Therapy Lessons Learned to Empower Programmers

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ABSTRACT

In the same way that educators teach much more than their subject matter, managers of programmers teach their employees much more than programming. Essentially teachers teach students and managers teach their employees. While it is imperative to know your subject matter in order to teach it to students or to know how to program in order to manage programmers; quite often, the interpersonal relationship that a manager maintains with her or her employees will have much more influence on an employee's work quality, productivity, job knowledge, creativity, job satisfaction, ability to work with others, and a whole host of other criteria which often form the basis of performance evaluations.

So how does this relate to therapy? First of all, this is not to imply that all managers or all programmers need therapy. Nor is it meant to imply that those who have been in therapy somehow have a leg up on those who haven't. However, many of the same communication techniques learned and used in a therapeutic environment between a therapist and patient can be used in an office setting to promote a collaborative and supportive environment in which programmers can feel empowered.

This paper is geared towards those who manage programmers. However, much of the information can also be applied to those who manage people in general.

INTRODUCTION

Managing programmers involves a combination of technical and non-technical skills. Technical proficiency is often a prerequisite for becoming a programming manager; however, technical programming ability alone has very little to do with one's ability to manage programmers. Non-technical skills such as communication, empathy, and empowerment are as important, if not more important, than technical ability when it comes to managing programmers.

This paper will identify various personality types and behaviors by using the profiles outlined in DiSC®. DiSC® assessments are not a component of this paper; however, generalizations based on these personality types will be used to illustrate how therapy techniques can be applied to different personality types. DiSC® assessments are only to be administered by a certified facilitator and that is beyond the scope of this paper.

The therapy lessons and techniques described in the paper draw upon several basic components of Cognitive Therapy as well as actual therapeutic experiences.

Definition of Cognitive therapy:
A relatively short-term form of psychotherapy based on the concept that the way we think about things affects how we feel emotionally. Cognitive therapy focuses on present thinking, behavior, and communication rather than on past experiences and is oriented toward problem solving. Cognitive therapy has been applied to a broad range of problems including depression, anxiety, panic, fears, eating disorders, substance abuse, and personality problems.

Many of the same communication techniques learned and used in a therapeutic environment between a therapist and patient can be used in an office setting to promote a collaborative and supportive environment. Five specific therapy skills, disarming, paraphrasing, inquiry, **empathy**, and boundaries, will be described and examples provided.

Medical Definition of empathy:
1: the imaginative projection of a subjective state into an object so that the object appears to be infused with it
2 : the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another of either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner; *also* : the capacity for empathy

To see how to use therapy lessons to empower programmers, a real world programming example will be used in conjunction with the previously defined personality types. The personality types will each represent a programmer. Based on a single example, four of the therapy techniques will be applied to three programmers to illustrate how to use these techniques to **empower** programmers.

Definition of empower:
1: to give official authority or legal power to <*empowered* her attorney to act on her behalf>

2: enable 1a
3: to promote the self-actualization or influence of <women's movement has been inspiring and *empowering* women — Ron Hansen>

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│ Know Programmers / │  │ Apply Techniques   │  │ Empower Programmers │
│ Identify Roles     │  │   • Disarming      │  │                    │
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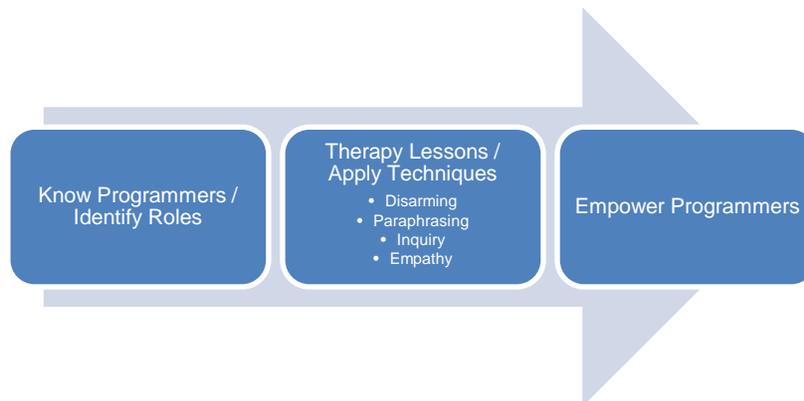
PROGRAMMING MANAGERS

WHO TYPICALLY MANAGES PROGRAMMERS?

In a biostatistics or programming department, programmers typically manage other programmers. Those who excel as programmers are skilled at analytical thinking, attention to detail, and writing code to produce desired output. The ability to manage and train other programmers assumes you have the ability to program as well as the ability to manage and train. So what additional skills, besides programming, does it take to effectively manage other programmers?

MANAGER SKILLS AND ASSESSMENTS

A checklist for a qualified programming manager might include the following skills:

- leadership
- problem solving and decision making
- compliance
- training and development

While these skills have the desired outcome of ensuring quality management, these skills alone will not guarantee quality management. Without the ability to empower programmers, quality management will not exist. If programmers do not feel empowered, no other management skills will be able to overcome this deficit. Empowering programmers goes far beyond the management components of leadership, problem solving and decision making, compliance, and training and development. While all of these managerial competencies are integral to management, it is the often the more subtle interpersonal skills that can never be measured by a checkbox that truly leads to empowering employees.

Empowering employees involves employees feeling good about their accomplishments, wanting to accomplish more, raising their own expectations, and realizing their full potential. Feeling empowered is what resonates with the employee. What empowers one employee may not empower another. Tuning into an individual employee's personality and needs will enable a manager to go from meeting manager expectations to genuinely supporting employees and building quality relationships. By empowering employees, a manager has set the stage to allow them to effectively lead, problem solve, train and develop employees. Feeling empowered allows programmers to excel at their work and be successful.

This is my no means the only way to build relationships and empower employees. Active listening is a tool to use to help facilitate the interaction between manager and programmer. Some managers may inherently have these interpersonal skills and the ability to connect with programmers; and, some programmers may inherently be self-motivated.

PROGRAMMERS
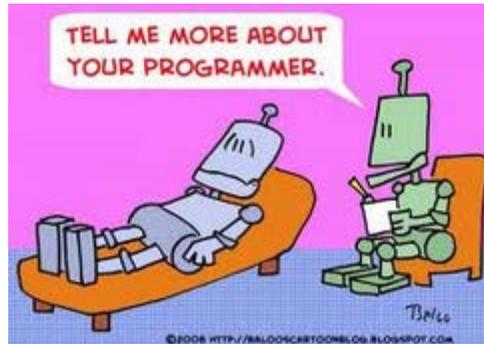
TYPES OF ROLES

While every programmer is unique, there are a number of tests (e.g., Myers-Briggs Type Indicator®, DiSC®, etc.) designed to look at personality types and behaviors. People are made up of varying degrees of each of the following styles and generally have a dominate behavior style. Using the DiSC® assessment tool, which focuses on four main personality types, programmers, for purpose of this paper, will be categorized by their "dominate" personality traits and behaviors to fit into a single category. No one has only one style and styles can change over time; however, using these four types of behavior categories will allow some generalizations to illustrate the therapy techniques described below.

Using these general classifications, managers can begin to assess their employees' personality traits and begin to formulate a plan for how best to work with each employee. No two employees are alike and management styles are most effective if geared towards each employee's unique personality.

Below is a brief overview of the four DiSC® styles:

"D" = "Dominance" [1] – emphasis on shaping the environment by overcoming opposition to accomplish results

- Prioritizes getting immediate results, taking action, challenging self and others
- When communicating with the D style individual:
    - give them the bottom line
    - be brief
    - focus your discussion narrowly
    - avoid making generalizations
    - refrain from repeating yourself
    - focus on solutions rather than problems
- "D" style individual are often the leaders in an organization and are motivated to get ahead

"D" style programmers are a rarity. This can be problematic as someone who is a programmer gets promoted to a manager. Since "D" may not be their primary type of behavior, some programmers may be taking o roles that are outside of their comfort zone and not necessarily compatible with their strengths. It may be challenging for a

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department without any "D" style management to have leadership. It can also be challenging if there are too many "D" style managers within a department as there could be too many people vying to be in charge.

Management Note: An advantage of having a "D" style manager is that they tend to make quick and efficient decisions. A disadvantage of having a "D" style manager is that they might be motivated more by getting ahead than by ensuring that their employees get ahead.

"i" = "Influence" [1] – emphasis on shaping the environment by influencing or persuading others
- Motivated by social recognition, disapproval, loss of influence, and being ignored
- When communicating with the "i" style individual:
    - share your experiences
    - allow the "i" style person time to ask questions and talk themselves
    - focus on the positives
    - avoid overloading them with details
    - don't interrupt them
- "i" style individuals are often the fun/playful people in an organization

There are also not many "i" style programmers. However, "i" is more common than "D" style programmers. The "i" style programmer will reap the benefits of using the techniques described in this paper. For the "i" style individual, having someone who understands them is key to their success. They need time to process information, but once they do, they are often very creative individuals. Fun is a huge motivator for an "i" and allows them to be creative.

Management Note: An advantage of an "i" style manager is that they tend to be fun and recognize others for their contributions. A disadvantage of an "i" style manager is that might be a challenge for them to follow through on everything they have committed to.

"S" = "Steadiness" [1] – emphasis on cooperating with others within existing circumstances to carry out the task
- You will notice: patience, team person, calm approach, good listener, and humility
- When communicating with the "S" style individual:
    - be personal and amiable
    - express your interest in them and what you expect from them
    - take time to provide clarification
    - be polite
    - avoid being confrontational, overly aggressive or rude
- S style individuals are often the people who are easiest to get along with in the organization

Many programmers are "S" style individuals. "S" style people are great at working on a team and get along well with others. These are the people who tend to be in a good mood all the time, or at least they appear to be. An "S" is motivated by avoiding confrontation and will go to great lengths to do so.

Management Note: An advantage of an "S" style manager is that they are easy to get along with and they are good listeners. A disadvantage of an "S" style manager is that they might want to please everyone; and in doing so, they end up not pleasing anyone.

"C" = "Conscientiousness" [1] **–** emphasis on working conscientiously within existing circumstances to ensure quality and accuracy

- Fear social criticism, slipshod methods, and being wrong
- When communicating with the C style individual:
    - focus on facts and details
    - minimize "pep talk" or emotional language
    - be patient, persistent and diplomatic
- C style individuals are often the most productive "worker-bee" types in an organization

The vast majority of programmers fall into this category. They are very analytical in their approach to problem solving. The "C" style individual likes to follow the rules and wants things to be black and white without any grey area. This emotional aspect of the therapy techniques can be minimized with "C" style programmers; however, it is still important that they be heard and understood. Moving into management might be challenging for a "C" because management tends to involve quick decisions and "C" style individuals want every possible fact before committing to a decision. Once a "C" does make a decision, it is almost guaranteed to be accurate.

Management Note: An advantage of a "C" style manager is that they will go to great lengths to get an answer and be correct. A disadvantage of a "C" style manager is that they might want focus too much on the technical aspects of the work and not provide enough emotional support to all of their employees.

THERAPY LESSONS

One of many goals of therapy is to learn to communicate with others to help improve relationships. Cognitive therapy is based on connecting thoughts and feeling within current situations to help address a broad range of topics. The relationship between a therapist and a patient is strengthened through creating a supportive environment in which a patient can openly and honestly express themselves. Although a manager is not expected to be a therapist, there are certain situations where it can be helpful for a manager to provide emotional support. Likewise, an employee is not expected to be a patient; however, life tends to throw obstacles in our path and it is often a manager who is there to help pick up the pieces.

The Feeling Good Handbook, by David D. Burns, M.D. [2] provides a number of examples of how to improve communication with others. Improving communication is not limited to therapy and these same techniques can be applied to the relationship between a manager and programmer. The listening skills outlined by Dr. Burns include "The Disarming Technique," "Empathy (thought empathy and feeling empathy)," and "Inquiry." Thought empathy involves paraphrasing another person's words. Each of these active listening skills will be described below and adapted to fit the manager and programmer as opposed the therapist and patient.

Along with the active listening skills, managing others needs to include knowing your employees and providing adequate boundaries to allow for clear lines of communication.

KNOW YOUR EMPLOYEES

Knowing who your employees is the first step to building a solid relationship. You do not need to best buddies; however, knowing the personality of your employees and their like outside of work goes a long way in building a relationship. Take some time to find out what your employees like and dislike. Ask questions to get information. For example, "how was your weekend?" They are more than just a person who reports to you. Being attuned to your employees will go a long way when it comes to empowering your employees.

LISTENING SKILLS

1) **The Disarming Technique:** Find some truth in what the other person is saying, even if you feel convinced that what they're saying is totally wrong, unreasonable, irrational, or unfair.

People want to be heard and understood. The disarming technique doesn't mean that you have to agree with something you do not believe. But instead of arguing and resisting, this tactic is much more powerful because it can have a calming effect. The idea is to find at least one piece of truth.

Example: An employee complains that they had to fix someone else's programs and feels they do more than their fair share of the work.

Response: "You are right to feel that way." You may or may not agree that they do more than their fair share. You may not even know if they really had to fix someone else's program. But you can certainly agree that they have a right to their feelings.

The idea in this example is that the employee upset and you want to help calm them down. Instead of fueling the fire, you want to defuse the situation and create a safe space where they can be heard.

2) **Paraphrasing:** Repeat or restate out loud what the other person said so they will know that you understand their point. You can ask questions to clarify. The goal is to understand what your employee is saying and not necessarily agree or disagree or state your own feelings.

Example: A programmer thinks they sent incorrect output to a client because the client indicated that the data did not look updated.

Response: "It sounds like you are saying that you ran output on data that wasn't updated. Is that correct?" Paraphrasing is done in a neutral tone to clarify the issue and allow the employee to be understood.

The objective is to thoroughly understand what the employee is saying.

3) **Inquiry:** Ask gentle probing questions to learn more about what the other person is thinking and feeling. Voice tone is crucial and a manager needs to avoid sarcasm or acting defensive for this technique to work. Asking a question in a non-threatening manner can help to disarm people and allows them to open up. People can be afraid to talk about their thoughts and feelings. Asking someone if they think or feel a certain way may provide an opportunity to identify what is happening.

Example: A programmer thinks they sent incorrect output to a client because the client indicated that the data did not look updated. Using the same example and response from paraphrasing above, the next step is inquiry.

Response: The employee may be feeling many things. For example, some programmers might be feeling guilty that they didn't check the output date, others might be feeling upset with the person who should have exported the data, others might be feeling unsure of what to do, and still others may have a variety of other feelings. The objective of inquiry is to identify what is happening for your employee. Ask questions such as, "If I were you I might feel frustrated with myself for not checking the date before running that output. Is that how you are feeling?"

Continue to ask until you completely understand the situation and their feelings. You are not judging; but rather, you are trying to listen and understand your employee.

4) **Empathy:** Put yourself in the other person's shoes and try to see the world through their eyes. Empathy and paraphrasing can be used together to gain an understanding of the situation. The goal is to understand how a person is feeling.

Example: An employee comes into your office to tell you about a client request. The client has requested an update to a table that will take several days to program and QC and the client wants this done immediately.

Response: Start by paraphrasing what the employee said. You might start by saying, "It sounds like this client wants an update to a table today that will take more time to program." If that is not accurate then ask questions until it is clear that you understand the situation. Then acknowledge their feelings to see if you understand where they are coming from on a feelings level. You might say, "I would be frustrated if that happened. Is that how you are feeling?"

The goal is to understand and ensure that an employee is heard and understood. Agreeing is neither required nor is it the objective. By being heard and understood, employees know that you "have their back" and are acting in their best interest.

By utilizing these listening skills to be able to empathize with an employee, a manager builds trust and understanding. This trust and understanding leads to more win-win situations and a solid relationship. The foundational relationship is the ground work for empowerment. The empowered employee will have greater job satisfaction, will want to be successful, and will become more motivated.

BOUNDARIES
Establish healthy work boundaries for yourself as a manager and for your employees. This is a general technique that allows you to have the space that you need to do your job and your employees to have their space to do their job. Establish clear lines of communication with employees. Set up times to be available for your employees and let your employees know when you are available and when you are not available.

There is no right or wrong way to do this. Some managers might be fine with employees walking into their office anytime. Others may keep more distance. Whatever style works for you just be clear to communicate this information.

This is not meant to imply that this is the only way to empower or motivate employees. Some employees are self-motivated and will strive to be successful regardless of their manager. Some managers have an innate ability to connect with employees and may provide motivation just by being who they are. Listening alone is not a recipe for empowerment; but, taking the time to know your employees and taking the time to build a trusting and understanding relationship through the techniques described above will.
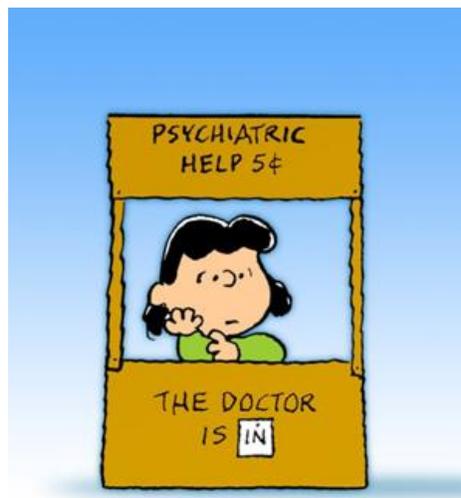
APPLYING THERAPY TECHNIQUES TO BEHAVIOR TYPES

The DiSC® personality types and the therapy active listening techniques described above will be applied to an example programming scenario. Based on a prototype programmer, with a given predominant personality style, the active listening skills of disarming, paraphrasing, inquiry and empathy are outlined to determine how best to manage each of these prototypes. These are not real people but are rather a composite of people fitting these descriptions. Management style also plays a role; however for sake of these examples, the personality style will based on the programmer and not the manager.

A single example will be used to illustrate the application of the therapy techniques to each behavior type, based on the DiSC® personalities. The fictitious programmers "**D**," "**i**," "**S**," and "**C**" are named to identify their personality style (i.e., Programmer "**D**" is a "D" style personality, programmer "**i**" is an "i" style personality, etc.). The names and programmers are not intended to be based on any known individual; but rather, are meant to represent a dominant behavior style.

Since most programmers typically fall into either the "**S**" or "**C**" types, these will be the primary focus for this example. "**D**" types tend to be in management and therefore are not included as an example. "**i**" types, although not as common as "**S**" or "**C**," are added just for fun as that is the nature of the "**i**."

EXAMPLE

Programmer X is working with a client to build a standard ADSL data set template to capture all of the standard metadata for a specific therapeutic area. Although there was previously an agreement regarding the process, the client has contacted the programmer and now wants to change some aspect. There are differing opinions and the employee seeks out their manager for input.

EXAMPLE APPLIED TO PROGRAMMER "I"

Programmer "i" = "Influence" (influencing or persuading others)
Programmer "i" walks into their manager's office in this scenario and starts by saying, "I don't like this client…" and then proceeds to explain the situation.

Manager of programmer "i":

1) **Disarming** (find some truth in what the other person is saying): The manager may start by stating, "I believe that you don't like this client."

2) **Paraphrase** (restate out loud what the other person said): "If I understand you correctly, you don't like the way the client wants to do this and you want to propose a different solution?"

3) **Inquiry** (ask gentle probing questions): Give the "i" plenty of time to talk and express themselves. Often times they just need to talk through the situation. Try not to interrupt and know that many times they can work out what they are feeling if they just have someone to listen. It is helpful for a manager to share personal experiences with an "i"; the "i" wants to feel like they are not alone and that they are accepted. The goal is not to approve or disapprove; but rather, the goal is to understand. The "i" has the goal of shaping the environment and tends to focus on the social aspect of the situation.

4) **Empathy** (put yourself in the other person's shoes): An "i" tends to use that language such as "liking" or "not liking" to help define their feelings. Try to understand the real feelings behind this and know the "i" will be happy that you did. The goal is not to solve the problem. Try asking a question such as, "If I were in your position, I would feel frustrated that the client wants to change the process. Is that how you feel?" They may not be upset about the change; instead, they might be concerned it is not their way of doing things and they somehow feels ignored or slighted. Provide them with the understanding that you approve of them and their ideas even if that will not be the final outcome for this process change.

EXAMPLE APPLIED TO PROGRAMMER "S"

"S" = "Steadiness" (cooperating with others):
Programmer "S" walks into their manager's office in this scenario and starts by saying, "The client wants…" and then proceeds to explain the situation.

Manager of programmer "S"

1) **Disarming** (find some truth in what the other person is saying): The manager may start by stating, "I believe that you want to give the client what they want."

2) **Paraphrase** (restate out loud what the other person said): "If I understand you correctly, you want to know if we can change our original solution and do what the client now wants instead?"

3) **Inquiry** (ask gentle probing questions): Ask enough questions to ensure that you fully understand all of the details. Know that programmer "S" wants to please the client and being kind is of primary importance. Your questioning is not to determine if this process needs to change; but rather, your questioning is to confirm that you understand programmer "S." Programmer "S" may not necessarily feel that this is the best option; however, they are may be willing to just change it because the client requested the change. Remember the "S" wants to avoid conflict at all costs. The fact that programmer "S" is telling you this, and not just making the change as requested is a big step.

4) **Empathy** (put yourself in the other person's shoes): Knowing the employee puts a manager in a better position to empathize with how this affects them. The goal is still to understand and not solve the problem; solving the issue will come later. The manager is in a place to acknowledge programmer "S's" feelings and ask questions to ensure the read on their emotions are accurate. The manager might say, "I would feel frustrated to have to change the process at this point. Is that what you are feeling?" Maybe the programmer is comfortable making the change but their frustration is that they will not have enough time to complete their other work. Once they are understood, then the manager and employee are in a much better place to resolve the issue.

EXAMPLE APPLIED TO PROGRAMMER "C"

Programmer "C" = "Conscientiousness" (quality and accuracy):
Programmer "C" walks into their manager's office in this scenario and starts by saying, "The client is wrong…" and then proceeds to explain the situation.

Manager of programmer "C":

1) **Disarming** (find some truth in what the other person is saying): The manager may start by stating, "I believe that you think that the client is wrong."

2) **Paraphrase** (restate out loud what the other person said): State as accurately as possible whatever the discrepancy is that the programmer described. For example, the manager might say, "If I understand you correctly, you think the client is incorrect because the template is different from the ADaMIG?"

3) **Inquiry** (ask gentle probing questions): Ask enough questions to ensure that you fully understand all of the details. Know that programmer "C" wants to be correct and that accuracy is of primary importance. Your questioning is not to determine who is right or wrong; but rather, your questioning is to confirm that you understand programmer "C." Focus on the facts when working with a "C."

4) **Empathy** (put yourself in the other person's shoes): One approach is to say, "In your position I would frustrated that the client doesn't want to follow the rules. Is that what you are feeling?" Know that "C" may not be in touch with their feelings or want to talk about them. If they can acknowledge this frustration then that is great; if not, then move on. They see the world as black and white. For them it may not be that they think they are frustrated, even if they are; but rather, they might be on the verge of telling the client they are wrong. It may very well be that the client is incorrect and "C" will be happy to know that they are correct. Once there is an understanding of the situation and "C" feels understood, then the manager is in a better place to help "C" determine the best course of action. Telling the client they are wrong may not be the best approach. The manager and employee can work together to determine how to present solutions to the client and what the options are. The manager might acknowledge that "C" is completely correct but need to explain why there may be a need to go with the client's plan regardless.

CONCLUSION

The pool of programmers tends to be heavily weighted to include less natural leaders and more analytical thinkers.

As a result, those programmers who become programming managers may need to develop skills beyond their technical abilities and outside of their natural behavior style. Using active listening skills that form the basis of Cognitive Therapy, such as disarming, paraphrasing, inquiry, and empathy, managers can learn to develop their interpersonal skills to build positive relationships with employees and create a trusting and supportive environment whereby employees feel understood and supported. By developing a supportive relationship with an employee, programming managers build a foundation that enables managers to empower programmers.

REFERENCES

[1] "*DiSC Classic to Everything DiSC®.*" Inscape Publishing. 2007. Available at http://www.discprofile.com/.

[2] Burns, M.D., David D. 1989. *The Feeling Good Handbook*. pages 374 - 410. New York, NY: William Morrow and Company

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