

How to Be a Great (Stats or Programming) Manager: Advice from an Underling

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ABSTRACT

Programmers and statisticians aren't well-known for being social butterflies. Most of us will tell you we prefer working with computers or numbers rather than people. In the contract research organization (CRO) world, however, we often find ourselves having to work with many different people, not just within our own company but also with clients and vendors. This environment can be challenging for introverts who are just starting a new job but even more so for introverts who find themselves in a managerial position. A manager may be a great programmer or statistician, but this doesn't mean he or she will also be a great manager. Additional skills are needed to bring a department or team together and help everyone, from the lowest ranks on up, to succeed. As an underling, I have compiled a list of actions, along with anecdotes and references, that stats and programming managers can take to overcome their introverted tendencies to help their (introverted) underlings succeed (and stay) at their company. I will also include suggestions for my fellow underlings on how to be a "great" underling for their managers.

INTRODUCTION

In *What's Your Type of Career*, Donna Dunning identifies four main personality types (Practical Expeditors, Logical Assimilators, Practical Analyzers, and Insightful Analyzers) that are drawn to careers in statistics and computer programming. People with these personality types, which tend to be introverted, task-oriented, and analytical, are drawn to these careers because such careers allow them to work independently and analytically on well-defined projects. Once statisticians or programmers move into managerial positions, however, they may find that their personality type may not "fit" a career in management very well. Managing people requires a different set of skills that can be difficult to learn for people who are naturally more project- than people-oriented.

Having worked under managers in a variety of work environments, including non-profit, retail, and government, I have been exposed to a variety of management styles. Some management styles were completely hands-off, others hard-driving. What I discovered over time was that there is a certain management "type" that made me (as well as my coworkers) want to do my very best. Based on my observations, it is my belief that one important step to becoming a great manager is learning to be aware of how your personality type may be determining how you work with your employees. Keeping in mind the four common personality types shared by many statisticians and programmers, I have compiled a list of five "words of advice" to managers who are wondering how to develop good management skills. I hope that hearing it from an underling will provide you with a new perspective on your role as manager and ultimately help you on your road to becoming a great manager. (Suggestions for how underlings can help facilitate your journey are included at the end of each advice section.)

DARE TO ASK

WORDS OF ADVICE: ASK US HOW THINGS ARE GOING, EVEN IF YOU DON'T LIKE ASKING QUESTIONS THAT DON'T HAVE CONCRETE ANSWERS.

Personality Type I: Practical Analyzers like to troubleshoot and solve current problems. They enjoy dealing with immediate situations and are most engaged with analyzing the details and specifics of a concrete problem (Dunning, p. 277).

A career in statistics is perfect for practical analyzers because it involves concrete goals, such as writing Statistical Analysis Plans (SAPs), programming derived datasets, or producing two hundred tables, listings and figures for one study. Stats and programming managers who have spent most of their careers

working on projects and meeting deadlines before becoming managers may naturally approach their underlings in the same way. He or she will give them defined tasks and goals and focus on making sure they finish their projects on time. They may think they are successful managers based on how much their employees produce.

By viewing their employees merely as producers, managers can lose sight of their employees as *people*. In 2015, the average turnover rate for the U.S. CRO industry was 25.1%, up from the previous year despite an increase in salaries by 7% (Fassbender). This fact demonstrates that it is not only pay that motivates us to produce, but other factors as well. According to the authors of *Love 'Em or Lose 'Em: Getting Good People to Stay*, “a crucial strategy for engaging and retaining talent is having conversations with every person you hope will stay on your team” (Kaye and Jordan-Evans, p. 2). These conversations should include asking “what can I do to keep you?” early and often. The authors add, “Not only will asking make your talented people feel valued, but their answers will provide the information you need to customize strategies to keep each of them” (p. 11).

As a manager, you might be afraid to ask such open-ended questions as “what can I do to keep you?” or “how are things going?” because there may not be an immediate solution. Now, imagine that one of your most productive employees is starting to burn out because he or she is taking on too much work. Would it be better to find this out by asking how they are doing just as they are starting to burn out or by waiting until the employee resigns? Even if you don't have an immediate solution, giving the employee an opportunity to explain how they are feeling can have a big impact. Once this situation is on your radar, you can start working towards a solution that avoids the outcome of a resignation.

In addition to asking us how things are going, take the time to listen carefully. It's tempting to start coming up with a solution right away or to minimize any problem brought up by dismissing it as unsolvable. If you take the time to listen without making a quick decision, you are sending a message to your underling that they can trust you to tell you what's going on with them without judgement. You can be a sounding board for their ideas and/or gripes and they may need your help to bring some perspective to what they are going through. Once you have built this trust, they will come to you to let you know about any problems right away instead of waiting until it is too late.

SUGGESTION FOR UNDERLINGS: WHEN YOUR MANAGER ASKS HOW THINGS ARE GOING, BE HONEST BUT REASONABLE AND USE EVIDENCE.

If your manager asks you how things are going, don't launch into a long list of your personal life issues or start gossiping about other employees. If you would like your manager to take you seriously, be thoughtful about your response and provide evidence of any problems you might have encountered in your day-to-day activities. If you need time to think about it, ask if you can get back to them or if they can schedule a one-on-one meeting that you can prepare for. If you do have a problem you feel they can address, try to appeal to their practical nature by framing it in concrete terms. Recognize your limits and seek help early on so that your manager has time to work on a solution before you get yourself into hot water. Work together with your manager in developing a solution with which you can both be happy.

A PENNY FOR YOUR THOUGHTS

WORDS OF ADVICE: AS A MANAGER YOU HAVE A LOT ON YOUR MIND, BUT PLEASE DON'T EXPECT US TO READ IT.

Personality Type: Logical Assimilators are usually directive and authoritarian leaders... It is important that they share their expectations and standards openly with others, since they tend to have much more exacting standards than others do (Dunning, p. 219).

When I first started working at a CRO, one of my first tasks was to read through the company's Standard Operation Procedures (SOPs). These SOPs explained the general steps employees were required to take to ensure quality work as well as meet FDA guidelines for clinical studies. I found these to be helpful because they were written instructions of the general company processes, something that I could turn to

for guidance if I wasn't sure of the next step to take when providing services to a client. These instructions were meant to lay a foundation for all the activities that took place in the company.

When it comes to more detailed processes involving specific tasks, however, the instructions are often left up to managers. Authoritative managers may forgo providing such detailed instructions because they operate under the assumption that their job is merely to direct, leaving it up to the employee to figure out exactly how to get there. Managers who have high expectations for their employees can take it for granted that their expectations are known without directly communicating them. While it is reasonable to hold us to high standards, if we don't know what those standards are, these expectations become unreasonable.

Especially for new employees who are just learning the ropes, it is worth your time in the long run to be clear about what is expected from the start. If you see an employee struggling with understanding what you are telling them to do, stop and ask them what needs clarification. If you see that they have done something completely different from what you requested, try to identify at what point the breakdown in communication occurred.

Another problem with not being able to read your mind is that we can spend a lot of time wondering how we are doing. As the authors of *Love 'Em or Lose 'Em* point out, "People want to know where they stand—they want to know if your perception of their performance is the same as their own" (p. 199). If we don't receive feedback, either negative or positive, from you on our performance, we are at a loss as to how we can improve. Waiting until the annual performance review to provide us with your feedback is not enough. Since the annual review covers such a long period of time, about 2,000 working hours, it tends to be so general that it is difficult for us to identify specific ways to improve in our daily work.

If you are a manager who has high expectations, then providing feedback more often to your employees can help you ensure that your expectations are met. "To retain your key people, it is essential that you give regular, honest input about their work" (Kaye and Jordan-Evans, p. 201). The best way to ensure that the same mistakes aren't repeated is to address them right away. Likewise, if your underling performs a task well, let them know right away so that they know to repeat it. We value your opinion of our work and want to improve. If you let us know what you are thinking, we can feel more assured that we are all on the same page about expectations and work together to meet them.

SUGGESTION FOR UNDERLINGS: WHEN YOU ARE HAVING TROUBLE READING YOUR MANAGER'S MIND, DON'T GUESS.

You might be hesitant to "bother" your manager, but if you feel that it will save time in the long run, i.e., before things have started moving forward, then take a minute to ask your manager for further clarification, in a succinct way. This will help your manager identify any additional resources you might need or how they can improve their own way of communicating in the future.

If you would like more timely feedback on your performance, ask your manager to set up regular meetings to discuss this with you. Show up to the meetings with specific questions about your recent activities. Be prepared to hear both positive and negative feedback and take the time to reflect on what your manager tells you. This a great opportunity to grow!

DELEGATION IS YOUR FRIEND

WORDS OF ADVICE: TRAINING US TO DO IT CAN BE JUST AS REWARDING AS DOING IT YOURSELF.

Personality Type: Practical Expeditors set high standards for themselves and for others. They can sometimes take on too many responsibilities and may become overcommitted (Dunning, p. 122).

When I was a statistical programmer, I noticed that my manager's work was starting to pile up on the studies on which both of us worked. Since I was familiar with the studies and happened to be caught up on my own work, I offered to take some work off her hands. Realizing that she wouldn't be able to keep

up with the work unless she delegated it, she decided to take me up on my offer. She took the time to show me how to perform her usual activities on those studies. There were several positive outcomes to her decision to delegate:

1. My manager was able to free up time to focus on her managerial duties.
2. I was able to learn a new skill.
3. My manager could identify me as an additional resource when training others on the same skills.
4. I appreciated and felt more encouraged that she trusted me to help her out.

“If delegation is so great, why don’t managers do it more often?” (Belker and Topchick, p. 181). One could argue that it is easier to just do something yourself rather than taking the time to train someone else to do it. This works in the short-term, when you are trying to get something out the door as soon as possible. However, in the long-term this strategy has several drawbacks. One drawback is that although you might have the time to do it yourself right now, you might not have time later. Another drawback is that you are sending the message that you don’t trust someone else to do it or that you don’t think anyone else is capable of learning how to do it.

Perhaps one way to resist the temptation to do it yourself is to consider what other tasks or duties you are neglecting while you work on a task that one of your employees can do just as well. If you can think of other tasks that might be more important, especially ones that can improve the long-term outlook of your department, then it might be better to train or identify someone else to do that task instead. You can still take the time to review the employee’s work and provide feedback. It might take longer to train than you planned, but remember that you are making a long-term investment, so it is worth your while to take that extra time to make sure it sinks in.

SUGGESTION FOR UNDERLINGS: MAKE IT WORTHWHILE FOR YOUR MANAGER.

A manager who takes the time to teach you something trusts you to do it on your own. Write everything down for future reference so you don’t need to keep going back to them to repeat their instructions. If you find yourself struggling with something, be honest about it and let your manager know with what specifically you are struggling so they can help you. If you are delegated a task, make sure you get it done on time and according to your manager’s specifications so that they know they made a good decision by delegating it to you.

YOU ARE OUR BEST ADVOCATE

WORDS OF ADVICE: BE LIKE THE LORAX AND SPEAK FOR US “TREES.”

Personality Type: Insightful Analyzers like to work with abstract possibilities using a strategic focus. They seek opportunities to spend time alone reflecting on and processing ideas (Dunning, p. 292).

Statisticians and programmers who have a more “insightful” personality type can develop a deep understanding of the “whys” of their work and are extremely knowledgeable about their craft. They can explain complex ideas and processes in great detail and provide intellectual weight to their workplace. As a budding statistician, I have sought out employees with this personality type to help me understand a difficult statistical concept or interpret the International Conference on Harmonisation (ICH) guidelines.

If you are a manager with this personality type, it might be difficult to set aside your tendency to play with ideas and focus on the day-to-day needs of your employees. Your employees need you to not only be a fount of wisdom, but also to be their advocate. One of the best examples of advocacy can be found in *The Lorax*, the well-loved children’s book written by Dr. Seuss. As told in the book, the Lorax tries to save the Truffula trees by pleading with the Once-ler to stop cutting all of them down. He is the only one willing to speak up for the trees, who are unable to speak for themselves.

As a manager, you can be like the Lorax and speak up for your underlings. In a large CRO, you are our collective voice to upper management, who may not be aware of what low-level employees are dealing with on a day-to-day basis. Working on clinical trials can be stressful if the processes aren't clear, there aren't enough employees to share the workload, or the technology is cumbersome. By listening to our collective needs and identifying ways to improve our daily working conditions, you can leverage your position as manager to bring these needs to the attention of upper management. We depend on you to go to bat for us. By speaking on our behalf, you are showing us that you take our needs seriously and we will love you for it, even if we don't get what we want.

SUGGESTION FOR UNDERLINGS: WHEN YOUR MANAGER ADVOCATES FOR YOU, BE APPRECIATIVE.

Just because your manager is open to suggestions for improvement, don't take it as an opportunity to complain about everything. Be specific about your needs and justify them. Identify other employees who are experiencing similar issues to demonstrate that a change will benefit others, too. Focus on concrete things that will make your work more efficient and of higher quality. If your manager secures a better computer software program or receives approval for hiring more staff, express your thanks, even if their efforts are unsuccessful.

TAKE THE LONG VIEW

WORDS OF ADVICE: MAKE IT YOUR GOAL TO SEE THE FOREST, TOO

Personality Type: Logical Assimilators may become impatient with spending time defining and building processes (Dunning, p. 221).

The CRO work environment can be fast-paced, with multiple deadlines occurring at the same time. Statisticians and programmers are expected to work on several studies simultaneously and adapt to constantly shifting deadlines as well as changes in the scope of their projects. As a result, they can get so caught up in the day-to-day activities that they lose sight of the big picture. A cycle can develop in which employees move from one task to the next and one study to the next without taking time to think about how they could have completed the task more efficiently or how communication could have been improved between team members. In such an environment, the same mistakes can be made again and again, employees can feel like they are spinning their wheels, and as the workload increases, efficiency decreases.

Statisticians and programmers who become managers may find it difficult to turn from the task at hand to take in the larger view of the environment in which that task is being performed. As the saying goes, they "can't see the forest for the trees." As managers, you are in a unique position to be able to take a step back and see what's working and not working in your workplace so that you can make long-term improvements. Managers who spend more of their time working on "defining and building processes" can streamline their workplace and reduce the amount of time employees spend trying to create processes for themselves.

As a manager, you can "see the forest" by asking more general questions about your department's performance. Here are some examples of what to ask:

- Which clients are the most satisfied and why? Which ones are the least satisfied and why?
- Are employees constantly missing deadlines? If so, why?
- Is the turnover rate increasing? If so, why?
- Which of the current processes are working? Which ones aren't working?

The answers to these questions and others can help you form a bigger picture of how well your department is functioning as a whole. With this picture in mind, you can then start to develop long-term solutions to systemic problems and take steps to ensure existing behaviors that have demonstrated success become workplace norms. As you start working towards a more well-functioning workplace, the fast-paced nature of the CRO environment will become more manageable for your employees.

SUGGESTION FOR UNDERLINGS: HELP YOUR MANAGER SEE THE FOREST BY BLENDING IN WITH THE TREES.

Help your managers identify areas in your work environment that could be improved. Try not to distract them with complaints about minor issues. “Blend in” with your coworkers so that your manager can focus on the bigger picture. Your manager may not be able to fix things right away, so be sure to give them time to figure out how to solve one thing before pointing out another issue. Provide positive feedback when improvements are made.

CONCLUSION

Statisticians and programmers who are aware of how their personality type can affect their management style can overcome their natural inclinations and take action to become great managers. To summarize, these actions include asking open-ended questions, clarifying expectations, delegating tasks, taking on the role of advocate, and looking at the big picture. With the assistance of cooperative and responsive underlings, great (stats and programming) managers can make their departments a great place to work.

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