

Chapter 3

The Mediating Effect of Intelligence, Willpower, and Intrinsic Motivation on Talent and Performance



Abstract The number of studies on the positive symptoms of intrinsic work motivation appears to be located in the frequently demonstrated relationship between work engagement and performance. Work engagement is not only important to the individual employee, but also to the employer. Engaged and passionate employees are more productive, more customer-friendly, loyal to the organization, make fewer mistakes, and cause fewer accidents.

Keywords Intelligence · Willpower · Intrinsic motivation · Sustainable performance

3.1 Introduction

According to many studies, talent is overrated (Colvin 2010; Ericsson 2014, 2016; Syed 2011). The results of my study completely support this idea. Although to some degree talent seems a prerequisite for sustained performance, the actual influence of talent is minor. But then which personality traits are of vital importance for ensuring sustainable performance? How about intelligence? The mental giftedness and the ability to apply knowledge and experience in order to solve problems. Or perhaps willpower, as Baumeister and Tierney (2012) asserts in his book of the same title?

My second hypothesis is as follows:

Hypothesis 2

Having certain personality traits to a greater or a lesser degree positively or negatively influences the relationship between talent and performance (Fig. 3.1).

3.2 Intelligence and Willpower

Swedish professor and psychologist Anders Ericsson concludes that in addition to talent, the amount of deliberate practice is vitally important to sustainable performance. But what about willpower and intelligence?

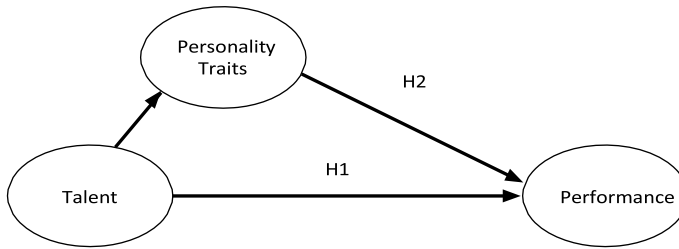


Fig. 3.1 Hypothesis 2

In 2014 and, more recently, 2016, Anders Ericsson’s studies and research received criticism (Macnamara et al. 2016). Despite thorough analyses of thousands of studies on top performers showing the importance of deliberate practice, other researchers concluded that different phenomena played a greater role in sustainable performance. For example, the deliberate practice was an important factor, but not the sole explanation for sustainable performance, studies by Roy Baumeister, and John Tierney showed.

Roy Baumeister is one of the most important psychologists of our time. He is a professor of psychology at Florida State University and professor by special appointment at the Vrije Universiteit Amsterdam. He started his career as a social psychologist researching self-esteem and self-confidence in the seventies. Along the way, he discovered that self-confidence was not the be-all and end-all that people thought it was. He started exploring other concepts such as self-regulation, self-control, and willpower. Whereas Freudians see human behavior as the result of mostly subconscious processes, Baumeister for years has emphasized the importance of conscious control of one’s behavior. His most recent book, *Willpower*, which he wrote together with science journalist John Tierney of *The New York Times*, is about the importance of willpower and self-control and how you can improve the two.

According to Baumeister and Tierney, when you look at the personality traits that are important to achieve success in life, it all comes down to two traits: intelligence and willpower. To them, success in life refers to “being happy, healthy, living longer, having less mental health problems, less physical ailments, better relations with other people, being more successful, and thus less likely to commit crimes and end up in jail.” As it turns out, good self-control has a positive influence on all those things. According to Baumeister, “you could even argue that self-control plays a role in many of the societal problems of our time, such as financial issues (like the 2008 financial crisis), violence, obesity, alcohol, and drug abuse”.

In the introduction to their book *Willpower* (2012), Baumeister and Tierney describes how initially, they were just as skeptical about willpower as most people in their field. Willpower was a nineteenth-century concept; Victorian ideas, strict and antiquated. In the twentieth century, it was generally assumed that self-esteem and self-confidence were much more important factors to success.

3.3 Discipline and Rules

In their book, Baumeister and Tierney argue that the average member of our modern society has far less willpower—the will to persevere—than people used to have. “That is partly due to the fact that schools and parents do not think discipline is important anymore. This is also the result of the self-esteem movement of the seventies, which emphasized how important it is to praise and encourage your children. Since that time, concepts such as punishing, disciplining, and criticizing have become increasingly unpopular. This is not a positive development, nor for self-confidence. It doesn’t help any child to be constantly praised. Children often do not receive any clue as to why exactly they are being praised. If you really want to teach your child to be self-confident, you should make clear what the rules are. Subsequently, you should tell them that they behave well when they follow the rules, and badly when they break them. That way the child will learn that his or her actions have consequences.”

3.4 Ego Depletion

Baumeister compares willpower to a muscle. If you use it too much, it will tire out. “Think of a normal workday. All-day you were looking forward to telling your smug boss what you really think of him. However, you maintained control over yourself and even greeted him in a friendly fashion. Then you arrive home. Your partner asks you if you remembered to get groceries, as you had promised. Suddenly you feel a blind rage building up inside you and you end up screaming and cursing.”

A typical example of the phenomena for which Baumeister coined the term “ego depletion”: running out of willpower. Ego depletion refers to a person’s reduced ability to regulate their behavior. “Everyone has a limited amount of willpower per day,” explains Baumeister. “And we use that willpower for a variety of unrelated tasks, but which share a connection through this one energy source. If someone focuses on not eating too much all day, he or she might erupt into a classic example of road rage later. Nevertheless, you can always improve your self-control, simply by training it.”

In my study, willpower, self-control, and self-confidence were also suggested as (potentially) important elements of personality traits that indicate sustainable performance. For my study, I used the following definition of willpower: the will to persevere and the ability to control yourself. Self-control is defined as the ability to control your whims and impulses. Not performing action now because it conflicts with what you want to achieve in the long term. And then there’s also self-confidence: the belief that someone can successfully control and influence his or her surroundings.

3.5 Intrinsic Motivation

And what about intrinsic motivation? As I said at the start and as others (Colvin 2010; Syed 2011, for instance) have said before; talent is overrated. But what is the role of intrinsic motivation in sustainable performance?

Intrinsic and extrinsic motivation are two different sources of motivation that are often distinguished from each other. The theoretical boundaries between these two concepts are not always clear, though. According to the self-determination theory, extrinsic motives are motives that originate from external sources. For instance, the promise of a reward or penalty for a specific action. On the other hand, intrinsic motives come from the person him/herself. These are not about getting an external reward or avoiding a penalty, but about the intrinsic value of the activity itself or a future goal.

As a metaphor; intrinsic motivation is about the game, extrinsic motivation about the rewards. In this study, I considered intrinsic motivation to be enjoying your job and having fun while doing it. Extrinsic motivation I understood as having a certain standard of living, making a lot of money, working for a paycheck. Both definitions are similar to those of Gagné and Deci (2005) and Gagné et al. (2010).

Several scientific studies indicate differences between behavior that arises from extrinsic motivation and behavior that is motivated intrinsically. According to scientific studies, people intrinsically motivated to perform a specific action demonstrate:

- a higher level of concentration;
- more creativity. This is in part due to a higher level of concentration, a higher willingness to take risks, being more playful and having more flexible trains of thought;
- increased feelings of self-competence and pride;
- increased enjoyment while performing their task.

Studies further show that extrinsic motivation can move non-intrinsically motivated people into action (Pink 2009). The downside, however, is that the prospect of a reward or penalty will need to continue to exist, or the extrinsic motivation will stop having any effect at all. Intrinsic motivation, on the other hand, can occur independently from external factors and can, therefore, be seen as more sustainable.

3.6 The Motivation Continuum

The motivation theory, or Self-Determination Theory (SDT), by Deci and Ryan has continued to develop since the 1970s. An important early milestone was the publication of *Intrinsic Motivation and Self-determination in Human Behavior* in 1985 (Deci and Ryan 1985). Years later, in 2000, Ryan and Deci published “Intrinsic and

Extrinsic Motivations: Classic Definitions and New Directions”, which is still considered one of the leading review articles in the field. In it, they offer insights into different forms and levels of motivation, and the mechanisms through which an organization’s environment can contribute to the motivation of its employees. Whereas motivation used to be considered a unidimensional concept, which people possessed to a greater or lesser degree, Deci and Ryan show that the concept of “motivation” is much more complex and multidimensional. In the previously mentioned publication from the year 2000, Ryan and Deci presented a “taxonomy of human motivation.”

In other words, a-motivation continuum. Their continuum starts on the left with a-motivation (absence of intention) and then moves to the right through four degrees of extrinsic motivation, ending with the most powerful form of motivation: intrinsic motivation.

Deci and Ryan also posited that intrinsic motivation is not a fixed thing, but rather a snapshot: An employee might be intrinsically motivated when starting a new job, but subsequently lose his/her intrinsic motivation for a variety of reasons (Fig. 3.2).



Motivation-type	A-motivation	Extrinsic motivation				Intrinsic motivation
		External regulation	Introjection	Identification	Integration	
Related processes	Experienced low competence level, absence of intentions	Aimed at external rewards Compliant, reactive	Ego plays an important role Aimed at-validation from others	Consciously appreciating certain behavior See the value	In accordance with own values and standards	Interest Enjoyment Satisfaction from activity
Level of autonomy	Absent	Very low	Low	Some level of autonomy	Significant level of autonomy	Significant level of autonomy

Fig. 3.2 Deci and Ryan’ motivation continuum (Deci and Ryan 1985)

3.7 Motivation 3.0

Pink (2009) demonstrates that several theories have been formed in recent decades about where people get their drive from. In his book *Drive* (2011), Pink links Deci and Ryan's motivation study (2000) to Csikszentmihalyi's study on flow (Csikszentmihalyi 1975, 2007).

Motivation 1.0 describes people's basic need to survive as their main drive. Motivation 2.0 includes managing employees using positive and negative reinforcement. Motivation 3.0 assumes the paradigm that people find their drive when they are intrinsically motivated. In his book, Pink explains why Motivation 2.0 is outdated and how you can use Motivation 3.0 to motivate people. According to Pink, three elements are essential to stimulate, realize, and retain motivation 3.0:

1. *Autonomy*. People should always have autonomy when it comes to their tasks, time, group, and work methods says Pink.
2. *Mastery*. Engagement van only is achieved through mastery. It is important that the work that you have to perform is in line with your talents. According to Pink, mastery is, therefore, a mindset. As it can always be improved, true mastery is essentially unattainable. That's why the entire concept of mastery results in people striving for it, stimulating to pursue mastery. It offers intrinsic motivation.
3. *Meaning*. According to Pink, the first two elements are essential. However, a third element is required for a proper balance. This element is meaning, something that provides a context for the other two. Autonomous people who strive for mastery, perform at a very high level. But the ones who do so with a sense of a higher purpose can achieve even more.

In his book *Drive* (2009), Pink points out the importance of intrinsic motivation by referring to several scientific studies. But like Deci and Ryan, he also argues that intrinsic motivation is not fixed. He believes it can fluctuate depending on how much autonomy someone has been given, how they are stimulated to strive for mastery and have a purpose, meaning.

It reminded me again of the story of Billy Bean and his will to get to the core of performance. After reading all, the aforementioned research and studies, I was as curious as ever: to what extent are willpower, self-control, self-confidence, intelligence, intrinsic and/or extrinsic motivation truly important for sustainable performance?

3.8 Results of the Study

This study demonstrates that intelligence and intrinsic motivation are in fact very important for sustainable performance. Intrinsic motivation turned out to be the fourth most important predictor of sustainable performance. Intelligence was number five. And just as important: a large-scale research project by researchers from the University of Amsterdam also shows intelligence tests to be one of the best predictors of future performance (UvA 2008).

The personal trait of willpower, on the other hand, did not show an important relation to performance. It did not even make the top 10 of the most important performance criteria. Unlike the variable dedication (one of the three elements of work engagement), which was the sixth-best predictor of performance. This concept also seems closely related to performance predictor number four, intrinsic motivation.

Willpower seems to have more of the characteristics of extrinsic motivation, and dedication seems more closely related to intrinsic motivation to perform our jobs. “I, or rather, we have a goal and I am dedicated to achieving it.” Instead of, “I have to do something and for that I need willpower.” Another explanation for the fact that willpower is not an important predictor for performance might lie in the fact that my research was done in a corporate environment—performing as a professional—whereas the studies by Baumeister and Tierney were more focused on people’s personal lives—performing as private persons. In the latter context, the role of willpower seems to be much more significant. After all, self-control and managing and controlling your own behavior are crucial factors in resisting all of modern life’s temptations, as the studies by Baumeister and Tierney show time and again (Baumeister and Tierney 2012).

Another remarkable outcome of my study is a reasonably strong, significant correlation between extrinsic motivation and sustainable performance. Extrinsic motivation did not turn out to be one of the most important predictors but still managed to take 10th place, after talent. And if you only look at one particular element of performance, namely the speed of achievements, then the importance of extrinsic motivation increases significantly, becoming a very important predictor, in fact (number 3). Extrinsically motivated professionals seem to deliver quick and short-term performance but lose their drive after a while when other factors are no longer in effect. This matches Daniel Pink’s theory (2009).

When asked what performance criterion they would use to hire new employees, most CEOs put the amount of talent present for doing the job at the top of the list. Intrinsic motivation came in second. Number 3 was intelligence. Willpower landed at number 7 (for more information, see Appendix B: Most important results of the study on performance indicators).

To the question of how these CEOs would determine the presence of intrinsic motivation, intelligence, and willpower during or after interviews, most could not give a clear answer. “Well, that’s a good question,” was a common response. Only a few mentioned that they started with an intelligence test, but almost all indicated that interviews and their own opinion determined whether or not they would hire someone. As Steve Jobs put it, “So, in the end, it’s ultimately based on your gut.”

This study has shown that professionals who deliver sustainable performance are intelligent, dedicated, and intrinsically motivated individuals. However, the two most important predictors for performance turn out to be two different traits: adaptability and self-efficacy!

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