#### Article

# Sustainable Leadership in Project Management. The Need for a New Kind of Leadership

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**Abstract** Adopting a long-term perspective has helped companies survive in difficult times and overcome economic crises, recessions, and pandemics such as the current COVID-19. At present, the project management approach is changing from more authoritarian management models to frameworks that are based on the management of people and society. This article researches the concept of sustainable leadership in the project management profession. It evaluates the level of sustainable leadership among project managers in Spain using the Avery and Bergsteiner's (2011) model of bees and locusts as a reference framework (Bee and Locust Sustainable Leadership Model). A qualitative study was carried out based on the analysis of the responses given by sixty-eight project managers in Spain who answered a 52-point questionnaire. The findings yielded interesting results. It was found that in projects considered as temporal organizations, companies tended to employ a mixture of bee and locust's leadership elements. Respondents recognized the importance of employee training and development, and most considered that it was essential to consider the environment when determining the organization's commercial objectives. However, based on this study's findings, the project management profession still has a long way to go as regards the practical implementation of sustainable leadership.

Keywords project management; sustainable leadership; sustainability

#### 1. Introduction

The concept of sustainable leadership has been researched in several contexts, such as in the educational sector or in organizational settings [1-3]. The first sustainable leadership model dates to 2006 and was developed by Hargreaves and Fink, who analyzed sustainable leadership in the education sector. According to these authors [4], the development of sustainable leadership allowed the development of an educational context that promoted the exchange of opinions and ideas.

Traditionally, the management of companies was carried out under an authoritarian leadership style. At present we are moving towards business management models that are more peopleand community-oriented. In this regard, sustainable leadership has more advantages than disadvantages, as it entails a more ample participation of work teams in the decision-making and the development of the organization, at a lower cost. All of this combines to produce a positive brand reputation and greater social respect. Adopting a long-term performance perspective has helped companies survive in difficult times, such as economic crises and recessions [1], as well as in the current context of the COVID-19 pandemic, confirming that, "sustainable companies must operate in a certain way so that they can meet the needs of the present without affecting the ability of future generations to meet their own needs" ([1], p. 9).

According to Hargreaves and Fink [4], the development of sustainable leadership in the educational context promotes the exchange of opinions and ideas. Davies (2007) and Lambert (2011) also developed sustainable leadership frameworks at the organizational level in the education sector, both in the United Kingdom and in the United States [3–5]. According to Davies (2007), sustainable development entails key elements that determine the long-term improvement of the school [3]. Such leadership is based on a moral purpose that places the ability to succeed

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permits unrestricted use and distribution provided that the original work is properly cited. within everyone's reach. According to Lambert (2011), sustainable leadership requires commitment at all levels of the organization to develop a culture in which leadership skills can be generated [5].

According to Kouzes and Posner (2007), good leaders must be honest, forward-looking, competent, inspiring, and intelligent, as well as have the ability to be flexible and to adapt to the specific context of the organization [6]. Thus, a sustainable leader must also care and inspire others to care about the well-being of humanity and all forms of life and nature.

Avery and Bergsteiner's (2011) sustainable leadership model is based on 23 key factors that underlie the concept of sustainable leadership, all of which will contribute over time to improving organizational performance [1]. If we compare this model with those previously presented by Davies (2007) and Lambert (2011) [3,5], one of the main differences is that Avery and Bergsteiner's sustainable leadership framework has been applied to a wider variety of organizational contexts and not just the education sector. This framework divides organizations into two main categories, one called "locust leadership" and one that is known as "bee leadership".

The leadership philosophy of the locusts is mainly based on obtaining profits, to the point of wanting to obtain them at any cost [7]. Avery and Bergsteiner's model has been previously studied at the organizational level firstly by Kalkavan (2015) [8], who analyzed sustainable leadership among managers in the Turkish insurance industry, and by Bulmer et al. (2021) [9], who examined sustainable leadership levels among female managers in the logistics industry in Spain.

The bee leadership approach provides a vision of social leadership with the involvement of all stakeholders. It is more holistic in nature and is based on generating value for all stakeholders. All this leads to the prioritization of values aligned with the seventeenth Sustainable Development Goal of the United Nations, that of creating global alliances [10]. Although it has been shown that the application of bee leadership in companies is more sustainable and profitable in the long term, many national and international companies continue to apply a more conventional model, such as the locust model, prioritizing short-term benefits [7].

#### 1.1. Leadership in the Field of Project Management

Although consciously responsible leadership has long been recognized as a success factor at the organizational level, it was not until comparatively recently that this concept was adopted more widely in the field of project management (PM) [7,11]. Even though there have been advances in leadership theory, leadership in PM has generally been solely based on the application of tools and techniques, regardless of the leadership style of the project manager. The first studies that considered the management style and personality of those leading PM as a potential influence on the success of project execution date from the year 2000 in a study carried out by Hauschildt et al. (2000) who categorized project managers as beginners, newcomers, creative experts, non-creative decision makers or thick-skinned pragmatists [12]. Hauschildt et al. (2000) determined which project characteristics coincided with the different project manager personality types. It was only several years later that scientific literature came to recognize that an individual's attitudes to wider project management processes as well as his or her general leadership skills and technical competencies needed to be considered when hiring a new project manager in a company [13].

The sixth edition of the Project Management Book of Knowledge highlights how essential is the project manager's role in leading a PM team to achieve the project's objectives. The role of the project manager can vary between projects according to the context or nature of the project. The Project Management Institute (PMI) however does highlight the importance of the wide range of skills that a project manager must have which, of course, include knowledge of project management techniques but also an appreciation of the wider strategic and business environment, and corresponding and contextual leadership skills and attitudes [14].

Müller and Turner (2005) analyzed the relative importance of project managers' attitudes and leadership competencies in achieving project success [13]. They found that traditional criteria for evaluating projects, such as cost, quality, and customer satisfaction, were not sufficient to achieve a balanced set of measures of project success. Project execution was found to be more affected by the project manager's attitudes and emotional intelligence. Consequently, the selection of a project manager in any human resource process must aim at aligning the psychological profile of the candidate with the PM knowledge itself [13]. Therefore, the education and training of a project manager should go beyond simply learning and understanding traditional PM tools and techniques and also include an appreciation of the psychological and social factors underlying the development of the wider contextual and emotional competencies needed in a project manager to achieve successful sustainable outcomes.

Sustainable leadership is a phenomenon that has not, to date, been studied in the project management profession, and therefore this study presents an innovative approach regarding leadership in project management. This paper analyzes the level of sustainable leadership among project managers from different sectors in Spain using Avery and Bergsteiner's (2011) bee and locust leadership model as a framework [1].

The two main research questions posed in this research were the following:

- How do project managers perceive leadership in the companies where they work?
- Is the project management profession more aligned with a more bee or a more locust approach to leadership, or a combination of the two?

#### 2. Materials and Methods

To carry out this study, a qualitative approach was adopted. An anonymous questionnaire made up of 52 questions was developed, aimed at middle and senior project managers in different professional sectors in Spain. Sixty-eight project managers participated in the study and provided their views on how they perceived leadership in the organizations where they worked. The contents of the questionnaire may be found in Appendix A of this article. Of the 52 questions (i.e., listed in Appendix A at the end of this article), 46 aimed at analyzing the level of sustainable leadership, and six introductory questions aimed at getting to know a little more about the profile of each of the project managers interviewed.

The 46 sustainable leadership questions aimed at evaluating the level and application of key elements making up Avery and Bergsteiner's framework that will, if undertaken together, contribute over time (i.e., and in the long-term) to organizational performance improvement, and to the gradual attainment of sustainable development. The framework of the questionnaire presents two opposing scenarios, whereby 23 of the questionnaire questions are tilted towards the attainment of a Honeybee philosophy, a style of leadership described as "sophisticated, stakeholder, social and sharing" ([1], p. 30), and the other 23 towards a Locust approach which is regarded as "tough, ruthless, asocial and profit-oriented-at-any-cost" ([1], p. 30). The Honeybee elements, if fulfilled in an organization, lead to a competitive advantage by leading it to becoming more sustainable in the long-term. What is important to highlight regarding the interpretation of the results is that for organizations to follow a Honeybee approach, they need to comply with all 23 elements associated with the Honeybee sustainable leadership philosophy.

A five-point Likert scale (i.e., 1–5) was used in determining the answers to all 46 "sustainable leadership" questions. This methodological approach was previously adopted by Kalkavan (2015) in a study that aimed to identify the level of sustainable leadership among managers in the Turkish insurance industry [8]. We, therefore, used the same scale in our study. Table 1 below describes the significance of the different Likert scale values that were used for this study.

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Range Level	Explanation			
1	I completely agree			
2	I agree			
3	I do not agree or disagree			
4	I disagree			
5	I completely disagree			

**Table 1.** Survey question range level explanation.

The questionnaires were created using Google Forms and were sent digitally via email and WhatsApp. The whole of the COVID-19 context forced us to select this method of data collection. It is important to note that all questionnaires were anonymous.

#### 3. Results

The objective of this study was to evaluate the level of sustainable leadership among project managers of different sectors in Spain. The first part of the interview aimed to find a bit more regarding the project managers themselves. 30.9% of the 68 interview respondents were women

and the remaining 69.1% were men. Their professional experience ranged widely from one year to over 30 years. The professional sectors of the interviewees varied greatly ranging from the logistics, audio-visual, construction, NGO, financial and services sectors to the renewable energies and telecommunication professions.

The second part of the questionnaire aimed at determining how the 68 project managers interviewed perceived the level of sustainable leadership in the organizations where they worked (i.e., the entire set of results may be viewed in Appendix B).

The results demonstrated that employee training and development (72%) was found to be critical, which aligns with the notion that companies and corporations around the world need to be people-centered [15]. All project managers interviewed considered the well-being of their team to be essential. This result aligns with the bee leadership perspective which is very much inclined towards helping each other in the workplace. What further supports this context is the negative response that was obtained from most interviewees (78%), when they responded to the question, "To me, employees are interchangeable and employee costs represent a significant percentage of the organization's overhead", demonstrating that in the organizations where the project managers worked, they seemed to care about the personnel involved in the sense that workers were not considered to be substitutable. Furthermore, 60.3% of interviewees considered that turnover rates needed to be minimal and said that, when possible, they tried to give preference to promotions from within the organization (92.7%). These results are very much aligned with what we would consider being sustainable leadership, a leadership type that is based on fairness, and ethics, providing benefits for all at present and in the future [16]. Very much aligned with this last point was the finding that 98.5% of respondents said that they cared for the well-being of their workers.

Often a big problem that we find ourselves within organizations is the lack of or limited attention to communication, which often causes distrust and may tend to reduce work collaboration. In our study, most of the interviewees felt that they were committed to knowledge-sharing. This very much implies a context of collaboration between the workers within their organizations. A large majority of the respondents understood that it is something very important to carry out throughout the organization and that communication was key. Furthermore, 97.1% of respondents agreed that having a shared vision for the future was an important strategic tool. 98.5% of the project managers interviewed valued highly staff commitment to the company and considered that teamwork was important and needed to be promoted throughout the organization. Furthermore, 95.6% thought that a high degree of trust with the workers could be achieved by maintaining good relationships with them.

There was a general preference on the part of those interviewed to meet long-term commercial objectives, as opposed to short-term ones, thus prioritizing sustainability over mere economic benefit (69.1%). Furthermore, 75% of respondents disagreed with the statement that the future did not really condition the business. This is very much aligned with the actual definition of the term Sustainable Leadership which describes a type of leadership that is continuously being carried out in an organization. Part of the reaching of long-term objectives involves accepting that change is part of an organization's life cycle if the organization wants to survive and thrive in the long term. 88.2% of interviewees said that change was a continuous and evolutionary process requiring constant consideration. Change management is key in project management and the interviewed project managers understood this and were favorable to its inclusion within their work, through the development of creative activities to identify and respond to change, as well as via investment in R&D. Furthermore, another element that was considered key for the success of an organization in the long term was innovation and how the latter should be promoted at all levels (94.1%). It should be noted that this result contrasted markedly with the response that innovation was something risky and that should be only managed by the company's manager (89.7%).

According to Tuppen and Porrit [17], sustainable leadership must also consider equity, environmental justice, intergenerational equality, and governance. Therefore, a sustainable leader must also care about the well-being of humanity and all forms of life and nature. In the study, 78% of respondents considered that the environment had a protagonist role among their business objectives. Complying with the Agenda 2030 and the 17 Sustainable Development Goals is key [10]. Much of this work may be carried out through the execution of projects. A systematic approach is needed, alongside collaboration between different stakeholders such as business, society, and civil society. 69.1% of respondents disagreed with the statement, "In my opinion, the environment exists to be exploited to increase profits".

This concept of ethics and sustainability also extends to how people and the community are treated. 95.6% of the project managers surveyed agreed that these stakeholders should be considered, since often business depends on their collaboration. Furthermore, most interviewees also agreed that having a shared vision for the future was a strategic tool (i.e., an indicator of bee-like leadership). 88.2% of respondents disagreed with the statement that people and the community should be exploited by the organization to increase its profits, and 93.5% disagreed that only the shareholders mattered. Moreover, there was general agreement (70%) that teamwork should be promoted at all levels and not be solely determined by company management.

#### 4. Discussion

This research took as its framework the model of Bee and Locust sustainable leadership of Avery and Bergsteiner (2011) [1]. According to this framework, organizations that are "100" percent "pure" regarding Bee or Locust leadership elements are hard to find. According to both authors, we are likely to find a mix of these two leadership element types. The project managers interviewed in this study seemed to indicate that in the companies in which they work, sustainable leadership is not being fully implemented, although bee leadership seemed to prevail. According to Avery and Bergteiner (2011) [1], the change towards the implementation of more sustainable leadership practices may occur in response to dramatic events such as mergers and acquisitions. Furthermore, global pressures due to changes in financial markets or political situations can also promote this form of change.

Sustainable leadership looks to the achievement of long-term objectives and should be performed collectively in organizations. In this regard, sustainable leadership is a way forward to drive an organization as well as its members towards sustainable development through the adoption and execution of socially responsible initiatives and practices. This leadership type is dependent on fair treatment and intends to benefit all organizational members in the immediate and long-term future. Sustainable leadership according to Avery and Bergsteiner (2011) goes beyond complying with the three pillars of sustainability which are financial, social, and environmental. Theoretically, a bee leadership approach would be ideal. In Bee organizations, the involvement of stakeholders such as customers, employees and suppliers is key. By contrast, Locust organizations operate in the short-term and represent the business-as-usual operations of many organizations, such as business schools, consultancy firms, and governmental organizations [1]. This leadership style is increasingly questioned as organizations are following the path to becoming more sustainable and striving toward compliance with the Sustainable Development Goals [10]. Furthermore, honeybee companies are more stakeholder oriented, more holistic in nature, and based on generating stakeholder value. In this context, managers should act as stewards for future generations and "plan for the long term and protect the firm's reputation through the implementation of ethical practices (caring for the environment and local communities)" ([1], p. 31). It is also very important to note that a Honeybee leadership approach is very difficult to fully attain 100% and hybrid organizations tend to be more frequent. Avery and Bergsteiner (2011) highlight how an organization implementing partly or fully the Honeybee-type leadership can be a self-reinforcing system, leading to better business performance and hence toward an evergreater degree of sustainability [1].

The results of this study seemed to indicate that the project managers interviewed perceived the leadership where they worked as a hybrid, the organizations seemed to practice elements of both Honeybee and Locust leadership. These results are very much aligned with Kalkavan's (2015) study, the goal of which was to assess the level of sustainable management practice. Kalkavan also used Avery and Bergsteiner's sustainable leadership model as a framework for her study. Her study results showed that despite the existence of significant sustainable leadership elements among managers of the Turkish insurance industry, corresponding sustainable leadership skills fell short of expectations, and that the leadership that was being implemented in this sector was a mixture of both leadership types [8].

At the temporal organizational level (i.e., the project level), it is only recently that leadership has been recognized as a factor that contributes towards project success. The sixth edition of the Project Management Body of Knowledge (PMBOK) [14] emphasizes the importance of the figure of the project manager and his/her team in achieving the project's goals, and how ensuring

having sufficient contextual knowledge of the type of project involved that is both its internal and its external contexts, as well as of the business environment in which the project is carried out is key to the execution of a successful project. The quality of leadership remains, as always, essential for effective project management and the achievement of successful project outcomes.

In this study, the project managers interviewed considered that the well-being of their team was essential, and the training of the latter was critical for the development of the organization. In recent years, leadership studies have moved towards a greater emphasis on a shared and human perspective, especially regarding the interaction between the leader and those executing the project on the ground. Times are changing and more and more there is a need for a more ethical and people-centered management, a type of leadership inspired by servant leadership. Servant leadership is very aligned with the Bee-leadership philosophy, with respect to the relationship that servant leaders have with their co-workers, while focusing their attention on the needs of the latter. The results of this study demonstrated that the project managers' organizations followed more of a hybrid sustainable leadership approach, however more inclined towards the bee-type philosophy.

Today, innovation and employee well-being have a high priority, and therefore leadership that is based on ethical and caring behavior has grown in response. In addition, this type of leadership dynamics social responsibility as an element in transformational leadership. Furthermore, according to Tuppen and Porrit [17], sustainable leadership should also consider equity, environmental justice, intergenerational equity, and governance. In line with this, according to Kouzes and Posner, a sustainable leader should also be concerned with caring for the well-being of humanity and all forms of life and nature itself [6].

In Spain, there seems to be anecdotal evidence that companies have, over time, been gradually moving towards a bee-type model of leadership. A company that appears to comply with the three pillars of sustainability is the clothing company Inditex, which has pledged to achieve sustainability across its global operations that aligns with the 2030 UN agenda (i.e., specifically aligned with SDG 8, promoting sustained, inclusive employment and decent work for all) [10]. Among those that incorporate some aspects of environmental, economic, and social sustainability, Enagas may be noted as being one of the most sustainable companies in its sector, obtaining 85 points out of 100 in the Dow Jones Sustainability Index [10]. Iberdrola is a company that was recently named in 2021 the most sustainable company in Spain and has been a pioneer in drawing up its first Diversity and Inclusion report. According to the latter the company works towards the creation of a working environment where opportunities are created and where everyone can display their maximum potential. We must emphasize that while these companies appear, in principle, to follow a bee-type leadership philosophy, a specific internal analysis of each company would be needed to confirm this. From this study, it has been shown that project managers felt that they worked in organizations that seemed to follow a mix of both Bee and Locust sustainable leadership philosophies. Their perspective as managers was also very much aligned with a hybrid approach of sustainable leadership as proposed by Avery and Bergsteiner's model [1]. This is a novel study as never before had Sustainable Leadership been analyzed at the project management organizational level as temporal organizations.

#### 5. Conclusions

The main objective of this research was to analyze how project managers in Spain perceived leadership in their organization and determine whether such leadership fits within Avery and Bergsteiner's (2011) sustainable leadership framework [1]. The results of the study showed that project management in Spain demonstrates a mix of leadership elements of bees and locusts. This context is quite common as it is very difficult to find an organization that is 100 percent consistent with the bee or locust models of leadership.

Regarding future research, the authors would like to suggest the following:

- Carry out this same study but expand the sample to also include project managers from other European countries.
- The same study could be repeated in the long term, therefore, carry out a longitudinal study, to observe different trends in the development of sustainable leadership over time in several different organizations. Cross-sectional evidence over time is necessary to create a repository of lessons learned to demonstrate whether sustainable leadership is the way forward.

The key to success, and to real sustainability, is its consideration in business strategies and the design of projects. In this sense, the project managers interviewed highlighted the importance of meeting the long-term objectives of the organization, thus prioritizing sustainability over mere economic benefit.

### **Data Availability**

The data that was used for the development of this study is primary data obtained by the authors of this study.

#### **Author Contributions**

All authors contributed equally towards the development of this work.

#### **Conflicts of Interest**

The authors have no conflict of interest to declare.

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# Appendix A. Sustainable leadership interview questions

## Part I. Introductory questions

- Sector
- Role
- Years of experience
- You work in the organization X. Could you tell me a little more about your organization?
- Have you always worked here? Why did you join this company?
- What challenges do you currently face in your organization? Name one or two (the most relevant).

# Part II. Sustainable Leadership questions

- 1. In terms of training and development I aim to develop everyone continuously.
- 2. In terms of training and development I aim to develop people selectively.
- 3. For me, long job tenure is very important at all levels.
- 4. At some level I can accept a high degree of personnel turnover.
- 5. I mostly make promotions from within the organization wherever possible.
- 6. I mostly appoint people from outside the organization wherever possible.
- 7. I am concerned about employees' welfare.
- 8. For me employees are interchangeable and employee cost is a very significant cost item in accounting.
- 9. In my opinion a CEO works as the top team member or as the representative of the team.
- 10. In my opinion a CEO is a decision maker and can be considered as the person in charge.
- 11. "Doing the right thing" in the business is more important than profit.
- 12. For me, assessable risks can be taken in any situation to increase profit.
- 13. I prioritize long-term business objectives over those that are short term.
- 14. I prioritize short-term profits and growth considerations.
- 15. I think that change is an evolving and considered process.
- 16. I think that change is something rapid, volatile, perhaps even ad hoc.
- 17. I think that people should work with maximum independence from others to increase the profits from their work.
- 18. I think people should follow their managers and obey instructions.
- 19. In setting business objectives, I always emphasize protecting the environment.
- 20. In my opinion, the environment is there to be exploited to increase profit.
- 21. I think that the interests of the people and of the community within the business environment should be carefully considered in making business decisions.
- 22. I think the people and community should be exploited since they are available to the business to increase profit.
- 23. I think that everyone matters, whether they are related to the business or not.
- 24. I think, since we are in business to generate profits, that only shareholders matter.
- 25. I believe in vision statements embodying a shared view of the future as an important strategic tool.
- 26. I believe that a vision of a shared, consensual future does not necessarily drive the business.
- 27. I believe the decision making in the business should be consensual and devolved.
- 28. I believe the decision making in the business should be primarily manager centred.
- 29. I believe staff are capable of self-managing.
- 30. I believe managers should manage and control staff.
- 31. I think team working should be extensive and empowered.
- 32. I think team working should be limited and manager centred.
- 33. I think widely shared culture fosters and enables the meeting of business objectives.
- 34. I think the pursuit and the achievement of short-term business objectives constitutes a valid business culture.
- 35. I believe the sharing of knowledge is especially important and should be practised throughout the organization.
- 36. I believe that knowledge-sharing is important only to the extent of a need-to-know basis with people having access only to what they need to fulfil their specific roles in meeting the overall business objectives.
- 37. In business I need to foster a high degree of trust through relationships and good will.
- 38. In business we must control and monitor staff to compensate for a low trust environment.
- 39. In my opinion strategic innovation is especially important and therefore should be encouraged at all levels of the organization.
- 40. In my opinion, innovation is risky and therefore should only be managed by managers.
- 41. I highly value emotionally committed staff.
- 42. In my opinion, financial rewards suffice as motivators, therefore I do not expect emotional commitment from the staff.
- 43. In my opinion, quality ought to be embedded within the culture of the business.
- 44. In my opinion, quality may only be achieved through mechanisms of control.
- 45. I effectively communicate the business culture and the strategic actions to be developed.
- 46. I understand that the functions of the workers on my team are easily achievable using new technologies, and that using them can eliminate jobs.

# Appendix B

**Table B1.** Results in percentages of a questionnaire based on interviews with 68 project managers from different sectors in Spain (The percentages are based on the proportions over a total of 68 participants).

Question	1	2	3	4	5
1	2.9%	4.4%	20.6%	33.8%	38.2%
2	8.8%	5.9%	20.6%	47.1%	17.6%
3	4.4.%	7.4%	27.9%	30.9%	29.4%
4	8.8.%	33.8%	36.8%	19.1%	1.5%
5	0%	1.5%	5.9%	41.2%	51.5%
6	5.9%	19.1%	51.5%	19.1%	4.4%
7	0%	0%	1.5%	11.8%	86.8%
8	52.9%	25%	10.3%	7.4%	4.4%
9	5.9%	17.6%	36.8%	22.1%	17.6%
10	0%	8.8%	29.4%	29.4%	32.4%
11	1.5%	1.5%	27.9%	32.4%	36.8%
12	4.4%	20.6%	33.8%	27.9%	13.2%
13	4.4%	1.5%	25%	33.8%	35.3%
14	42.6%	29.4%	22.1%	2.9%	2.9%
15	0%	0%	11.8%	33.8%	54.4%
16	14.7%	26.5%	27.9%	22.1%	8.8.%
17	22.1%	30.9%	29.4%	10.3%	7.4%
18	17.6%	22.1%	39.7%	17.6%	2.9%
19	0%	10.3%	11.8%	22.1%	55.9%
20	82.4%	11.8%	2.9%	2.9%	0%
21	0%	0%	4.4.%	22.1%	73.5%
22	83.8%	4.4.%	5.9%	2.9%	2.9%
23	0%	1.5%	5.9%	32.4%	60.3%
24	70.6%	23.5%	5.9%	0%	0%
25	0%	0%	2.9%	25%	72.1%
26	50%	25%	16.2%	5.9%	2.9%
27	0%	5.9%	22.1%	44.1.%	27.9%
28	19.1%	39.7%	23.5%	16.2%	1.5%
29	1.5%	11.8%	33.8%	35.3%	17.6%
30	8.8.%	17.6%	33.8%	33.8%	5.9%
31	0%	0%	1.5%	23.5%	75%
32	63.2%	25%	11.8%	0%	0%
33	0%	0%	2.9%	26.5%	70.6%
34	2.9%	2.9%	5.9%	45.6%	42.6%
35	0%	0%	1.5%	7.4%	91.2%
36	79.4%	17.6%	1.5%	1.5%	0%
37	0%	0%	4.4.%	27.9%	67.6%
38	39.7%	35.3%	14.7%	10.3%	0%
39	0%	0%	5.9%	17.6%	76.5%
40	63.2%	26.5%	5.9%	4.4.%	0%
41	0%	0%	1.5%	19.1%	79.4%
42	39.7%	41.2%	16.2%	2.9%	0%
43	1.5%	5.9%	19.1%	29.4%	44.1%
44	39.7%	20.6%	23.5%	11.8%	4.4.%
45	0%	0%	11.8%	52.9%	35.3%
46	29.4%	39.7%	16.2%	14.7%	0%