, objective resources and subjective social-class rank give rise to dramatically different patterns of thought, feeling, and action" (Kraus et al., p. 246). The objective elements of social class include actual objective resources such as wealth, education and occupational prestige (Adler, Epel, Castellazzo, & Ickovics, 2000). Researchers have traditionally measured subjective social class rank by using a measure of SEL, where participants rank themselves in relation to others (Adler et al.; Cohen et al., 2008). This process is more detailed than the method used to ascertain SEL in the 2018 national survey, which will be discussed shortly, but the principle is consistent. Interestingly, subjective social class rank influences peoples' "social thought, emotion, and behaviour independently of the substance of objective social class" (p. Kraus et al., 2011, p. 248).

There are a number of indicators for observed differences between people of relatively low SEL and high SEL, from both objective and subjective perceptions. Earlier studies have observed differences in family values. According to Kohn (1977), middle-class and working-class parents traditionally emphasise different values when raising their children. For example, middle-class parents emphasise self-control, intellectual curiosity, and consideration for others. In addition, Welter (1990) found that working-class university students had a preference for positions within an organisational setting, while individuals from a middle-class background

demonstrated a preference for becoming self-employed. Additionally, Kraus et al. (2011), indicate that objective and subjective differences between low and high SEL ranks lead to notable differences in psychological and behavioural outcomes. Lower SEL groups tend to think of others more, while higher SEL groups tend to be more self-orientated.

In terms of behaviour, people with lower SEL perceptions may be more engaged and social than their upper-class counterparts. This was supported by results from both objective and subjective lower SEL populations being more charitable and giving than populations from higher SEL in at least two independent studies (Kraus et al., 2011; Independent Sector, 2001). For example, an objective study found: “Household contributions increase as income increases, but people in the lower income groups give a higher percentage of their incomes to charities” (Independent Sector, p. 18).

In terms of expected economic growth and satisfaction with salary, Welter (1990) cites Hamilton (1966). Hamilton “found that middle-class identifiers ... expected further economic progress over and above that anticipated by other “white-collar” and skilled workers. They also showed greater dissatisfaction with their level of income than working-class identifiers” (p. 63). Welter also suggested that students from the middle class may feel greater pressure to seek material wealth through occupational and economic status, often at the expense of social responsibility. Regarding conformity to authority, Welter (1990) concluded that there was no evidence to suggest significant differences between US college students from middle-class backgrounds and students with a working-class.

Sample Population and SEL

In Ecuador, there have been many studies that have analysed the effects of SEL and inequalities in Ecuador. In recent decades, inequality has been falling across Latin America, Ecuador included. Inequality measures such as income-based Gini coefficient and the ratio of household per capita income between urban and rural populations have improved in Ecuador (Gachet et al., 2017). However, social inequalities persist and they are difficult to identify. In Ecuador, a five-point scale is used to describe SEL. INEC (2011) formulated a questionnaire to establish SEL scores for households across the country (see appendix 4A for details of the study items and methodology). Based on the answers given, all households were categorised into one of five SEL categories from A, the highest, to D, the lowest (see Figure 2). The disparities in SEL are evident in the results of the study. 1.9% of the population represents the top SEL category (A), and 11.2% makes up the second highest SEL group (B). In contrast, 14.9% make up the bottom, D, group, and 49.3% represent the second lowest SEL group (C-) (INEC, 2011).

Identifying SEL for the student population in the 2018 sample was challenging. There are no recent studies that give a clear indication of the SEL of students based on the university they attend. Hence, student´s self-perceived SEL was relied upon for this study. When gauging people’s perceived SEL, differences in career and education level have been seen to distort results, especially for comparative purposes (Welter, 1990). The 2018 Ecuador study reduces these limitations. All participants in the survey were university students, and the career factor was minimal, as the majority of students did not have a job, and even less had a full-time job, at the time they completed the survey. As demonstrated in Chapter 1, Figure 1, only 7% of students surveyed had a full time job, and 69% were unemployed. The method used to ascribe SEL to each student, and to each university type in the Ecuador study is outlined below.

The 2018 national survey included a question that was intended to gauge the subjective SEL of each respondent, specifically to test for differences in response for self-perceived SEL. The question asked: *What do you consider to be your socio-economic level?* Students selected from a scale of one to one hundred, with one representing the lowest and one hundred the highest level. As the same question was posed to all students, their responses should be valid for the purpose of comparing students’ self-perceived SEL. Based on the number of students that selected each score, 1 to 100, each number was allocated and distributed to one of the five categories of SEL established by the INEC (2011) in the national SEL study (A to D). This was done by using the same percentiles for each category, as shown in *Figure 2*.

Outside of the INEC study, there is limited data about objective SEL of university students from across the country. One exception is the INED (2018) national education report. INED provides some data on the SEL of students that completed the 2017-2018 university entry exams and the type of high school they attended. The results show a clear connection between higher SEL and private high school attendance. In addition, there was a positive correlation between higher SEL and higher average scores in the entrance exam (p. 148).

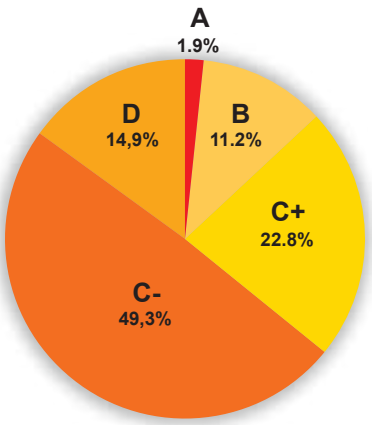


Figure 2. SEL Ecuador 2011

Note. Stratification of socio-economic level in Ecuador in 2011, from INEC (2011). See Appendix E for the descriptions of each level by INEC.

The SEL selected by students and the adaption of the INEC percentiles are summarised in Table 2. Category A, the highest SEL group, was represented by 1.9% of the national population surveyed by INEC. In the 2018 national survey, 2% of students selected a SEL value between 85 and 100 over 100 (the additional .1% in the student population is due to the multiple students that answered with a score of 85). Level B SEL included 11.2% of the national population, which is represented by students who selected a SEL between 70 and 84 over 100. The percentage of those students totalled 13.3% of the sample population, 2.1% higher than the INEC percentile, again due to multiple students responding with 70 (the threshold point). C+ students included those with SEL scores between 56 and 69, or 21.1% of the population. The C- group make up 49.1% of the sample population, and include those that selected scores of 37 to 55. Finally, the D category of SEL is made up by students who selected SEL scores from 1 to 36, or 14.5% of the sample population (see Appendix E, Table E1 for the count and cumulative percentage of SEL of all samples).

Table 2

Comparison of INEC SEL Population and University Student Sample Population

Level	INEC percentages of population	National student Sample population	Score range by sample (self-selected SES from 0-100)	Cumulative percentage of sample population and SEL (ordered A to D)
A	1.9%	2%	85-100	100%
B	11.2%	13.3%	70-84	98%
C+	22.8%	21.1%	56-69	84.6%
C-	49.3%	49.1%	37-55	63.6%
D	14.9%	14.5%	1-36	14.5%

Note. Adapted from INEC (2011) and author's survey data.

Based on the calculation made in Table 2, the subjective SELs of private, public and UEES (High SEL) students were created (see *Figure 3*). The private university group has the following breakdown for SEL category: A, 3.5%; B, 19.3%; C+, 25.1%; C-, 42.2%; and D, 9.9%. The public university group has the following breakdown: A, .6%; B, 7.4%; C+, 17.4%; C-, 55.6%; and D, 18.9%. Finally, UEES, representing the high SEL group, has the following breakdown: A, 6%; B, 30%; C+, 27%; C-, 34%; and D, 3%. Overall, clear differences emerged between the three groups' SEL: UEES has a higher number of students that self-evaluated with high SEL, followed by private university students. Public university students self-evaluated with the lowest SEL (see

Figure 3). This trend is consistent with the INED (2018) report, which saw a clear correlation between private high school attendance and higher SEL, as well as public high school attendance and lower SEL, amongst final year high school students undertaking the university entry exam (p. 148).

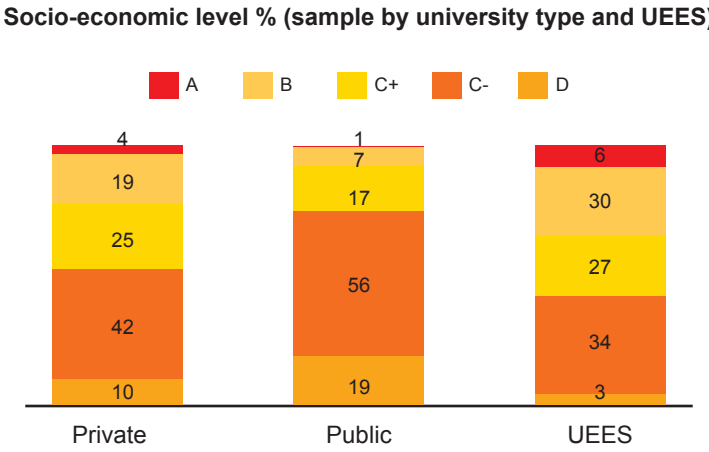


Figure 3. SEL by private and public university students and UEES (high SEL)

The category breakdown for each of the universities represented in the national study, that had a sample population greater than 100, are described in *Figure 4*. The universities are ordered from highest subjective SEL to lowest from left to right. UEES, PUCE, UDLA, Universidad de Azuay and ECOTEC make up the private universities. The public universities include Universidad de Guayaquil, Universidad de Cuenca, ESPE, ESPOL, UTM and EPN. Overall, students from public universities self-rated lower SELs, on average, than students from private universities (see Appendix E, Table E2 for SEL by university), and UEES students had the highest average SEL self-ratings of all universities.

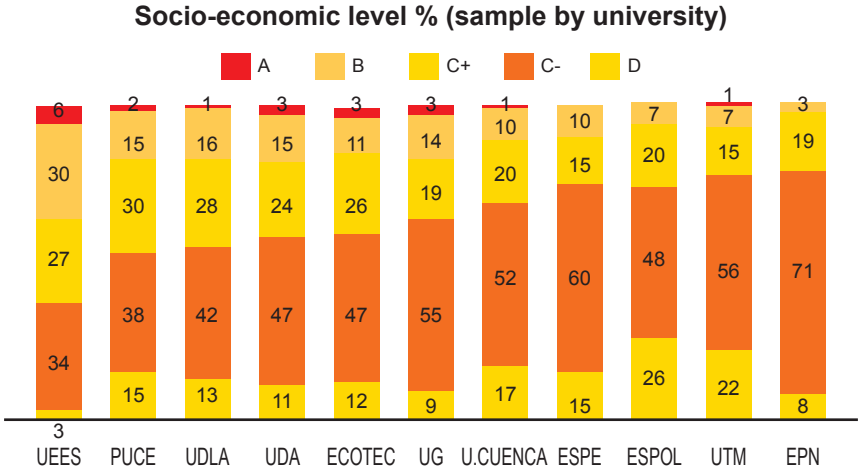


Figure 4. Subjective SEL of students by university

Limitations

There are limitations to using the described method to allocate SEL to individual students, and SEL to the universities and university groups. First, the question in the survey did not provide details about what exactly constitutes higher or lower SEL. Nevertheless, the responses given by students serve as perceived, subjective, SEL, in line with Kraus et al. (2011) and subjective SEL ranking. Also, the INEC categories for SEL were compiled in 2011 and the current study was completed in 2018. Nevertheless, given that there is limited data available on the SEL of university students in Ecuador, it serves to at least give an indication of the percentiles of each group of SEL amongst the population. Finally, the INEC SEL study represented the entire population of Ecuador, while the sample population is exclusively made up of Millennials/Gen Zers enrolled in tertiary education. As Ecuador is a developing country, a significant portion of youth are generally prevented from

entering higher education study due to economic disadvantages. According to SENESCYT (2018), in 2018, the projected percentage of youth aged between 18-29 that completed high school but were not able to attend higher education due to a lack of economic resources was 18.2%. The figure was higher for rural Millennials/Gen Zers with 26.9% of the total population aged 18-29 (SENESCYT, 2018). Despite these valid limitations, the categorisation of students into the five categories from A to D, based on INEC (2011) percentiles, as well as the self-ascribed SELs of students in the survey, are a valid basis for an exploratory study, which is comparative in nature. The results in this chapter are intended to identify areas where differences and similarities are apparent and to compare the three university groups. In future research, focused studies should seek to ascertain more reliable SELs for university students from across the country.

Results of the 2018 National Millennial/Gen Z Survey – University Type and SEL

Work Status

Public universities had a higher average rate of students that were not working, with 74%, followed by private university students, with 65% (*Figure 5*). UEES students had the lowest non-working rate, with 60% of students not working. Similarly, public universities had the lowest rate of full time employed students, with 4%, compared to a higher 10% of private university students and 11% from UEES. Finally, UEES students reported the highest rate for working for a family business, with 15%. Private university students had 10% of students in a family business, and 8% of public university students selected this option. The results for part time work and other were similar for all populations. It appears that SEL impacts employment status of students working in Ecuador, with higher SEL relating to higher employment rates of students.

Private university students have a lower unemployment level than public university students

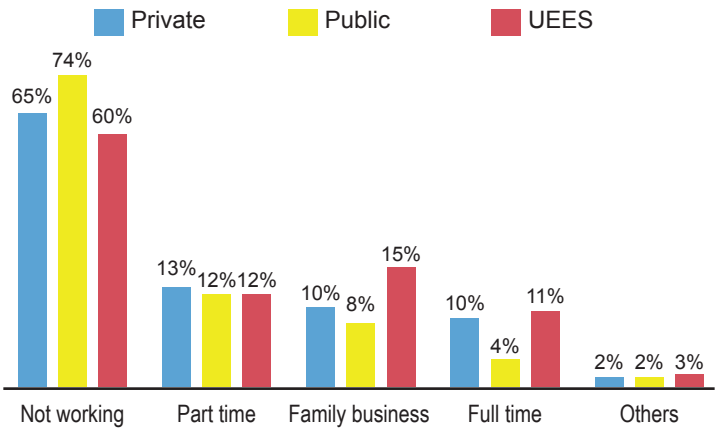


Figure 5. Work status of students, by university group

Q. What is your current work status?

Reaching Millennials/Gen Z

The main differences in job search preferences between private, public and high SEL students were in the areas of *friends and family*, *employment agencies*, *job fairs* and *newspapers* (*Figure 6*). UEES students far exceeded other students with a preference for family and friends with 32% of students selecting this option, followed by private university students with 22%. Public university students preferred employment agencies more than private and UEES university students. Also, Job fairs and newspapers were a notably lower preference for UEES students compared to both private and public university students. Overall, public and private university students' responses were more spread out than UEES students. 63% of UEES student responses were for three of the nine options provided, namely friends and family, company websites and university databases.

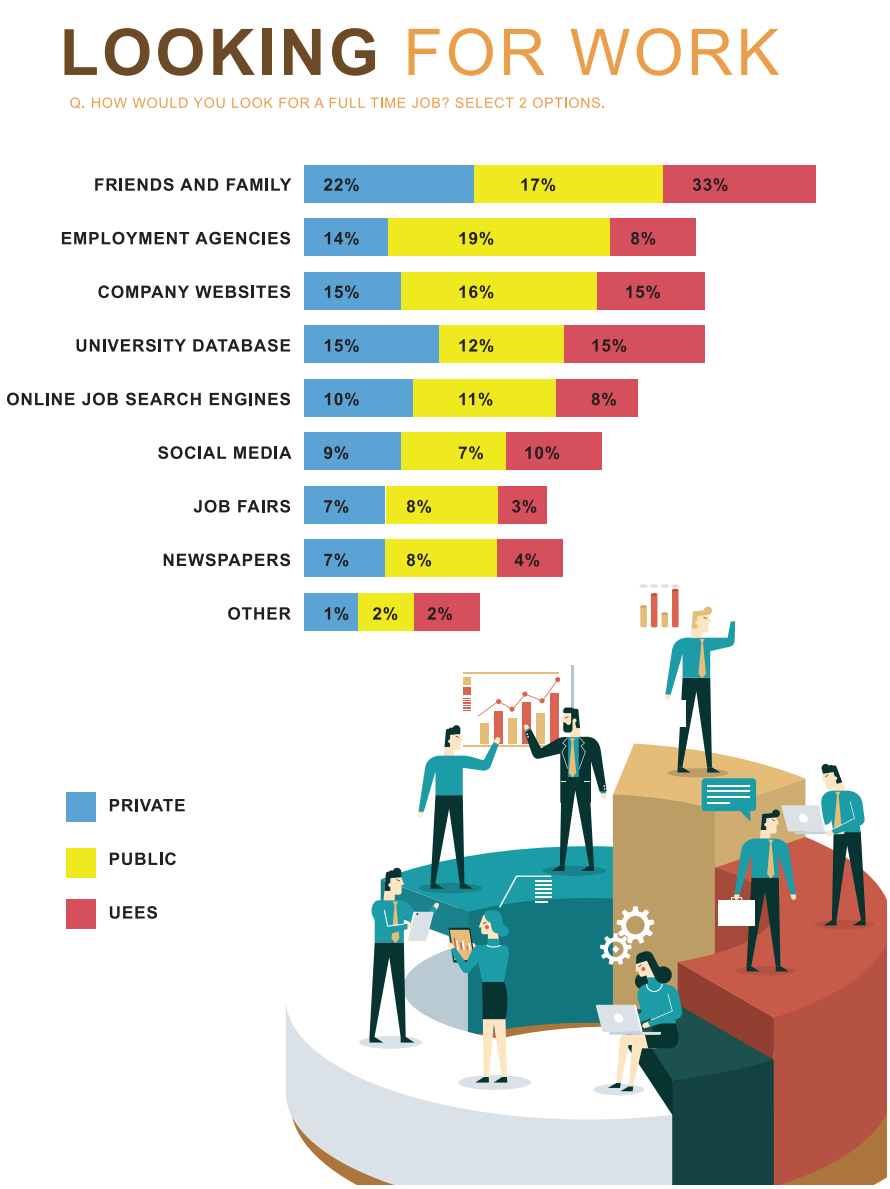


Figure 6. The avenues students, by university group, would use to search for a full time job

4.1 Workplace Preferences and Attitudes

- JOB SECTOR
- MOBILITY
- WORKPLACE PREFERENCES
- SALARY EXPECTATIONS
- OVERTIME
- RESIGNATION

Preferred Job Sector

For preferred workplace, UEES (high SEL) students had the lowest preference for a government agency, and the highest preference for a family business and NGO (*Figure 7*). Private university students had the lowest preference for a multinational. It appears that this was due to a higher preference for a government agency, compared to other students. Public university students had the highest preference for multinational organisations and the education sector. They had the lowest response rate for a family business.

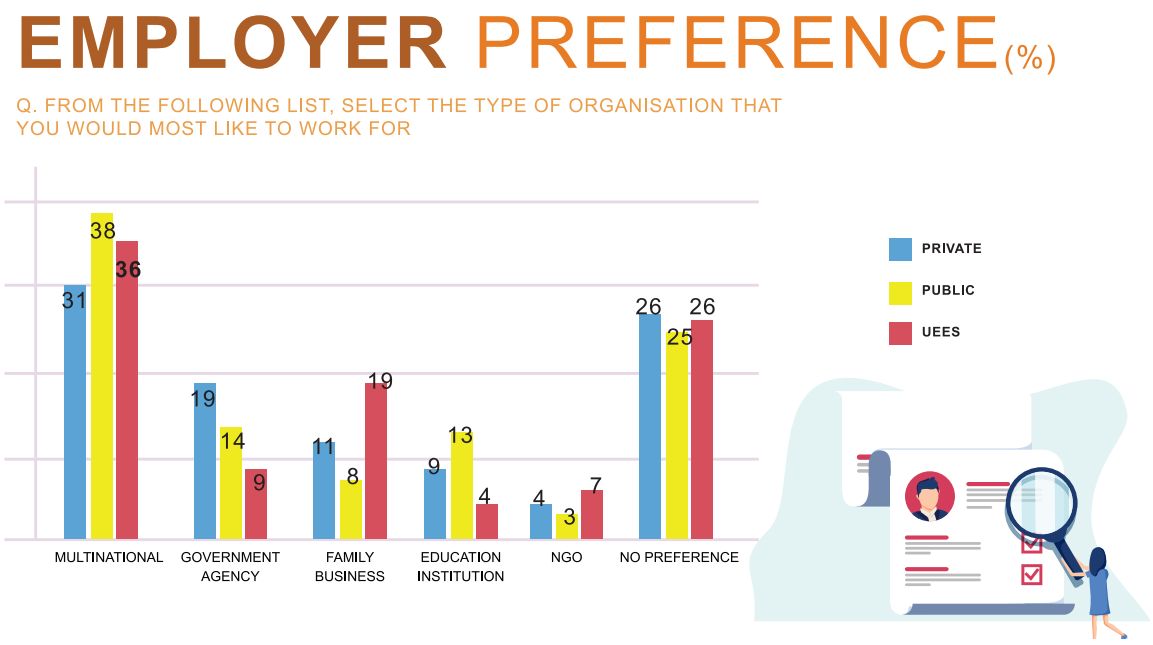


Figure 7. The organisational type or sector Millennials/Gen Zers, by university group, would like to work in

Employment Mobility

UEES students were the most reluctant to move cities for a better job, with a combined 19% stating *probably not* or *definitely not* (*Figure 8*). Private university students had a total of 17% that were disinclined to do so. The least resistance to mobility came from public university students, with only 11% stating a negative response.

Public university Millennials/Gen Zers have a greater willingness to move cities for work

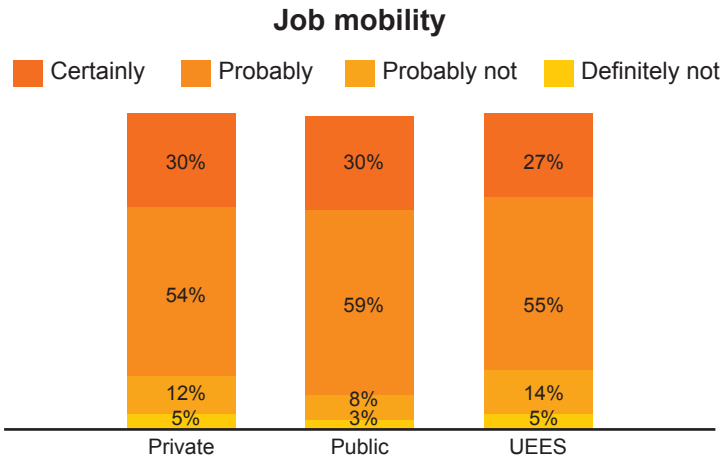


Figure 8. The percentage of students, by university group, that are willing to move cities for a better job

Q. Would you be willing to change cities for a better job?

Workplace Preferences

With regards to workplace preferences, the most notable differences between the three university groups appeared for *promotional opportunities* and *flexible hours* (*Figure 9*). Private university students had a lower preference for *promotional opportunity* than public and UEES students. With regards to *flexible hours*, UEES students had the lowest preference response. Perhaps the most significant results here are the similarities across the groups for j*ob stability*, *friendly atmosphere*, *good salary*, *ongoing training* and *private healthcare*.

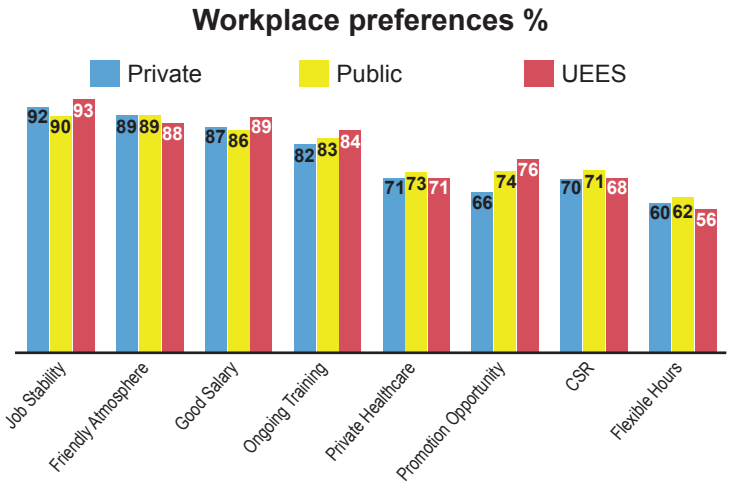


Figure 9. Main differences in workplace preferences by university group

Q. Rate the importance you give to the following work factors.

Note. Responses are a combination of *very important* and *essential* only.

Salary Expectations

The main differences in salary expectations were for the selection made in the top salary brackets of $1200 and above, per month (*Figure 10*). UEES students had the highest expectation for a salary of $1200 or above, with 22% of respondents; second were private university students with 19%; followed by public university students with 15%. This aligns somewhat with what Welter (1990) referred to: higher SEL students are more likely to be unsatisfied with salary than lower SEL students. There were few differences in the other selections. For example, the selections for a salary of $800 or less saw 46% of UEES and private university students and 44% of public university students select these.

High SEL students had a higher salary expectation

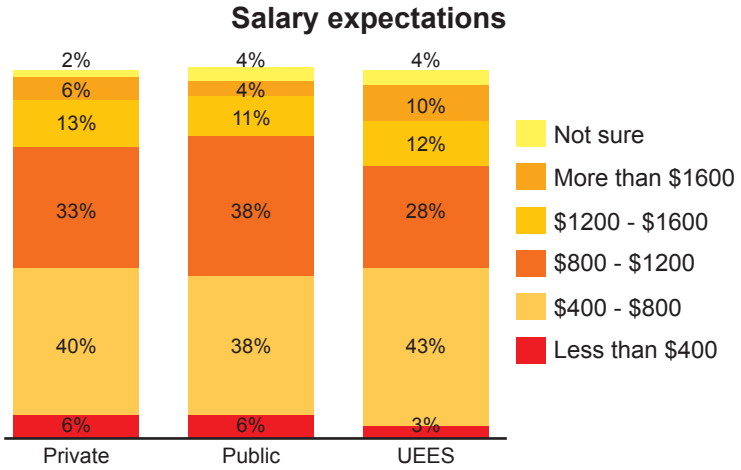


Figure 10. Starting salary expectation by university group

Q. What do you consider to be a fair starting salary in your field?

Voluntary Overtime

UEES students contrasted with the other two university groups over their willingness to work overtime without pay. They had a much higher response, with 70% stating yes. On the other hand, private and public university students had a similar lower willingness with 54% and 55%, relatively (*Figure 11*). This may be due to a correlation between high SEL and the pursuit of greater material wealth, as working longer is likely to lead to promotion and pay increases in the long run (Welter, 1990). However, the relatively small difference between private and public university groups indicates that this may only be valid with higher SEL students.

HIGH SEL MILLENNIALS/GEN ZERS ARE MORE WILLING TO VOLUNTEER TO STAY AFTER HOURS ***WITHOUT EXTRA PAY***

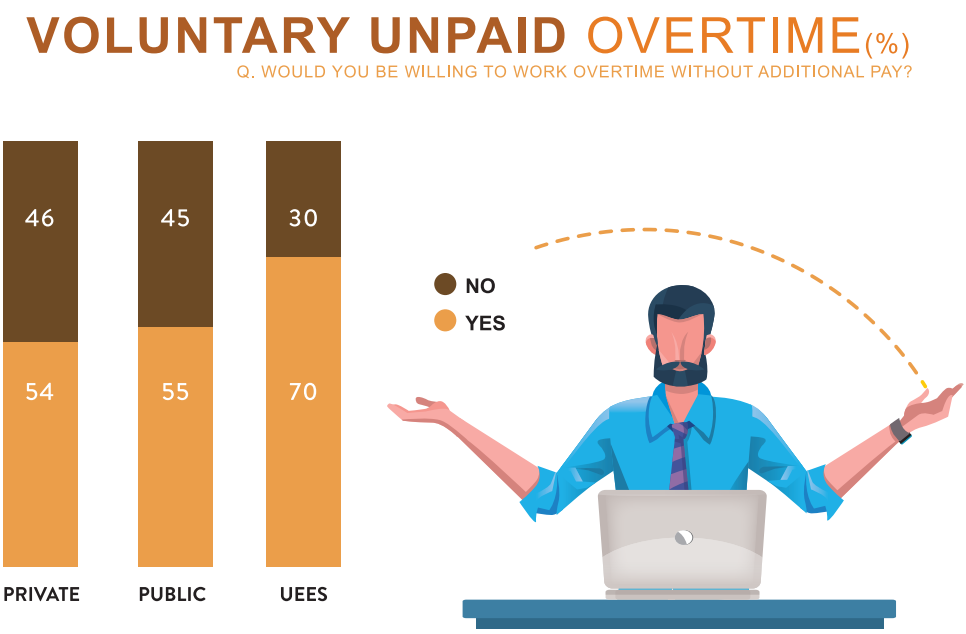


Figure 11. University group comparison for percentage of students that would voluntarily work extra hours for no additional pay

Of the respondents that were willing to work overtime, UEES students stated the longest hours, followed by private university students (*Figure 12*). Public university students stipulated the lowest number of extra hours. Although public and private university students had similar responses for willingness to work overtime for no pay, public university students selected the least number of additional unpaid hours. The motivation to work longer for the same pay is usually to position oneself for promotions and pay rises in the longer term. The result here aligns with Welter (1990); higher SEL students seek more material gains, and career advancement than lower SEL students.

Private university Millennials/Gen Zers are willing to stay back longer than public university students for no extra pay

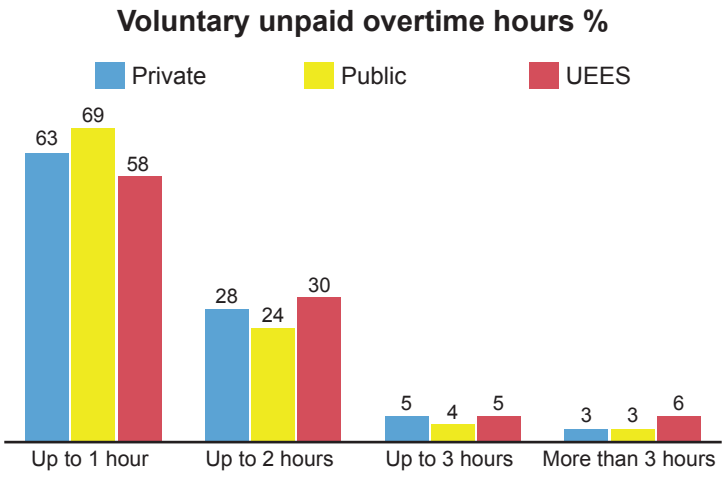


Figure 12. Number of extra hours students, by university group, are willing to work for free
Q. Would you be willing to work overtime without additional pay?

Resignation Notice

UEES students turned out to be the most likely to quit a job they do not like within 6 months, with 76%; second were private university students with 70% of respondents (*Figure 13*). Public university students had the lowest response, with 66%. SEL appears to influence the results here. The higher the SEL group the lower the commitment to an unsatisfactory job.

Public university Millennials/Gen Zers appear to be the most committed group of graduate employees

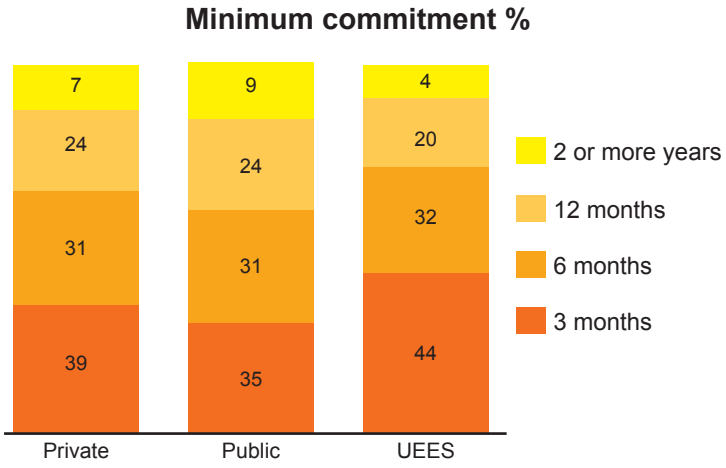


Figure 13. Time period students, by university group, would wait before resigning from a job
Q. If you do not like your job (current/future), how long would you wait before resigning?

4.2 General Personality

- POWER DISTANCE
- INDIVIDUALISM
- WORK-LIFE BALANCE
- HAPPINESS
- ECONOMIC OPTIMISM

Power Distance

Public university students (85%) had a higher response for addressing superiors by their title than private (73%) and UEES (69%) students (*Figure 14*). Between private university students and UEES students, UEES were less formal. Welter (1990) concluded that there was no difference in attitude to authority and SEL. However, in Ecuador, the results here indicate that higher SEL students view authority with less formality than lower SEL students. Hence, there is support for power distance generalisations here, where the SEL of students plays a role in their perceived position in their relationship with superiors.

PUBLIC UNIVERSITY MILLENNIALS/GEN ZERS ARE CLEARLY MORE FORMAL WITH THEIR RELATIONSHIP WITH SUPERIORS

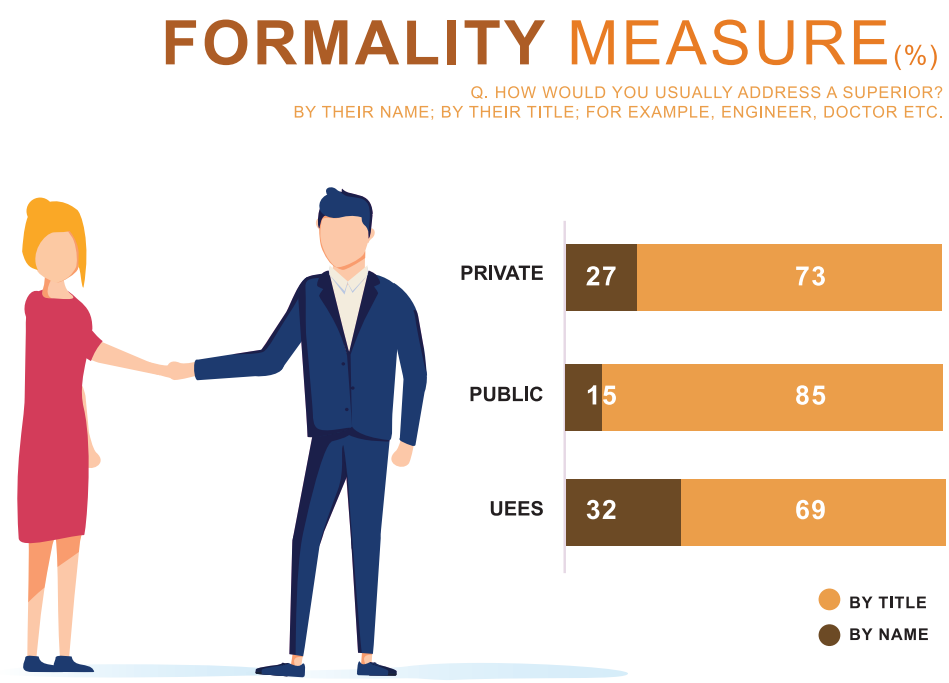


Figure 14. The percentage of students, by university group, that would use a superior's title

PUBLIC UNIVERSITY STUDENTS HAVE ***THE LOWEST PREFERENCE*** FOR WORKING ALONE

Individualism

UEES students stated a higher preference for working alone, with 63%, followed by private university students with 59% (*Figure 15*). In comparison, a lower 54% of public university students selected these options. The results here align with SEL. It appears that in Ecuador, higher SEL students may have a greater preference for work independence than lower SEL students.

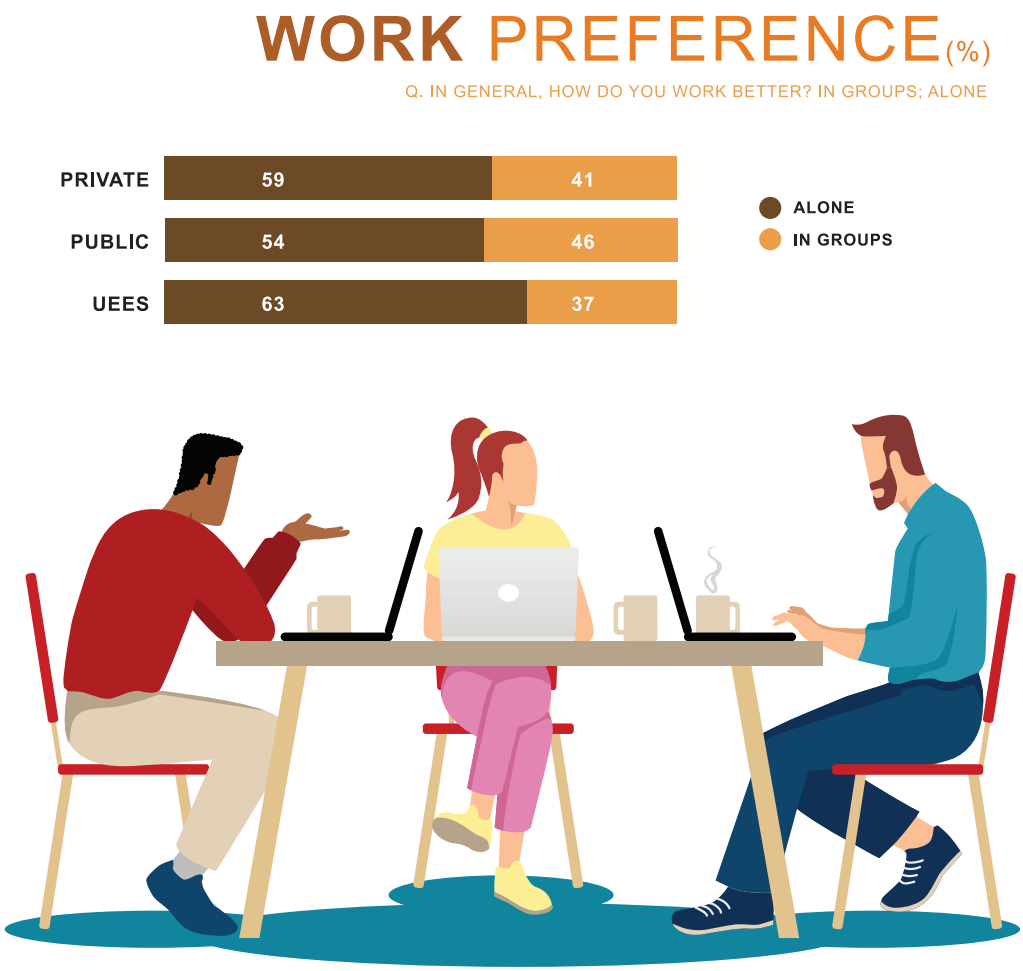


Figure 15. Percentage of students, by university group, that work better in groups versus alone

Work-life Balance

Public university Millennials/Gen Zers chose a lower priority for work over personal time than private university students and high SEL students (*Figure 16*). The responses favouring work over personal time show 51% of public students, 55% of private university students and 54% of UEES students selecting either *probably not* or *definitely not* for quitting a job for more personal time. This agrees with Welter (1990), that higher SEL students seek material wealth more than their counterpart, lower SEL students.

Public university students chose a higher priority for personal time over work

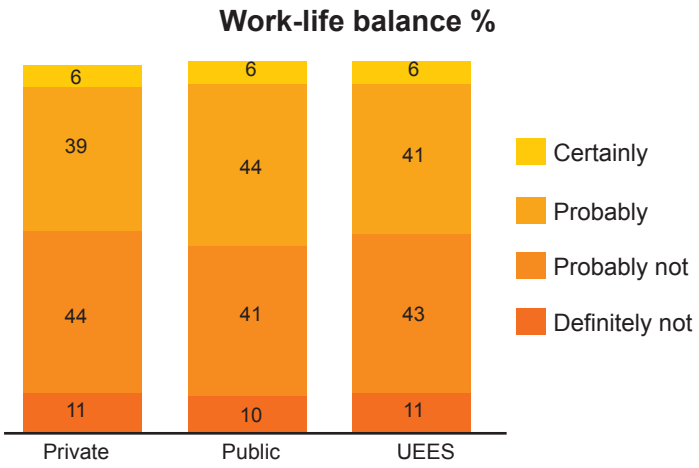


Figure 16. Students' attitude, by university group, towards work and their personal life

Q. Would you give up a well-paid job to have more time for your personal life?

Happiness

Private university students, followed by UEES students, had a slightly higher self-rated happiness level than public university students (*Figure 17*). 81% of private university students, 79% of UEES students and 75% of public university students selected either *always* or *mostly* happy. The results here are inconclusive, as studies have shown that happiness is likely to be more related to comparative wealth than to actual wealth (Graham & Felton, 2005). However, if the respondents live in towns or cities where they perceive themselves to be in the bottom two quintiles (bottom 40%) of socio-economic ranking, then, as stated in Graham and Felton (2015), they are likely to experience less well-being or happiness than students in the upper 60% (p. 115).

Public university Millennials/Gen Zers seem to be slightly less happy than other students

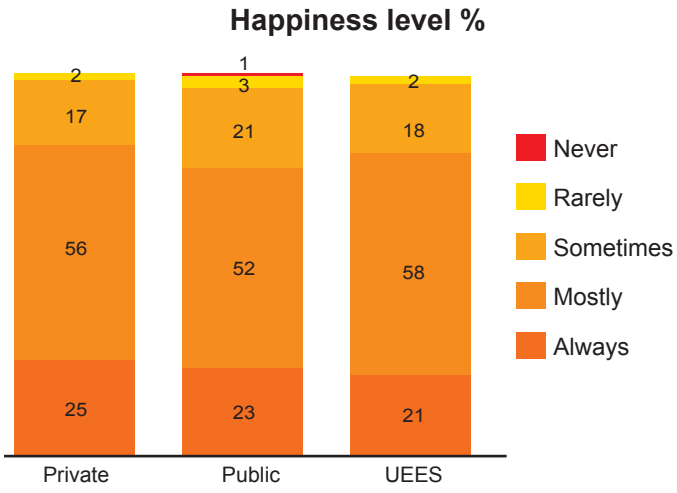


Figure 17. The happiness level of students by university group

Q. In general, how often are you happy?

Economic Optimism

Public and private university students had a neutral to pessimistic view of the future of the economy (*Figure 18*). However, UEES (high SEL) students were more optimistic. For the combined responses *remain the same*, *slightly better* and *much better*, UEES recorded 67% of responses, compared to 57% from public university students and 58% from private university students. With the highest SEL group (UEES), this fits with what Welter (1990) stated: higher SEL students have a greater expectation that economic growth will continue, compared to lower SEL students. The economy affects different groups differently. At times, certain groups may be positively affected whilst others are negatively affected.

High SEL Millennials/Gen Zers have the most optimistic expectations for the economy

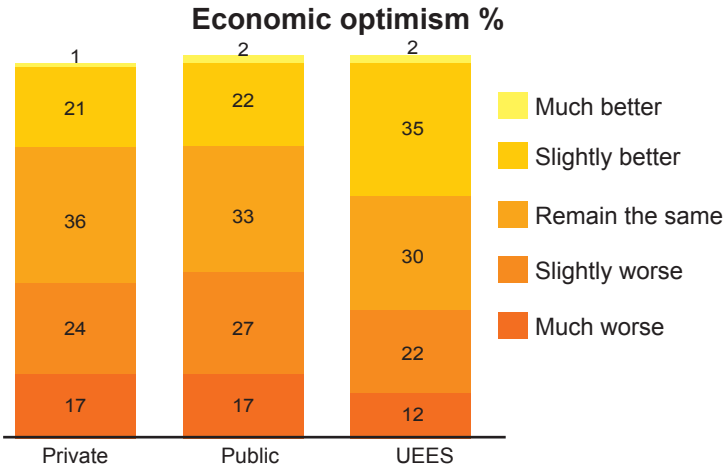


Figure 18. Percentage of students, by university group, that expect the economic situation to improve/get worse
Q. What do you expect the general economic situation of Ecuador to be like over the next 2 years?

Life Goals

UEES students seem to deviate from both public and private university students with regards to life goals (*Figure 19*). UEES students stated a slightly higher preference for *religion/spirituality*, and a significantly higher preference for *being wealthy*, *having children* and *getting married*. The higher preference for *being wealthy* correlates to what Welter (1990) referred to when stating that higher SEL students seek material wealth at greater levels than lower SEL students. However, in this case this seems to align only to the higher SEL group, UEES students, and not to private university students. As for *religion/spirituality*, *children* and *marriage*, it may be that these traditional Ecuadorian values are stronger amongst higher SEL students in Ecuador, whilst the majority of other students place a relatively lower preference for them.

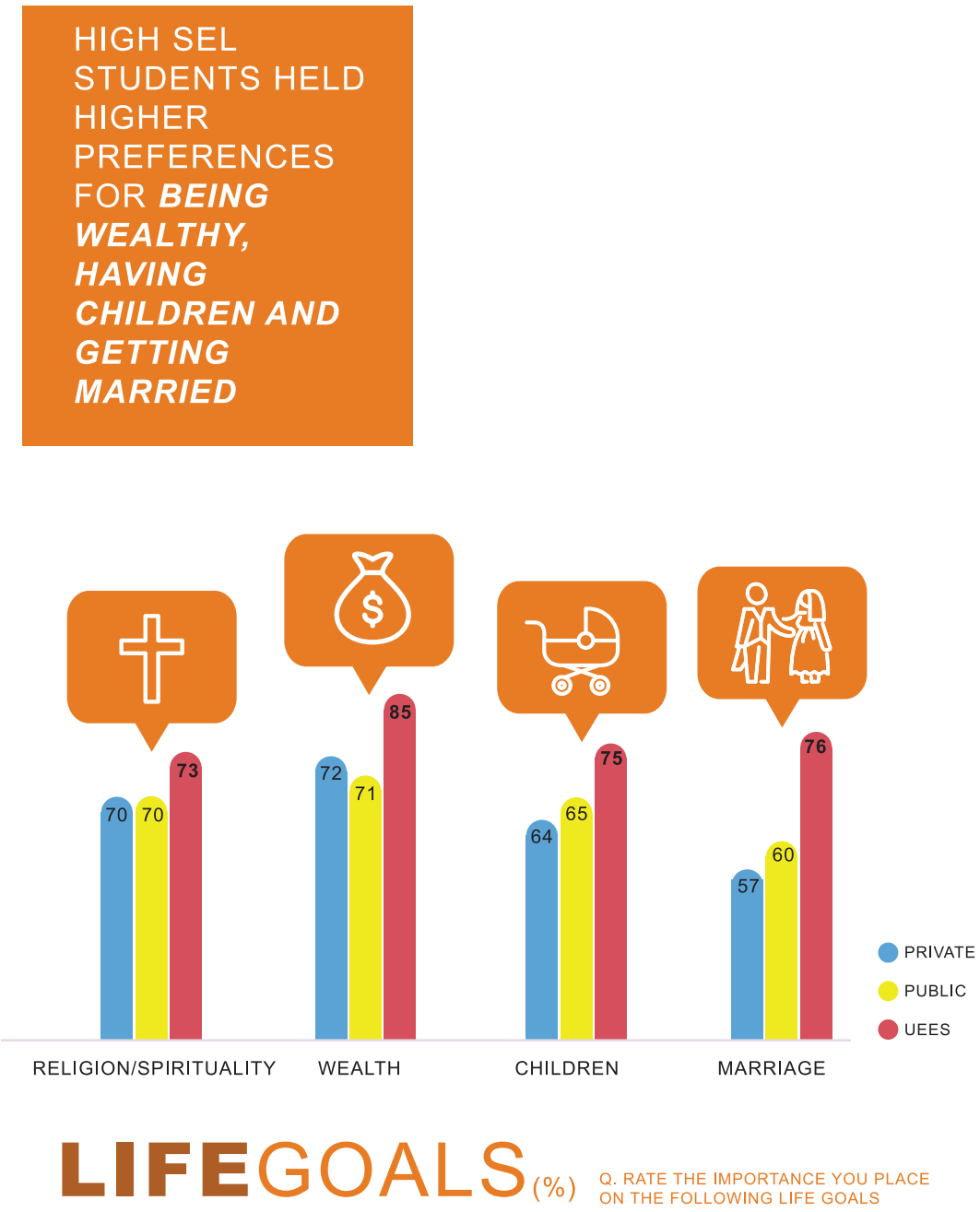


Figure 19. Life goal preferences by university group

Note. Responses are the sum of *moderately important*, *very important* and *essential.*

Religion/Spirituality = To have an active religious or spiritual life; Wealth = to be rich

Entrepreneurialism

All three groups had a high response for planning to start their own business (*Figure 20*). However, there is a slight difference, with UEES students being the highest, followed by private university students and then public university students. These results align along SEL rankings. This may be indicative of a relationship between SEL and entrepreneurialism, which was suggested by Welter (1990).

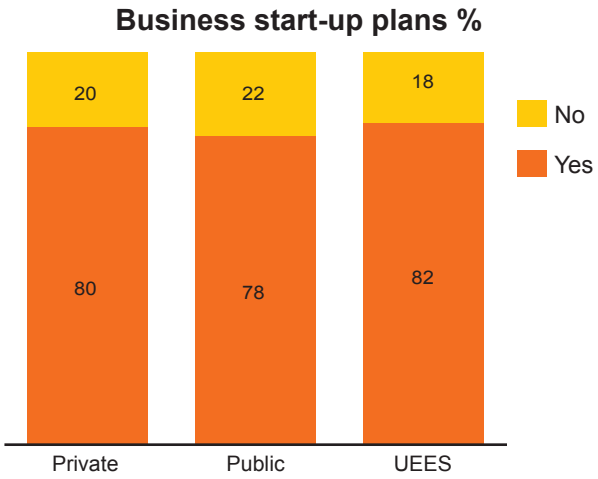
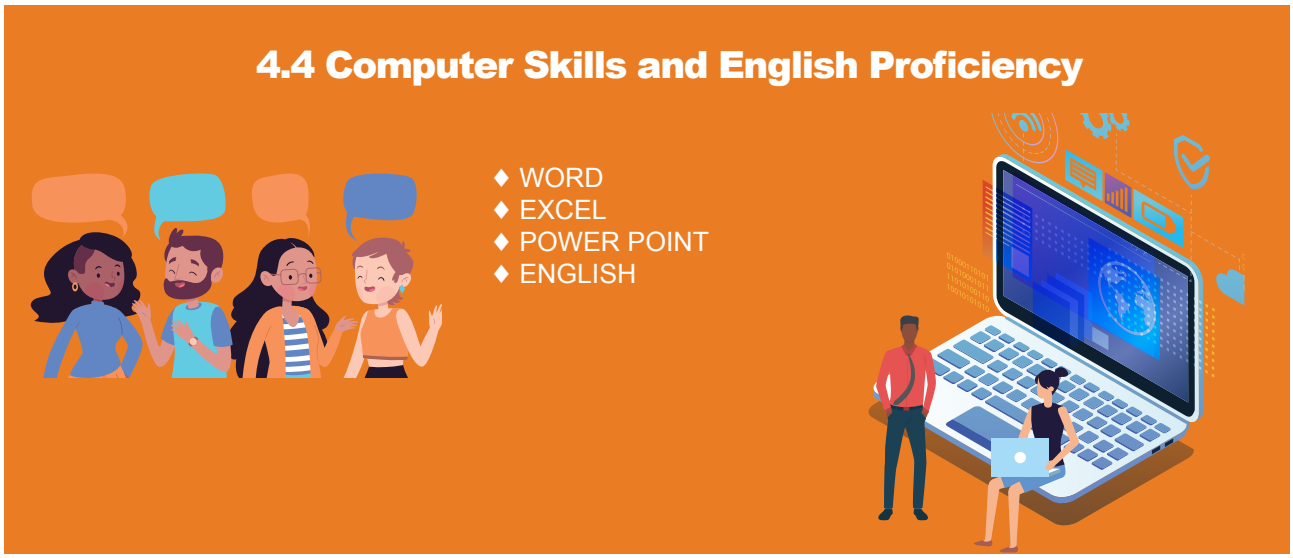


Figure 20. Plans to start their own business, by university group
Q. Do you have plans to start your own business?



Computer Skills

UEES students rated their Microsoft Word skills highest, with 74% stating *high* or *very high*. This was followed by private university students with 65% and then public university students with 60% (*Figure 21*). For Microsoft Excel, there were similar results across all three groups. UEES students had a slightly higher self-rating than private and public university students. Most students from all groups selected an *intermediate* level. In Power Point, UEES students had the highest self-rating, with 67% stating *high* or *very high*, followed by 56% of private and 51% of public university students.

UEES students have the highest self-rated skills in Microsoft Word, Excel and Power Point

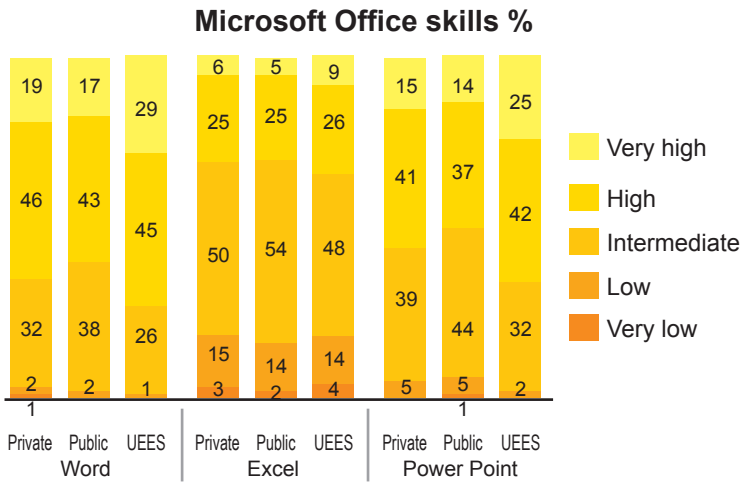


Figure 21. Skill level across the Microsoft applications of Word, Power Point and Excel by university group

Q. Rate your general computer skills.

English

There was a marked difference in self-rated English levels selected by each group (*Figure 22*). UEES students had a significantly higher selection for *advanced* and *upper intermediate* levels, with 69% of students. Private university students followed with 27% and then public university students with 17%. Public university students selected the lowest levels, with 52% stating *basic* or *lower intermediate*, compared to 41% of private university students and only 10% of UEES students.

UEES students rated their English level higher than private and public university students

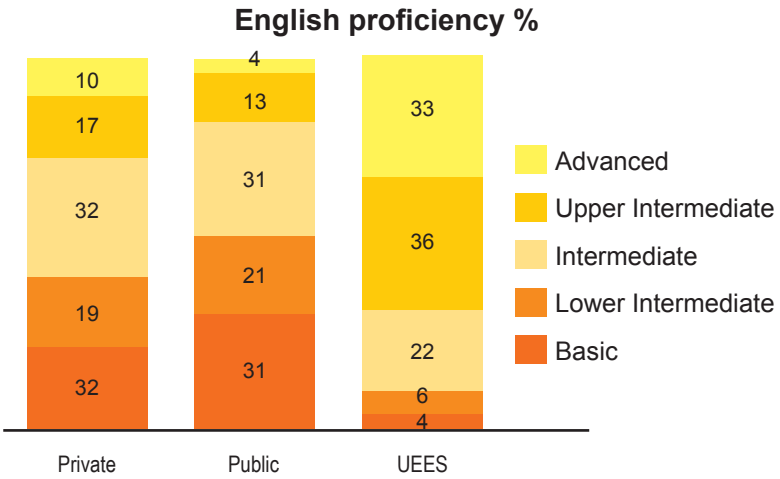


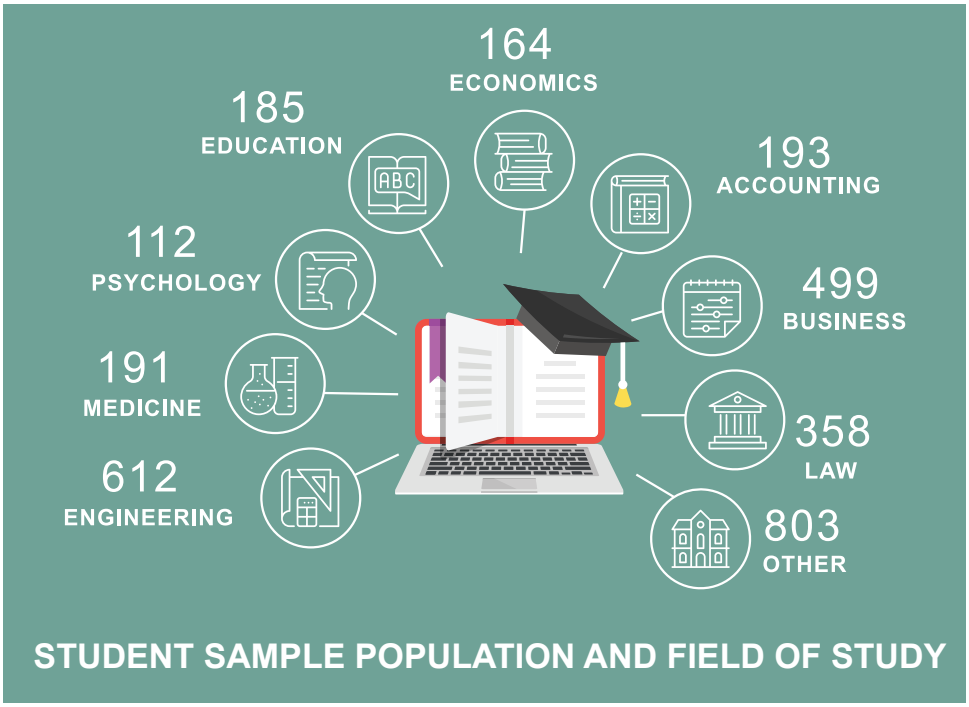
Figure 22. English level by university group

Q. What is your English level?

Chapter 5

Comparing Study Majors:

Engineering, Business, Law, Accounting, Medicine, Education, Economics, and Psychology



Many studies have reported that significant personality differences exist between groups from different academic majors (Vedal, 2016; Paulsen & Wells, 1998; Worthington & Higgs, 2003: 2004; Lounsbury, Smith, Levy, Leong, & Gibson, 2009; Wolk & Nikolai, 1997; Pike, 2006; Richter & Neumann, 2011; Kaufman, Pumaccahua, & Holt, 2013; Vedel, Thomsen, & Larsen, 2015; Pozzebon, Ashton, & Visser, 2013). Additionally, studies have demonstrated correlations between individuals personality types and their choice of career (Holland, 1985; Ackerman & Beier, 2003; Carless, 1999; Ehrhart & Makransky, 2007; Rosenbloom et al., 2008). This chapter aims to explore similarities and differences between students from different majors in Ecuador. First, a little background on relevant theories is discussed.

Holland's Theory

Dr Holland is one of the most recognised researchers into personality types and academic study majors and vocation. Holland´s theory states that when like-minded people work together they are more likely to get along and be more productive and creative. Additionally, Holland states that there are certain key traits that can be attributed to people from the same academic major and vocation. As such, people are most likely to be happier and better studying and working in an environment that is congruent to their personality type.

Holland developed a model of six personality types describing individuals and work environments (Holland, 1985). The six environmental dimensions are realistic (R), investigative (I), artistic (A), social (S), enterprising (E), and conventional (C) (Pike, 2006). Table 1 summarises each personality type. The theory supports the notion that people look for and flourish in work environments where there is a good match between their own characteristics and the characteristics of their occupation (Holland, 1996). This is supported by Ehrhart and Makransky (2007): "Vocational interests have been shown to predict individuals' occupational membership" (p. 208).

Table 1

Holland's Personality Types

Personality type	Characteristics	Academic disciplines included in each type
Realistic (R)	Prefer the use and manipulation of machines, objects and tools. Dislike educational and social activities. Sample occupations include auto mechanics, gardener, plumber and engineer.	Electrical engineer Mechanical engineer Design
Investigative (I)	Prefer exploration, understanding and prediction of biological, physical and cultural phenomena. Value science and technology and see themselves lacking in interpersonal skills. Sample occupations include college professors, physicians, psychologists, and chemists.	Finance Civil engineering Chemical engineering Pharmacy Economics Sociology General biology
Artistic (A)	Prefer artistic, literary and musical activities. They are non-conformists to establishment rules and have a desire for self-expression. Lack clerical and office skills. Sample occupations include lawyer, musician, architect and English teacher.	Arts English Language/literature Music Architecture
Social (S)	Prefer to teach and help others. They avoid mechanical and technical activities. Value social and educational service. Empathetic, helpful and understanding. They like to solve problems by discussing feelings and interaction with others. Sample occupations include nurse, social worker, and elementary school teacher.	Nursing Political science Psychology Social work Law enforcement Philosophy History Elementary education
Enterprising (E)	Prefer to persuade and direct others to obtain organisational and personal goals and economic gain. Avoid scientific and intellectual topics. They value political and economic achievements, power, leadership and status. They see themselves as confident, leaders and sociable. Sample occupations include realtor, sales manager and marketing executive.	Business administration Marketing Management Industrial engineering Communications Computer science Journalism
Conventional (C)	Prefer activities that manipulate data through orderly and systematic methods and routines. They avoid unstructured activities. They value material and financial accomplishments. They see themselves as conforming, orderly and methodological. Sample occupations include bookkeepers, accountants and bankers.	Accounting Secretarial duties

Note. Adapted from Pike (2006) and Rosenbloom et al. (2008).

Holland arranged the six personality types in a hexagonal shape. He suggests that the closer the personality types are to each other the greater the similarity, and the further the greater the differences. For example, R types are more similar to I and C types, and least similar to S types. E types are more similar to C and S types, and least compatible with I types. Pike (2006) confirms that students actively search for and choose majors that are compatible with their personality type. *Figure 1* depicts the hexagonal personality types.

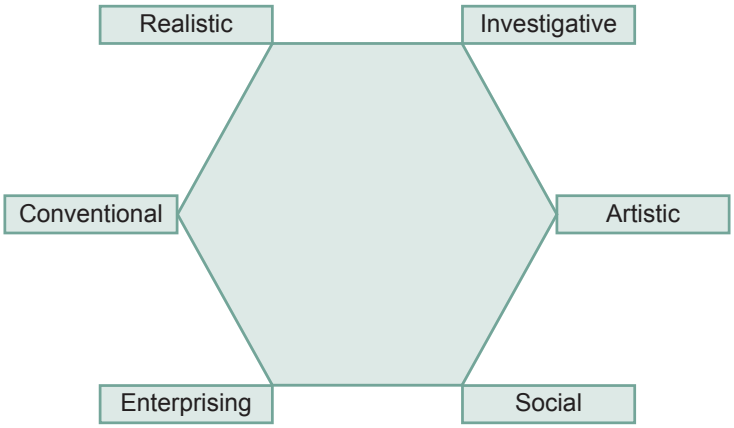


Figure 1. Holland's Hexagonal personality types

Note. Adapted from Pike (2006).

The Big Five Personality Traits

Holland's vocational theory (1985) has inspired an abundance of research on personality types and job fit as well as personality type and academic majors. From Holland, the b*ig five personality traits* have emerged: *neuroticism* (N) (sometimes called emotional stability) - the level of calmness and tranquillity, *extraversion* (E) - the level of sociability and enthusiasm, *openness* (O) - the level of creativity and curiosity, *agreeableness* (A) - the level of friendliness and kindness, and *conscientiousness* - the level of organisation and work ethic (Lounsbury et al., 2009). The value of identifying shared traits within a group includes the potential for employers to better understand graduate employees. Studies have tested personality types from across majors, careers and job positions, finding consistent differences. The classification of majors can be tricky, as there is debate over classifying and grouping majors, for the purpose of studying personality differences.

A number of studies have found that there are differences between personality types of students from different majors (Lounsbury et al., 2009). For example, the big five personality traits were tested among students from business majors and contrasted with students from other majors in Lounsbury et al. (2009). They found that business major students had a different score across all big five personality traits, in comparison to non-business students. Specifically, business major students scored higher on extraversion, conscientiousness, and emotional stability. They scored lower on agreeableness and openness.

Vedel (2016) looked at twelve studies that used the big five model with an aggregate sample of 13,389 students from different majors. He confirmed that personality differences do exist between groups. "On a general level, the studies found significant differences across academic majors in most big five personality traits" (Vedal, 2016, p. 3). Group differences were discovered across a number of majors including arts and humanities, psychology, economics, business, law, political science, medicine, sciences, and engineering. A summary of the group personality traits and the differences found in Vedel can be found in Table 2. In certain instances, a personality trait was found to be high or low. In other instances, Vedel only noted whether the trait was *higher* or *lower* compared to other majors. For example, in Table 2, arts and humanities students have a high N trait, a lower E trait, higher O and A traits, and a lower C trait compared to other majors.

Table 2

Summary of the Big Five Personality Traits and Groups of Majors

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Arts & Humanities	**High**	*Lower*	*Higher*	*Higher*	*Lower*
Psychology	**High**	*n/a*	*Higher*	*Higher*	*Higher*
Medicine	*n/a*	*High*	*n/a*	*Higher*	*Higher*
Economics	*Lower*	*n/a*	*Lower*	**Low**	*n/a*
Business	*Lower*	*n/a*	*n/a*	**Low**	*n/a*
Law	*Higher*	**High**	*Lower*	**Low**	*Higher*
Political science	*n/a*	**High**	*Higher*	*n/a*	*n/a*
Engineering	*Higher*	*n/a*	*Lower*	*n/a*	*Higher*

Note. Adapted from Vedel (2016, p. 7).

n/a stands for not assessed.

There is evidence that suggests people tend to choose to study different majors based on their gender. Vedel (2016) found some patterns in the big five personality traits and gender. Females had higher N, A and C traits than males. In terms of selection of majors, the study found that females were more likely than males to choose to major in psychology, while more males chose to study a major related to the hard sciences.

Adapted from Holland's theory, Ehrhart and Makransky (2007) and Rosenbloom et al. (2008) confirmed a clear correlation between people's personalities and their career choice. They found that individuals' personality types were useful predictors for their occupation choice based on environmental characteristics of the profession. For example, *realistic* (R) is positively correlated with IT careers (Rosenbloom, 2008). This can be useful for employers to test with their employees, as a higher job fit ratio is correlated to increased job satisfaction, higher retention and better productivity. In terms of the 2018 Millennial/Gen Z study, the results in this chapter may likewise serve as an indication of students' characteristics based on their affiliation to their major.

Pike (2006) found a connection between students' personality type and their intended major, based on Holland's theory. Biglan groups areas of study and majors based on categories of hard versus soft, and pure versus applied. Furthermore, he breaks down areas of study by life versus non-life fields. These are summarised in Table 3.

Table 3

Biglan's Classification of Disciplines

	Hard		Soft	
	Life	**Non-life**	**Life**	**Non-life**
Pure	Biology, Biochemistry, Genetics, Physiology, etc.	Mathematics, Physics, Chemistry, Geology, Astronomy, Oceanography, etc.	Psychology, Sociology, Anthropology, Political Science, Area Study, etc.	Linguistics, Literature, Communications, Creative Writing, Economics, Philosophy, Archaeology, History, Geography, etc.
Applied	Agriculture, Psychiatry, Medicine, Pharmacy, Dentistry, Horticulture, etc.	Civil Engineering, Telecommunication Engineering, Mechanical Engineering, Chemical Engineering, Electrical Engineering, Computer Science, etc.	Recreation, Arts, Education, Nursing, Conservation, Counselling, HR Management, etc.	Finance, Accounting, Banking, Marketing, Journalism, Library And Archival Science, Law, Architecture, Interior Design, Crafts, Arts, Dance, Music, etc.

Note. Adapted from Biglan (1973).

Sample Populations by Major

The majors that will be compared in this chapter are those where there was a minimum sample size of 100 students. The majors, in order of highest sample size to lowest are [8]engineering (612), business (499), Law (358), accounting (193), medicine[9] (191), education (185), economics (164), and psychology (112). The majors are listed in *Figure 2* (see Appendix F, Table F1 for the sample populations by major). The remaining 803 students were from other fields of study.

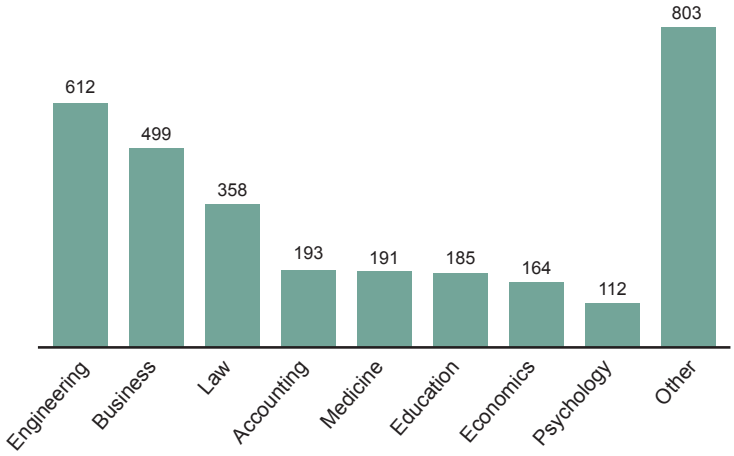


Figure 2. Sample size of each major

Note. From author's data.

SENESCYT provides records of some of the most popular university majors, by enrolment, in Ecuador. The most recent data was from 2016. The enrolment totals from most to least enrolled students were in the fields of business and law (33.4%), engineering, industry and construction (14.3%), health and well-being (14%), social sciences (11.5%), education (6.1%) and the rest made up 20.7%. Unfortunately, the majors are not listed individually, but grouped into categories. In order to provide a comparison of the 2018 sample population by majors, similar groupings of majors were conducted from the sample population (see appendix F, Table F2 for details of each group). Table 4 compares the national populations with the sample populations. The study field that deviated most in the sample population was engineering. In the sample population, the engineering field is overrepresented by 5.6%. The other fields of study are reasonably representative of the national enrolments, within 4.5% variance.

Table 4

Comparison of National Enrolments and Sample Population by Field of Study

Major groups	National population % (2016)	Sample population %	Variance %
Business and law	33.4	37.5	-4.1
Engineering	14.3	19.9	-5.6
Health and wellbeing	14	9.7	4.3
Social Sciences	11.5	10.6	0.9
Education	6.1	6	0.1
Other	20.7	16.2	4.5
Total	100	100	

Note. Adapted from SENESCYT (2018, p. 20). The SENESCYT classifications were listed as follows: Business administration and law; Engineering, industry and construction; Health and wellbeing; Social sciences, journalism and information; Education. A combination of minors were combined from the sample populations to equate with the national categories of fields of study (see Appendix F, Table F2).

[8] Engineering includes all the majors listed in Biglan`s classification of disciplines for Hard, non-life, applied. See Appendix F, Table F1 for the engineering types by number of students.

[9] Medicine includes medicine, odontology and veterinary students. See Appendix F, Table F1.

Limitations

Representation by universities.

From the 2018 sample population, some majors are less represented than others, with regards to the diversity of universities that students belong to, as summarised in *Figure 3* (see Appendix F for the universities and majors of the sample population). The most diverse sample populations, by number of universities, come from engineering and business, with at least six universities representing each sample population. Psychology and economics were slightly less represented by university variability, with four universities representing the majority of each sample. The least representative samples, by university number, are in the education, law, accounting and medicine majors. Here, the majority of students came from three universities.

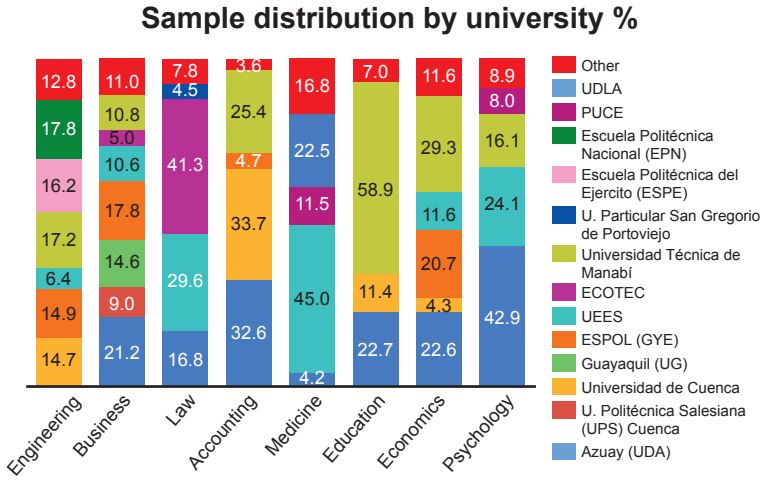


Figure 3. Sample populations of each major by university

Representation by province.

There was also a difference in sample populations and the provincial representation for each major (see *Figure 4*). The majors that were best represented by a mix of students from all four provinces were engineering, medicine, and psychology. Pichincha was underrepresented in a number of majors, with few students, including economics (3.7%), business (5.4%), law (2.2%), accounting (1%) and education (3.2%). Law had an overrepresentation of students from Guayas, with 62.3% of the sample. Accounting was overrepresented by students from Azuay, with 58% of the sample. Finally, education was overrepresented by students from Manabí, with 51.1% of the sample.

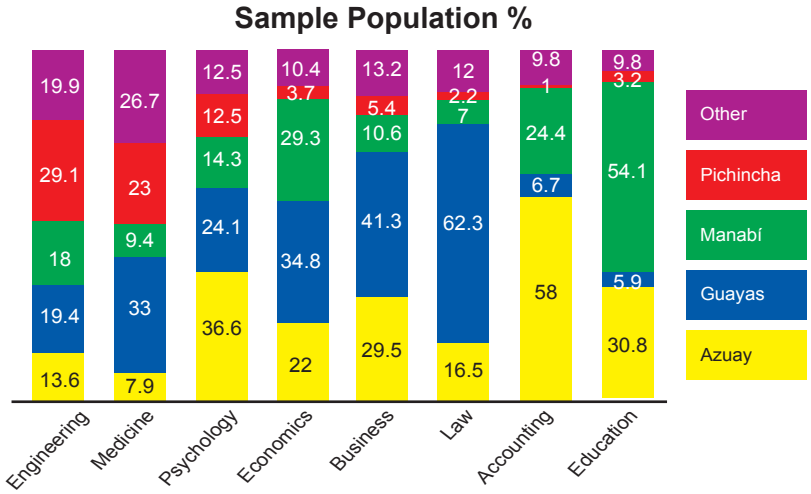


Figure 4. Sample populations of each major by home province

Q. In which province have you spent most of your life in?

Representation by university type.

Regarding the sample populations of each major and the university type, public or private, there were some differences (see *Figure 5*). A more representative mix, of both public and private university students, was found in economics, business and accounting. Public university students were overrepresented in a number of majors, including education (71%) and engineering (85%). On the other end, private university students were overrepresented in a number of majors, including psychology (79%), medicine (88%) and law (97%).

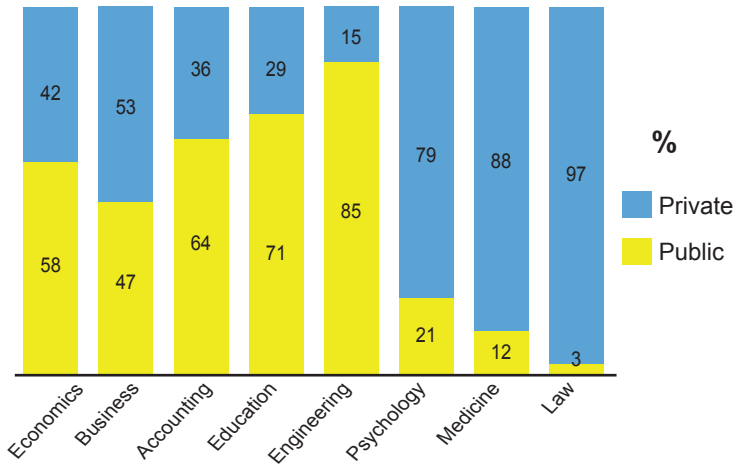


Figure 5. Sample populations of each major from public and private universities

Representation by gender.

In Ecuador, there is a majority of females enrolled in a number of fields of study. According to SENESCYT (2015), females outnumbered males in the fields of business administration and law, education, health and wellbeing and social sciences. The only field of study where males outnumbered females was engineering (*Figure 6*). The sample population of Ecuadorian students supports this (*Figure 7*). Hence, some differences in results between majors may be in part attributed to gender differences, as discussed in Chapter 2 (see Appendix F, Table F4 for details of gender by majors).

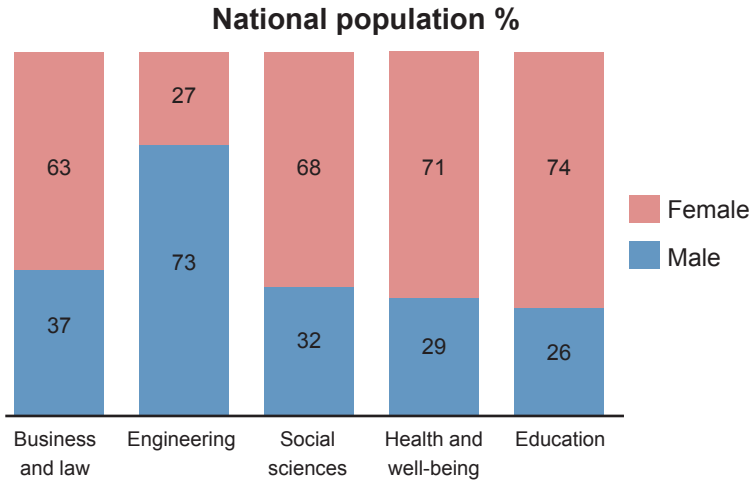


Figure 6. Gender by field of study - National enrolment

Note. Adapted from SENESCYT (2015).

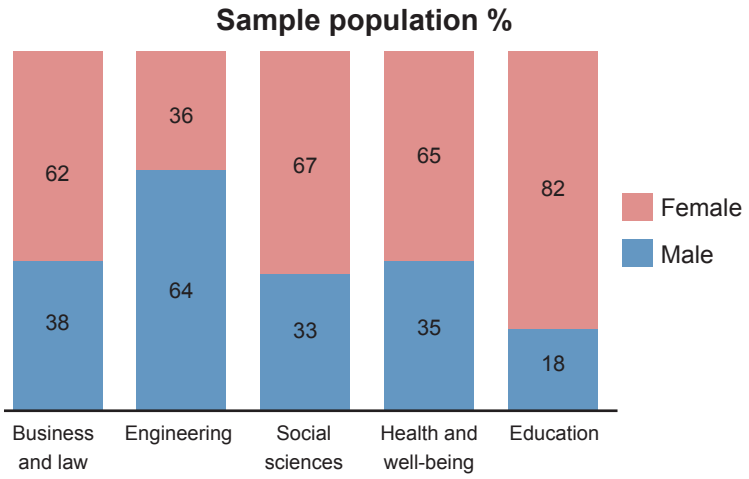


Figure 7. Gender by field of study - sample population

Note. Law enrolment is 58% female and 42% male; business enrolment is 63% female and 37% male. Adapted from author's results from 2018 survey.

The results in this chapter have clear limitations, as the differences that emerge between students from each major will certainly be due in some part to other factors including gender differences (Chapter 2), provincial differences (Chapter 3) and university group/SEL differences (Chapter 4). Nevertheless, as there is scarce data on personality differences by major in Ecuador, it is worth considering. This chapter is exploratory and is limited to mainly descriptive analysis. Further research is welcomed to explore the results in this chapter.

Results of the 2018 National Millennial/Gen Z Survey – By major

Work Status

From the 2018 sample population, employment status can be seen for students from each major (*Figure 8*). The majors that had the highest *not working* population can be seen from right to left. Students that major in business have the lowest non-working status with 61.9%. This is followed by law, 65%; engineering, 71.4%; accounting, 72%; economics, 74.4%; education, 75.7%; psychology, 79.5%; and medicine, 84.8%, majors. In terms of students that work for a family business, business (12.6%), economics (11%) and law (10.3) majors represent the highest percentages.

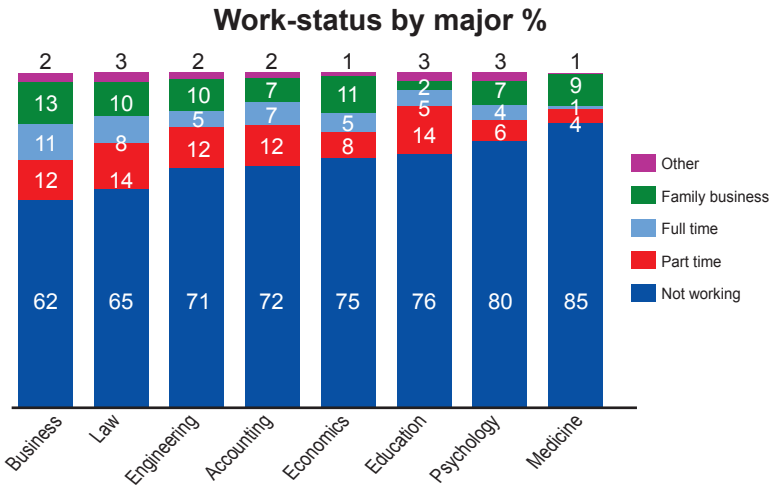


Figure 8. Work status by major

Q. What is your current work status?

Reaching Millennials/Gen Z by Major

There was some variety in the methods and preferences students, from the eight majors, chose for how they would search for full time work, as seen in *Figure 9*. The data here is not particularly useful for the purpose of comparisons. Rather, this data can be used to advise employers from different departments and industries about how best to advertise positions to targeted students. Having said that, there are some visible differences amongst Ecuadorian students from different majors regarding how they would look for a full time position. Some notable differences include law students having a higher preference for *friends and family* than other groups; education students, by contrast, have a higher preference for *employment agencies* and *newspapers* and a lower preference for *company websites* than other groups.

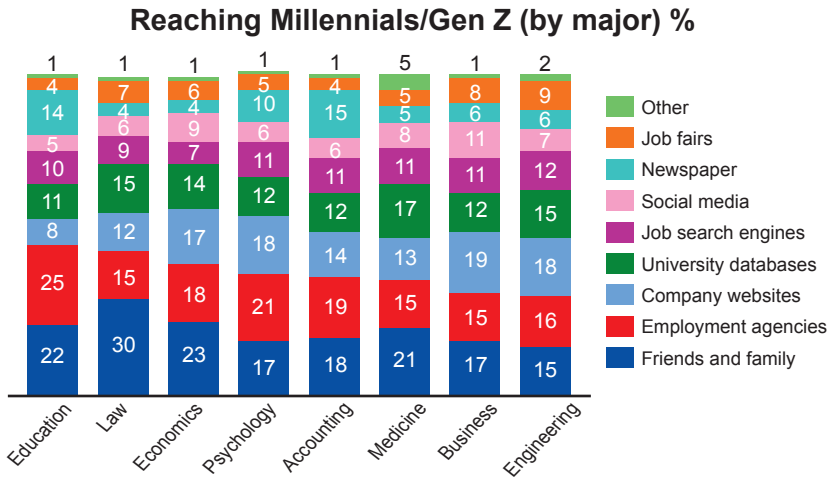


Figure 9. The methods Millennials/Gen Zers, by major, would use to search for a full time job
Q. How would you look for a full time job? Select 2 options.

5.1 Workplace Preferences and Attitudes

- JOB SECTOR
- MOBILITY
- WORKPLACE PREFERENCES
- SALARY EXPECTATIONS
- OVERTIME
- PROMOTION
- RESIGNATION

Preferred Job Sector

From *Figure 10*, it can be observed that business and engineering students had the highest preference to work for a *multinational corporation*. On the lower levels, education, medicine and psychology students did not have a high preference for *multinationals*. As expected, education students chose education overwhelmingly, with 64% of respondents. Law, economics and accounting students had a higher choice for the public sector than the other groups of students. Medicine and psychology students had a higher response for *other,* most likely in part due to the lack of a listed option for the healthcare industry. Also, medicine and psychology students had the highest preference for *NGOs*, compared to the other groups of students. For the preference to work for a *family business*, medicine students had the highest response with 20%, followed by business students at 16%.

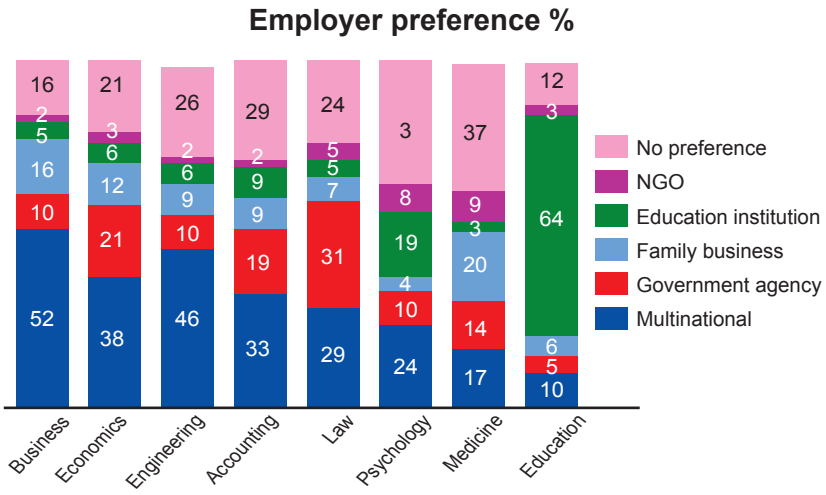


Figure 10. The organisational type or sector students, by major, would like to work in

Q. From the following list, select the type of organisation that you would most like to work for.

Employment Mobility

The main difference for job mobility can be seen by students from economics and engineering, which have a slightly higher willingness to move cities for a job (*Figure 11*). 7% of economics students said *certainly not* or *probably not*, and 10% of engineering students had these responses. On the other hand, students from the other six majors had a similar negative response, ranging from between 15% and 18% for not being willing to move cities.

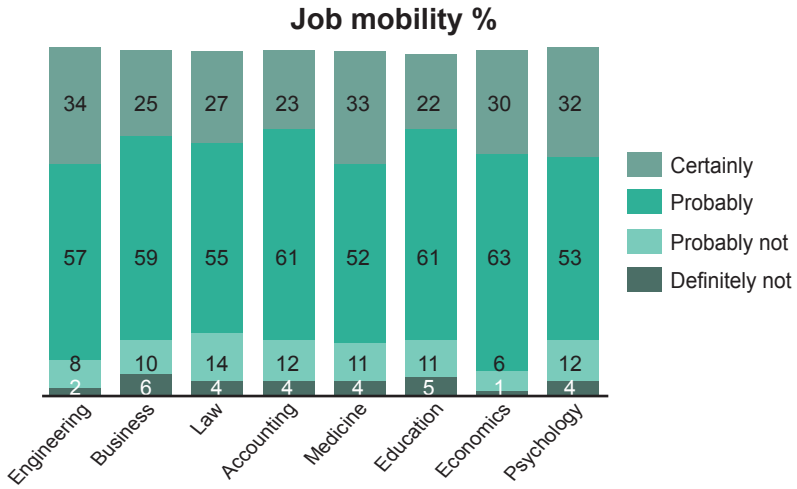


Figure 11. The percentage of students, by major, that are willing to move cities for work

Q. Would you be willing to change cities for a better job?

Workplace Preferences

There are a number of significant differences among students from different majors regarding workplace preferences, especially for the lowest rated four workplace preferences listed in Figure 12. To begin with, *private healthcare* was most preferred by students from psychology, medicine, education and engineering. *Promotional opportunity* was most preferred by engineering and economics students and least by law and accounting students. Psychology, education and medicine students gave the highest importance for working for *an organisation that helps the community (CSR)*. Finally, *flexible hours* were more important to students from accounting, education and economics.

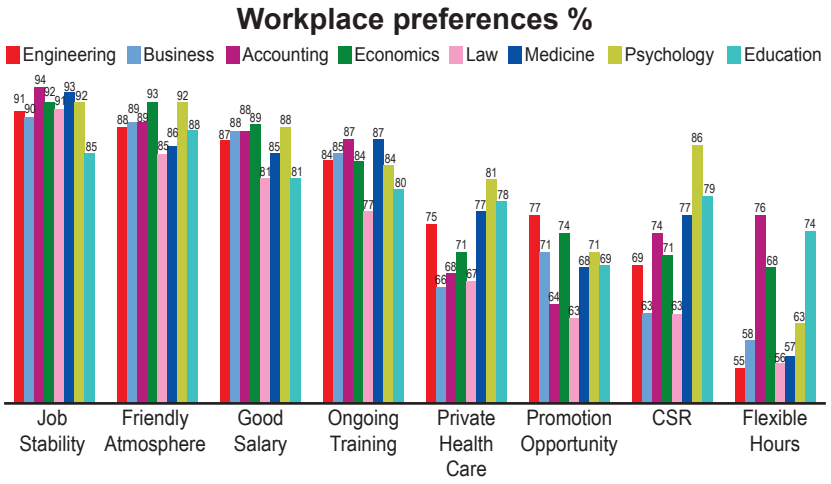


Figure 12. Comparison for the importance students, by major, place on workplace preferences

Q. Rate the importance you give to the following work factors.

Note. Responses are an accumulation of *very important* and *essential* from each field of study.

Salary Expectations

It can be noted that students from different majors have varied expectations of a starting salary in their field of work. The lowest to highest expectations, high being $800 or above, by major, can be seen by the trend from left to right in *Figure 13*. The highest salary expectation was held by medicine students, followed by engineering and then economics students. The other four majors had a lower starting salary expectation, with accounting being the lowest. Regarding the top brackets selected, $1200 to $1600 and more than $1600, the order from highest to lowest responses are medicine (38%), economics and engineering (22%), law (16%), psychology (13%), education (12%), business (10%), and accounting (3%).

MEDICAL AND ENGINEERING STUDENTS HAVE ***THE HIGHEST STARTING*** SALARY EXPECTATIONS

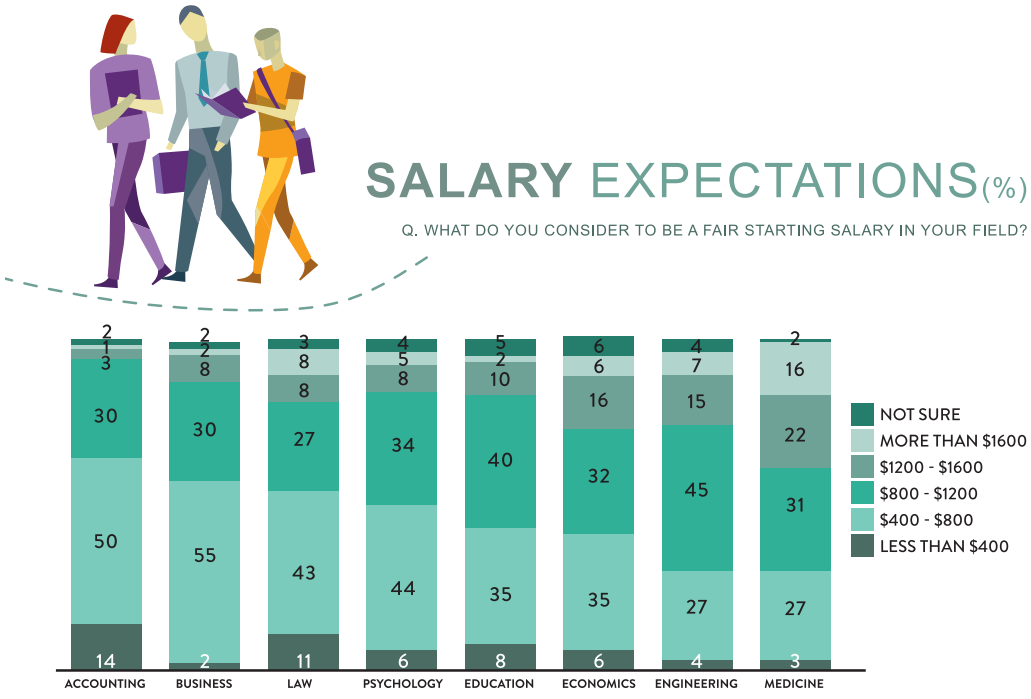


Figure 13. Expected starting salary by Millennials/Gen Z by major

Voluntary Overtime

As seen in Figure 14, the most notable differences between the eight majors and their willingness to work overtime for free can be seen for education, accounting and business. Students from these majors were the least willing to work extra time for free.

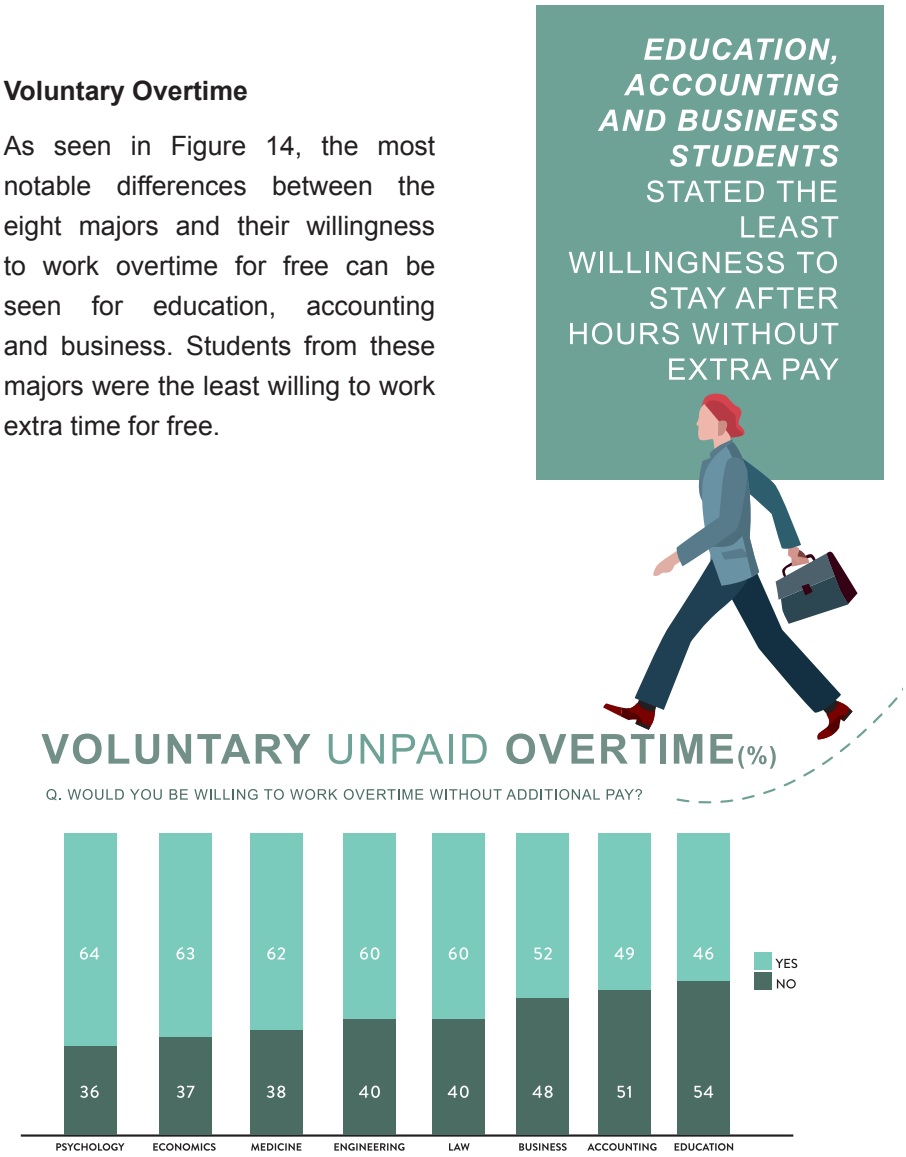


Figure 14. Comparison of students from different majors and their responses to voluntarily work extra hours for no additional pay

In *Figure 15*, it can be seen that among students who stated they were willing to work overtime for free, the groups that offered the longest hours per day are from psychology, law, engineering and medicine. The students that were willing to work the least hours a day unpaid come from education, accounting, business and economics.

Psychology, law, engineering and medicine students stated that they are willing to work the longest hours for no extra pay

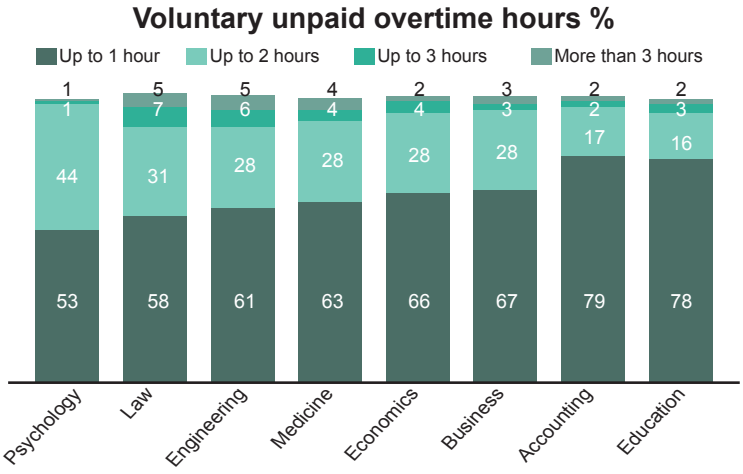


Figure 15. Students from different majors and the number of unpaid hours they are willing to work per day

Q. Would you be willing to work overtime without additional pay?

Note. Five responses were offered. No; yes, up to 1 hour daily; yes, up to 2 hours daily; yes, up to 3 hours daily; yes, more than 3 hours daily. This chart shows those that responded with an affirmative option only.

Promotion Expectations

There are slight differences for expected promotion time (the time period within which first promotion is expected after starting a new job) based on the major students are enrolled in. In *Figure 16*, from left to right, the trend shows a steady decrease in expected promotion time. Psychology and law students had the highest expectation of swift promotion, with 67% and 62% respectively stating they expected to be promoted within one year after starting a new job. On the opposite end, 48% of economics and 52% of medicine students chose this same period.

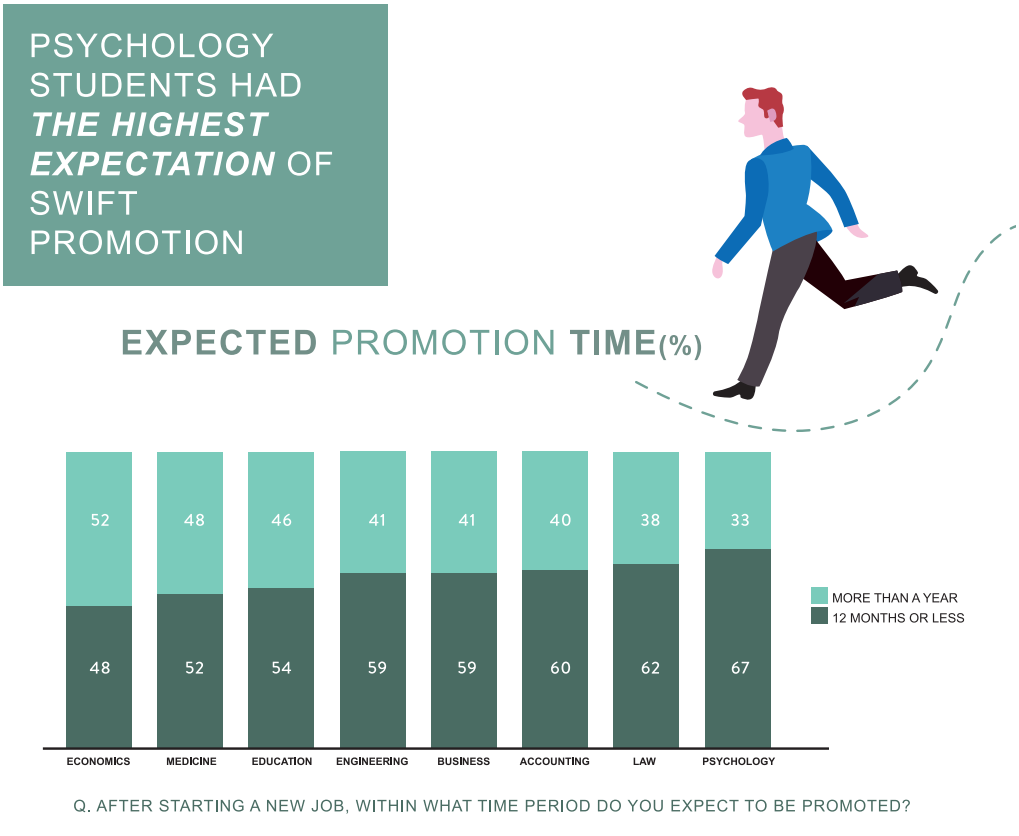


Figure 16. The time period Millennials/Gen Z, by major, expect to be promoted after starting a new job

Resignation Notice

It can be seen from *Figure 17* that students from the medical and law fields were the least willing to wait long periods before resigning from a job they do not like, with 77% and 73% respectively giving a waiting period no longer than six months. In contrast, 65% of engineering students, and 68% of business students chose the same period.

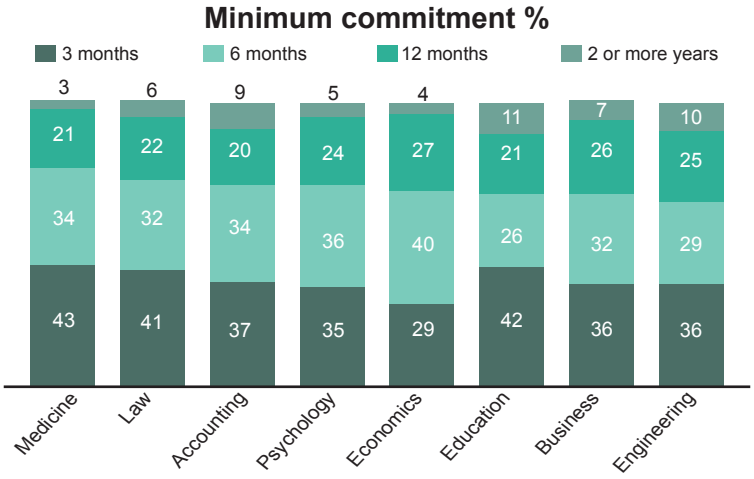


Figure 17. Period that students, by major, would wait before resigning from a job

Q. If you do not like your job (current/future), how long would you wait before resigning?

5.2 General Personality

- POWER DISTANCE
- INDIVIDUALISM
- WORK-LIFE BALANCE
- ECONOMIC OPTIMISM

Power Distance

In *Figure 18*, the more formal groups of students, in terms of respecting hierarchical differences, can be seen on the left end of the table. The majors with the highest responses for addressing a superior by their title were medicine (91.3%), accounting (90.7%), engineering (86.8%) and law (85.1%). The majors with the lower responses for addressing a superior by their title were psychology (61.3%), education (71.9%), business (72.5%) and economics (80.9%).

Accounting, medicine, engineering and law students seem to be the most formal of the eight majors

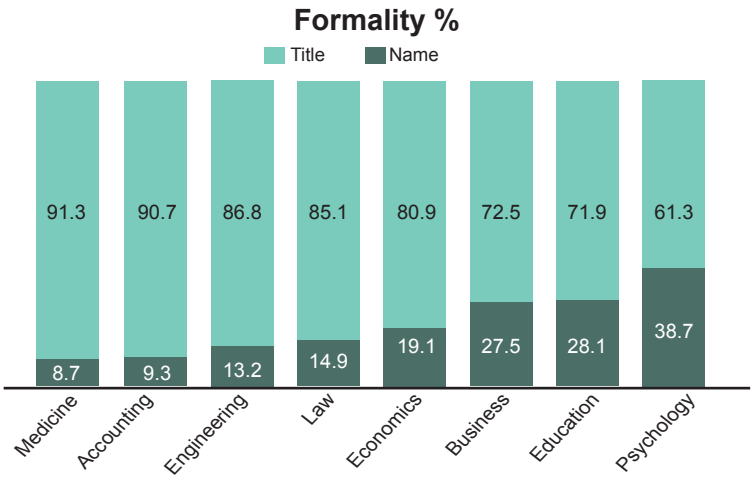


Figure 18. The percentage of students, by major, that would address a superior by their title

Q. How would you usually address a superior? By their name; by their title, for example, Engineer, Doctor etc.

Individualism

From *Figure 19*, it can be seen that students from law, psychology, medicine and education had the highest responses for working better alone, rather than in groups. On the other hand, engineering, economics, business and accounting students had a lower preference for working alone.

In a comparative study in Romania, Generation Z students from the economic sciences field of study seemed to have a similar preference for group work to economics students in Ecuador. 47.7% of Romanian students sampled preferred teamwork and working in open spaces versus working independently and in a private office (Iorgulescu, 2016). This is similar to the results for economics students in Ecuador, whom 48% stated a preference for group work.

LAW, PSYCHOLOGY AND MEDICINE STUDENTS ARE ***THE MOST INDIVIDUALLY ORIENTED*** WITH WORK TASKS

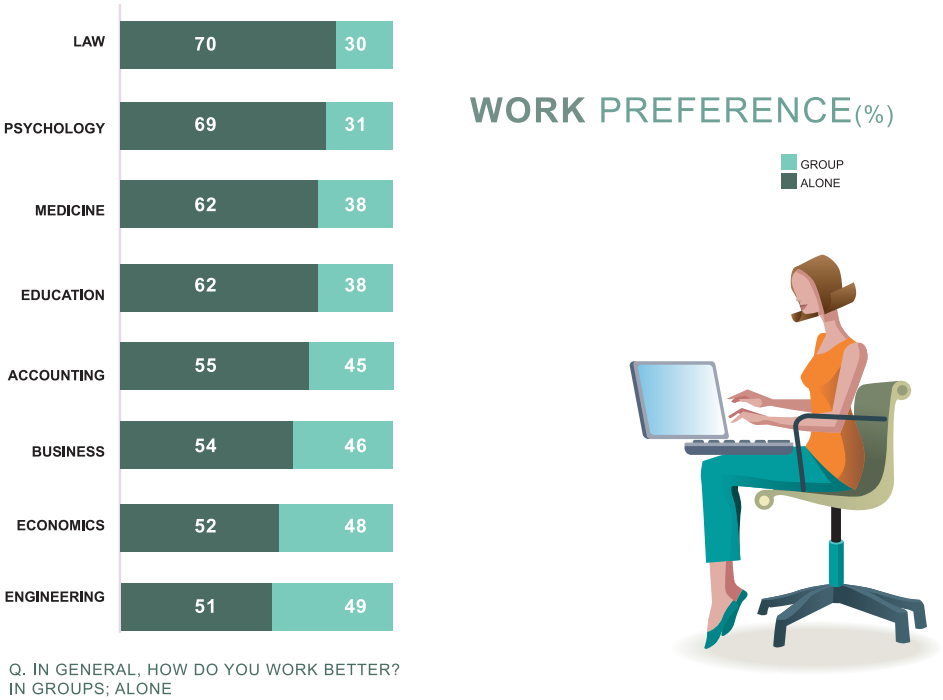


Figure 19. Percentage of Millennials/Gen Z, by field of study, that work better in groups versus alone

Work-life Balance

Notable differences are observable in students' willingness to quit a well-paid job to have more personal time, as seen in *Figure 20*. Students from education, psychology, economics and medicine had the highest response rate in favour of personal time over work. Students from law, business, engineering and accounting had a higher response rate in favour of work.

Education, psychology, economics and medicine students chose the highest priority for personal time over work

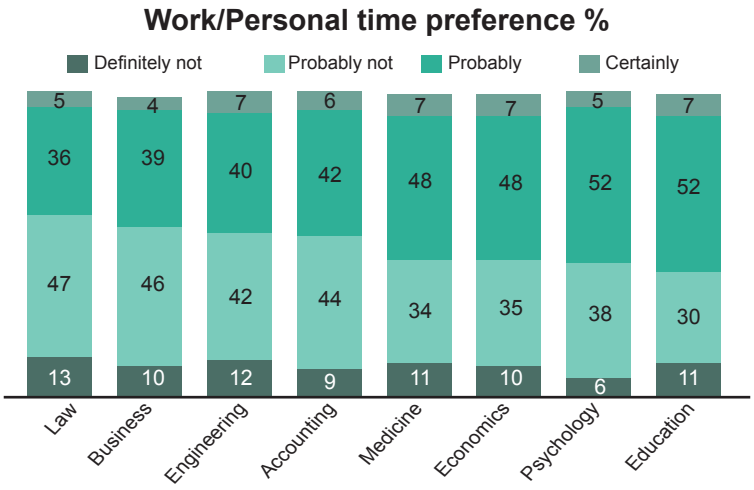


Figure 20. The attitude of students towards work and their personal life by major
Q. Would you give up a well-paid job to have more time for your personal life?

Economic Optimism

From *Figure 21*, it can be seen that, in general, students are pessimistic about the economic outlook. Accounting students seem to be the most pessimistic towards the outlook of the economy, with 58% stating either *much worse* or *slightly worse*. Regarding the pessimistic responses for the other majors, they added up to 47% for medicine, 44% for education, 43% for engineering, 40% for law, 39% for psychology, 33% for economics and 32% for business. On the other hand, economics students were the most optimistic about the economy over the next two years, with 34% stating that it will be either *much better* or *slightly better*. Business (27%), law (27%), psychology (26%) and engineering (26%) students had similar optimistic responses, between 26% and 27%.

Economics and business students seem to be the most optimistic over the economy

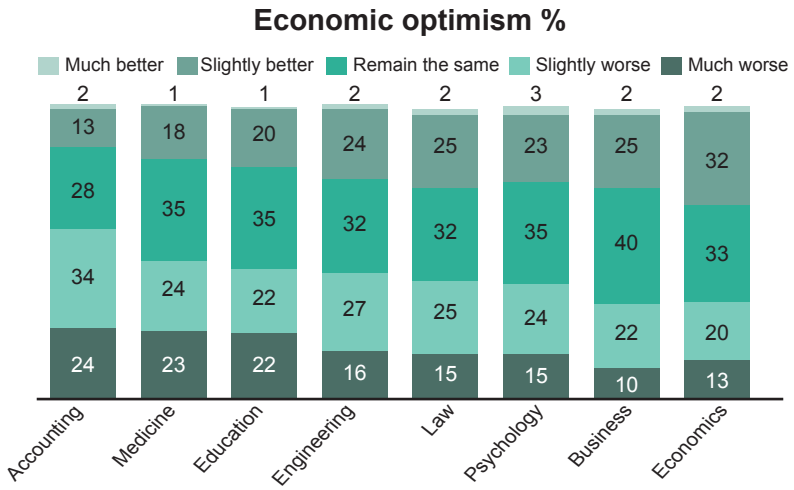


Figure 21. Percentage of Millennials/Gen Z, by major, that expect the economic situation to improve/get worse
Q. What do you expect the general economic situation of Ecuador to be like over the next 2 years?

5.3 Life Goals and Priorities

- LIFE GOALS
- POSTGRADUATE STUDY
- ENTREPRENEURIALISM

Life goals

From *Figure 22* it can be seen that the main differences for life goals across majors are for responses related to an *active social life*, *wealth*, *religion/spirituality, children* and *marriage*. The results show combined responses for *moderately important*, *very important* and *essential*.

Active social life.

Starting with an active social life, medicine students stand out with a lower importance response than the other majors; 84% of medicine students stated this was either *moderately important, very important* or *essential,* compared to a range between 89% and 92% for all other majors.

Wealth.

For the life goal of being wealthy, between 74% and 77% of students from most majors answered *moderately important, very important* or *essential*. The students from law had the highest response with 82%, while on the lower end were education (63%) and accounting (60%) students.

Religion/Spirituality.

Having a *religious/spiritual* life was most important to education (85%) and accounting (80%) students, whereas law (67%) and engineering (64%) students recorded the lowest preference; the other majors' responses ranged between 72% and 73%.

Children.

For having *children*, students from education (76%) and accounting (74%) had the highest preference, and students from medicine (64%) and engineering (63%) had the lowest stated preferences; the responses from the other majors ranged from 68% to 71%.

Marriage.

Finally, for *marriage*, education students had the highest stated preference with 70% of students selecting either *moderately important, very important* or *essential*, while medicine (60%) and engineering (58%) students had the lowest responses; the range for the other majors vary between 63% and 65%.

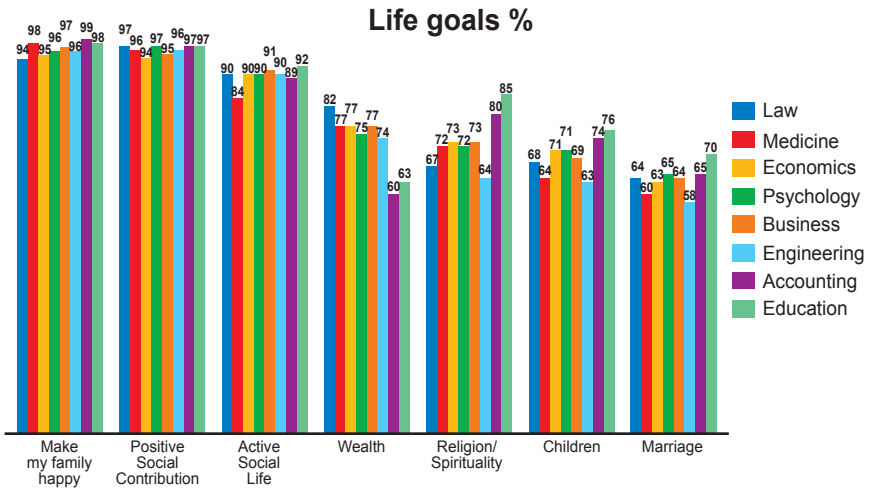


Figure 22. Breakdown of the importance students, by major, placed on a list of life factors

Q. Rate the importance you place on the following life goals.

Note. The aggregate percentage of responses for *moderately important, very important and essential* given by students of each field of study.

Positive social contribution = Make a positive contribution to society; Religion/Spirituality = To have an active religious or spiritual life; Wealth = to be rich

Postgraduate Study

Students from all majors overwhelmingly stated that they intend to undertake postgraduate study (*Figure 23*). However, there is a minority of 7% of students from accounting, 6% from engineering, 5% from education, 4% from business and economics, 3% from medicine and 2% from law that do not plan on doing so.100% of psychology students intend to continue studying.

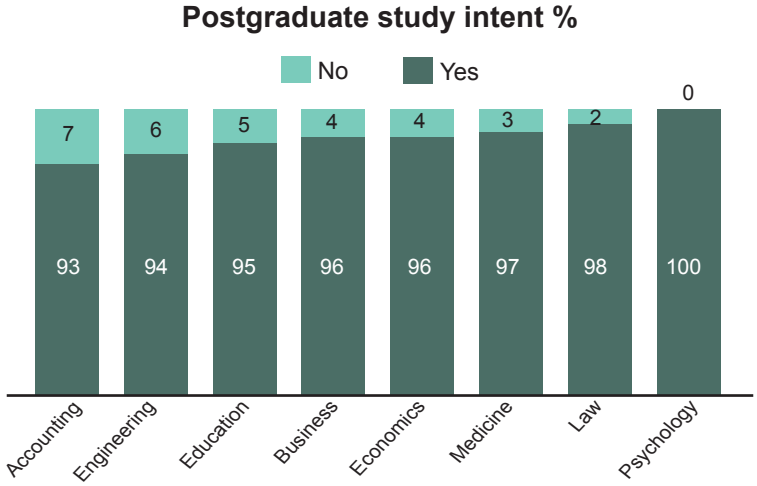


Figure 23. Percentage of Millennials/Gen Z, by major, that expect to continue with postgraduate study

Q. Do you intend to study a post graduate degree? (Masters, Ph.D).

Entrepreneurialism

From *Figure 24*, it can be seen that business (89%) and accounting (84%) students had a more defined intention to start their own business, compared to students from other areas. On the lower end, students from education (76%), law (76%), engineering (79%), economics (80%), medicine (80%) and psychology (81%) were less likely to want to start their own business.

Business students had the highest response for planning to start their own business

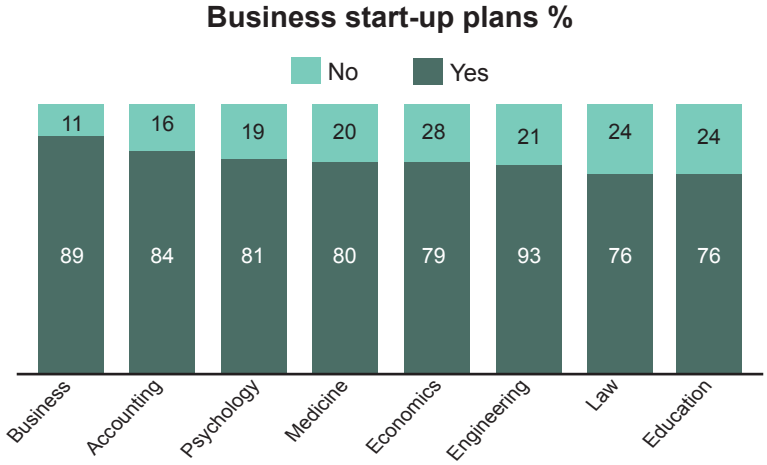
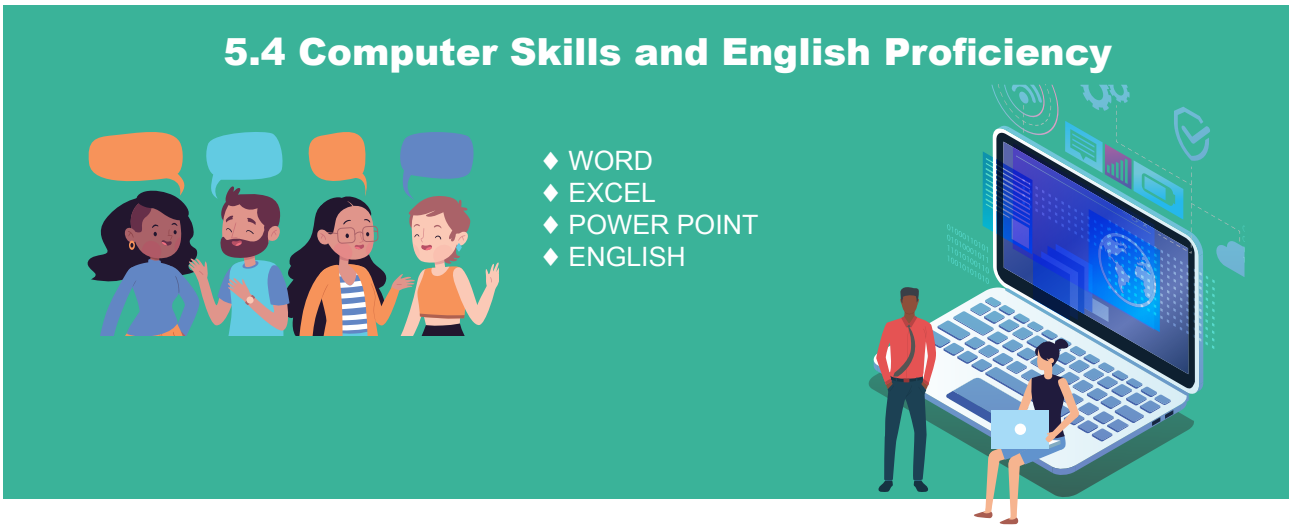


Figure 24. Percentage of Millennials/Gen Z, by major, that plan to start their own business

Q. Do you have plans to start your own business?



Computer Skills

Word.

Regarding Microsoft Word skills, there are notable differences in self-evaluated skill levels across majors, as seen in *Figure 25*. The highest self-ratings came from 74% of medicine, 71% of psychology, 68% of economics and 66% of engineering students, stating that they had a *high* or *very high* level. This is compared to the lowest self-ratings by students from education (50%), accounting (53%), business (59%) and law (64%).

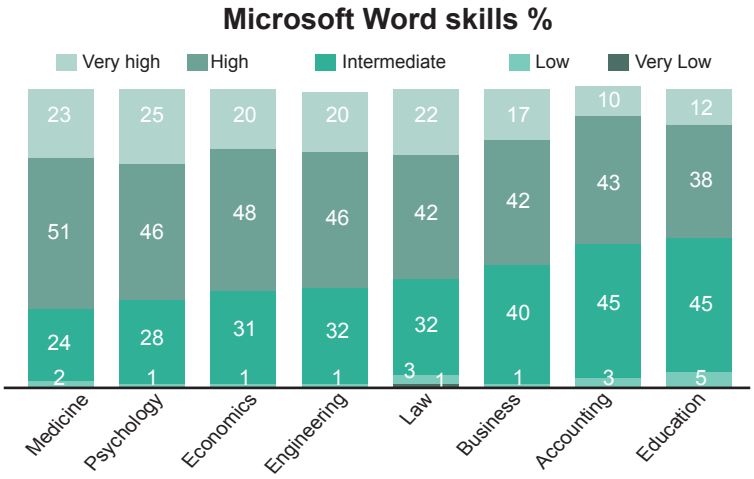


Figure 25. Skill level for Microsoft Word by major

Q. Rate your general computer skills: Microsoft Word.

Excel.

There are more students that had difficulty with Microsoft Excel than the other applications (Figure 26). Here, most students from all fields selected an *intermediate* level. With regards to the higher end of students that selected *high* or *very high*, 44% of economics, 41% of accounting, and 40% of engineering students selected these options. On the lower scale were business (33%), medicine (29%), psychology (24%), law (24%) and education (17%) students.

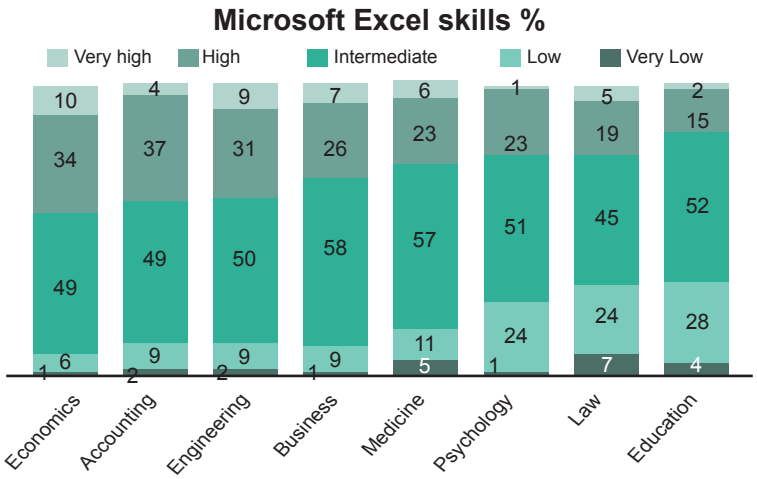


Figure 26. Skill level for Microsoft Excel by major

Q. Rate your general computer skills: Microsoft Excel.

Power Point.

Figure 27 shows that when it comes to Power Point, Psychology, medicine and engineering students had the highest self-rating, with 67%, 65% and 59% selecting *high* or *very high*. The students that selected the lowest levels of *high* or *very high* were business (52%), economics (51%), law (51%), accounting (44%) and education (38%) majors.

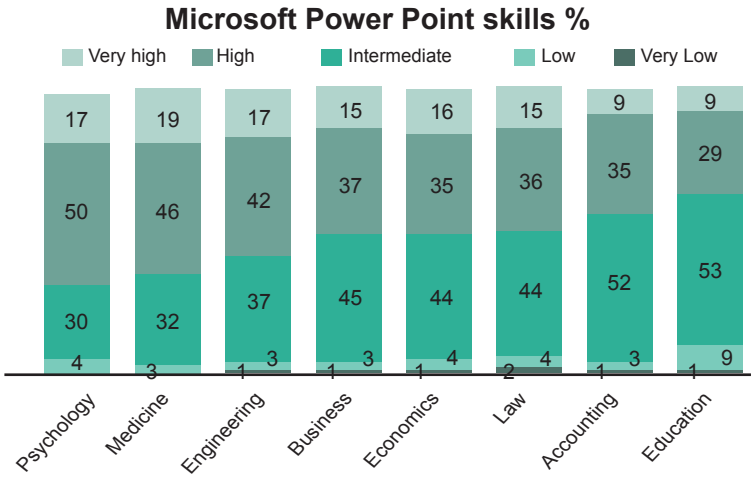


Figure 27. Skill level for Microsoft Power Point by major

Q. Rate your general computer skills: Microsoft Power Point.

English

Figure 28 shows the self-ratings of students across majors for their English level. The top three self-rated majors for English level were Law (43%), medicine (39%) and economics (36%) stating *upper intermediate* or *advanced*. Psychology students had the next highest self-rating with 30% of students stating these levels. The other four majors were clearly lower in their self-ratings for English levels. For the levels *lower intermediate* or *basic*, 41% of business, 44% of engineering, 69% of accounting and 71% of education students selected these levels.

Education and accounting students had the lowest self-rated English level

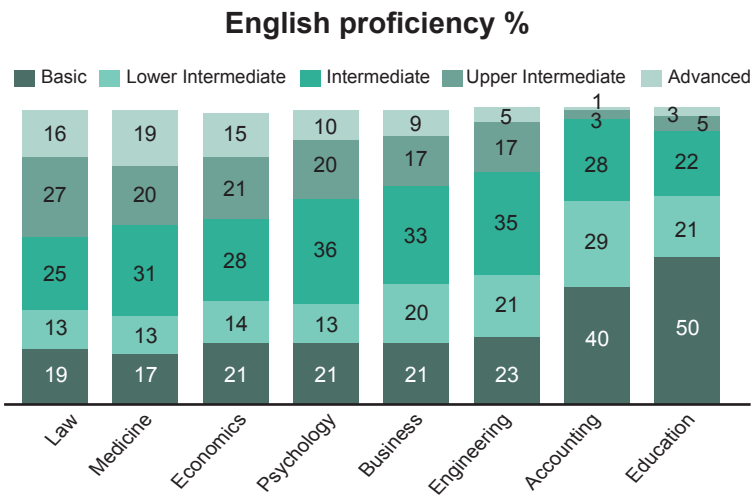


Figure 28. English level by major

Q. What is your English level?

Chapter 6

Global Leadership Skills and University Students in Ecuador

By Isidro Fierro

Dean of the School of International Studies

Universidad de Especialidades Espíritu Santo (UEES)

2012 to present

As the current dean of the School of International Studies, at UEES, I have experience in dealing with the supply and demand sides of human resources. By interacting with and managing university students, I have first-hand knowledge of their capabilities and desires for transitioning from university to the professional workplace. On the other hand, as a dean of a staff of over a dozen professionals, I have the experience of going through the process of hiring, training and maintaining staff. In recent years, Millennials and Generation Z students have dominated the student body of the university. In terms of the teaching and administrative staff I manage, there are a number of Millennials that have come through the faculty.

Tusev`s study, in this book, addresses a large gap in existing literature regarding Millennials and Generation Z in Ecuador, that generation of university students who are currently transitioning into the workplace. Understanding how they think and what they value is critical, as they will form the future talent and leaders of the country. The chapters in this book provide indispensable information for human resources departments, which can be adapted to help managers in the areas mentioned by Tusev: recruitment, training and retaining Millennial and Generation Z talent.

In the academic and professional environment, Ecuador has been dealing with the profound changes that technology has brought about in recent decades, similar to the changes that have affected countries around the world. Thus, the youth of Ecuador have been inundated with online resources, electronic gadgets and social media. Due to the international reach of these tools, they are more engaged with what occurs beyond the borders of Ecuador, empowering them to better interact with foreign cultures and work practices.

Global Leadership and Intercultural Competence

In a globalised world, global leadership skills are becoming essential for individuals, especially in the professional workplace. Through higher education institutions, Ecuador is beginning to prepare its future professionals with the tools needed to deal with the effects of globalisation. The synergy between government, private companies and universities is essential to equip young professionals with the global leadership skills required to compete in an increasingly complex business environment.

The central aim of this chapter is to address the concepts of global leadership and intercultural competence in the context of higher education. First, this will be done by defining the concepts of global leadership and intercultural competences. Next, the role of higher education will be touched on. Finally, the case of UEES will be discussed to demonstrate how Ecuador is pursuing the concepts of global leadership in its higher education institutions, through policies, teaching methods, and student interaction.

Today, organisations face many challenges in a highly competitive and globalised world (Irigoytia, 2017). Understanding international interaction is essential for multinational organisations to work effectively in today's environments (Jokinen, 2005). As a result, leaders of multinational organisations need to be prepared to manage intercultural competences through global leadership (García-Morato, 2012).

Organisations need to interpret the conditions globalisation presents, and position themselves within a global context, including the ability to generate global leadership talent. One of the main dilemmas for organisations to enter foreign markets is their lack of preparedness to face globalised competition (Puerto Becerra, 2010). Constant changes in the dynamics of globalisation put pressure on global leaders to gain skills that allow them to manage international environments (Yeung & Ready, 1995). Leaders of organisations need to produce more global leaders amongst their talent so that they can respond to culturally diverse situations and people (Alon & Higgins, 2005). Globalisation has made it imperative that leaders with the global mind-set are developed and become available to lead in a work environment that requires global leadership capabilities (Beechler & Javidan, 2007).

The development of intercultural competencies in higher education institutions is seen as a response to address current global challenges. Globalisation has made it imperative that students are equipped with global leadership qualities in order to be better situated in the present workplace environment (Beechler & Javidan, 2007). This involves preparing leaders to compete in the global market and keep updated with information technologies and globalised knowledge (Siaya & Hayward, 2003). The importance of this is evident as intercultural competence placed fourth out of ten skills needed in the future workplace (Institute for the future, 2011).

Global Leadership

The study of global leadership has emerged in the last two decades as a response to the need for companies working internationally to develop global strategies, helping to expand their market share and compete in the global market (Black, Morrison, & Gregersen, 2013; Mendenhall, Stevens, Bird, Oddou, & Osland, 2008). Williams (2003), defines global leadership as the focus of policies and appropriate measures to ensure survival. Moreover, it can be defined as the process of influencing others to adopt a shared approach; by structures and methods that facilitate positive change while encouraging individual and collective growth in a complex work environment (Yoon & Han, 2018). In addition, it is characterised by power sharing, rapid decision-making, intercultural communication, political conflict, chaos and constant change (Kezar, 2008). According to Beechler and Javidan (2007), global leadership is the process of influencing individuals, groups and organisations (within and outside the limits of the global organisation) representing diverse cultural, political, institutional systems to contribute to the achievement of the objectives of global organisations. At the same time, Mobley and Dorfman (2003) stated that global leadership is the influence across national and cultural borders. Global leadership is the norm where people everywhere begin to move forward to co-create the leadership that the world needs (Adler, 2007). Finally, Landesz (2018) states that global leadership is still an emerging field, and much remains to be understood about its process. Subsequently, Mobley, Li, and Wang (2012) maintain that global leadership remains a constant challenge. Global leadership has practical applications, including how to manage purchases and cross-border acquisitions, and how to lead virtual teams when the company is in the midst of an economic crisis.

Subsequently, Mendehall, Arnardottir, Oddou and Burke (2013), claim that to empower and motivate effectively, it is not enough simply to apply the principles of traditional leadership in a global context. While traditional leadership skills are transferable to the global environment, pressure to implement them is higher in multidimensional contexts. Moreover, global leadership is aimed at cognitive and behavioural integration of a set of highly intricate skill levels, usually having some form of intercultural interaction (Mendenhall et al., 2013). Likewise, global leadership is about managing a business across borders. Particularly, leaders need to be aware of how to work with various colleagues globally and operate in multiple environments in an effort to achieve a common corporate objective. From another point of view, Deters (2017) states that global leadership supports the process of innovation and allows people to take advantage of cultural differences. It is a valuable means to build a successful global business. Finally, developing global leaders will be increasingly important as multinational organisations expand further.

Intercultural Competence

Intercultural competence goes beyond a person speaking a foreign language. It is the ability to interact with people from foreign cultures and be flexible towards their actions, attitudes and expectations. The adequacy and flexibility involved in intercultural competence requires immersed knowledge of the cultural differences between the parties communicating. The origin of intercultural competence arose in the early 1990s in Europe. The process was an extension of learning a foreign language. It has come to be seen as important, if not more so. In this context, the concept of intercultural competence was influenced by the concept of interlanguage (Viudez, 2002). Meyer (1991) points out that developing intercultural competences includes means for interfacing with any culture and any language, giving the learner the knowledge and skills to facilitate mutual understanding in intercultural situations.

Internationalisation has been defined based on the idea of making universities globally oriented by implementing a series of actions, from the integration of various international elements in educational programs to increasing the presence of international faculties. This vision motivates everyone linked to academia to think globally in a dynamic and diverse world (Knight, 1997). Gómez-Schlaikeir (2009) indicates that since 1987 the Socrates program has sought to mobilise students and teachers from across European Union countries. In 2006, this program was renamed Erasmus (European Community Action Scheme for the Mobility of University Students). The purpose of the program is to develop intercultural skills. Regarding the internationalisation of higher education, Aguilar-Castillo and Riveros-Angarita (2016) indicate that instead of being a stable and fixed process it varies according to the global context.

Higher Education and Global Leadership in Ecuador

The internationalisation of higher education goes back to the Renaissance period, where universities emerged to serve students from across Europe (Gacel-Ávila, 2018). The United Nations Educational, Scientific and Cultural Organization (UNESCO) (1995), in *Policy paper for change and development in higher education*, stated the following:

> Responsibility for the actual form and measures of implementation of the renewed higher education system belongs to every country and to its academic community - yet in a fast-changing world, no country can consider itself isolated from the influences of international events and developments (p. 43).

In Ecuador, it is essential to understand the workforce of the future since they will be the leaders that will guide the country to face an increasingly interconnected and globalised world (Vasco & Lombaerde, 2000). For 2018, the projected population of 18 to 34 year olds was estimated at 27% of the national population (INEC, 2010). This group seeks to create new social and intellectual horizons, in accordance with current technologies. They are different from the older generations in that they rely on new media channels, compared to the traditional press, radio and television. Millennials and Generation Z are characterised by their ability to master technology, being connected *24/7*, and being self-sufficient. Ecuadorian Millennials and Generation Z have very specific future expectations, such as living in a society with less violence and having better economic conditions. For them, having grown up in the 21st century, technology is a natural part of daily life, as they are accustomed to the speed of social changes that take place as a result of technological innovations.

Regarding multinational organisations that wish to establish themselves in Ecuador, it is important to remember that Ecuadorians are gregarious, and they place the family on par with personal and professional goals. In the results of Chapter 1, Millennials/Gen Z held their family's happiness in high regard; however, at the same time, the results showed that starting a family was not amongst their highest priorities, indicating shifting trends amongst the younger generations. Also, the youth in Ecuador generally have a strong command of a second language, eliminating a core barrier, from the past, for attracting multinational organisations. However, as seen in the results of the study, there is room for improvement with certain segments of the population. These youth are capable of managing several activities simultaneously in their work spaces,

confirming general global trends that Millennials and Generation Z are inclined towards multitasking. Another characteristic of the youth in Ecuador is that they are eager to learn more and upgrade their skills, which was evident in the high response students gave for intending to enrol in a postgraduate course. Finally, as seen in the results of Chapter 1, this group of future professionals indicated that it is vitally important for them to have a positive contribution to society and to have an active social life. To sum up, students are more exposed to international influences and are willing to learn.

UEES, Global Leadership and Intercultural Competence

UEES is a higher education institution that seeks to position itself as being internationally minded. It is a prominent university that promotes global leadership through the development of intercultural competencies. As a result, it has become a national leader in preparing students with intercultural competencies. This can be attributed to the vision of the university from its inauguration, in 1993. UEES had the vision of being an internationalised institution, in part due to the influence of the first Vice-president, a US native. Also, as UEES is a private, not-for-profit institution, it has been allowed to realise its international focus without the burden of some of the overbearing government regulations that public institutions have been made to follow.

Students at UEES are at an advantage for global competencies due to their background in cultural interactions. Most students that enrol are already bilingual, as they come from schools in which English is a top priority. Furthermore, many of the students have experienced foreign cultures in their childhood, either by vacations abroad or as exchange students. As such, they are likely to fit in well with the internationalisation methods UEES promotes throughout all majors. The university provides scholarships for *abanderados* and *escoltas*. Successful candidates often already encompass the qualities of a global leader.

The university has an official policy where English is a requirement for students in order to graduate. Each student must have at least a C1 level of proficiency, and take a number of regular courses in English. *UEES* has a language school that aims to promote not only the English language, but other languages as well, making such classes an incentive to explore other cultures. In other words, it's not only about learning a new language, but learning new cultures. Teachers purposely attempt to globalise their classrooms as much as possible. In classrooms, online simulations and case studies with global content are integrated. Also, many teachers at UEES incorporate digital devices in classes, where students can access their devices to obtain information for research purposes. In this way, students explore international concepts and look at different perspectives of social issues. In accordance, UEES promotes cultural events that aim to emphasise traditions from other countries. Additionally, UEES is affiliated with universities from around the world, seeing a healthy level of inbound and outbound exchange students all year round.

The typical student that possesses high global leadership qualities is outgoing and sociable. They often have some previous experience, either as a tourist or as an exchange student, with other cultures and thus likely speak several languages and are interested in discussing global issues. They are often economically secure, being able to travel abroad. The most common faculties, or majors, of such students include business and marketing. Organisations may find it useful to approach these types of students by contacting the outreach department at UEES. Also, UEES participates in job placements, where organisations are paired with the best candidates from the university.

Summary of Millennial and Generation Z Students

Based on my experiences as a Dean at UEES, Millennials and Generation Z value flexible hours. They are ambitious and desire quick promotion, since they expect to get a good return on their investment in education. Patience is not the greatest asset for this generation, and they place a lower value on power distance between superiors and themselves. They are more likely to speak to their teachers informally than prior generations. With space, large work areas are changing towards smaller spaces, where group communication is preferred. With regards to their future plans, students plan to continue postgraduate studies before forming a family. At the same time, they are opting out of attending church services. To sum up, organisations should take the time to study the results in this book and better understand these generations. By doing so, organisations can avoid, or at least minimise, the growing pains of incorporating Millennial and Generation Z recruits into the workplace.

Conclusion

Our world is changing at an ever-increasing pace, resulting in a generation gap of arguably unprecedented dimensions. Millennials and Generation Z see the world and interpret the technologically complex reality they inhabit in a very different way from the generations of their parents and grandparents. What Millennials and Generation Z value and believe, and how they behave, will have an enormous impact on how organisations and societies will evolve in the not too distant future. Their impact has already begun to influence organisations. This reality has been recognised by organisations, researchers and governments across the world. Extensive studies have been undertaken on these generational changes, over a period of decades. However, in Ecuador, despite some effort being undertaken to understand these generational cohorts, the data is limited. Hence, this investigation sought to undertake a comprehensive national study of the next generation of professional talent in Ecuador: Millennials/Generation Z.

It is important for governments and organisations to have the clearest possible understanding of these generations, who are already making their influence felt in the workplace. A lack of understanding in this regard is likely to lead to lower job satisfaction, higher turnover, increased inter-organisational conflicts and broader societal problems.

Based on the results throughout the chapters of this book, readers should begin to grasp what is new and different in the attitudes, personality and life goals of these generational cohorts. The main results for each chapter will be summarised here, in order to reaffirm the overall profile of Millennial/Gen Z university students, as well as the differences described between men and women; provinces; private, public and high SEL students; and students from different majors.

Chapter 1 provided some useful insights into the next generation of Ecuadorian talent. Based on their responses, some generalisations can be made about MIllennials/Gen Z. The majority of Millennial/Gen Z university students would prefer to work for a multinational organisation. They are willing to move between provinces for a desirable job. Job stability and a friendly atmosphere are their top priorities when considering a workplace. On the other hand, Ecuadorian students do not seem to value flexible work hours and CSR as much as Millennials and Gen Zers in other parts of the world. Students have an unrealistic expectation for a starting salary. Millennials/Gen Zers are split on their willingness to work overtime for no extra pay. Also, they seek quick promotions, while they would resign from a job they do not like with little notice. Members of this generation show respect for hierarchical superiors. There is a split with regard to preference to work alone versus in groups. Also, work/life balance is something only about half of students value. Overall, this generation is happy most of the time. Most students think the economy will not change in the next two years (2018-2020). In terms of life goals, Millennials/Gen Zers in Ecuador value making their families happy, making a positive contribution to society and having an active social life. On the other hand, they attach less value to religion, being wealthy, having children and getting married. Almost all students plan to continue studying at the postgraduate level, and to have their own business one day. This generation rates their best computer skills in Microsoft Word and Power Point, with many admitting to a weaker command of Excel. Finally, the English level of Millennial/Gen Z students, in Ecuador, is not as high as it could be.

Chapter two offered an insight into the main differences in responses between male and female Ecuadorian Millennials/Gen Zers. Overall, the differences followed the communal (female) versus agentic (male) personality traits. In terms of preferred workplace, males had a significantly higher preference for a multinational organisation than females. With regards to workplace preferences, females had higher ratings for a workplace with a friendly atmosphere, ongoing training, CSR and flexible hours. Overall, male Millennial/Gen Z students had a higher salary expectation than females. Slightly more males than females were willing to work overtime for no extra pay. Female Millennials/Gen Zers had a higher preference to work alone than males. Additionally, females stated higher happiness levels than males. Male Millennial/Gen Z students were more optimistic about the economic outlook of Ecuador than females. Regarding life goals, female students had a higher preference for an active religious/spiritual life and male students had a higher preference for being

wealthy. Also, males had a slightly higher preference than females for having children and getting married. Slightly more male students stated that they planned to start their own business. Moreover, males rated their skills in Microsoft Excel higher than females. Finally, males had higher self-ratings for their command of the English language.

Regarding provincial differences, Chapter 3 described the results across the four main provinces where students were from, namely Pichincha, Guayas, Azuay and Manabí. Travelling students seemed to make up between 19% and 21% of students, except for in Manabí, where there were fewer students commuting from outside provinces (10%). There were more employed students from Guayas than the other provinces, with 38% engaged in some form of remunerated employment. At the other extreme, Manabí students were the most likely to be unemployed, with 74% stating they were not working. Regarding job sector or employer preferences, the most vivid differences were between university students from the larger provinces of Pichincha and Guayas, who showed a higher preference to work for a multinational company, and the smaller provinces, where there was a higher preference in the field of education. As regards workplace preferences, Manabí students stand out most, compared to students from the other three provinces. Manabí students had a higher preference for private healthcare, CSR and flexible hours, and lower comparative preferences for job stability and a good salary. When it comes to salary expectations, Pichincha students had the highest, followed by students from Manabí. Students from Guayas were the most willing to work overtime for free, while Pichincha students were the least disposed to do so, out of the four provinces. Furthermore, Pichincha students were the least patient with regards to expected promotion time. Azuay province had the highest percentage of students that would resign within six months of a new job, whilst Manabí had the lowest percentage. Manabí students were by far the most formal students with regards to addressing superiors by their title versus their first name. With regards to individualism, Azuay students stood out with a higher response for working better alone rather than in groups. Regarding self-rated happiness level, Azuay and Manabí students appeared to be the happiest students amongst the four provinces. The least pessimistic students regarding the economic outlook were from Guayas. In life goals, Manabí students showed a number of significant differences. They had the highest response for importance of religion/spirituality, children and marriage. On the opposite end, students from Pichincha had the lowest preferences for these three life goals. Guayas students stood out with their higher importance selections for being wealthy. In computer skills, Manabí students self-selected the lowest levels across all three Microsoft applications. Also, Manabí students had by far the lowest self-rated English level, whilst Guayas students had the clearly highest self-rated English level.

Chapter 4 compared students by university group (private and public) as well as by SEL, with UEES students representing the highest SEL group. High SEL students departed from the norm in certain questions. First of all, high SEL students were more likely to have a job while studying and a higher rate of working in a family business. Also, high SEL students had a higher salary expectation for $1600 or more per month. High SEL students had a higher positive response to volunteering overtime for free. Moreover, high SEL students were less formal with superiors than other students. Also, they had a higher preference for working alone, rather than in groups. High SEL students were also more optimistic about the economy than other student groups. With life goals, high SEL students had higher preferences for religion/spirituality, being wealthy, marriage and having children. In terms of Microsoft Office skills, High SEL students had higher self-ratings for advanced and upper intermediate levels for Word, Excel and Power Point. Finally, High SEL students self-rated their English level at much higher levels than other students. The main differences between private and public university students were seen in certain questions. Public university students had the lowest employment rate. They had the highest response for job mobility. Public university students reported the lowest additional hours that they would work overtime for free. They appear to be the most loyal employees, with the highest responses for committing to an employee for 12 months or more. They were the most formal group of students and had the highest responses for a preference to work in groups. Public university students chose a higher priority for personal time over work. Finally, public university students had the lowest self-rated English level. Private university students were more similar to public university students than high SEL students for certain

questions including life goals, economic outlook, and minimum commitment time. On the other hand, private university students were more aligned to High SEL students for job mobility, formality, a preference for work over personal time, and the life goals of religion/spirituality, wealth, marriage and children.

The final category analysed in the national survey was differences by academic major. There were eight majors that had a sample population of over 100, which were compared in Chapter 5. There were notable differences amongst students from across the majors in all sections of the survey. Some highlights are reviewed here. More students with a job came from the business and law majors. In workplace preferences, law and business students had the lowest preference rates for CSR, whilst psychology students had the highest preference for this factor. With salary, law and education students had the lowest preference rating. In flexible hours, education and accounting students stood out with a higher preference than students from other majors. Ongoing training was a considerably lower preference for law students than students from other majors. Finally, education students stated a notably lower preference for job stability than students from other majors.

Although the results in this book are not conclusive, they do offer significant trends and details regarding the profile of Millennial/Gen Z students from across the country. Organisations and managers can use this information as a tool to help develop and implement policies and procedures targeted at Millennials/Gen Zers, especially in the areas of recruitment, training and remuneration.

To conclude, the chapters in this book left many questions unanswered regarding the data presented. Due to the colossal workload of gathering, quantifying and describing the data presented in this book, there was limited analysis of the results. However, the raw data will continue to be analysed in future research. The next step should be to conduct correlational analyses across and between students based on the variables introduced in the chapters, namely gender, province, socio-economic status, private and public universities, and academic major. Ecuador is a nation with enormous potential for development. However, it is essential to understand the youth that are shaping the future of this society, so as to minimise generational conflicts going forward.

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Appendices

Appendix A - Projected population by year born - 2010-2020

Table A1

Projected Population by Year Born - 2010-2020

YEARS	2015	2016	2017	2018
TOTAL	16,278,844	16,528,730	2017	2018
Age				
18	302,351	306,353	310,229	313,926
19	297,561	301,643	305,630	309,488
20	292,613	296,819	300,888	304,855
21	287,524	291,863	296,050	300,093
22	282,371	286,779	291,097	295,259
23	277,263	281,672	286,063	290,361
24	272,297	276,628	281,016	285,387
25	267,533	271,717	276,039	280,406
26	263,021	267,010	271,187	275,499
27	258,733	262,553	266,542	270,720
28	254,613	258,334	262,156	266,148
29	250,577	254,265	257,994	261,813
30	246,585	250,291	253,981	257,709
31	242,610	246,342	250,051	253,745
32	238,628	242,417	246,152	249,865
33	234,545	238,463	242,258	246,001
34	230,310	234,407	238,328	242,125
35	225,849	230,172	234,279	238,207

Note. From INEC (2010)

Appendix B – Sample population by age

Table B1

Sample Population by Age

Age (year)	Frequency	Percent	Accumulated Total %
18 (2000)	230	7.4	7.4
19	558	17.9	25.3
20	478	15.3	40.6
21	404	13	53.6
22	385	12.4	65.9
23 (1995)	375	12	78
24	195	6.3	84.2
25	168	5.4	89.6
26	100	3.2	92.8
27	63	2	94.8
28 (1990)	48	1.5	96.4
29	25	0.8	97.2
30	32	1	98.2
31	21	0.7	98.9
32	11	0.4	99.2
33 (1985)	24	0.8	100
Total	**3117**	**100**	

Note. From author`s original study results constructed in IBM SPSS

Table B2

Population by University Attended

	Frequency	Percent	Valid Percent	Cumulative Percent
Azuay (UDA)	448	14.4	14.4	14.4
Casa Grande	5	.2	.2	14.5
Católica de Cuenca (UCACUE)	12	.4	.4	14.9
Universidad Católica de Santiago de Guayaquil	11	.4	.4	15.3
Pontificia Universidad Católica del Ecuador (PUCE)	113	3.6	3.6	18.9
Central del Ecuador	5	.2	.2	19.1
Universidad de Cuenca (UC)	290	9.3	9.3	28.4
ESPOL Gye	326	10.5	10.5	38.8
Universidad Nacional de Loja (UNL)	1	.0	.0	38.9
Guayaquil (UG)	104	3.3	3.3	42.2
Universidad Politécnica Salesiana (UPS) Guayaquil	7	.2	.2	42.4
San Francisco de Quito (USFQ)	3	.1	.1	42.5
Universidad Internacional SEK (UISEK)	1	.0	.0	42.5
UDLA	115	3.7	3.7	46.2
UEES	430	13.8	13.8	60.0
Tecnológica Equinoccial (UTE)	26	.8	.8	60.9
Universidad Santa María	5	.2	.6	61.0
Universidad de Los Hemisferios	20	.6	6.9	61.7
Ecotec	215	6.9	3.9	68.6
Escuela Politécnica del Ejercito (ESPE)	123	3.9	6.0	72.5
Escuela Politécnica Nacional (EPN)	188	6.0	.1	78.5
Andina Simón Bolívar (UASB)	3	.1	.0	78.6
Iberoamericana del Ecuador (UNIBE)	1	.0	.1	78.7
Internacional del Ecuador (UIDE)	4	.1	2.2	78.8
Universidad Politécnica Salesiana (UPS) Cuenca	70	2.2	.1	81.0
Técnica Particular de Loja (UTPL)	4	.1	.6	81.2
Universidad Estatal de Milagro	18	.6	16.4	81.7
Universidad Técnica de Manabí	511	16.4	.4	98.1
UniversidadLaica Eloy Alfaro de Manabí	13	.4	.0	98.6
EscuelaSuperior Politécnica Agropecuaria de Manabí	1	.0	.7	98.6
UniversidadParticular San Gregorio de Portoviejo	23	.7	.1	99.3
UniversidadEstatal del Sur de Manabí	3	.1	.6	99.4
Otro	18	.6		100.0
Total	3117	100.0		

Note. The question was: *Which university do you attend?*
From author`s original study results constructed in IBM SPSS.

Appendix C – Student provincial populations

Table C1

Student Provincial Populations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Azuay	690	22.1	22.1	22.1
	Bolívar	7	.2	.2	22.4
	Cañar	49	1.6	1.6	23.9
	Carchi	12	.4	.4	24.3
	Chimborazo	17	.5	.5	24.9
	Cotopaxi	10	.3	.3	25.2
	El Oro	102	3.3	3.3	28.5
	Esmeraldas	25	.8	.8	29.3
	Galápagos	15	.5	.5	29.7
	Guayas	950	30.5	30.5	60.2
	Imbabura	25	.8	.8	61.0
	Loja	31	1.0	1.0	62.0
	Los Ríos	59	1.9	1.9	63.9
	Manabí	542	17.4	17.4	81.3
	Morona Santiago	12	.4	.4	81.7
	Napo	7	.2	.2	81.9
	Orellana	3	.1	.1	82.0
	Pichincha	484	15.5	15.5	97.6
	Santa Elena	20	.6	.6	98.2
	Santo Domingo de los Tsáchilas	29	.9	.9	99.1
	Sucumbíos	7	.2	.2	99.4
	Tungurahua	19	.6	.6	100.0
	Zamora Chinchipe	1	.0	.0	100.0
	Total	3116	100.0	100.0	
Missing	0	1	.0		
	Total	3117	100.0		

Note. The question asked was: *Which province have you spent most of your life in?*
From author`s original study results constructed in IBM SPSS.

Appendix D - University attended by students from the top six provinces – Azuay, El Oro, Guayas, Los Ríos, Manabí and Pichincha

Table D1

University Attended by Students from the Top Six Provinces – Azuay, El Oro, Guayas, Los Ríos, Manabí and Pichincha

Q4-C25 - Which province have you lived most of your life in?			Frequency	Percent	Valid Percent	Cumulative Percent
Azuay	Valid	Azuay (UDA)	382	55.4	55.4	55.4
		Católica de Cuenca (UCACUE)	11	1.6	1.6	57.0
		Católica de Quito (PUCE)	1	.1	.1	57.1
		Universidad de Cuenca (UC)	236	34.2	34.2	91.3
		Universidad Nacional de Loja (UNL)	1	.1	.1	91.4
		Universidad Politécnica Salesiana (UPS) Guayaquil	3	. 4	.4	91.9
		Tecnológica Equinoccial (UTE)	1	.1	.1	92.0
		Universidad Politécnica Salesiana (UPS) Cuenca	52	7.5	7.5	99.6
		Técnica Particular de Loja (UTPL)	1	.1	.1	99.7
		Universidad Técnica de Manabí	1	.1	.1	99.9
		Otro	1	.1	.1	100.0
		Total	690	100.0	100.0	
El Oro	Valid	Azuay (UDA)	24	23.5	23.5	23.5
		Católica de Guayaquil (UCSG)	1	1.0	1.0	24.5
		Católica de Quito (PUCE)	1	1.0	1.0	25.5
		Universidad de Cuenca (UC)	17	16.7	16.7	42.2
		ESPOL Gye	12	11.8	11.8	53.9
		Guayaquil (UG)	6	5.9	5.9	59.8
		UEES	26	25.5	25.5	85.3
		Tecnológica Equinoccial (UTE)	1	1.0	1.0	86.3
		Ecotec	2	2.0	2.0	88.2
		Escuela Politécnica del Ejercito (ESPE)	1	1.0	1.0	89.2
		Escuela Politécnica Nacional (EPN)	1	1.0	1.0	90.2
		Universidad Politécnica Salesiana (UPS) Cuenca	5	4.9	4.9	95.1
		Universidad Técnica de Manabí	4	3.9	3.9	99.0
		Otro	1	1.0	1.0	100.0
		Total	102	100.0	100.0	
Guayas	Valid	Azuay (UDA)	6	.6	.6	.6
		Casa Grande	5	.5	.5	1.2
		Católica de Guayaquil (UCSG)	10	1.1	1.1	2.2
		Católica de Quito (PUCE)	1	.1	.1	2.3
		Universidad de Cuenca (UC)	2	.2	.2	2.5
		ESPOL Gye	261	27.5	27.5	30.0
		Guayaquil (UG)	86	9.1	9.1	39.1
		Universidad Politécnica Salesiana (UPS) Guayaquil	2	.2 .	.2 .	39.3
		UDLA	2	2	2	39.5
		UEES	331	34.8	34.8	74.3
		Tecnológica Equinoccial (UTE)	14	1.5	1.5	75.8
		Universidad Santa María	5	.5	.5	76.3
		Ecotec	190	20.0	20.0	96.3
		Internacional del Ecuador (UIDE)	2	.2	.2	96.5
		Universidad Politécnica Salesiana (UPS) Cuenca	1	.1	.1	96.6
		Universidad Estatal de Milagro	16	1.7	1.7	98.3
		Universidad Técnica de Manabí	11	1.2	1.2	99.5
		UniversidadParticular San Gregorio de Portoviejo	1	.1	.1	99.6
		Otro	4	.4	.4	100.0
		Total	950	100.0	100.0	

Los Ríos	Valid	Azuay (UDA)	2	3.4	3.4	3.4
		ESPOL Gye	17	28.8	28.8	32.2
		Guayaquil (UG)	6	10.2	10.2	42.4
		UEES	17	28.8	28.8	71.2
		Tecnológica Equinoccial (UTE)	2	3.4	3.4	74.6
		Ecotec	10	16.9	16.9	91.5
		Escuela Politécnica del Ejercito (ESPE)	1	1.7	1.7	93.2
		Universidad Técnica de Manabí	3	5.1	5.1	98.3
		Otro	1	1.7	1.7	100.0
		Total	59	100.0	100.0	
Manabí	Valid	Universidad de Cuenca (UC)	2	.4	.4	.4
		ESPOL Gye	8	1.5	1.5	1.8
		Guayaquil (UG)	1	.2	.2	2.0
		UEES	21	3.9	3.9	5.9
		Tecnológica Equinoccial (UTE)	1	.2	.2	6.1
		Ecotec	4	.7	.7	6.8
		Escuela Politécnica del Ejercito (ESPE)	2	.4	.4	7.2
		Escuela Politécnica Nacional (EPN)	2	.4	.4	7.6
		Universidad Técnica de Manabí	462	85.2	85.2	92.8
		UniversidadLaica Eloy Alfaro de Manabí	13	2.4	2.4	95.2
		EscuelaSuperior Politécnica Agropecuaria de Manabí	1	.2	.2	95.4
		UniversidadParticular San Gregorio de Portoviejo	21	3.9	3.9	99.3
		UniversidadEstatal del Sur de Manabí	3	.6	.6	99.8
		Otro	1	.2	.2	100.0
		Total	542	100.0	100.0	
Pichincha	Valid	Azuay (UDA)	3	.6	.6	.6
		Católica de Quito (PUCE)	79	16.3	16.3	16.9
		Central del Ecuador	1	.2	.2	17.1
		Universidad de Cuenca (UC)	5	1.0	1.0	18.2
		ESPOL Gye	1	.2	.2	18.4
		Universidad Politécnica Salesiana (UPS) Guayaquil	1	.2	.2	18.6
		San Francisco de Quito (USFQ)	3	.6	.6	19.2
		Universidad Internacional SEK (UISEK)	1	.2	.2	19.4
		UDLA	87	18.0	18.0	37.4
		UEES	8	1.7	1.7	39.0
		Tecnológica Equinoccial (UTE)	4	.8	.8	39.9
		Universidad de Los Hemisferios	18	3.7	3.7	43.6
		Escuela Politécnica del Ejercito (ESPE)	89	18.4	18.4	62.0
		Escuela Politécnica Nacional (EPN)	166	34.3	34.3	96.3
		Andina Simón Bolívar (UASB)	3	.6	.6	96.9
		Iberoamericana del Ecuador (UNIBE)	1	.2	.2	97.1
		Internacional del Ecuador (UIDE)	2	.4	.4	97.5
		Técnica Particular de Loja (UTPL)	2	.4	.4	97.9
		Universidad Estatal de Milagro	1	.2	.2	98.1
		Universidad Técnica de Manabí	6	1.2	1.2	99.4
		Otro	3	.6	.6	100.0
		Total	484	100.0	100.0	

Note. The question asked was: *Which university do you attend?*
From author`s original study results constructed in IBM SPSS

Appendix E - SEL Statistics

Description of Socio-Economic Level by Category: Stratification of socioeconomic level in Ecuador in 2011. From INEC (2011)

Level A

In stratum A there is 1.9% of the population investigated. Characteristics of the dwellings • The predominant material of the floor of these dwellings are stave, parquet, plank or floating floor • On average they have two bathrooms with shower exclusively for the home. Assets • All households have conventional telephone service. • All households in this stratum have a refrigerator. • More than 95% of households have a kitchen with an oven, washing machine, sound system and / or mini component. • On average, households in this stratum have two color televisions. • More than 80% of households have up to two vehicles for exclusive use in the home. Technology • 99% of households in this level have Internet service. • Most households have a desktop and / or laptop computer. • On average, they have four cell phones in the home. Consumption habits • Members of upper strata households buy most of their clothing in shopping centers. • Households in this level use the internet. • 99% of households use personal email (not work). • 92% of households use a social page on the internet. • 76% of households in this level have read books other than study and reading work manuals in the last three months.

Education • The head of the household has a higher level of education and a considerable number reaches post-graduate studies. Economy • Heads of households of level A work as scientific professionals, intellectuals, members of the executive power, legislative bodies, personnel of the Public Administration and business management. • 95% of households are affiliated or covered by the IESS Insurance (general insurance, voluntary or peasant insurance) and / or ISSFA or ISSPOL insurance. • 79% of households have private health insurance with hospitalization, private health insurance without hospitalization, international insurance, AUS, municipal insurance and Provincial Councils and / or life insurance.

Level B

B is the second stratum and represents 11.2% of the population investigated. Characteristics of the dwellings • In 46% of the homes, the predominant material of the floor of the dwelling is stave, parquet, plank or floating floor. • On average they have two bathrooms with shower exclusively for the home. Assets • 97% of households have a conventional telephone service. • 99% of households have refrigerators. • More than 80% of the homes have a kitchen with an oven, washing machine, sound system and / or mini component. • On average, households have two color televisions. • On average, households have a vehicle exclusively for the home.

Technology • 81% of households in this level have internet service and a desktop computer. • 50% of households have a laptop. • On average they have three cell phones in the home. Consumption habits • People in these households buy most of the clothing in shopping centers. • 98% of households use the internet. • 90% of households use personal email (not work) • 76% of households are registered in a social page on the Internet. • 69% of households in this level have read different books to study and reading work manuals in the last three months.

Education • The Head of the Home has a higher level of education. Economy • 26% of heads of households in level B work as scientific professionals, intellectuals, technicians and mid-level professionals. • 92% of the households are affiliated or covered by the IESS Insurance (general insurance, voluntary or peasant insurance) and / or ISSFA or ISSPOL insurance. • 47% of households have private health insurance with hospitalization, private health insurance without hospitalization; international insurance, AUS, municipal insurance and Provincial Councils and / or life insurance.

Level C+

The C + stratum represents 22.8% of the population investigated. Characteristics of the dwellings • The predominant floor material of these dwellings are ceramic, tile, vinyl or marmetón. • On average they have a bathroom with shower exclusively for the home. Assets • 83% of households have a conventional telephone service. • 96% of households have refrigerators. • More than 67% of households have a kitchen with an oven, washing machine, sound system and / or mini component. • On average they have two color televisions.

Tecnología • El 39% de los hogares de este nivel cuenta con servicio de internet. • El 62% de los hogares tiene computadora de escritorio • El 21% de los hogares tiene computadora portátil. • En promedio disponen de dos celulares en el hogar. Hábitos de consumo • El 38% de los hogares compran la mayor parte de la vestimenta en centros comerciales. • El 90% de los hogares utiliza internet. • El 77% de los hogares tiene correo electrónico personal (no del trabajo) • El 63% de los hogares está registrado en alguna página social en internet. • El 46% de los hogares ha leído leído libros diferentes a manuales de estudio y lectura de trabajo

en los últimos tres meses. Educación • El Jefe del Hogar tiene un nivel de instrucción de secundaria completa. Economía • Los jefes de hogar del nivel C+ se desempeñan como trabajadores de los servicios, comerciantes y operadores de instalación de máquinas y montadores. • El 77% de los hogares está afiliado o cubierto por el Seguro del IESS (seguro general, seguro voluntario o campesino) y/o seguro del ISSFA o ISSPOL. • El 20% de los hogares cuenta con seguro de salud privada con hospitalización, seguro de salud privada sin hospitalización, seguro internacional, AUS, seguros municipales y de Consejos Provinciales.

Level C-

Stratum C- represents 49.3% of the population investigated. Characteristics of the dwellings • The predominant floor material of these dwellings are brick or cement. • On average they have a bathroom with shower exclusively for the home. Assets • 52% of households have a conventional telephone service. • More than 84% have a refrigerator and a stove with an oven. • Less than 48% have a washing machine, sound system and / or mini component. • On average they have a color television. Technology • 11% of households have a desktop computer. • On average they have two cell phones in the home. Habits of consumption •

14% of households buy most of the clothing in shopping centers. • 43% of households use the internet. • 25% of households use personal e-mail (not work) • 19% of households are registered in a social page on the internet. • 22% of households in this level have read books other than study and reading work manuals in the last three months. Education • The Head of the Home has a complete primary education level. Economy • The heads of household of level C- work as service workers and merchants, installation operators of machines and assemblers and some are inactive. • 48% of households are affiliated or covered by the IESS Insurance (general insurance, voluntary or peasant insurance) and / or ISSFA or ISSPOL insurance. • 6% of households have private health insurance with hospitalization, private health insurance without hospitalization, international insurance, AUS, municipal insurance and Provincial Councils and / or life insurance.

Level D

Panel D represents 14.9% of the population investigated. Characteristics of the dwellings • The predominant material of the floor of these dwellings are brick or cement, untreated board or earth. • 31% of households have a bathroom with a shower exclusively for the home. Assets • 12% of households have a conventional telephone service. • Less than 43% has a refrigerator and a stove with an oven. • 5% of households have a washing machine. • 10% have sound equipment and / or mini component. • On average they have a color television.

Technology • On average they have a cell phone at home. Habits of consumption • 9% of households use the internet. • 9% of households have read books other than study and reading work manuals in the last three months. Education • The Head of the Home has a complete primary education level. Economy • Heads of households in level D work as unskilled workers, service workers, merchants, installation operators of machines and assemblers and some are inactive. • 11% of households are affiliated or covered by the IESS Insurance (general insurance, voluntary or peasant insurance) and / or ISSFA or ISSPOL insurance.

Table E1

Sample Population and SEL

	SEL 0-100	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	.1	.1	.1
	2	4	.1	.1	.2
	3	3	.1	.1	.3
	4	1	.0	.0	.4
	5	4	.1	.1	.5
	6	4	.1	.1	.6
	7	1	.0	.0	.7
	8	4	.1	.1	.8
	9	2	.1	.1	.9
	10	4	.1	.1	1.0
	11	3	.1	.1	1.1
	12	4	.1	.1	1.2
	13	3	.1	.1	1.3
	14	7	.2	.2	1.5
	15	18	.6	.6	2.1
	16	4	.1	.1	2.3
	17	6	.2	.2	2.5
	18	7	.2	.2	2.7
	19	3	.1	.1	2.8
	20	46	1.5	1.5	4.3
	21	8	.3	.3	4.6
	22	6	.2	.2	4.8
	23	6	.2	.2	5.0
	24	8	.3	.3	5.2
	25	24	.8	.8	6.0
	26	12	.4	.4	6.4
	27	9	.3	.3	6.7
	28	11	.4	.4	7.1
	29	15	.5	.5	7.6
	30	72	2.3	2.4	10.0
	31	25	.8	.8	10.8
	32	21	.7	.7	11.5
	33	13	.4	.4	11.9
	34	13	.4	.4	12.3
	35	52	1.7	1.7	14.0
	36	14	.4	.5	14.5
	37	129	4.1	4.3	18.7
	38	25	.8	.8	19.6
	39	24	.8	.8	20.4
	40	148	4.7	4.9	25.2
	41	37	1.2	1.2	26.5
	42	30	1.0	1.0	27.4
	43	29	.9	1.0	28.4
	44	31	1.0	1.0	29.4
	45	71	2.3	2.3	31.8
	46	31	1.0	1.0	32.8
	47	30	1.0	1.0	33.8
	48	38	1.2	1.3	35.0
	49	57	1.8	1.9	36.9
	50	497	15.9	16.4	53.3
	51	87	2.8	2.9	56.1
	52	91	2.9	3.0	59.1
	53	45	1.4	1.5	60.6
	54	23	.7	.8	61.4
	55	66	2.1	2.2	63.6
	56	29	.9	1.0	64.5
	57	22	.7	.7	65.2

	58	27	.9	.9	66.1
	59	32	1.0	1.1	67.2
	60	182	5.8	6.0	73.2
	61	48	1.5	1.6	74.8
	62	71	2.3	2.3	77.1
	63	24	.8	.8	77.9
	64	18	.6	.6	78.5
	65	94	3.0	3.1	81.6
	66	26	.8	.9	82.4
	67	22	.7	.7	83.2
	68	15	.5	.5	83.7
	69	30	1.0	1.0	84.6
	70	125	4.0	4.1	88.8
	71	41	1.3	1.4	90.1
	72	28	.9	.9	91.0
	73	10	.3	.3	91.4
	74	19	.6	.6	92.0
	75	63	2.0	2.1	94.1
	76	18	.6	.6	94.7
	77	7	.2	.2	94.9
	78	13	.4	.4	95.3
	79	1	.0	.0	95.4
	80	52	1.7	1.7	97.1
	81	13	.4	.4	97.5
	82	7	.2	.2	97.7
	83	4	.1	.1	97.9
	84	4	.1	.1	98.0
	85	17	.5	.6	98.6
	86	2	.1	.1	98.6
	87	2	.1	.1	98.7
	88	3	.1	.1	98.8
	89	1	.0	.0	98.8
	90	9	.3	.3	99.1
	91	1	.0	.0	99.1
	92	1	.0	.0	99.2
	94	2	.1	.1	99.2
	95	1	.0	.0	99.3
	96	1	.0	.0	99.3
	97	1	.0	.0	99.3
Missing	100	20	.6	.7	100.0
	Total	3035	97.4	100.0	
	0	82	2.6		
		3117	100.0		

Note. The question was: *Select you socio-economic level from 0-100, 0 being the lowest and 100 the highest.*
From author`s original study results constructed in IBM SPSS.

Table E2

SEL and Universities with Sample Above 100 Students

Q25-C25 - Which university do you attend?			Frequency	Percent	Valid Percent	Cumulative Percent
Azuay (UDA)	Valid	D	44	9.8	10.8	10.8
		C-	193	43.1	47.4	58.2
		C+	98	21.9	24.1	82.3
		B	61	13.6	15.0	97.3
		A	11	2.5	2.7	100.0
		Total	407	90.8	100.0	
	Missing	System	41	9.2		
	Total	Total	448	100.0		
Católica de Quito (PUCE)	Valid	D	17	15.0	15.3	15.3
		C-	42	37.2	37.8	53.2
		C+	33	29.2	29.7	82.9
		B	17	15.0	15.3	98.2
		A	2	1.8	1.8	100.0
		Total	111	98.2	100.0	
	Missing	System	2	1.8		
	Total	Total	113	100.0		
Universidad de Cuenca (UC)	Valid	D	49	16.9	17.1	17.1
		C-	150	51.7	52.4	69.6
		C+	57	19.7	19.9	89.5
		B	28	9.7	9.8	99.3
		A	2	.7	.7	100.0
		Total	286	98.6	100.0	
	Missing	System	4	1.4		
	Total	Total	290	100.0		
ESPOL Gye	Valid	D	84	25.8	25.9	25.9
		C-	155	47.5	47.8	73.8
		C+	64	19.6	19.8	93.5
		B	21	6.4	6.5	100.0
		Total	324	99.4	100.0	
	Missing	System	2	.6		
	Total	Total	326	100.0		
Guayaquil (UG)	Valid	D	9	8.7	8.7	8.7
		C-	57	54.8	55.3	64.1
		C+	20	19.2	19.4	83.5
		B	14	13.5	13.6	97.1
		A	3	2.9	2.9	100.0
		Total	103	99.0	100.0	
	Missing	System	1	1.0		
	Total	Total	104	100.0		
UDLA	Valid	D	15	13.0	13.2	13.2
		C-	48	41.7	42.1	55.3
		C+	32	27.8	28.1	83.3
		B	18	15.7	15.8	99.1
		A	1	.9	.9	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
	Total	Total	115	100.0		

UEES	Valid	D	11	2.6	2.6	2.6
		C-	145	33.7	34.3	36.9
		C+	116	27.0	27.4	64.3
		B	127	29.5	30.0	94.3
		A	24	5.6	5.7	100.0
		Total	423	98.4	100.0	
	Missing	System	7	1.6		
	Total	Total	430	100.0		
Ecotec	Valid	D	26	12.1	12.3	12.3
		C-	99	46.0	46.7	59.0
		C+	56	26.0	26.4	85.4
		B	24	11.2	11.3	96.7
		A	7	3.3	3.3	100.0
		Total	212	98.6	100.0	
	Missing	System	3	1.4		
	Total	Total	215	100.0		
Escuela Politécnica del Ejercito (ESPE)	Valid	D	18	14.6	15.0	15.0
		C-	72	58.5	60.0	75.0
		C+	18	14.6	15.0	90.0
		B	12	9.8	10.0	100.0
		Total	120	97.6	100.0	
	Missing	System	3	2.4		
	Total	Total	123	100.0		
Escuela Politécnica Nacional (EPN)	Valid	D	14	7.4	7.5	7.5
		C-	132	70.2	70.6	78.1
		C+	35	18.6	18.7	96.8
		B	6	3.2	3.2	100.0
		Total	187	99.5	100.0	
	Missing	System	1	.5		
	Total	Total	188	100.0		
Universidad Técnica de Manabí	Valid	D	111	21.7	22.3	22.3
		C-	277	54.2	55.7	78.1
		C+	72	14.1	14.5	92.6
		B	33	6.5	6.6	99.2
		A	4	.8	.8	100.0
		Total	497	97.3	100.0	
	Missing	System	14	2.7		
		Total	511	100.0		

Note. From author`s original study results constructed in IBM SPSS.

Appendix F – Academic Majors

Table F1

Field of Study and Major

Major	Field of study stated by students	Number	total
Engineering	Civil Engineering	86	
	Electrical engineering	60	
	Engineering (other)	392	
	Industrial engineering	63	
	Mechanical engineering	11	612
Business administration	Business administration	499	499
Law	Law	358	358
Accounting	Accounting	193	193
Health and well being	Medicine	147	
	Veterinary	13	
	Odontology	31	191
Education	Pedagogy	77	
	Education	108	185
Economics	Economics	164	164
Psychology	Psychology	112	112

Note. From author`s original study results.

Table F2

Sample Population`s Stated Major and the Categorisation of the Fields of Study for National Comparison

Business	Accounting	Advertising	Business administration	Finance	Marketing	International business	Total	
	193	3	499	12	55	47	809	**26.0%**
Social Science	Economics	Sociology	Social science	International studies	Social work			
	164	10	35	61	59		329	**10.6%**
Engineering	Agricultural engineering	Civil Enginering	Electrical engineering	Enginering (other)	Industrial enginering	Mechanical engineering		
	8	86	60	392	63	11	620	**19.9%**
Health & wellbeing	Medicine	Veterinary	Psychology	Odontology				
	147	13	112	31			303	**9.7%**
Law	Law							
	358						358	**11.5%**
Pedagogy	Pedagogy	Education						
	77	108					185	**6.0%**
Other							505	**16.2%**

Note. The numbers are the total individuals in the survey that stated that major. From author`s original study results constructed in IBM SPSS.

Table F3

Academic Majors and University

Major			Frequency	Percent	Valid Percent	Cumulative Percent
Engineering	Valid	Azuay (UDA)	4	.7	.7	.7
		Católica de Cuenca (UCACUE)	1	.2	.2	.8
		Católica de Quito (PUCE)	5	.8	.8	1.6
		Universidad de Cuenca (UC)	90	14.7	14.7	16.3
		ESPOL Gye	91	14.9	14.9	31.2
		Universidad Nacional de Loja (UNL)	1	.2	.2	31.4
		Guayaquil (UG)	5	.8	.8	32.2
		Universidad Politécnica Salesiana (UPS) Guayaquil	2	.3	.3	32.5
		San Francisco de Quito (USFQ)	1	.2	.2	32.7
		Universidad Internacional SEK (UISEK)	1	.2	.2	32.8
		UDLA	3	.5	.5	33.3
		UEES	39	6.4	6.4	39.7
		Tecnológica Equinoccial (UTE)	4	.7	.7	40.4
		Ecotec	2	.3	.3	40.7
		Escuela Politécnica del Ejercito (ESPE)	99	16.2	16.2	56.9
		Escuela Politécnica Nacional (EPN)	109	17.8	17.8	74.7
		Internacional del Ecuador (UIDE)	1	.2	.2	74.8
		Universidad Politécnica Salesiana (UPS) Cuenca	20	3.3	3.3	78.1
		Técnica Particular de Loja (UTPL)	1	.2	.2	78.3
		Universidad Estatal de Milagro	17	2.8	2.8	81.0
		Universidad Técnica de Manabí	105	17.2	17.2	98.2
		UniversidadLaica Eloy Alfaro de Manabí	2	.3	.3	98.5
		UniversidadEstatal del Sur de Manabí	2	.3	.3	98.9
		Otro	7	1.1	1.1	100.0
		Total	612	100.0	100.0	
Business	Valid	Azuay (UDA)	106	21.2	21.2	21.2
		Casa Grande	1	.2	.2	21.4
		Católica de Quito (PUCE)	15	3.0	3.0	24.4
		Universidad de Cuenca (UC)	15	3.0	3.0	27.5
		ESPOL Gye	89	17.8	17.8	45.3
		Guayaquil (UG)	73	14.6	14.6	59.9
		Universidad Politécnica Salesiana (UPS) Guayaquil	2	.4	.4	60.3
		UDLA	1	.2	.2	60.5
		UEES	53	10.6	10.6	71.1
		Tecnológica Equinoccial (UTE)	3	.6	.6	71.7
		Universidad Santa María	1	.2	.2	71.9
		Universidad de Los Hemisferios	10	2.0	2.0	73.9
		Ecotec	25	5.0	5.0	79.0
		Escuela Politécnica del Ejercito (ESPE)	4	.8	.8	79.8
		Universidad Politécnica Salesiana (UPS) Cuenca	45	9.0	9.0	88.8
		Universidad Técnica de Manabí	54	10.8	10.8	99.6
		Otro	2	.4	.4	100.0
		Total	499	100.0	100.0	
Law	Valid	Azuay (UDA)	60	16.8	16.8	16.8
		Católica de Cuenca (UCACUE)	2	.6	.6	17.3
		Católica de Guayaquil (UCSG)	2	.6	.6	17.9
		Católica de Quito (PUCE)	4	1.1	1.1	19.0
		Central del Ecuador	2	.6	.6	19.6
		Universidad de Cuenca (UC)	3	.8	.8	20.4
		Guayaquil (UG)	3	.8	.8	21.2
		San Francisco de Quito (USFQ)	1	.3	.3	21.5
		UDLA	2	.6	.6	22.1
		UEES	106	29.6	29.6	51.7
		Tecnológica Equinoccial (UTE)	4	1.1	1.1	52.8
		Universidad de Los Hemisferios	2	.6	.6	53.4
		Ecotec	148	41.3	41.3	94.7
		Universidad Técnica de Manabí	1	.3	.3	95.0
		UniversidadLaica Eloy Alfaro de Manabí	1	.3	.3	95.3
		UniversidadParticular San Gregorio de Portoviejo	16	4.5	4.5	99.7
		Otro	1	.3	.3	100.0
		Total	358	100.0	100.0	

Accounting	Valid	Azuay (UDA)	63	32.6	32.6	32.6
		Católica de Guayaquil (UCSG)	1	.5	.5	33.2
		Católica de Quito (PUCE)	1	.5	.5	33.7
		Universidad de Cuenca (UC)	65	33.7	33.7	67.4
		ESPOL Gye	9	4.7	4.7	72.0
		Universidad Politécnica Salesiana (UPS) Guayaquil	1	.5	.5	72.5
		Universidad Politécnica Salesiana (UPS) Cuenca	3	1.6	1.6	74.1
		Universidad Técnica de Manabí	49	25.4	25.4	99.5
		Otro	1	.5	.5	100.0
		Total	193	100.0	100.0	
Medicine	Valid	Azuay (UDA)	8	4.2	4.2	4.2
		Católica de Cuenca (UCACUE)	3	1.6	1.6	5.8
		Católica de Guayaquil (UCSG)	5	2.6	2.6	8.4
		Católica de Quito (PUCE)	22	11.5	11.5	19.9
		Central del Ecuador	2	1.0	1.0	20.9
		Universidad de Cuenca (UC)	6	3.1	3.1	24.1
		Guayaquil (UG)	1	.5	.5	24.6
		UDLA	43	22.5	22.5	47.1
		UEES	86	45.0	45.0	92.1
		Universidad Politécnica Salesiana (UPS) Cuenca	1	.5	.5	92.7
		Universidad Técnica de Manabí	12	6.3	6.3	99.0
		UniversidadParticular San Gregorio de Portoviejo	1	.5	.5	99.5
		Otro	1	.5	.5	100.0
		Total	191	100.0	100.0	
Education	Valid	Azuay (UDA)	42	22.7	22.7	22.7
		Universidad de Cuenca (UC)	21	11.4	11.4	34.1
		ESPOL Gye	1	.5	.5	34.6
		Guayaquil (UG)	1	.5	.5	35.1
		San Francisco de Quito (USFQ)	1	.5	.5	35.7
		UEES	5	2.7	2.7	38.4
		Tecnológica Equinoccial (UTE)	2	1.1	1.1	39.5
		Ecotec	1	.5	.5	40.0
		Técnica Particular de Loja (UTPL)	2	1.1	1.1	41.1
		Universidad Técnica de Manabí	109	58.9	58.9	100.0
		Total	185	100.0	100.0	
Economics	Valid	Azuay (UDA)	37	22.6	22.6	22.6
		Católica de Quito (PUCE)	3	1.8	1.8	24.4
		Universidad de Cuenca (UC)	7	4.3	4.3	28.7
		ESPOL Gye	34	20.7	20.7	49.4
		UDLA	2	1.2	1.2	50.6
		UEES	19	11.6	11.6	62.2
		Tecnológica Equinoccial (UTE)	2	1.2	1.2	63.4
		Universidad Santa María	1	.6	.6	64.0
		Ecotec	4	2.4	2.4	66.5
		Escuela Politécnica Nacional (EPN)	6	3.7	3.7	70.1
		Universidad Técnica de Manabí	48	29.3	29.3	99.4
		Otro	1	.6	.6	100.0
		Total	164	100.0	100.0	
Psychology	Valid	Azuay (UDA)	48	42.9	42.9	42.9
		Católica de Cuenca (UCACUE)	1	.9	.9	43.8
		Católica de Guayaquil (UCSG)	1	.9	.9	44.6
		Católica de Quito (PUCE)	9	8.0	8.0	52.7
		Central del Ecuador	1	.9	.9	53.6
		Guayaquil (UG)	3	2.7	2.7	56.3
		Universidad Politécnica Salesiana (UPS) Guayaquil	1	.9	.9	57.1
		UDLA	2	1.8	1.8	58.9
		UEES	27	24.1	24.1	83.0
		Escuela Politécnica Nacional (EPN)	1	.9	.9	83.9
		Universidad Técnica de Manabí	18	16.1	16.1	100.0
		Total	112	100.0	100.0	

Note. The question was: *Which university do you attend?*
From author`s original study results constructed in IBM SPSS.

Table F4

Gender Composition by Majors

Major			Frequency	Percent	Valid Percent	Cumulative Percent
Engineering	Valid	male	395	64.5	64.5	64.5
		female	217	35.5	35.5	100.0
		Total	612	100.0	100.0	
Business	Valid	male	218	43.7	43.7	43.7
		female	281	56.3	56.3	100.0
		Total	499	100.0	100.0	
Law	Valid	male	149	41.6	41.6	41.6
		female	209	58.4	58.4	100.0
		Total	358	100.0	100.0	
Accounting	Valid	male	35	18.1	18.1	18.1
		female	158	81.9	81.9	100.0
		Total	193	100.0	100.0	
Medicine	Valid	male	78	40.8	40.8	40.8
		female	113	59.2	59.2	100.0
		Total	191	100.0	100.0	
Education	Valid	male	33	17.8	17.8	17.8
		female	152	82.2	82.2	100.0
		Total	185	100.0	100.0	
Economics	Valid	male	68	41.5	41.5	41.5
		female	96	58.5	58.5	100.0
		Total	164	100.0	100.0	
Psychology	Valid	male	27	24.1	24.1	24.1
		female	85	75.9	75.9	100.0
		Total	112	100.0	100.0	
Other	Valid	male	314	39.1	39.1	39.1
		female	489	60.9	60.9	100.0
		Total	803	100.0	100.0	

Note. The question was: *What is your gender?*
From author`s original study results constructed in IBM SPSS.