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# Herzberg's Two Factor Theory of Motivation: A Generational Study

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EASTERN KENTUCKY UNIVERSITY

Herzberg's Two Factor Theory of Motivation: A Generational Study

Honors Thesis  
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in Partial Fulfillment  
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Herzberg's Two Factor Theory of Motivation: A Generational Study

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This study attempts to fully investigate the well-researched and world-renowned theory—The Two Factor Theory of motivation by Frederick Herzberg. One might notice after being engulfed in the plentiful research of the theory that there is a gap in the research. There is no research on how the Two Factor theory differs among varying generations. This research paper attempts to fill that void by diving into a targeted study of Baby Boomers and Millennials. This study is focused on comparing and contrasting the first level factors that are identified as Motivators and Hygiene factors by each generation listed above. By uncovering a difference at this initial level of the theory, it will lay the foundation for future research into the more complex ideas surrounding the Two Factor theory. The study was conducted closely to Herzberg's original method in order to determine if generation is the variable causing any differences in the data that might be collected. By conducting the study in this way, some personal biases that might occur in the execution of the study will be eliminated. All of this is done with the intent to better tailor the Two Factor theory to employees of each respective generation within the workforce in order to boost motivation within companies.

Key Words and Phrases: Herzberg; Two Factor Theory; Dual Factor Theory; Motivators and Hygiene Factors; Motivational Theories; Employee Motivation, Millennials, Salary

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## **Introduction**

Growing up, my grandparents would always tell me stories of all the jobs that they had throughout their life. They would explain that they got up early in the morning and worked till late at night. Coal miner, school teacher, and nurse are just a few of the jobs they had. All required a great amount of effort and dedication to do successfully. When I would ask them why they would work so hard for so many hours, their answer was always simple. They wanted to give my parents, and consequently me, a better life than they had growing up. It is what motivated them to put in long hours and to strive for better results at work. My parents saw this drive and work ethic in their parents and modeled it. They saw the need for a “better” lifestyle and worked for larger paychecks and more money to provide a better life for my siblings and me. That example was their motivation to work hard. As I continued on that line of thinking, I thought to myself what is my motivation to work? What drives me when I go to my job and put in hours? Is it different from my parents or my grandparents or is it the same? These are the questions that led me to this study of motivation.

This study revolves around the elusive idea—motivation. Motivation is what drives employees to exceed the goals of their company. It is the determination of a

student to pass a class. It is the empowerment behind individuals to work hard toward a cause. Motivation is not static; it is dynamic and elusive. It cannot be defined in just one way. Companies can employ different tactics and strategies to encourage motivation to no avail or create a driven workforce that accomplishes tasks and exceeds goals.

Motivation is a valuable asset to individuals, families, organizations, and corporations.

Throughout my management classes at Eastern Kentucky University, I learned about several different motivational theories. There was one in particular that stood out to me and that I wanted to investigate further. This theory is Frederick Herzberg's Two Factor Theory of motivation. As I engulfed myself in the research of the theory, I noticed that there was a gap in the research. There was no research dealing with generational differences in the Two Factor theory. I decided that the best way to answer the research questions and fill the void in the research was to examine the theory through a generational perspective.

The effect that this study can have on modern motivational strategies is unlimited. Companies or universities can explore this topic as far as they are willing to invest in it. There are multiple avenues that can be studied with in this one motivational theory. Herzberg researched countless variables in his original study. They ranged from the duration of a sequence of events to deviation between first and second level factors. The more of these variables that can be identified as generational differences, the more fine tuned the theory can become toward generations. There are many opportunities for companies to thoroughly research this theory and develop new game plans for motivating their employees based on what generation they belong to. This is a significant reason why



I am pursuing this study, to begin the process of enhancing and specifically tailoring this motivational theory to all of the generations of the workforce.

This research paper begins with a thorough review of the literature that is available for Herzberg's Two Factor Theory of Motivation. Due to the immense amount of research that has been conducted on this theory, there is no way I was able to review all of the literature available. The literature review is a well-rounded analysis of the recreations and opinions of the study as well as an analysis of the theory itself. I then discuss the hypotheses that I tested in my recreation of the study. They detail what I expected to see in the trends of the data. The next section is the method that I employed in order to setup and execute my study. There is a detailed section pertaining to the collection, cleaning, and sorting of my data. I also explain my participants' demographics at the end of my method. From the method section, I then move into a quantitative explanation of my results. In this section I explain what hypotheses were statistically supported and which were not. Following, there is a discussion of the results that dives into why the results possibly arose and a discussion of other interesting findings in the data. I then close my paper with the strengths and weaknesses of my study, future research that can be pursued by other entities resulting from my study, and the academic and practitioner implications of my findings.

### **Literature Review**

The topic of motivation has a multitude of research articles available that describe different motivational theories, recreations of those theories, criticisms, support and much more. Some of the theories that were available to research were Herzberg's Two Factor Theory, Vroom's Expectancy Theory, Adam's Equity Theory, and Maslow's Hierarchy

of Needs. These are just a few of the available theories of motivation that I could have used for the basis of my research. Herzberg's Two Factor Theory was an easy choice as the focal point of my research. The first reason for that is the gap in the research pertaining to generations. By pursuing my research, I would be filling that void. The other reason that I chose this theory is due to the questionable dichotomy that is presented in the theory. This dichotomy is heavily debated among critics and proponents of the theory, and I wanted to contribute to the discussion.

### Herzberg's Two Factor Theory

According to the Two Factor theory, there are two main categories of attitudinal factors that affect motivation (Herzberg, Mausner, & Snyderman, 1959; Schwab, DeVitt, & Cummings, 1971). These include "Satisfiers", or as I will refer to them as "Motivators," and "Dissatisfiers" also known as "Hygiene" factors. These two categories differ fundamentally and are independent of one another (Maidani, 1991). In Herzberg's original study, he identified six Motivator factors that are determined intrinsically by the employee. They include recognition, achievement, possibility of growth, advancement, responsibility, and the work itself. Motivators are referred to as "job content" due to the intrinsic nature of what is gained from Motivators (Herzberg, Mausner, & Snyderman, 1959; Maidani, 1991).

Hygiene factors are determined by the extrinsic factors of an employee's job. There are ten Hygiene factors that were identified by Herzberg in his original study. They include salary, interpersonal relations—supervisor, interpersonal relations—subordinate, interpersonal relations—peers, supervision—technical, company policy and

administration, working conditions, factors in personal life, status, and job security (Herzberg, Mausner, & Snyderman, 1959).

One foundational suggestion of the Two Factor theory is that these factors—Motivators and Hygienes—are determined on two separate continua for each employee (Whittsett & Winslow, 1967). Motivators are evaluated on a range from neutrality to highly satisfied, whereas Hygiene factors are evaluated on a range from neutrality to highly dissatisfied (Schwab, et al., 1971). It follows that Motivator factors do not affect job dissatisfaction and Hygiene factors do not affect job satisfaction.

Schwab, et al. argue that a theory of motivation should, “attempt to define the attitudinal determinants of employee behavior” (1971, p. 294). According to Schwab, et al., Herzberg's theory states “performance effects are more likely to be associated with the satisfiers (hence the term “motivators”) than with dissatisfiers. The [Hygiene factors] serve merely to maintain performance levels (hence the term “hygienes”)” (1971, p. 294). What this infers is that respondents mentioned an increase in productivity or positive work outcomes when referring to Motivators and only mentioned maintaining levels of productivity when describing Hygiene factors. This is why Herzberg deems this a theory of motivation because he found this statistical relationship between performance effects and satisfaction.

Schwab et al. do warn about the pitfalls of relying on self-report performance effects though. Schwab and his fellow authors, at one point, refer to self-report performance effects as a “questionable procedure” due to respondents' propensity to bias results in favor of what they saw as positive outcomes (1971). House and Wigdor, critics of the Two Factor theory, suggest that self-report data of increased job performance

might just be moral justification for higher job enjoyment (1967). House and Wigdor reaffirm Schwab's et al. caution toward self-report performance effects and how the subjective nature can lead to bias.

Herzberg's Two Factor theory has garnered international acceptance as a theory of motivation (Hines, 1973). This is not to say that it has not accumulated much criticism as well. Since Herzberg's findings were first released in 1959, the study has been recreated numerous times by supporters and critics alike. There have been instances where Herzberg's results were supported, but there have also been, more often than not, numerous studies that have failed to provide unequivocal support of the theory (Hines, 1973). Actually, only one in three studies substantiates Herzberg's conclusions (Gardner, 1977). The reason this theory has gained such notoriety is due to the ease of reproducing the aggregate results of Herzberg's study under controlled conditions (Schwab, et al., 1971). Critics of the theory argue that this reliance on controlled conditions suggests method dependency and invalidates the study due to the fact that it cannot be replicated by any other data collection method consistently other than the critical incident technique. A majority of the criticisms have focused on the methodology employed by Herzberg while measuring employee satisfaction (Schwab, et al., 1971).

Method dependency means that a theory's results can only be concluded using the one method that it was originally deduced from. There is a multitude of articles that discuss or argues that the Two Factor theory cannot be replicated under any other circumstances than the conditions that Herzberg used in his first study (French, Metersky, Thaler, & Trexler, 1973; Graen, 1966; House & Wigdor, 1967; Schwab et al. 1971; Soliman, 1970; Vroom, 1964). If the specific data gathering techniques are not employed,

then researchers, a majority of the time, do not gather the same results as Herzberg.

French et al. claim, "Others who applied different methodologies, either in terms of data collection, reduction or analysis, failed to obtain results supportive of the Two Factor theory" (1973, p. 369). French et al. explain that other researchers that are testing this theory are not finding data and conclusions that support the theory, unless they conduct the study under specific conditions, which is not optimal when trying to validate such a world renowned and implemented theory of motivation (1973).

In the case of the Two Factor theory, the data collection method is the critical incident technique. The way that Herzberg utilized the critical incident technique includes first-level thought units and second-level thought units. The first-level thought units include separating the responses of the participants into sixteen attitudinal categories (i.e. the individual Motivators and the individual Hygiene factors). Furthermore, after categorizing the responses into these categories the reviewer separates the responses further into favorable and unfavorable events, which results in the second-level thought units (Herzberg, Mausner, & Snyderman, 1959; Schwab, et al., 1971). The reason critics claim the Two Factor theory is method dependent is because only studies that replicate Herzberg's variables near perfectly have the same or similar results as Herzberg such as in Soliman's study (1970) (French, et al., 1973). Soliman (1970) tested to see if changing the method of how the study was conducted would have an effect on the results. What Soliman found was that, indeed, if a researcher follows Herzberg's methodology perfectly, they would result in similar results as Herzberg. Conversely, if researchers changed the data collection method, participant selection method, etc., then the study would usually come to results that do not substantiate the Two Factor theory. All in all,

Soliman found that the Two Factor theory is a function of its methodology (Soliman, 1970).

Another set of critics, Dunnette, Campbell, and Hakerl (1967), contends that the theory is overly simplified. The theory, in their opinion, draws conclusions that are simply not supported by data. Their findings, along with many other critics of the theory, suggest that motivators or hygiene factors both influence job satisfaction and job dissatisfaction, directly challenging the Two Factor theory's claim of two separate continuums for these factors and the causal connection between motivation and satisfaction (Dunnette, et al., 1967; Hines 1973). Schwab, et al. go further to say that the only way for the Motivator—Hygiene dichotomy to maintain integrity is if favorable outcomes are exclusively associated with Motivators and unfavorable outcomes are exclusively associated with Hygiene factors. There have been many critics that find this statement simply not true when it comes to the Two Factor theory. Schwab and Heneman replicated Herzberg's original study and found that 15% of favorable responses were associated with Hygiene factors, and 54% of the responses that were unfavorable remarks included Motivator factors (1970). Additionally, House and Wigdor (1967) found that five of the six Motivator factors ranked among the top nine Hygiene factors in respondents' answers. These two pieces of evidence suggest that Motivators and Hygienes do not exclusively relate to favorable and unfavorable sequences, respectively. This, in turn, casts doubt on the relationship between satisfaction and motivation (House & Wigdor, 1967).

Proponents of the Two Factor theory criticize the theory's critics. They claim that only studies that take reasonable steps to recreate Herzberg's method can be "considered

relevant in criticizing the theory” (French, Metersky, Thaler, & Trexler, 1973, p. 369). These proponents also claim that comparing results of today compared to those in the 1950s is irrelevant because the participants in the study today live in a different time, with different conditions, different influences, and different environments. These comparisons hold no weight due to these differences (French, et al., 1973).

There is much controversy surrounding the world-renowned Two Factor theory of motivation. Some buy into the theory full-heartedly, others have a healthy skepticism of the theory, and then there are people who reject a majority of the theory's assumptions (Farr, 1977). So why do we still care about a theory that no one can agree upon or, even, one that is rejected more than it is substantiated by replications of the study (Gardner, 1977)?

One reason it is imperative to review and test Herzberg's theory is that it has been, in the words of George Hines, “widely taught by the universities, management consultants, and company training officers, most of which appear to have accepted the motivator—hygiene dichotomy without reservation” (Hines, 1973, p. 376). If it is discovered that this dichotomy was based on an anomaly or a misrepresentation of the data, it may be that an internationally renowned theory is misleading industry experts. This is of great importance to my study because if it is suggested by the data that Herzberg's theory falls into the pattern of a generational difference, universities and management consultants will have to change their approach in presenting how to motivate employees of differing generations within the framework of Herzberg's theory. Hines also found that cultural differences have a significant effect on the data collected when testing Herzberg's theory in cross-cultural contexts, and he suggests that cultural

considerations must be made when transplanting the westernized version of the Two Factor theory into other international cultures. I suspect that similar considerations must be made when applying the Herzberg framework to varying generations.

### Generational Research

While there is no widespread standard for when generations begin and end, there is a generalized time frame that each generation fits into. There are usually two to five years of difference between the differing opinions of when a generation begins and ends. There are many proposed beginning and ending dates for Baby Boomers. The most supported dates are 1946-1964 (Benson and Brown, 2011; Cogin, 2012; Dries et al., 2008; Meriac et al., 2010). For Millennials, I chose 1980-1999 after considering the same studies that I did for the Baby Boomers (Cogin, 2012; Dries et al., 2008; Meriac et al., 2010). The reason I did not include the year 2000 in my study is because I was not approved to collect data provided by a minor. By decreasing the birth year to 1999, this insured that all participants were eighteen years or older.

A generation is “a cohort of persons passing through time that come to share a common habitus, hexis and culture, a function of which is to provide them with a collective memory that serves to integrate the cohort over a finite period of time” (Eyerman and Turner, 1998, p. 93). As we can see described with by Eyerman and Turner, there is a group of people that live in the same finite period of time through the passage of that time that share commonalities among each other. Alternative definitions of generations highlight that generations are groups of people born in the same era that share common political or social experiences, values, personalities, and peer traits (Jurkiewicz and Brown, 1998; Smola and Sutton, 2002). Whatever definition is used, the



common theme is that there is a large group of people that share commonalities that unite them as an identifiable group.

There are three generations in the workforce today. There are Baby Boomers that comprise the individuals close to retirement and hold a lot of the top leadership roles in companies today. The Gen. X population represents the portion of the workforce that make up the mid to top-level managers in companies. Finally, the Millennials are the newest addition to the workforce that make up most entry level to mid-level manager positions (Shrivastava et al., 2017). For my study, I am going to be focusing on Baby Boomers and Millennials so that we can see how the generation that is just now entering the workforce is different than the generation leaving the workforce.

Both Baby Boomers and Millennials have identifying characteristics that separate them from one another. Baby Boomers are driven by their work. They measure the worth of people and their self-worth by the dedication they have to their work and the quality of the work produced (Hicks and Hicks, 1999). Baby Boomers are goal oriented in their work (Lamm and Meeks, 2009). They strive to meet deadlines, projections and targets. Some identifying characteristics of Baby Boomers that Shrivastava et al. identified were: “authentic, experienced and competitive, they believe in equal rights and opportunities, consider values, teamwork and discussions, are motivated to work and value commitment and loyalty, and believe in long-term employment” (Shrivastava et al., 2017, pg. 261).

Millennials are the technological generation. The life span of new age technology and Millennials are very similar. This is the generation that has always had technology. Millennials do not need a leader to boss them around, they need an intellectual leader that will effectively utilize technology to coordinate efforts and direct them on the right path

(Taylor and Keeter, 2010). Some of the identifying characteristics provided by Shrivastava et al. for Millennials include: “view work as a source of revenue; they value a creative environment and recognition; workplace and time flexibility; and a participative work style” (Shrivastava et al., 2017, pg. 262).

### Generations and Herzberg's Two Factor Theory

As of now there is not research on how the Two Factor theory holds when compared across generations. This is an important perspective that needs to be evaluated. By uncovering any differences that generations have in relation to this theory, there could be major implications for how it is implemented by consulting groups and universities alike. Companies could tailor their motivation building initiatives to directly influence each employee based on their respective generation. By doing this, employees will be able to receive the first level factors that are more likely to motivate them to work harder. This more individualized approach could help companies develop a highly motivated team.

### Hypotheses

Since there is such a large gap in the generational research of Herzberg's Two Factor Theory of motivation, my study aims to fill this void by testing a few different hypotheses relating to generations. The first hypothesis is based on the overlying goal of the study. Hypothesis 1 is that the first level factors that make up motivators and hygiene factors will differ depending upon what generation is being tested. Essentially, what factors make up motivators for Millennials might be entirely different for the factors that make up motivators for Baby Boomers. This hypothesis focuses on the fundamental differences between the two generations. Hypothesis 2 is that salary will be a motivator

for Millennials and a hygiene factor for Baby Boomers. This can be separated into hypothesis 2a which is salary will be a motivator for Millennials and hypothesis 2b which is salary will be a hygiene factor for Baby Boomers. The reason for Hypothesis 2 is to focus in on one specific factor that could have possibly changed between generations. Salary has been debated as being a motivator or hygiene by many academic researchers. This disagreement is what led me to focusing on salary. Hypothesis 3 is that Millennials will provide more events that have a first level factor of salary than the events provided by Baby Boomers. Hypothesis 3 does not address whether either generation is mentioning it as a motivator or hygiene factor, but which generation is mentioning more often? I am trying to get to the bottom of who is more concerned with salary—Millennials or Baby Boomers?

### **Method**

The goal of this study is to test whether Herzberg's original findings of the factors that make up hygiene factors and motivator factors are the same for differing generations. Specifically, these generations are the Millennial generation and the Baby Boomer generation. With this in mind, in order to maintain the integrity of the results and interpretations of the original study, I conducted my study as closely to Herzberg's original study as possible. By modeling my questions and method closely to Herzberg's, I tried to eliminate any variances in the data that could be caused by my interpretation of a question or detail, in order to be able to confidently identify any statistical differences as generational differences instead of data anomalies caused by my interpretation. There are some differences between Herzberg's and my method because of the resources that are available to me. These differences will be discussed later as limitations.

### Survey Distribution

In order to efficiently collect my data, I used an online survey, which presented the greatest opportunity to collect a large sample of both generations, within the scope of my resources. I partnered with 41 professors to distribute my survey to students in their classes via email. In the emails, I requested that the professors take the survey as well as distribute it to their students. The email can be referenced as Appendix C. At the end of the emails, I provided the online link they could use to navigate to my survey. I also suggested to the professors that I could come and present a small introduction of the survey to the class. Some professors allowed me to attend the class and directly request that students go to the online link to participate. In these classes I shared what the participants could expect on the survey, the qualifications to take the survey, and the closing date. In the case that the professor did not allow me to come and speak, I ensured that the professor knew the necessary information and instructed them to share it with their class before distributing the link.

The eligibility requirements for the participants included that they be eighteen years of age or older. This was in place so that I could gain consent from participants more quickly, and I was not handling data that was collected from minors. The second requirement was that they had to have prior or current working experience. The reason for this requirement is they had to have experiences in a working environment in order to be a useable response for my data.

The majority of the survey included various questions exactly as they appeared in Herzberg's original study and a few new demographic questions that allowed for coding and organization of the data. The survey that I used is noted in Appendix A. Once the

participant was recruited and decided to participate, they clicked on the link, which led them straight to the survey. The survey starts with the description of the survey and what the participants can expect. It also detailed their voluntary participation and notified them that they could end the survey if they decided they no longer wished to participate. The survey then moved into the first set of questioning which prompted the participants to reflect on an event or a sequence of events that provoked an exceptionally positive feeling within them toward their job. Unlike Herzberg, I did not have separate long-term and short-term sequence of events. The reason for this is because the data that I would gather from this distinction exceeds the scope of my investigation. After the participants finished the positive set of questions, the next set of questions asked the participant to identify the exact opposite of what they had already identified—a negative sequence of events. The questions were worded exactly the same just the word positive was exchanged for negative. This was done so that no bias was incidentally given to either set of questioning due to the language of the questions. After the participants finished the negative event section, they moved into a set of questioning about demographics. This section was included so that I could piece together the identifying factors of the sample. Finally, the survey ended with a statement thanking the participant for responding.

### Data Analysis

Herzberg decided the best way to analyze his data was to use a form of content analysis. There are two basic approaches to content analysis that Herzberg had to choose from. The first approach is called the a priori approach. This approach simply means that the categories that the data will be sorted into will be decided before the study. The

criteria used to separate the data are also determined beforehand. Once the data is available, the criteria are applied and the data is separated into the appropriate groupings.

The second approach of content analysis is referred to as the a posteriori approach. This form of content analysis is more organic and allows the data to determine the categories that it will be separated into. The patterns of the data are identified and similarities among the data are used to form the groupings. Herzberg chose this second method to apply to his study because he did not want to rely on previous research and limit this new way of thinking. Because I am testing whether the factors that Herzberg identified differ among generations, I will be using the factors that he identified in his original study along with the criteria for each factor. This means that I will be employing the a priori approach of content analysis because my first level factors are predetermined. By using Herzberg's first level factors and his criteria for the factors, this allowed my team to interpret the data as closely to Herzberg's original interpretations (Herzberg, Mausner, & Snyderman, 1959). By doing this, we can identify whether the motivator or hygiene factors that Herzberg originally identified differ among generations.

#### Data Cleaning

There were a few criteria that were used to thin the data to the most valid responses. It is imperative that valid data was used to draw conclusions. If the data was invalid, the conclusions would not be able to be applied to the population. There were five criteria total that were used to filter the data and with each step the data became more and more precise. After the data was organized, each individual response was scanned for the first criteria, then the second, and so on. The first criterion that was used to filter the data was if there was simply no response at all for the participant. The second criterion

for cleaning that was used was if the response took greater than twelve hours to complete. The reason I did this was to eliminate participants that might not have taken the survey as serious as they should have and that maybe had forgotten about the survey. The third criterion was if there was no birth year listed. If there was no birth year provided, the response could not accurately be separated into the correct generation therefore making the data unusable. The fourth criterion implemented was if the answers were immature, irrelevant, or otherwise unusable content. This is a subjective criterion, but it was a necessary one. An example of a response that had to be deleted was a response that referenced inappropriate sexual acts at work. The final criterion that was used to clean the data was if the response duration was less than five minutes. The survey had a lot of open ended questions and prompts for the participants to read, which should have taken the respondent on average approximately four to five minutes to just read through. In order to eliminate careless responses, I highlighted the responses that took less than five minutes to complete in red. After all the criteria had been applied to the data, I deleted all the responses that violated any of the conditions. The raw data included 237 responses, which equated to a 29% response rate. After I cleaned the data of all the unusable responses, the useable response rate was 15%. This 15% included the limited number of Baby Boomer responses that were collected.

### Data Sorting

In order to sort the data, I first had to assemble a team of researchers to help with sorting the data into the correct factors. In Herzberg's original study, he had a large number of assistant researchers aide in his sorting process. I was able to gather a team,

including myself, of three qualified data sorters. Both researchers that were recruited have worked with interpreting raw data for research purposes in the past.

Each positive and negative event that was recorded from each participant had a first level factor that needed to be identified. The first-level factor is defined as the objective element of the event that the respondent identified as the identifiable source of their positive or negative attitude toward their job. The first-level factor is meant to identify the surface or face value element of what the participant said, what actually happened in the event.

In order to identify the factors, I created three separate excel sheets with the cleaned data. It included the participant ID number, the positive set of questions, negative set of questions, and spaces for the sorters to record the first level factors for each. I also pulled Herzberg's first level factor criteria sheet from his original study (See Appendix B for the criteria sheet). I printed three separate copies for each data sorter. The criteria sheet assigned a number to each first level factor. Each sorter read all of the responses individually and assigned what factor they thought was evident as the first level factor for both the positive and negative event for each participant by typing the corresponding number into the excel sheet. Once all responses had been individually coded, the team gathered together and compared responses. If the responses were different there would be a discussion to decide what first level factor was most apparent in the situation provided by the participant. Once all three sorters agreed, the final first level factor number was recorded on the master excel sheet.

Once the team had sorted all of the data, the data was separated into two groups using the birth years of each participant, Baby Boomers (1946-1964) and Millennials



(1980-1999). Once the data was separated by generation, frequency tables were created for each generation. The number of occurrences of each first level factor was recorded for each generation separately. There was a separate frequency table for the first level factors for both negative and positive events of each generation. Therefore, there were four frequency tables total.

### Participants

As mentioned above, the usable response rate of my entire data was 15%. Which means out of the 831 people that were given the opportunity to take my survey, 122 of them provided usable responses. The sample of participants was a convenience sample. Namely, college student workers were the group that composed my Millennial generation sample and college professors were the group that formed my Baby Boomer generation sample. For the purpose of this study, Baby Boomers will be those individuals that were born in the years of 1946 to 1964, whereas Millennials will be those individuals that were born between 1980 and 1999. For the Millennial generation sample there were 113 responses. The Millennial sample's average education level was "Some undergraduate education" which is expected because the method used to distribute my survey targeted undergraduate students at Eastern Kentucky University. On the other hand, the average level of education for the Baby Boomers was "Completed postgraduate education," which was also not surprising. The average age of the Millennials that responded was 23 years old, where as for the Baby Boomers the average age was 60 years old. Both groups' averages were toward the younger side of their respective generations. As for the male/female distribution, the Millennial respondents were 52% male and 48% female, and the Baby Boomers were 80% female and 20% male. Finally the average number of

jobs that the Millennial sample said that they have held since they began working is four. The Baby Boomers have held an average of ten jobs since they began work.

### **Results**

The statistical tools that used to analyze this data had to be altered after collecting my data. The original plan was to use a Chi Squared test to compare and determine the statistical significance between the Baby Boomer Generation and the Millennial Generation. Not enough data was collected from Baby Boomers to extrapolate my conclusions to the entire population. Only five Baby Boomer responses were recorded. If there was more time allowed, I would have continued my data collection, but due to the limitations, I had to run a different test on the useable data that I collected. The Millennial sample included 113 useable responses. This number, though small, can have some statistical significance as long as I draw my conclusions cautiously. The test that I used to test the statistical significance of the Millennial sample is the test for one proportion. This test allowed me to use the single sample that I collected and determine if the differences between the rank of my first level factors in the positive and negative events were statistically significant.

The first hypothesis of my study states the first level factors that make up motivators and hygiene factors will differ depending upon what generation is being tested. This hypothesis can neither be accepted nor rejected with the data that was collected. There is a sufficient amount of data to determine the first level factors that compose motivators and hygiene factors for Millennials, but not Baby Boomers. Since there is not another sample to compare the Millennial sample to, I cannot definitively say

that Hypothesis 1 is accepted or rejected. In the discussion, I will, however, compare my findings in the Millennial sample with Herzberg's original findings.

The second hypothesis of my study states that salary will be a motivator for Millennials and a hygiene factor for Baby Boomers. Hypothesis 2a is salary is a motivator for Millennials, and Hypothesis 2b is salary is a hygiene factor for Baby Boomers. From my study, I was able to accept Hypothesis 2a, and Hypothesis 2b can neither be accepted nor rejected based on the lack of data. For Hypothesis 2a, Table 1 shows that indeed salary was a statistically significant motivator compared to ten out of the eleven first level factors that ranked under it. There was no statistical difference between responsibility and salary, which ranked second and third respectively. Salary was statistically more of a motivator for Millennials than working conditions, advancement, work itself, interpersonal relations—peers, interpersonal relations—supervisor, possibility of growth, status, personal life, company policy and administration, and interpersonal relations—subordinates. All of the Z scores calculated were significant at a 99% confidence level for the 10 comparisons. Table 2 shows that salary was not among the top five hygiene factors. Seven first level factors ranked above salary as hygiene factors for Millennials. All of the Z scores of these comparisons were also significant at a 99% confidence level. The first level factors that ranked above salary as hygiene factors include Recognition, Supervision-Technical, Interpersonal Relations—Supervisor, Interpersonal Relations—Peers, Achievement, Company policy and Administration, and Working Conditions.

Table 1. Z Scores of Test for One Proportion for Millennial Motivator Factors

FLF	1	2	3	4	5	6	7	8	9	10	11	12	13
1- Recognition													
2- Achievement	6.939*												
3-Salary	10.075**	1.832											
4- Responsibility	14.835**	4.297*	1.954										
5-Working Conditions	16.36*	5.035*	2.517*	0.417									
6- Advancement	18.308**	5.953*	3.207*	0.915	0.46								
7-Work Itself	20.87*	7.127*	4.073*	1.524	1.018	0							
8- Interpersonal Relations-- Peers	20.87*	7.127*	4.073*	1.524	1.018	0	0						
9- Interpersonal Relations-- Supervisor	20.87*	7.127*	4.073*	1.524	1.018	0	0	0					
10- Possibility of Growth	20.87*	7.127*	4.073*	1.524	1.018	0	0	0	0				
11-Status	44.321**	17.13*	11.086**	6.044*	5.042*	3.028*	3.028*	3.028*	3.028*	0			
12-Personal Life	44.321**	17.13*	11.086**	6.044*	5.042*	3.028*	3.028*	3.028*	3.028*	0	0		
13- Company policy and Administration	44.321**	17.13*	11.086**	6.044*	5.042*	3.028*	3.028*	3.028*	3.028*	0	0	0	
14- Interpersonal Relations-- Subordinates	44.321**	17.13*	11.086**	6.044*	5.042*	3.028*	3.028*	3.028*	3.028*	0	0	0	0

\*Significant at p<. 05  
 \*\*Significant at p<. 01

Table 2. Z Scores of Test for One Proportion for Millennial Hygiene Factors

FLF	1	2	3	4	5	6	7	8	9	10	11	12
1- Recognition												
2- Supervision-Technical	2.614**											
3- Interpersonal Relations--Supervisor	4.932**	1.917										
4- Interpersonal Relations--Peers	6.819**	3.41**	1.241									
5- Achievement	10.694*	6.338**	3.567**	1.982*								
6-Company policy and Administration	10.694*	6.338**	3.567**	1.982*	0							
7-Working Conditions	18.383*	11.859*	7.711**	5.336**	2.368*	2.368*						
8-Salary	23.133*	15.181*	10.123*	7.229**	3.610*	3.610*	0.724					
9-Personal Life	23.133*	15.181*	10.123*	7.229**	3.610*	3.610*	0.724	0				
10-Possibility of Growth	33.583*	22.389*	15.269*	11.194*	6.101*	6.101*	2.037*	1.019	1.019			
11- Interpersonal Relations--Subordinates	33.583*	22.389*	15.269*	11.194*	6.101*	6.101*	2.037*	1.019	1.019	0		
12- Responsibility	33.583*	22.389*	15.269*	11.194*	6.101*	6.101*	2.037*	1.019	1.019	0	0	
13-Work Itself	33.583*	22.389*	15.269*	11.194*	6.101*	6.101*	2.037*	1.019	1.019	0	0	0

\*Significant at p<. 05  
 \*\*Significant at p<. 01

Hypothesis 3 states that Millennials will provide more responses that have a first level factor of salary than the responses provided by Baby Boomers. Once again, due to the lack of data that was collected for the Baby Boomer Sample, this hypothesis can neither be accepted nor rejected. The Millennial generation provided 14 responses throughout all of the responses provided including both positive and negative events. Baby Boomers could not be determined since due to the low amount of responses.

## **Discussion**

Even though I was unable to determine if all of my hypotheses were supported or rejected, I was able to uncover some interesting observations of the data and a unique perspective regarding Herzberg's original findings.

The goal of Hypothesis 1 was to compare and contrast the first level factors that made up motivators and hygiene factors for Millennials and Baby Boomers. Since I was unable to gather enough data from Baby Boomers to make a statistically significant conclusion, the other option that was available was to compare the results I gathered from Millennials to Herzberg's original findings. In the time period that Herzberg would have been conducting his tests, his participants would have fallen into the Lost (1890-1915), GI (1900-1925), or Silent (1925-1945) generations.

My data suggested that the top three motivators for Millennials were recognition, achievement, and salary, respectively. This rank order was based on the frequency the response occurred in the sample. After running my statistical tests though, I found that the difference between the number of responses including recognition and achievement/salary was statistically different, but the difference between achievement and salary was not. Therefore, achievement and salary could be interchanged as second and third ranked. Further testing with a larger sample would help to uncover which is statistically more of a motivator factor. Herzberg's top three identified factors were achievement, recognition, and work itself. Both achievement and recognition occurred in my top three as well. What differed was the work itself and salary. There could be a number of reasons that this difference exists. My hypothesis would suggest though that this difference arises from generations developing different motivational drives. Maybe

Millennials have transitioned to being driven more by money than the work itself, while the Silent generation cared more about the work that they were doing. Perhaps it has something to do with the world that Millennials live in. Phones, cars, technology, expense after expense...does having all of these expensive hobbies have an effect on what motivates workers in the workplace?

The Millennial's top three hygiene factors include recognition, supervision—technical, and interpersonal relations—supervisor, respectively—refer to Appendix B for the first level factor criteria. Again the difference between the number of responses for recognition and supervision—technical/interpersonal relations—supervisor is statistically significant, but the difference between supervision—technical and interpersonal relations—supervisor is not statistically different, which suggest those factors can be interchanged. Herzberg's top three hygiene factors were company policy and administration, supervision—technical, and recognition. The factors that are included in both top three hygiene factors are supervision—technical and recognition. The factors that differed were company policy and administration and interpersonal relations—supervisor. The rest of Herzberg's list of hygiene factors shows that interpersonal relations—supervisor actually ranks fourth. In my study, company policy and administration ranks sixth. Now we see something peculiar: the top motivator is also the top hygiene factor in my study and the third highest hygiene factor in Herzberg's study. We have seen this before in House and Wigdor's (1967) research. They found that five of the six motivator factors ranked among the top nine hygiene factors in respondents' answers. This calls into question the two different continuums used to explain the theory's basis. If motivators do not affect dissatisfaction and hygiene factors do not affect

satisfaction, how can there be a factor that exists on both continuums? In Herzberg's publication of his study, he does not seem to be worried that this has occurred, he just explains that there were instances where recognition was not obtained and that it contributed to job dissatisfaction. He did not mention the fact that recognition was his second highest motivator factor. Another question arises, are there other factors that would exist on both continuums?

I would argue, yes there are other factors that were not identified as first level factors in Herzberg's original study. I say this because I have potentially identified one. The factor that was repeatedly mentioned in both positive and negative events was customer relations. Customers were mentioned in 17% of the total responses. Multiple positive events included the participant being praised by a customer, gaining satisfaction from simply working with customers first hand, and gaining some type of award from a customer. For the negative events, there were multiple participants that mentioned being ridiculed by a customer, seeking gratification from a customer that was not given, and just negative personal relations with customers. This pattern of responses concerned me because there was no first level factor that fit exceptionally well in these events. Most of them were categorized as recognition because they gained or lacked the recognition from customers. This repetition of events that were affected by a customer warrants a new first level factor of customer relations. A possible explanation of why Herzberg did not include this in his original study is that he simply did not observe it. His samples were made up of accountants and engineers, both of which do not have direct contact with customers. My data included a multitude of professions ranging from the fast food servers to sales representatives. My participants were able to speak to a different



perspective than Herzberg's participants were able to. It is pertinent for future researchers to note this new first level factor and to also determine if their data warrants another new first level factor.

Hypothesis 2a was supported. This means that something is causing Millennials to identify salary as a motivator. One potential explanation for this is the current economic status. Millennials live in a time where there are smartphone watches, self-driving cars, and technology that make life easier. All of this technology comes at a price, literal dollars and cents price, which is not cheap. One of the possible causes for Millennials identifying salary as a motivator is the price that all of this new age technology demands. With the exponential growth in the amount, complexity, and efficiency of technology comes an exponential growth in the price compared to earlier technology through the 1900's. Also, the rising costs of insurance and living expenses could explain salary becoming a motivator. Another possible explanation that we consider is the data is not representative. There were 113 useable responses and even though that is a fair amount of participants, further research needs to be conducted to further validate my claims.

### **Conclusion**

In order to address the steps moving forward, it is imperative to reflect on the strengths and weaknesses of this study. These strengths and weaknesses also give rise to future research opportunities.

### **Strengths**

As I conducted my survey, I was able to identify a few strengths of my study. The first that I would like to mention is that my study was a qualitative study. This means that the responses that I was able to collect from the participants were extremely detailed and

included a comprehensive account of the facts that surrounded the event that was being described. By collecting as many of the facts as possible through open-ended questions, the sorting team was able to easily identify the first level factor instead of asking for the respondent to identify the factor such as on a Likert scale. This provides a more reliable assessment of the first level factors of each event.

Another strength of my study was that I used a survey to collect my data instead of an interview. The survey was a better tool to collect my data for two reasons. The first reason is that the event each participant described was more accurate and precise. The reason for this is that they had time to sit down, alone, and take as much time as they needed to fully remember the event that they were describing. If I had conducted an interview, there would have been an artificial time pressure to answer the questions quickly. By using a survey, there was no artificial time pressure for the respondent. The second reason is the convenience it offered in my data collection, sorting, and analysis. By conducting an online survey, I was able to easily distribute my survey to 800+ people in the matter of weeks. I was also able to easily download my raw data into excel to sort it and run the necessary tests on it. This process would have been much longer if I had either written the responses to an interview or even typed the responses to an interview. The data collection and analysis was simplified at little expense of the quality of data that I gathered.

Another strength of my study was the generalizability of my sample. Herzberg, on the other hand, chose one company and collected his sample from the accountants and engineers from that company. The reason he chose two different professions is because he did not want there to be any bias in his results due to the fact of only using one

profession. The Millennial sample shared experiences from a variety of different professions including, but not limited to, the food service, construction, finance, retail, and many others. Herzberg wanted to collect diverse perspectives, and that is exactly what I achieved through the Millennial sample that was collected. If the Baby Boomer sample had been useable, the varying perspectives would not have originated in the profession, since they were all professors, but from what field their expertise was in. There were a variety of business professors given the opportunity to take the survey including professors of management, marketing, finance, and many others.

Unfortunately, I was not able to collect many responses from my Baby Boomer sample and was not able to observe the diverse perspectives. All in all, even though my sample was different from Herzberg's, my Millennial sample strengthened Herzberg's original intent of diversifying the perspectives of the study.

The last strength that I noticed was the questions that my study attempted to answer. In the research for this project, I noticed there was a gap in the research regarding generational differences pertaining to the Two Factor Theory. My study of the theory attempts to analyze this unique perspective and open up a new caveat to this complex theory. By attempting to answer the questions that I posed about the Two Factor Theory, I hope this leads other researchers to also explore the possibilities of how to most effectively apply the theory to varying generations.

### Limitations

Not only did my study have its strengths, it also had its limitations. Other researchers should note these limitations to improve their study if they so choose to recreate a study such as mine. Given the opportunity to continue my research, I would

create a research study that addressed these limitations throughout so that I could have stronger results in the end.

The response rate for this study is definitely one of the largest limitations of the entire study. The problem did not reside in the number of Millennial responses. I had a total of 113 responses from Millennials. This is an adequate number of responses in order to draw conclusions. The problem arose from the number of responses from Baby Boomers. In total, after cleaning the data, I only collected five Baby Boomer responses. Considering how large the population of Baby Boomers is, this is not a statistically representative number and I cannot draw any conclusions about Baby Boomers with the responses that I received.

Another problem with my response rate was the comparison between the raw response rate and the cleaned data response rate. The response rate that I had with the raw data was 29%. The response rate after cleaning the data was 15%. I do understand that the response rate is expected to drop after cleaning, but being cut in half is a serious reduction in responses. There are a few factors that could have led to this reduction. The first could be the setting in which people took the survey. Some professors allowed the students to take the survey in class. This could have created the artificial time limit that I was trying to avoid by using a survey. By creating this time pressure to finish, respondents could have skipped over necessary instruction or hurried their response, which led to their response being unusable. Another explanation for the reduction could have been from the questions or prompts that I used. I might not have provided enough instruction or information to guide the participant to exactly what I needed for my data. They may have become confused and responded in the way they thought was appropriate

which would have led to their response being unusable. Whatever the case may be, if this study is recreated, time should be spent brainstorming ways to communicate the instructions and qualifications of the survey fully and eliminating any artificial time pressure that could lead to an unusable response.

The next limitation that needs to be addressed is the type of study this is—qualitative. Ironically, this is actually a strength as well because both types of studies—quantitative and qualitative—have their advantages and disadvantages. I chose to do a qualitative study over a quantitative study. As I mentioned earlier, qualitative studies do have their advantages, but they also have their weaknesses. By choosing a qualitative study, I relied heavily on self-report data from employees. There is always a risk of biased answers when employees report their own observations. This is highlighted in the research article published by Schwab et al. (1971). Another disadvantage of qualitative studies is that the results depend on the skills of the research team. The sorting team was in charge of interpreting the data and assigning the necessary first level factor to the response. This interpretation allows for more human error, which would not be present in a quantitative study. Although, if I had asked the participants to identify the first level factor, it would have allowed an error to be committed by the participant. Either way, there could be human error that skews the results. I just had to decide which one would have the least impact, and that is why I chose a qualitative study. The last disadvantage is that qualitative studies get a lower response rate, which leads me into my next limitation.

The last limitation that should be discussed is the differences between Herzberg's original study and my study. In my literature review, I discussed supporters of the Two Factor theory who argue that researchers who do not use the same exact procedures as

Herzberg cannot criticize the theory if they do not find supporting evidence. Because of this, I wanted to keep my study as close as possible to Herzberg's original study, so that in the case that I found evidence that did not agree with Herzberg's findings, dissenters could not claim that I used a faulty method. Even with this in mind, it was hard to stay exactly true to the original study because of the resources and time that was available to me. I thought it was pertinent to be clear about exactly what was different from Herzberg's study.

One of the major differences was the amount of investigators I had for the data sorting process. Herzberg had many assistants helping him sort the data and they all had to come to an agreement on what first level factor was appropriate for the event. My team of investigators was three people including myself. Another discrepancy would be the number of variables that were being tested in each of the studies. In Herzberg's original study, he has multiple different hypotheses that are testing multiple variables such as duration of events, factor effects, second level factors, performance effects, etc. In my study, I am only testing the first level factors and determining if they are grouped into the same factors, motivator and hygiene, for different generations. I have three hypotheses compared to the multiple that Herzberg had. Finally, the last discrepancy is the data collection method employed. Herzberg utilized an interview method with which he sat every participant down and asked him or her a set of questions. In my study, I sent an online survey to the participants with all of the original interview questions that Herzberg asked.

### Future Research

As I conducted my research, there were several ideas that came to mind that would provide an interesting opportunity for new research. These ideas were outside of the scope of this study, but I wanted to mention them for future researchers to explore.

The first notable idea that came to mind during the analysis of my data was does a specific generation have a propensity to have more differences between their first level factors and second level factors than other generations? First level factors are what objectively happened in the event to cause the feelings and the second level factor is what the participant perceived as causing the feelings in an event. My question would be, do Millennials have a propensity to perceive a different factor than what actually happened? The reason I mention Millennials is because that is the only useable data I had for this study, but for future research, any generation could be analyzed. I did notice in my data though that there were many instances that what was perceived as causing the feelings of positivity or negativity differed from the actual factor that occurred.

The second opportunity for further research is establishing a difference between developmental differences and generational differences within Herzberg's Two Factor Theory. Does the difference between older and younger participants' motivator and hygiene factors stem from a generational difference or just a developmental psychology standpoint? As the workforce ages, potentially, the way we implement motivational efforts change as well.

### Implications

Academic Implications. One of the major takeaways that universities can focus on is proactively looking for new first level factors that affect job satisfaction and dissatisfaction. By finding these factors, researchers will be able to more precisely

identify the motivators and hygiene factors in the Two Factor theory. The best way to find new first level factors is by considering new perspectives. That is exactly how I identified customer relations as a new first level factor. I considered a perspective that had not previously been provided. In college, every year there is a set of fresh, new perspectives to contribute to this discussion. It would be worthwhile for universities to use their students as a resource to discuss and further the Two Factor theory.

Practitioner Implications. Whether it be a consulting firm reorganizing a business for maximum motivational efforts or a business designing their manager training program, businesses need to understand that recognition is going to be the factor that will give them the biggest bang for their buck. What I mean is by investing time, money, and effort into recognizing employees, they will not only be satisfying employees, but they will also be lessening the employees' dissatisfaction. Both effects contribute to higher motivational levels. Recognition was the most mentioned factor among respondents. Companies should employ the Pareto Effect and focus on recognition to motivate a large majority of the company. They should focus their efforts on producing as many quality points of recognition that they can for their employees in order to boost motivation.

### Final Comments

This has been a review and study of Herzberg's Two Factor Theory of motivation. I first began by diving into the research to see what the Two Factor Theory was and how the original research was conducted. I also saw it important to understand the arguments of the theory's critics and proponents. After concluding the research of the theory, I needed to have a basis for the generational part of my study. I found the defining characteristics of the generations that were a part of my study. One part of the research



that was severely limited was a generational perspective of the Two Factor Theory. I conducted my research study in order to begin the process of filling this gap in the research. I then described the method in which I distributed my survey, collected my data, sorted my data, and interpreted the data. Unfortunately I did not collect enough data to draw results about the Baby Boomer generation, which disallowed me to either accept or reject hypothesis 1, 2b, or 3. I was able though, through my research, to accept the hypothesis that salary is a motivator for Millennials. I was also able to, through my research, identify an additional first level factor, customer relations, that was not included in Herzberg's original study. Universities should continue the research into the first level factors of the Two Factor Theory and also a generational perspective of the theory. It is also pertinent that businesses note that recognition was the most mentioned first level factor for both motivators and hygiene factors and that their efforts would best be spent on focusing on how to increase recognition opportunities throughout their business.

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Appendix A  
Online Survey

[Page 1]

**Welcome! Thank you for your interest in our study!**

**About this study.** This study is being conducted by an Honors Student at Eastern Kentucky University. The purpose of this study is to understand if generational differences affect motivational theories in the workplace.

**About your participation.** To be eligible to participate in this study, you must be 18 years of age or older and must have prior work experience. Your participation in this study is voluntary. You may choose not to participate, agree to participate and then stop, and, while completing the survey, you may skip any question you do not wish to answer.

**Confidentiality of your responses.** This is an anonymous survey; no identifiable information will be collected. The survey and your answers are housed on a secure server and individual responses will only be seen by the researchers. Any reports we prepare will be summaries of how large groups of participants answered.

Please contact the Principal Investigator of this study, Daniel Bevins (daniel\_bevins@mymail.eku.edu) if you have any questions about this research or if you feel you have been harmed in any way by your participation. Please print a copy of this web page for your records so that you have this contact information.

**Agreement to participate.** You are being asked to participate in a research study being conducted by Daniel Bevins (Principle Investigator) of Eastern Kentucky University.

By continuing on to the survey, you agree that you have read this page, are 18 years of age or older, and are aware that you are being asked to participate in a research study. By continuing on to the survey, you voluntarily agree to participate in this study. If you do not wish to participate, simply close this window to end this session. Do the same should you wish to discontinue your participation once you have begun.

[Page 2]

On the following pages you will encounter a series of questions. These questions will ask you to recall an event or sequence of events that occurred at either a current or past job that evoked either an exceptionally positive attitude or exceptionally negative attitude in you. You will be asked to provide a detailed description of these events through the questions that are asked. Please give the most honest and accurate assessment of the facts that were present during the event.

[Page 3]

- 1) Think of a specific experience that caused you to feel **exceptionally good** about or have a **positive** attitude toward your job. This can be a specific event that affected

your attitude toward your job or a reoccurring event that affected your attitude toward your job. It can either be from your current job or a past job.

- a) Please explain what happened.
- b) How long ago did this happen?
- c) How long did the positive feeling last?
- d) Can you describe specifically what made the change of feelings begin?
- e) When did it end?
- f) If it was a specific event and not a reoccurring one, was what happened typical of what was going on at the time?
- g) Can you explain more precisely why you felt exceptionally positive at the time?
- h) What did these events mean to you?
- i) Did these positive feelings affect the way you did your job?
- j) Can you give me a specific example of how your performance on the job was affected by this event?
- k) Did what happened basically affect the way you felt about working at that company or did it merely make you feel good about the occurrence itself.
- l) Is there anything else you would like to say about the event you have described?

[Page 4]

2) Now please think of an event that caused you to feel **exceptionally bad** about or have a **negative** attitude toward your job. This can be a specific event that affected your attitude toward your job or a reoccurring event that affected your attitude toward your job. It can either be from your current job or a past job.

- a) Please explain what happened.
- b) How long ago did this happen?
- c) How long did the negative feeling last?
- d) Can you describe specifically what made the change of feelings begin?
- e) When did it end?
- f) If it was a specific event and not a reoccurring one, was what happened typical of what was going on at the time?
- g) Can you explain more precisely why you felt exceptionally negative at the time?
- h) What did these events mean to you?
- i) Did these negative feelings affect the way you did your job?
- j) Can you give me a specific example of how your performance on the job was affected by this event?
- k) Did what happened basically affect the way you felt about working at that company or did it merely make you feel bad about the occurrence itself.
- l) Is there anything else you would like to say about the event you have described?

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- 3) What year were you born?
- 4) Approximately how many jobs have you had since you began working?
- 5) What is your Gender?
- 6) What is the highest level of education you have completed?

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Thank you for your participation. Your response has been recorded.

Appendix B  
First Level Factor Criteria

1. Recognition—First level
  - 1.1. Work praised—no reward
  - 1.2. Work praised—reward given
  - 1.3. Work noticed—no praise
  - 1.4. Work not noticed
  - 1.5. Good idea(s) not accepted
  - 1.6. Inadequate work blamed or criticized—no punishment
  - 1.7. Inadequate work blamed or criticized—punishment given
  - 1.8. Successful work blamed or criticized—no punishment
  - 1.9. Successful work blamed or criticized—punishment given
  - 1.10. Credit for work taken by supervisor or other
  - 1.11. Idea accepted by company
2. Achievement—first level
  - 2.1. Successful completion of job, or aspect of it
  - 2.2. The having of a good idea—a solution to a problem
  - 2.3. Made money for the company
  - 2.4. Vindication—demonstration of rightness to doubters or challengers
  - 2.5. Failure in job, or aspect of it
  - 2.6. Seeing results of work
  - 2.7. Not seeing results of work
3. Possibility of growth—first level
  - 3.1. Growth in skills—objective evidence



- 3.2. Growth in status (advancement)—objective evidence
- 3.3. Lack of opportunity for growth—objective evidence
4. Advancement—first level
  - 4.1. Received unexpected advancement
  - 4.2. Received advancement (expected or unexpected not mentioned)
  - 4.3. Failed to receive expected advancement
  - 4.4. Demotion
5. Salary—first level
  - 5.1. Received wage increase (expected or not expected not mentioned)
  - 5.2. Received unexpected wage increase
  - 5.3. Did not receive expected wage increase
  - 5.4. Received wage increase less or later than expected
  - 5.5. Amount of salary
  - 5.6. Wages compare favorably with other doing similar or same job
  - 5.7. Wages compare unfavorably with other doing similar or same job
6. Interpersonal relations—supervisor—first level
  - 6.1. Friendly relations with supervisor
  - 6.2. Unfriendly relations with supervisor
  - 6.3. Learned a great deal from supervisor
  - 6.4. Supervisor went to bat for him/her with management
  - 6.5. Supervisor did not support him/her with management
  - 6.6. Supervisor honest
  - 6.7. Supervisor dishonest

- 6.8. Supervisor willing to listen to suggestions
  - 6.9. Supervisor not willing to listen to suggestions
  - 6.10. Supervisor gave credit for work done
  - 6.11. Supervisor withheld credit
7. Interpersonal relations—subordinate—first level
- 7.1. Good working relationship with subordinates
  - 7.2. Poor working relationship with subordinates
  - 7.3. Good personal relationship with subordinates
  - 7.4. Poor personal relationship with subordinates
8. Interpersonal relations—peers—first level
- 8.1. Liked people he/she worked with
  - 8.2. Did not like people he/she worked with
  - 8.3. Cooperation of people he/she worked with
  - 8.4. Lack of cooperation on the part of his/her co-workers
  - 8.5. Was part of a cohesive group
  - 8.6. Was isolated from group
9. Supervision—technical—first level
- 9.1. Supervisor competent
  - 9.2. Supervisor incompetent
  - 9.3. Supervisor tried to do everything himself/herself
  - 9.4. Supervisor delegated work well
  - 9.5. Supervisor consistently critical
  - 9.6. Supervisor showed favoritism

**10. Responsibility—first level****10.1.** Allowed to work without supervision**10.2.** Responsible (for his/her own efforts)**10.3.** Given responsibility for the work of others**10.4.** Lack of responsibility**10.5.** Given new responsibilities—no formal advancement**11. Company policy and administration—first level****11.1.** Effective organization of work**11.2.** Harmful or ineffective organization of work**11.3.** Beneficial personnel policies**11.4.** Harmful personnel policies**11.5.** Agreement with company goals**11.6.** Disagreement with company goals**11.7.** High company status**11.8.** Low company status**12. Working conditions—first level****12.1.** Work isolated**12.2.** Work in social surroundings**12.3.** Good physical surroundings**12.4.** Poor physical surroundings**12.5.** Good facilities**12.6.** Bad facilities**12.7.** Right amount of work

**12.8.** Too much work

**12.9.** Too little work

**13.** The work itself—first level

**13.1.** Routine

**13.2.** Varied

**13.3.** Creative (Challenging)

**13.4.** Too easy

**13.5.** Too difficult

**13.6.** Opportunity to do a whole job—all phases

**14.** Factors in personal life—first level

**14.1.** Family problems

**14.2.** Community and other outside situations

**14.3.** Family needs and aspirations salary wise

**15.** Status—first level

**15.1.** Signs or appurtenances of status

**15.2.** Having a given status

**15.3.** Not having a given status

**16.** Job security—first level

**16.1.** Tenure or other objective signs of job security

**16.2.** Lack of objective signs of security

Appendix C  
Recruitment Email

[Professor Name],

I hope you are having a great semester so far!

I am reaching out to you today because I am currently conducting a survey for my Honors Thesis. I am working under the guidance of Dr. Beth Polin. This study has received IRB approval. The objective of my study is to determine if generational differences impact the two-factor theory of motivation proposed by Frederick Herzberg. In order to test my hypothesis, I need to collect data that represents a wide range of generations. In order to collect multiple generations, I am asking ECU faculty and staff to participate in the study. If you could participate in my survey, I would greatly appreciate it. I will provide a link below.

Also to diversify the generations being collected, I am recruiting students to take my survey. If you could make an announcement or allow me to come and speak for 5 minutes to your [specific classes], I would greatly appreciate it!

If you would rather make an announcement to the class, please inform the students that they must have had prior work experience in order to take the survey. Please provide the students with the same link that I am providing below. This survey will be open until March 23, so please encourage your students to participate as soon as possible. If you would rather me come to your class to introduce the study myself, I would happily do so as long as my schedule permits. If I do attend one of your classes, I will give a brief 4-5 minute introduction to the survey. Please send me an email with the classes that you would like for me to visit and I will let you know as soon as possible which ones I will be able to attend.

Survey Link:

[https://ekubusinessstech.co1.qualtrics.com/jfe/form/SV\\_4Gh8VKb9hQH7dIh](https://ekubusinessstech.co1.qualtrics.com/jfe/form/SV_4Gh8VKb9hQH7dIh)

Thank you in advance for any capacity you decide to participate.

Thank you,  
Daniel Bevins