

# The perception of leadership in Anáhuac University

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“We are Anahuac Mexico. Positive Action Leaders” reads the message first encountered when accessing the webpage of Anáhuac University—one of Mexico’s most renowned higher learning institutions. And it is true: leadership is a key component of Anáhuac’s curriculum. Moreover, both its mission—“...instruct, boost, and link students with the greatest Leadership potential...”—and its vision—“...boosting positive action leaders...” —are centered in instilling leadership qualities in its students. But what exactly does it mean to *be* a leader?

Although a plethora of research has been done on the subject, there is still no consensus on a conclusive definition of leadership. Historically, some authors have asserted it is linked to your genes (such as the divine right of kings), while others have argued that it relies on a combination of traits (such as Sun Tzu in his *Art of War*).<sup>1</sup> Nowadays, research in leadership is divided into multiple different theories, such as the managerial grid model (Blake and Mouton, 1964), situational and contingency theories (Fiedler, 1958; Evans, 1970; Vroom and Yetton, 1973), and the attribute pattern approach (Smith and Foti, 1998).

As in everything subjective, defining such a broad concept will ultimately depend on each individual. But, as it goes, *objectivity is but a consensus of the subjective*. As a statistician, I believe that one way to define leadership is to average how people define it themselves. In that line of thought, I designed a survey to measure key qualities of leadership, and asked undergraduate students at Anáhuac University to answer it.

## The survey

The survey, designed in Spanish using Google Forms, is available [online](#) and consists of three parts:

1. In the first part, ten qualities are shown in alphabetical order. Respondents rank each quality on a scale from 0 to 10 according to how relevant they believe it to be for a leader. The shown qualities are social action, charisma, oral communication

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<sup>1</sup>See Pockell and Avila (2007) for more historical principles on leadership.

capabilities (eloquence), initiative / proactive behaviour, inspiring others, moral integrity, intelligence, interpersonal relations, having passion, and team work.

2. The second part asked respondents to write, in an open-text box, the word or short phrase they thought better represented what leadership means.
3. Lastly, a third part asked respondents their age, gender, term in school, and degree. Respondents could decide not to answer any question in part three.

The idea of the survey was to first measure what people think of fixed qualities often associated with leadership, but then allow them space to add anything they believed to be relevant.

## What is leadership?

The survey was distributed among Anáhuac University students for two weeks in February 2019, and ended up being answered by 91 students. Of these, 61 identified themselves as women, 27 as men, 1 as other, and 2 decided not to disclose their gender.

Table 1 summarizes the survey’s answers. Interestingly, the most important quality of a leader (as measured by its average importance) is having a proactive behaviour, and this is also true if one looks at answers by women and men separately. Inspiring others and being eloquent are also paramount qualities, although the former is less popular among men than women. Surprisingly, the quality perceived as least important—and not by a small margin—is intelligence. This also holds if studying answers by women and men separately.

Quality	Average importance (rank)		
	All	Women	Men
Proactive behaviour	9.42 (1)	9.48 (1)	9.63 (1)
Inspire others	9.25 (2)	9.33 (2)	9.52 (4)
Eloquence	9.23 (3)	9.26 (3)	9.63 (2)
Team work	9.11 (4)	9.03 (4)	9.59 (3)
Moral integrity	8.98 (5)	8.98 (5)	9.26 (6)
Having passion	8.84 (6)	8.70 (6)	9.26 (5)
Charisma	8.53 (7)	8.66 (7)	8.81 (7)
Social action	8.32 (8)	8.25 (8)	8.74 (8)
Interpersonal relations	8.21 (9)	8.23 (9)	8.59 (9)
Intelligence	7.92 (10)	7.75 (10)	8.19 (10)
Total average	8.78	8.77	9.12

Table 1: Average importance and rank (in parenthesis) of qualities in part one of the survey. Split by men/women gender is also shown.

Notice that the top two qualities are related to one’s actions and outward demeanor, while the third highest quality (second for men) is a personal ability. This hints that the concept of leadership is not solely based on how one acts or how one is, but rather on a combination of both.

These findings are further confirmed when looking at the overall probability density in Figure 1 and not only at the average importance by quality. The top qualities are strongly centered around 10, while low-ranking ones are more scattered. In other words, Anáhuac University students are pretty sure about what qualities are relevant for leadership, but seem to have mixed opinions about those that are not—although Intelligence has a rather symmetric density centered around 8, in contrast to other low-ranking qualities that have multiple modes and clear bias.

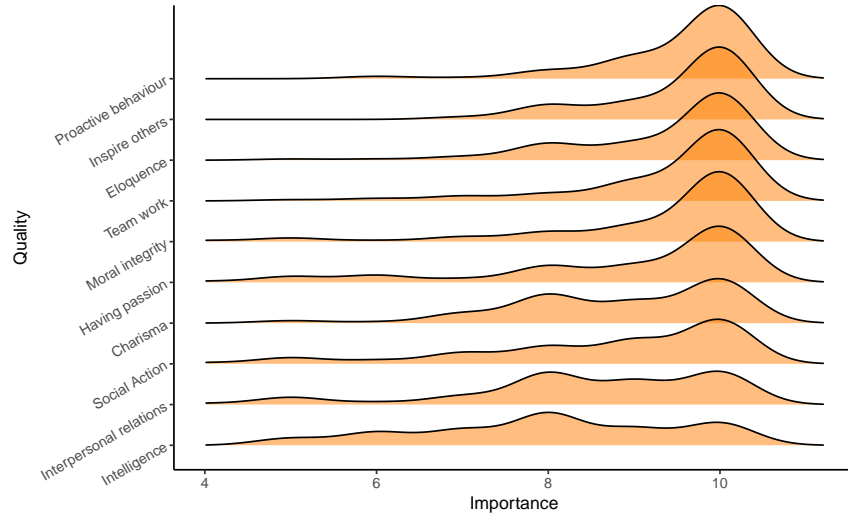


Figure 1: Densities of answers of each quality in part one of the survey, in decreasing order according to their mean.

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Densities in Figure 1 were smoothed via a Gaussian kernel. Although a histogram would have been best suited to represent importance scores given the discrete 0-10 scale, the resulting graph was harder to interpret visually and so densities were used instead.

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Things become more tangled when degree of study is taken into account. Considering answers in which respondents included the degree studied (76 of 91), I categorized different degrees into five major fields of study: Arts and Humanities, Engineering, Law, Science, and Social Science. The number of answers by field of study were 38, 10, 7, 10, and 11, respectively.

Tables 2 and 3 show how qualities are ranked among each major field of study. Intelligence is ranked as the least important quality in each field of study, which further confirms previous findings. Interestingly, Proactive behaviour—the overall most relevant quality—is only the top-ranked one among Arts and Humanities students, and it is actually not high in the Science and Social Science rankings. Interpersonal relations—the second lowest overall quality—is highly valued among lawyers, who on average also consider Moral integrity to be barely more relevant than Intelligence.

Rank	Major field of study		
	Arts and Humanities	Engineering	Law
1	Proactive behaviour	Inspire others	Eloquence
2	Eloquence	Proactive behaviour	Proactive behaviour
3	Team work	Team work	Interpersonal relations
4	Inspire others	Moral integrity	Having passion
5	Having passion	Social action	Charisma
6	Moral integrity	Charisma	Team work
7	Charisma	Eloquence	Inspire others
8	Social action	Having passion	Social action
9	Interpersonal relations	Interpersonal relations	Moral integrity
10	Intelligence	Intelligence	Intelligence

Table 2: Leadership qualities’ ranking by major field of study based on the first part of the survey.

Rank	Major field of study	
	Science	Social Science
1	Moral integrity	Inspire others
2	Inspire others	Moral integrity
3	Eloquence	Eloquence
4	Team work	Proactive behaviour
5	Proactive behaviour	Team work
6	Having passion	Interpersonal relations
7	Social action	Having passion
8	Charisma	Charisma
9	Interpersonal relations	Social action
10	Intelligence	Intelligence

Table 3: (Continued) Leadership qualities’ ranking by major field of study based on the first part of the survey.

Obtaining more decisive conclusions from a degree-centered perspective seems complicated, although the analysis did yield an interesting insight: regardless of what field of study a student belongs to, Intelligence is consistently ranked as the least important quality.

Given that qualities are ranked differently between different genders and degrees, it is of natural interest to study how qualities are related between them. In this spirit, with a visual inspection of the correlation between importance scores of each quality in Figure 2, we can define categories of qualities whose scores are similar.

For example, Inspiring others is highly correlated with Charisma and Eloquence, and so these three qualities can be clustered into a category. This category consists of qualities related to public image—someone with charisma and eloquence will surely inspire others to rally for a cause. Similarly, Team work and Moral integrity can be clustered into a category. These qualities are related to the trust that can be placed in someone. A leader has to be trusted to adhere to the highest moral principles, and also to do their part in a team job.

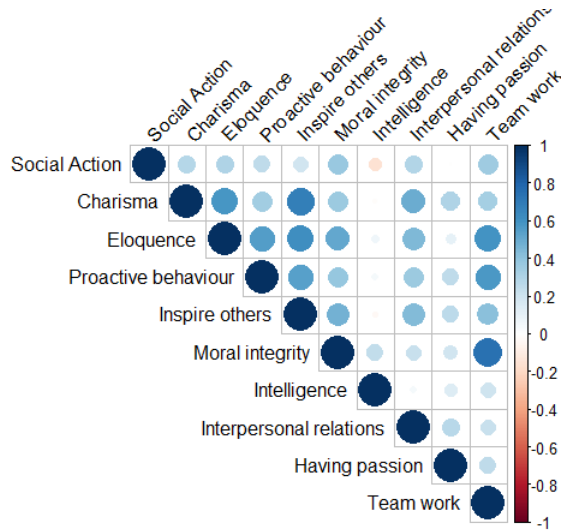


Figure 2: Correlation matrix of the qualities ranked in part one of the survey.

Moreover, Intelligence is the only quality that is unrelated to any other quality. This means that, regardless of what scores were given to other qualities, Intelligence was consistently ranked low. In other words, different people may have different opinions of what the most relevant quality for a leader is, but almost all agree that Intelligence is not.

Continuing on to the second part of the survey, where respondents entered a word or short phrase that they felt better embodied leadership, insights previously found were reaffirmed. The most common word is *inspiration*, followed by *guide*, *initiative*, and *team*. These are all related to the top-two ranked qualities of section one, Proactive behaviour and Inspiring others.

Moreover, popular answers in section two of the survey are aligned to the previously-defined categories: *inspiration*, *guide*, and *influence* are related to the public image category; *team*, *team work*, *commitment*, *delivery*, and *responsibility* are all related to being trustworthy. Noticeably, positive action—the leadership focus of Anáhuac University—was not a popular answer in part two of the survey.

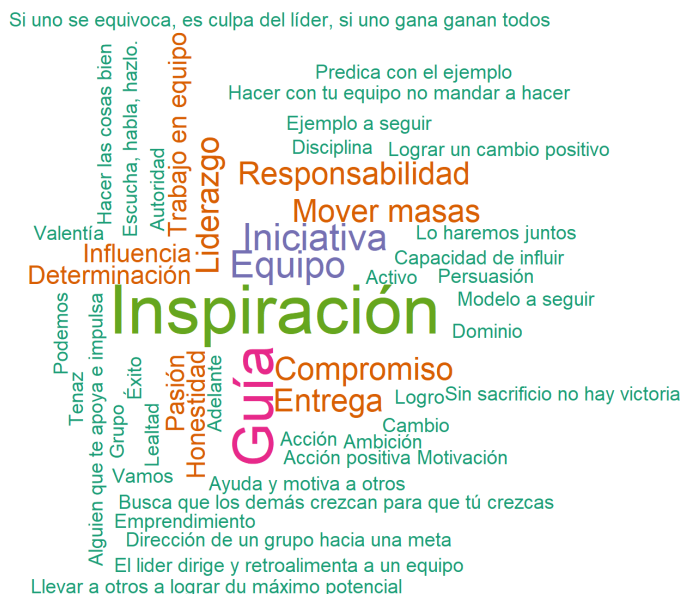


Figure 3: Most common phrases (in Spanish) registered in part two of the survey.

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Words in part two of the survey were recorded in Spanish because it is the official language in Mexico, where Anáhuac University is. However, for the purpose of this analysis, I translated the words to English throughout the article.

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All in all, defining leadership is a task that remains elusive, even to Anáhuac University students. To them, it seems, leadership relies on achieving a balance between inward traits—being proactive, having passion, acting with honesty—and outward ones—inspiring others, communicating eloquently, working with a team. What is true is that Anáhuac students do have much to say regarding leadership. For a university that places so much focus on developing positive action leaders, this seems appropriate.

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