

Influences on Goal Orientation

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Abstract

The purpose of this study is to analyze whether there is an influence on individual goal orientation self-perception when an individual is pre-exposed to a description paragraph of either a performance or mastery goal orientation, as well as whether there is an effect of a gender. A sample of 143 adults between the ages of 18 and 60 participated in the experiment in which they identified as mastery oriented or performance oriented. The results revealed there was no significant effect of gender differences and there was no interaction between gender and goal perspective. The analysis did show a small effect of goal perspective on the survey scores. However, condition had the opposite of what we predicted.

Keywords: Goal Orientation, Mastery goal orientation, Performance goal orientation, gender differences

Influences on Goal Orientation

A goal is defined as the desired outcome or achievement of a person's ambition.

Achievement motivation can be defined as the desire to achieve. The purpose of this paper is to test the use of different types of goals and how they can encourage either mastery-oriented or helpless patterns. Achievement motivation is important because without it the human need to succeed would not exist. Goals are important because they are not only used for the creation of a plan, but they help people move forward. The motivation to achieve goes hand and hand with the creation of goals. Without motivation people are unlikely to achieve their goals.

Elliot and Dweck (1988) conducted a two phase experiment to see how diverse goals influence the types of responses individuals make. The two typical types of responses can be described as following a helpless or mastery-oriented pattern. Individuals who have the helpless pattern respond to failure as if they have been negatively criticized about their abilities, and try to make note of their abilities, but do not do so. While those who have a mastery-oriented pattern respond to failure as if they were provided with sufficient feedback, and gather the tools needed to learn from their failure. The authors pointed out two primary goals that most people seek within the helpless and mastery goal achievement patterns. The first is a performance goal, in which people try to exert their power to act and to avert adverse perceptions. The second is a learning goal, in which people try to boost their performance or adopt new skills.

In Elliot and Dweck's (1988) study participants were placed at random in one of four experimental groups: learning goals low ability, learning goals high ability, performance goals low ability, and performance goals high ability regardless of their actual ability. The experimenter also manipulated feedback on the participants' performance on a pattern recognition assignment. Some of the participants were told they had a low ability while the

others were told they had a high ability for the task. Participants were asked to choose a “box” which related to either a learning goal or performance goal. Both boxes contained the exact same discrimination task. For this task, each child was shown three test problems and four training problems. The problem contained a deck of cards, and on every card there were two figures, that were three different colors, form or symbols.

The first option to choose was the learning goal box which contained a discrimination task, which produced skill development, but was associated with a high chance of mistakes and disorientation during the acquisition process. The second option to choose was the performance goal box, which included some hard tasks and well as easy tasks, but did not provide new knowledge and gave participants the opportunity to either show or hide their skills. Within the second phase of the study, another experimenter who was not briefed on the type of the participants’ feedback took over the experiment. This experimenter then assigned half the participants to either the learning or performance goal at random instead of letting the participants choose their task of choice.

Elliot and Dweck (1988) hypothesized that performance goals will leave people exposed to a helpless reaction due to the possibility of a lack of success, which causes low ability ascriptions, adverse thoughts, and flawed execution. On the other hand, learning goals will produce a mastery-oriented reaction to interferences, such as, anxiety or fear of goal failure, which results in maintained performance, and an affirmative influence. The authors’ study showed that when the worth of performance goals was emphasized and participants were under the assumption they had a low ability, they replied to feedback about their errors in their skills acquired in a helpless way. Regardless of feedback, when participants had a learning goal, they attempted to expand their proficiency. When the worth of the performance goals was emphasized

the participants were under the assumption that they had a high ability, and they excelled in completion of the discrimination tasks per learning box.

Overall, Elliot and Dweck's (1988) results suggested that participants' personal achievement goals are factors that can affect whether participants develop a helpless or mastery-oriented pattern. This work could possibly be used for the broad analysis of motivation. It also could be valuable in understanding achievement patterns. The authors' work could help us to better understand individual differences in motivation and the influence of different situations on motivational patterns.

Harackiewicz and Elliot (1993) performed a study where participants' achievement goals and intrinsic motivation were examined. The purpose of this study was to identify the effects that achievement goal types had on intrinsic motivation for a fun game such as pinball. Intrinsic motivation was defined differently as it pertained to each group, for the purpose of this study intrinsic motivation also meant the level of interest that the individual demonstrated in the task assigned. Mastery goal intrinsic motivation was defined as the focus on advancement in personal skills and mastery of the task.

Performance goal intrinsic motivation was defined as the focus on and improvement of ability compared to others. The method of measurement for intrinsic motivation (or interest in the task) was gathered by how well each individual performed in each condition: the more interested the better the performance. The participants were categorized as either low in achievement orientation (LAM) or high in achievement orientation (HAM) using a questionnaire prior to the experiment. Within this experiment two tasks were performed that focused on mastery goals (self-improvement goals) and performance goals (egocentric goals) while participants played a pinball game.

The participants were divided into three separate test groups within both studies; all the participants were asked to play a game of pinball and record their scores. The first group was told that the purpose of the study was to compare how well some students can play pinball compared to others; this group represented the performance goal (Harackiewicz & Elliot, 1993). The second group was told that the study was centered on how well students develop, learn, and improve their pinball game skills, this group represented the mastery goal. The third group was the control group, they received a neutral statement which did not suggest any goal preference; they were simply told that the researchers were interested in how well participants enjoyed their pinball machines.

Both structures of the studies within the article were the same, with the exception that positive feedback was given in the middle of the second experiment. For example, some participants in the performance group were told that they had done well compared to other participants examined so far; while the participants in the mastery group were told that they had shown good improvement in their game skills (Harackiewicz & Elliot, 1993). The results of both studies indicated that participants with different goal orientations were least interested in the opposite goal type, with or without positive feedback. This was assessed with the results of how well the participants did in each condition. Participants who were categorized as HAMs showed more interest and performed better in the performance goal situation; this indicated that these participants strived for ability, competence, and normalcy in comparison to other students.

On the opposite end, participants who were categorized as LAMs showed better performance and a higher interest in the pinball game when they were in the mastery goal situation. This revealed that low achievement-oriented participants did better under circumstances where there was no pressure on them to perform better than someone else. These

studies concluded that individual preferences or differences in goal orientation type affect how well an individual will acquire and how open they are to a new task or educational skill. This supports the single goal perspective theory, which suggests that a single goal orientation is enough for any individual to succeed.

A similar study which focused on achievement goals and optimal motivation by Barron and Harackiewicz (2001) helped to further explain how differences in achievement orientation aided participants perform better or worse when given different tasks. The goal of the study was to attempt to comprehend the different types of goal perspectives and identify whether a single or multiple goal perspective approach was the best way to learn new tasks or skills. This study included high achievement-oriented participants and low achievement-oriented participants. The goal-type personalities were identified through the use of a 16-item Achievement Orientation subscale of the Personality Research Form (PRF), this survey was taken by the participants several weeks before the actual experiment session (Barron & Harackiewicz, 2001, Measures, para. 1).

The mastery goal perspective suggests that participants would benefit the most if they focused on mastery skills and understood the task, because they would center on self-improvement, which would lead them to develop a higher skill level. The performance goal perspective suggested that individuals would benefit the most if they compared themselves to other individuals and showed improvement in personal skills that way. The multiple goal perspective suggests that participants would gain the most if both performance and mastery goals were used. Two studies were conducted to help identify which goal perspective would provide a better way to gain educational skills.

Before the study began all the participants were taught a new method to solve multiplication problems that was developed by Flansburg and Hay in 1994. It is important to state that in this study participants were not instructed to use and were not swayed to perform within a certain goal type; the goal type was self-set through the individual's personality. In one condition the group used their own method to solve multiplication problems, while in the other condition they were instructed to use the new technique. The conditions in this section were designed to show if the participant could solve the problem with ease or would have difficulty using either of the methods. Baselines were acquired at the beginning of the experiment when all the participants were given five minutes to complete as many multiplication problems as they could use their own method to solve them. The success rate of each individual was measured by the number of problems that each individual was able to complete (whether with their own method or the new one) in the period of five minutes and by the number of errors made. In support of the multiple goal perspective hypotheses, the results revealed that both types of achievement goal types gave the same amount of opportunity and were beneficial for learning a new skill. This was demonstrated through the ability of each goal condition to complete more problems with the new math method than the baseline previously recorded, regardless of the goal type.

The second study was structured similarly as the first with three exceptions. First, instead of instruction on a new math technique the participants received a description of one of three achievement goals, mastery, performance, or both and were instructed to adopt the perspective in order to solve the math problems. The second change involved collecting process measures right after that manipulation as well as at the end of the test. The last change included feedback to all the participants from the experimenter. The feedback was given to the participant after the

first set of math question, the content reflected the goal perspective assigned and stated whether they were doing well or not. This was done in hope that they would stay on track with the goal type they were assigned.

Prior to the study, participants filled out a questionnaire which helped to identify whether they were low in achievement motivation (LAM) or high in achievement motivation (HAM). Again, the participants were asked to solve math problems; however, the method used to solve the problems was focused on the assigned goal. The mastery goal group was instructed that the purpose of this experiment was to learn a new method to solve a math problem. The performance goal group was told that the purpose of this study was for them to find or use a method to solve math problems that would help them do better than other participants. The group which was assigned both goals received both sets of instructions. The results suggested that HAMs did better when engaged in the performance group while LAMs did better in the mastery group, even after they had performed well in their assigned groups which involved the opposite goal type. This gave the implication that the multiple goal hypothesis can be an efficient way to acquire a new education skill because even when in the opposite goal type of their personality, the participants were still able to succeed answering the math questions and showed improvement.

In summary, Harackiewicz & Elliot's (1993) study demonstrated that participants enjoyed the pinball game and were better at it if their goal orientations matched their personality. For example, HAMs did better when matched with the performance goal while LAMs did better when matched to the mastery goal. This supported the single goal perspective theory. Their research indicated each participant has different responses to achievement goals that were not related to levels of competency, but to differences in personal motivational interests. This

brought into perspective how every individual has his or her own intrinsic motivators that allow them to be successful when they acquire new educational abilities or skills.

The results of both studies conducted by Barron and Harackiewicz (2001), supported their hypothesis which suggests that individuals can benefit just as much or even more when engaging in both goal orientation types, as opposed to just a single one. This was demonstrated when individuals were able to perform better than their baselines when solving multiplication problems with a new math technique, regardless of the goal type they identified to. In the second portion of Barron and Harackiewicz study, the goal orientation types were randomly assigned to participants regardless of their personal goal orientation type. The results of this study also suggested that the multiple perspective hypothesis was the preferred method of acquiring a new skill. Even though, participants did better when their personality matched the condition, they still performed well when in the opposite group, suggesting that the multiple goal perspective could be a beneficial way of introducing new skills.

Barron and Harackiewicz (2001) identified gaps in the literature and offered suggestions for future research. The first issue they recognized was that there has not been a set method of test designs for mastery and multiple goal perspectives in both correlational and experimental studies; only a few studies have been able to test similar methods on both mastery and multiple goal perspectives. They realized that this leaves a lot of room for interpretation and test design alteration. One suggestion to improve this would be to establish a set standard of how these perspectives are measured, for example, a control group could be added to each study in order to have a neutral condition to compare the other two conditions to.

Furthermore, there are additional factors that can be considered when researchers determine whether their hypothesis was supported, these include age, sex, context, and task.

These different variables could possibly render different results. Specifically, to conduct an experiment with the focus on goal orientation could possibly provide further insight on the different goal perspectives that individuals of different genders could perform better with. This could also help researchers understand how goal orientation differs between males and females, how it affects each gender, and how each is motivated to accomplish tasks. In the present study, it is hypothesized that there will be an influence on individual goal orientation self-perspective when an individual is pre-exposed to a description of either a performance or mastery goal orientation. Additionally, it is hypothesized that there will be a gender difference in how males and females describe their own goal orientation on a survey after reading the condition paragraphs.

Method

Participants

A convenience sample of 143 adults (52 male and 91 female) that ranged in age from 18 to 60, were recruited with flyers posted at the Hermiston and La Grande Eastern Oregon University campuses, along with advertisements to participate posted on both experimenter's social media accounts. Advertisements stated the experimenter's accepted both male and female participants between the ages of 18 and 60, who can read English. All participants had normal or corrected to normal vision. Except for extra-credit opportunities, participants did not receive compensation for their participation.

Materials

The surveys and distractor task in this experiment were presented via Google Forms. The paragraphs used to describe mastery and performance goal orientations were constructed based on Anderman (2015), Girod (n.d), and Kapla and Maehr (2007). The neutral paragraph was

constructed based off of Fischer and Buchanan (2015) and Varcarolis and Halter (2013). These paragraphs can be found in Appendix A. The survey provided to the participants was created by the investigators in their own words, but borrowed characteristics of each orientation from Girod (n.d); see Appendix B). The simple mathematical problems used as the distractor task were developed by the investigators (see Appendix C).

Procedure and Design

In this between-subjects experiment two goal orientation types along with a neutral (i.e. mastery and performance) are examined. After participants electronically submitted the consent form, they were instructed to answer three questions: month of birth, age, and gender. Participants were then instructed to read a paragraph they were assigned to based on their month of birth, which contained the description of either mastery goal orientation, performance goal orientation, or a random topic as the neutral description. Participants who were born in January, April, July, or October were assigned to receive the mastery goal orientation description. Participants who were born in February, May, August, or November were assigned to receive the performance goal orientation description. The participants who were born in the months of March, June, September, or December were assigned to receive a neutral description.

The instructions revealed to the participants were that there would be a memory test at the end of the experiment. After the participants read the goal orientation paragraph, they were engaged in a distractor task which involved the completion of 5 simple mathematical problems. This distractor task was used to distract the participants from the paragraph they just read. Once the mathematical problems were solved, the participants were directed to the survey which revealed if participants identified as mastery goal oriented or performance goal orientated. At the end of the experiment the participants were debriefed and told the true purpose of the experiment

was to identify whether being exposed to the goal description would influence how they answered the survey. As well as identifying if females or males or more oriented towards mastery goals versus performance goals.

Results

Figure 1 (see Appendix D) shows the means for male and female survey scores for each goal orientation condition. There was no significant effect of gender $F(1,137) = 2.04, p > .05$. There was a small effect on the goal orientation depending on which goal perspective condition the participants were exposed to. Individuals who were exposed to the performance condition had higher survey scores, which indicated higher mastery orientation, than those who were exposed to the mastery condition, $F(2,137) = 4.13, p < .05$ (See figure 1). Finally, there was no interaction between gender and goal orientation $F(2,137) = 0.02, p > .05$.

Discussion

In this study it was suspected that pre-exposure to a goal orientation description would have an influence on how participants described themselves in goal orientation perspective survey. Furthermore, it was also analyzed whether gender played a role on how participants would respond to the goal descriptions. The data collected did not support our expectations. There was no significant display between genders nor was there a significant interaction between the gender type and condition. However, there was a small effect on condition and results. Specifically, those individuals who were exposed to the performance condition received higher scores for the survey which indicated that they related most to the mastery perspective while the mastery condition scored lower on the scale. We suspect that being exposed to the performance condition made the individuals more self-conscious about their learning goal orientations.

The current study revealed certain weaknesses that could have affected the results and could have been related to the format of the presented survey. Participants were prompted to answer survey questions after reading the condition paragraphs and answering the distractor math problems. There were 16 total survey questions; the first eight were in relation to the mastery orientation perspective while the remaining eight were in relation to the performance orientation perspective. We suspect that this could have had an effect on how participants answered the questions. If the questions were in random order instead, participants could have felt more secure in answering “no” to a positive sounding trait and “yes” to a negative sounding trait. Answering “yes” to one negative sounding trait after another could make the participant feel like they should not answer “yes” because of how it may make them look or feel.

An additional factor that could have contributed to the overabundance of participants who identified as mastery goal oriented is the perception that individuals want others to perceive them as modest even though in reality they may not be. Future research could display these questions in a random order instead of all together, in hope that the participants do not catch on to the type of questions that are being asked. Similarly, the mastery questions were written in a more positive manner as opposed to the performance questions which could have been interpreted as a negative trait, thus affected the response of the participants answer. If the performance questions would have been written to present a more positive trait, the participants could have been less reluctant to answer “no” when describing themselves.

Summary

The purpose of the current study was to analyze the possible influences on goal orientation when an individual is pre-exposed to a goal orientation description. Furthermore, it was also analyzed whether gender played a role on how participants would respond to the goal

descriptions. The experiment revealed that there was a small effect on the goal orientation depending on which goal perspective condition the participants were exposed to, but was no relationship between gender and goal description identification.

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Appendix A

Mastery Goal Orientation

Goal orientation can be described as the particular way in which any individual engages in developing or demonstrating an ability in achievement or success situations. This theory focuses on the why and how or purpose behind individuals attempting to achieve any given task, and not just on what the individual is trying to accomplish. There has been many research studies performed in regards to answering these why and how questions, this research has found that there is two main types of orientations. One of these orientation types was labeled mastery goals.

Individuals who learn with a mastery goal orientation are most likely to be interested in personal achievement and gain, in other words they are motivated to well on tasks or jobs in order to improve themselves as individuals. Their mentality revolves around the belief that competence and expertise is built with time after much practice and effort is put into the task. These individuals do not just want to go well on a given task, they also want to understand what they are doing and why they are doing it, for sake of their own knowledge. They seek out challenges and opportunities to better themselves, and are willing to change the way they think or do things in order to promote greater comprehension. These individuals are really open to feedback, they view this as a way to better themselves and grow. Mistakes are viewed as areas of improvement and usually work hard to overcome a difficult situation in order to gain knowledge and better themselves. To these individuals being the best is not as important to them as long as they shown progress and some level of improvement.

Performance Goal Orientation

Goal orientation can be described as the particular way in which any individual engages in developing or demonstrating an ability in achievement or success situations. This theory

focuses on the why and how or purpose behind individuals attempting to achieve any given task, and not just on the what the individual is trying to accomplish. There has been many research studies performed in regards to answering these why and how questions, this research has found that there is two main types of orientations. One of these orientation types was labeled performance goals

Individuals who learn with a performance goal orientation are most likely to be extrinsically motivated to accomplish a task or gain a new skill, in other words these people are motivated by expectations of outside things such as rewards and punishments. These individuals thrive in situations where competence is key and being more better than others is important. Individuals in this group choose opportunities that will give them the maximized chance to see how much better they are compared to others, but will refrain from participating in tasks where they might not do as well as they want if fear of looking incompetent. They are open to feedback that only compliments how well they have done and react negatively to criticism. When individuals cannot succeed in a task or commits an error, they view themselves as failures and justify that failure by handicapping themselves, this way the reason why they failed is not entirely theirs. These individuals are only content with themselves and the people around them when they succeed and look better than others.

Neutral Description

Schizophrenia is a chronic mental disorder which varies in severity and can affect many aspects of a person's life, such as how that person feels, thinks, and acts on a day to day basis. This mental disorder is prevalent in approximately 1% of the population worldwide and demonstrates no significant correlation within any type of specific demographic such as social status, race, or gender. Researchers have found that there are a few risk factors that if exposed to

at the right time increases the chance of any individual developing schizophrenia. These include living in an urban area, obstetrical complications, late-winter/early-spring birth, or advanced age at conception of parents. Premorbid conditions have shown that individuals who are diagnosed earlier in life (ages 18-25) tend to be males, along with this there seems to be more evidence of brain damage, more prominent negative symptoms, and have poorer adjustment to the situation. Those individuals who are diagnosed later in life (ages 25-35) tend to be females; they tend to have better outcomes with their disorder which may be related to the less brain damaged noted.

Appendix B

1. Do you believe that competence develops over time through practice and effort?
2. Do you choose tasks to increase opportunities to learn and find challenges?
3. Do you feel bored when completing easy tasks?
4. Do you look for feedback that helps you improve?
5. Do you see failure as a sign to work harder?
6. Would you be okay with your performance as long as you have shown some progress?
7. Do you view a teacher as a resource?
8. Do you work with your peers to enhance learning?
9. Do you choose tasks that increase opportunities to show competence and avoid tasks that would make you look incompetent?
10. Do you seek feedback that makes you look good?
11. Are you only happy IF you succeed? (a tad of progress is not enough)
12. Do you use strategies that promote memorization?
13. Do you believe that people are either competent or not, therefore people should not have to try hard?
14. Do you see failure as a sign of low ability?
15. Do you view a teacher as a judge, rewarder, or punisher?
16. Do you prefer to keep your distance from the school environment?

Appendix C

Solve 5 simple mathematical problems.

1. $71 - 48 =$

2. $12 \times 9 =$

3. $38 + 67 =$

4. $54 - 39 =$

5. $17 + 35 =$

Answers:

1. 23

2. 108

3. 105

4. 15

5. 62

Appendix D

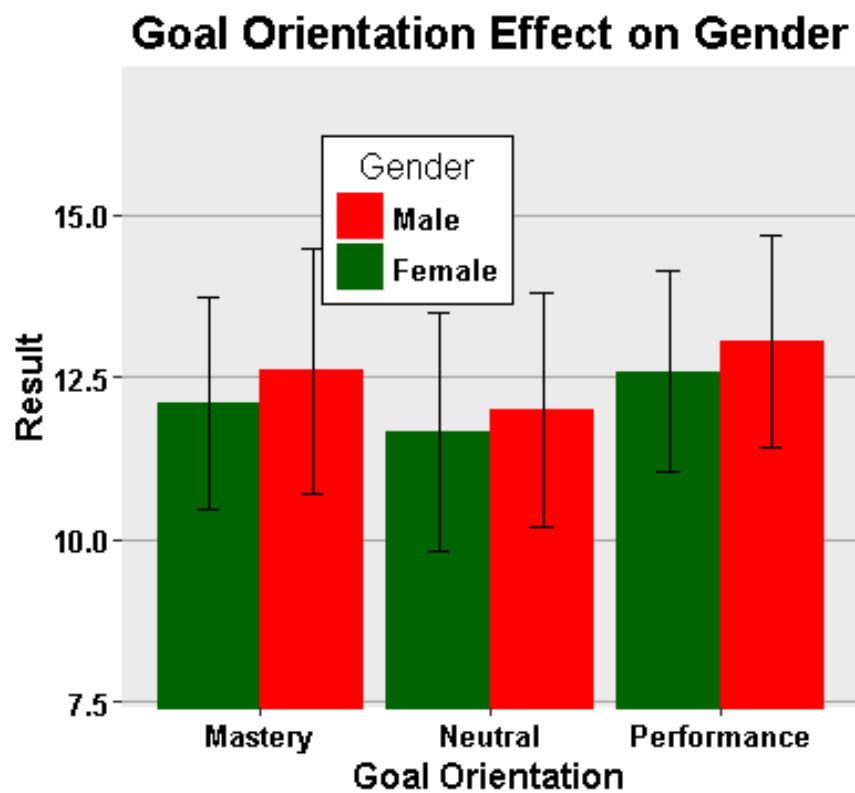


Figure 1. The means for male and female result for each goal orientation condition and neutral condition are tallied.