Introversion and Workplace Factors in Burnout

A thesis submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Business Administration and Management and the Honors Program

By

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Be accepted in partial fulfillment of the requirements for the degree of

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Abstract

Research on personality traits has grown in recent years, particularly looking into extraversion and introversion as it relates to workplace decisions. Most studies find that acting contrary to one’s natural personality traits is minimally impactful to the individual, and can even be beneficial for the purpose of one’s job. However, there is little research to show that the effects of this behavior beyond the duration of the act. This study analyzed the likelihood of burnout given one’s level of introversion, and how strongly their workplace shows preference for extraversion. Results indicate a strong possibility that both introversion and workplace preference for extraversion lead to burnout, though more research is needed to confirm these findings.
Acknowledgements

I thank my thesis advisers Frances McKee Ryan and Jinyu Hu who guided me through this process and gave lots of support the whole way. A special thanks as well to Dr. Kuthy who advised with the statistical analysis and took an additional interest in my project. Finally, thank you to my friends, family, and partner who spent many hours consoling me when this project became overwhelming. It is finally done!
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Introduction

In modern business environments, leadership is often modeled as energetic and gregarious, which is particularly true in charismatic and transformational leadership styles (Zopiatis & Constanti 2012). Not everyone naturally acts this way, however. Of the two personality types, introverted and extraverted¹, there is a great divide in the way people interact with others. Extraverts are assertive and friendly while introverts are quiet and thoughtful. Despite introverts making up half of the workforce, workplaces heavily cater towards extraverts in the environments they create for employees through leadership role modeling (Myerson, Bichard, & Erlich, 2010). This environment puts pressure on introverts to act more outgoing and participate in behavior that would appear extraverted (Little, 1996, p.340).

While it may seem beneficial for workers to take on these qualities for leadership roles, extraverted behavior is not always the most successful option. In the case of having a proactive team, introverts actually outperform extraverts as leaders (Grant, Gino, & Hofmann, 2011), demonstrating the value of having both personality types active and engaged in the workplace. Unfortunately, there is a disconnect between behavior that organizations promote and the actual workforce. With this type of environment surrounding introverts, we must consider what impacts there may be to the individuals. Acting contrary to a personality trait is a phenomenon called counter-dispositional

¹ The word extravert originated as an English translation from a 1917 German publication by Carl Jung (Kaufman, 2019). Though in English it is now more commonly spelled “extrovert,” it is still regarded in academia to be spelled “extravert.”
behavior, which manifests differently in introverts and extraverts (Zelenski, Santoro, & Whelan, 2012).

Literature indicates that introverts are unlikely to suffer any costs while acting out of character in the workplace (Fleeson, Malanos, & Achille, 2002), and that there may even be temporary mental benefits to doing so. Yet, there is a distinct lack of research that evaluates long-term costs that arise from this behavior. Based upon theories of emotional and mental resource depletion, it is likely that serious results could occur (Zelenski et al., 2012). In extreme instances of stress and job related strain, employees experience burnout that leads to personal dissatisfaction and termination (Carson, Baumgartner, Ota, Kuhn, & Durr, 2017). To verify these theories, this study sought out information about introverted UNR undergraduates’ burnout scores based upon their workplace.

To achieve this goal, this study conducted human subject research to procure data from UNR students who also had an outside job. Information of interest included personality traits, perceived extraverted nature of the workplace, and burnout. This study aims to contribute to the current body of research to identify potential long term impacts to personality introversion given that work environments may often be extraverted in nature.

**Literature Review**

Since the terms extraversion and introversion were introduced to academia in the 20th century by Carl Jung, they have evolved from archetypes to a dimension of personality that exists in all people. This dimension is simply referred to as “extraversion,” but it represents the spectrum of behavior that includes introversion at the
opposite end of the scale from extraversion. This was formalized under the Five Factor Model (FFM) of personality (McCrae & Costa, 1990) which identified the most prominent universal factors of personality. This model is known for measuring personality on a bipolar scale, which evaluates which side of the spectrum an individual scores for each trait. A similar model is the Eysenck Personality Model which places extraversion, neuroticism, and psychoticism on bipolar scales as well, though is less commonly used (Alimohammadi, 2013).

**Extraversion and Introversion**

To understand this model, it is necessary to understand how the characteristics differ between each side of the spectrum. Introversion is characterized by a quiet, reserved, and an even-paced nature (Vohs & Baumeister, 2007, p. 503). Typical introvert behavior is also associated with being less sociable, passive, or otherwise in opposition to the extraverted personality type (Zelenski et al., 2012). It is important to note that while introvert behavior can seem withdrawn, it is not necessarily the same as being asocial. The academic community is somewhat split on whether social anxiety and shyness are inherently a part of personality, or if these behaviors simply coincide with introversion frequently (Vohs & Baumeister, 2007; Cooper, Hellriegel & Slocum, 2017).

For extraversion, individuals are seen as louder and more outgoing in nature. Extraverts often have many social connections, behave more assertively across situations, and are associated with confidence (Vohs & Baumeister, 2007). Despite this association, this may only be a correlation or social perception, rather than a factor of personality. The downsides of extraversion include a higher tendency for being distracted or impulsive, which can bear consequences on personal and organizational levels.
One popular theory asserts that there are three categories for how personality traits function: biological (internal), social (external), and ideological (both) (Little, 2008, p. 1236). This theory runs on the foundation that biological forces are hereditary and based on genetic makeup, and also operate regardless of self-awareness. However, the external force of societal influences (including norms, rules, and social scripts) may be contrary to the biological trait. Social influences on personality may occur with or without awareness from the individual. Finally, the ideological factor looks at an individual's core values and personal projects, which are internal but developed in response to external influences. Individuals must be aware of their ideologies to act upon them.

To explain this theory better, we could observe an interaction between employees at a cubicle. When an employee sits down each morning in a shared space with a coworker, there are different forces that guide their behavior. Biologically, this employee may be easily overwhelmed, and if their coworker was already talking to someone else, the employee may decide to forgo a greeting. Ideologically, however, this individual might value community and inclusion, and would therefore enact a social script to reach that personal goal. By engaging the coworker in even a simple bout of greetings and small-talk, the employee will have circumvented their natural biological trait of introversion and instead acted extravert based upon ideological values through the use of social conventions.

This is called “free trait” behaviors, and is defined as acting in a manner of social convention in order to advance personal values or goal, regardless of their biological factors (Little, 2008, p. 1237). The problem with this theory is that it is slightly
disjointed from the main body of research on the subject. The academic community has established that personality traits are indeed biologically based (Loehlin, McCrae, & Costa, 1998; Briley & Tucker-Drob, 2014), but have also found traits to be “consistent across a lifetime” (Vohs & Baumeister, 2007, p. 503). The defining difference is that social and ideological forces may evolve dramatically over a lifetime due to changing environments.

The best solution is to then simply consider biology to be the basis of dispositional personality traits, while social factors simply influence observed behavior. Because ideology is both external and internal, it is then a mix of both dispositional and behavioral factors. Placing an individual in a social environment that is contrary to their biological predisposition, the observable behavior tends to be opposite of what would occur naturally. This is considered counter-dispositional behavior. Understanding the long term impacts of this phenomenon is one of the major goals of this study, as it is still unclear based on current research.

Using this modified model, the theory fits better with other research. It is estimated that fifty percent of a personality trait is based on biological forces, and the other fifty percent are developed from the environment (Briley & Tucker-Drob, 2014, p.1316). In this case, the environment would be the ideological forces, since social factors only influence behavior, not the actual trait. The biological (or internal) component of personality has been researched far more extensively, and has two primary explanations for the differences between introverts and extraverts.

The first explanation asserts that introverts have a biological predisposition to impulse control systems that extraverts lack, and this causes reserved behavior (Vohs &
Baumeister, 2007, p. 504). This could be seen when an introverted employee gets off of a long day at work and declines to meet coworkers at a bar, knowing that they will be even more tired the next day. An extravert in the same position might say yes despite being tired because they are more prone to the impulsive choice of having fun despite the consequences.

The second explanation asserts that there are biological “neural mechanisms” (Vohs & Baumeister, 2007, p. 503) that make introverts over-aroused from their environment. This means that stimulus from the environment such as noise, lights, and other distractions can easily become overwhelming for an introvert. On the opposite end of the spectrum, extraverts are under-aroused by nature and tend to seek excitement due to their different patterns in the brain (Vohs & Baumeister, 2007, p. 335). In this case, the introverted employee might decide to go home after work because they find bars too overwhelming, while an extravert might attend the social gathering because their workplace did not meet their needs for interaction.

**Workplace Environments**

The impacts of this personality traits can be seen in the workplace in a number of ways. With the rise of open-concept office designs, the likelihood of distraction is higher than ever. A study found that stimulus such as road noise impacted work performance and led to introverts not performing as well as extraverts (Alimohammadi, Soltani, Sandrock, Azkhosh, & Gohari, 2018). This is due to the overarousal that introverts experience in comparison to extraverts, who have a much easier time ignoring external stimulus. Along with the open-concept office trend is the installation of cafe or lounge features to encourage informal collaboration (Myerson et al., 2010, p.22). This often
comes at the cost of not having as many private workspaces available, which negatively impacts introverts who need quiet to engage in deep thought without distraction.

**Leadership Models**

Aside from the physical office environment, leadership and role models lead introverts to pretend to be more outgoing and extraverted than they truly are (Vohs & Baumeister, 2007, p. 504). Extraverts are not only more likely to emerge as leaders, but to be perceived as more effective by their superiors and subordinates (Judge, Bono, Ilies, & Gerhardt, 2002). This leads introverts to perceive a pressure to act gregarious and assertive in order to gain or succeed in leadership roles. However, these perceptions do not indicate the success of the leader; Grant et al. discovered that proactive workforces actually operate better under an introverted leader (2011). The common misconception that introverted leaders are ineffective brings individuals to act extraverted, even when it may not be in the best interest of those involved.

Leadership models can also be seen to impact employees in the way that they set a precedent and interact with other employees. Leadership styles such as transformational leadership is characteristic of extraverts (Alkahtani, Abu-Jarad, Sulaiman & Nikbin, 2011, p. 75) while other forms such as servant leadership is more typical of an introvert (Saiz, 2017, p. 71). As a consequence of the prominence of extraverted leadership styles and over-stimulating work environment, introverts are made to act counter-dispositionally in their workplace.

**Shortcomings of Current Research**

The literature is unclear on how introverts will be affected by counter-dispositional behavior. In 1995, a study determined that acting dispositionally, or in-
character for one’s personality traits, would derive more pleasant effects (Moskowitz & Coté). Only a few years later, another study claimed that acting extraverted increased happiness, and introverts participating in this behavior could reap the benefits equal to dispositional extraverts (Fleeson et al., 2002). Most recently Zelenski et al. found that acting counter-dispositionally as an introvert increased happiness, but there were no assurances against longer-term costs such as emotional “tiredness” (2012, p. 300). All these studies share a relatively short-term model for evaluating positive affect and happiness, and fail to account for long-term results for a counter-dispositional introvert.

Unfortunately, there is a basis to be concerned for introverts. Ego-depletion theories suggest that when individuals use up limited mental resources, they are likely to suffer downsides over time (Zelenski et al., 2012). These downsides vary, though identified results include impacted reasoning, mental processing, self-control and most prominently, substance abuse and reliance. All of these outcomes can be very damaging to the personal and professional life of the individual (Zelenski et al., 2012). The likelihood of these outcomes occurring for introverts engaging in regular counter-dispositional behavior are uncertain but probably given the evidence from academia.

Methodology

This study set out to evaluate the possible relationships between introverted personality traits, workplace environments that encourage extraversion, and the likelihood of burnout. The study anticipated that while introversion would predict burnout, workplaces that supported extraversion would also play a role in the model. While a longitudinal study would collect data that might be more illuminating to this issue, this study had to work within the set timeframe of the academic school year 2018-
2019. For this reason, a cross-section study was chosen instead. Scales were sought out that reflected how individuals felt at the time of the study as well as past experiences for this reason.

**Hypotheses**

- **Hypothesis 1:** There is a significant positive correlation between personality introversion and burnout.
- **Hypothesis 2:** There is a statistically significant positive correlation between workplace extraversion and burnout.

**Sample**

This study was conducted at the University of Nevada, Reno, which resides in the western region of the United States. The university as a whole hosts more than 460 undergraduate and graduate degrees across 11 academic colleges (University of Nevada, Reno, n.d.). Participants were recruited through SONA, UNR’s undergraduate research portal. Subjects available to access this system included undergraduates in the following majors: criminal justice, special education, human development and family sciences, journalism, management, marketing, and sociology (Social Research Sign-Up System, n.d.). Some courses offer extra credit for SONA participation, and others require SONA participation as part of the course grade.

The SONA system hosted an online survey that students were able to complete at their leisure. Informed consent was ensured though the cover letter to participants (See Appendix A). In order to join the study, participants needed to verify that they were undergraduate students at UNR, 18 years of age or older, and had a job other than being a full-time student. The link through SONA led to a questionnaire created in Qualtrics.
software (see Appendix B for survey). The Qualtrics system recorded respondents’ data and redirected users back to the SONA system upon completion to earn a credit for the study. Students who did not complete the survey or did not meet the study criteria were not able to gain study credits with SONA. The estimated average duration of the survey was 13.2 minutes, as determined by Qualtrics software.

**IRB Approval.**

Due to the involvement of human subjects, this study sought approval from the UNR Institutional Review Board (IRB). Given that the participants were able to complete the survey anonymously online, did not need to provide personally identifiable data, and were asked questions about very neutral topics, the IRB determined the study to be exempt with less than minimal risk. This meant that the participants were expected to face no detriments due to their participation, and had only the incentives of earning SONA credits for their course of choice.

**Survey Design**

The survey evaluated three main variables: personality extraversion/introversion, nature of workplace, and burnout levels. In addition to variable data, basic demographics were collected for records purposes as potential controlling variables. Age, gender, ethnicity, major, college, and year in school were all collected from participants. In addition, our study asked about current job relevance to desired future career goals on a 7-point Likert scale. The purpose of this item was to if a majority of students worked in hourly positions in food services or unrelated industries would obscure the data.
**Burnout**

To measure burnout from work, this study utilized the Maslach’s Burnout Inventory (MBI). While this scale was designed originally for the field of human services, it has since been proven to apply to other domains as well. Depending on the use, often phrasing must be minorly adjusted to fit the circumstance of its use; this study made such minor adjustments to ensure clarity for general use for university students and their jobs. The slightly modified questionnaire can be viewed in Appendix B.

This scale has a total of 15 items, some of which were reverse coded to avoid participant bias. A five-point Likert scale ranging from “strongly agree” to “strongly disagree” with “neither agree nor disagree” at the center was used to evaluate responses. Thus, response data ranged between one and five.

**Workplace Extraversion.**

The nature of the workplace refers to the extent that extraverted behavior is encouraged and supported by environmental factors. Items for this variable were devised by the author based on a review of relevant literature. The construction of this inventory began by identifying the most impactful aspects of the environment in the ways that extraverts and introverts would be affected differently. The main categories for this variable included leadership models, distracting stimulus, social interactions, and expectations for performance. Once these categories were established, several items were created for each area, totaling to eleven items by the time the construction was complete.

Items for this variable were dichotomous, giving participants the option to choose which sentiment better described their workplace. Each choice for the workplace environment described a typical environmental factor that gave preference for either
extraverts or introverts within the same area of interest. Every other question had reverse coding to avoid bias from always presenting extraverted or introverted options first. Scores for this scale ranged between zero and one.

**Personality Introversion.**

This variable refers to the level of introversion that each participant was determined to have. Data for this variable was collected using the International Personality Item Pool (IPIP) (Goldberg et al., 2006) for extraversion. This database includes 3,320 items, the most prominent of which are the major five personality dimensions identified in the FFM. Extraversion/introversion in particular has been rigorously tested and evaluated in years of research due to its prevalence in organizational behavior theories (Donnellan, Oswald, Baird, & Lucas, 2006). Test-retest reliability for the IPIP scale has been proven far greater than many other scales, particular against the Myers-Briggs Personality Type Indicator (MBTI). Despite the pop culture success of the MBTI and its use in employment decision in many companies, it has been deemed one of the least reliable and valid measures of personality available by the academic community (Boyle, 1995).

There were 20 items for the IPIP scale with occasional reverse coding, to avoid participant bias. It is important to note that introversion was evaluated as the functional opposite of extraversion, and the responses were coded inverse to typical so that a higher score indicated more introverted behavior. Each question was answered on a five-point Likert scale ranging from “strongly agree” to “strongly disagree” with “neither agree nor disagree” at the center.
Data Collection and Statistical Analysis

As previously mentioned, the data was anonymously submitted to the Qualtrics system during the active period of the survey from March 1, 2019 to April 1, 2019. The raw data was downloaded into SPSS, at which time responses that were invalid were eliminated. After this, necessary question responses were re-coded to accurately reflect the nature of the response. At this time, items that measured each of the three main constructs were aggregated into new variables: Burnout, WorkplaceExtraversion, and PersonalityIntroversion. The following statistical analysis included running descriptive statistics, correlations, ANOVAs, and hierarchical regressions.

Results

The survey received a total of 42 responses, 36 of which were usable for this study. The remaining responses were disqualified due to pre-screening requirements or failure to complete the survey. There were a diverse group of respondents, however, it skewed mostly white, young adult, and female as shown on Figure 1 below. Year in school reflected a regular bell curve with second and third years being most common, with other years being less present in response data. Current jobs for respondents has no observable pattern in how relevant it was to their future career, though the average response trended slightly below neutral in relevance.
Descriptive statistics shown in Table 1 below establish that the average rating for burnout is very close to the midpoint of 2.5, which indicates moderate likelihood of burnout in the respondents’ current workplace environment. Workplace Extraversion scored an average of 0.58, which is notably above the midpoint of 0.50. This indicates that most workplaces were more extraverted. Finally, Personality Introversion had a mean score of 2.65, which indicated that respondents were slightly more introverted than extraverted.
As shown along the diagonal in Table 1, reliability statistics indicated that two out of the three measures were internally consistent. The only measure that failed to reach internal consistency is the custom-designed scale for Workplace Extraversion, which had a Cronbach’s alpha of 0.60, which did not meet the 0.70 level desired. The other Cronbach’s alpha both scored well above 0.70 as they were previously tested scales.

Looking to the correlations on Table 1, Burnout and Workplace extraversion had the most significant relationship and the 95% level of confidence. The Pearson Correlation Coefficient was equal to 0.364, indicating a moderate positive relationship between variables. Burnout and Personality Introversion had a correlation of 0.268, which is evaluated as a weak positive correlation. This relationship was valued significant at the 90% level of confidence. The relationship between dependent variables was not significant, and therefore not worth further evaluation.
Under the ANOVA from a hierarchical regression in Table 2, the p-values in the rightmost column are less than 0.05, showing statistical significance at the 95% confidence level at both steps. This measure proves that the overall model was statistically significant and worth further research.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
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<tr>
<td>1</td>
<td>Regression</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>2</td>
<td>Regression</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Burnout  
b. Predictors: (Constant), WorkplaceExtraverison  
c. Predictors: (Constant), WorkplaceExtraverison, PersonalityIntroversion

In the hierarchical regression in Table 3, again it can be seen that both steps in the model are statistically significant since the p-values are less than 0.05. The regression showed that while Workplace Extraversion had a moderate positive relationship to Burnout of 0.36 on its own, in the second step it increased to 0.43. Personality
Introversion in this model also had a moderate positive relationship of 0.35, showing that both variables indicated the same influence on the dependent variable.

**Table 3**  
*Hierarchical Regression*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized B</th>
<th>Coefficients Std. Error</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.56</td>
<td>.42</td>
<td>.</td>
<td>.</td>
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<tr>
<td></td>
<td>Workplace Extraversion</td>
<td>1.56</td>
<td>.68</td>
<td>.36</td>
<td>2.28</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>.20</td>
<td>.72</td>
<td>.</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>Workplace Extraversion</td>
<td>1.84</td>
<td>.67</td>
<td>.43</td>
<td>2.78</td>
</tr>
<tr>
<td></td>
<td>Personality Introversion</td>
<td>.45</td>
<td>.20</td>
<td>.35</td>
<td>2.25</td>
</tr>
</tbody>
</table>

d. Dependent Variable: Burnout  
e. Predictors: (Constant), Workplace Extraversion  
f. Predictors: (Constant), Workplace Extraversion, Personality Introversion

In the model summary in Table 4, Workplace Extraversion is shown to account for 13.3% of variation in the data variance, as shown by the $R^2$ value. By adding the variable of Personality Introversion, the model accounted for an additional 11.5% of variation. The total variation accounted for is therefore 24.8%, as shown by the total $R^2$ value.
Table 4

Model Summary

<table>
<thead>
<tr>
<th>Mode</th>
<th>R</th>
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<th>Std. Error Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
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<td>.76074</td>
<td>.115</td>
<td>5.068</td>
<td>1</td>
</tr>
</tbody>
</table>

Note:
- a. Workplace Extraversion
- b. Personality Introversion

Discussion

Demographics gathered from the participants indicated that in some ways, the data set was biased. Given that 90% of the population was between ages 18-24, the results listed below may not apply to all working adults, but only college-aged individuals. However, given that the participants in this study already reported symptoms of burnout at their young age, it is possible that the findings below may actually point to more serious issues in older populations that have had more time in the workplace to become emotionally strained by their environments.

The data results in show that overall, the model was statistically significant in explaining the relationships between Burnout, Personality Introversion, and Workplace Extraversion. While the Workplace Extraversion scale did not quite meet the minimum threshold for internal validity, the Cronbach’s alpha value approached the threshold, and can still be used to identify potential variable relationships. Since other scales had internal consistency, the data results were still worth consideration.
Looking at the relationships between specific variables, the strength of the relationship between Workplace Extraversion and Burnout was the strongest, though also less statistically relevant. This could be in part due to the scale needing more refinement and items added to it. While the correlation between Personality Introversion and Burnout was lower, it was more statistically significant. The difference in these correlations show that the Workplace Extraversion variable was able to successfully separate itself from Personality Introversion in that the scales did not measure the same constructs.

The most important statistical measurement of all was the hierarchical regression, which showed that together, Workplace Extraversion and Personality Introversion both had moderate correlation to Burnout, whereas alone Personality Introversion had a weak correlation. By measuring both variables together, not only did the model have stronger relationships to Burnout, but the variation that could be accounted for in responses was substantially increased. The final model covered almost one quarter of variation of participant response.

**Significance of Results**

In the beginning of this study, it was hypothesized that Personality Introversion and Workplace Extraversion would lead to burnout. From performing statistical analysis, it is concluded that each variable has done so, but at different levels of confidence. We can reject the first null hypothesis on the basis that the p-values were lower than 0.05, therefore accepting the alternative hypothesis that Personality Introversion and Burnout have a statistically significant positive relationship. The second hypothesis stated that
Workplace Extraversion and Burnout would also have a statistically significant positive relationship to Burnout, and this proven to be true at the 90% confidence level.

Given that this study performed a preliminary analysis of these variables, accepting a lower level of confidence allows data results to still be considered as indicative of potential real-world phenomenon, even if the results cannot be considered definitive at such a level.

Conclusion

This study has demonstrated through data gathering and analysis that there is a strong possibility of relationships between being an introvert and burning out, as well as working in an extraverted workplace and burning out. Implications of this study show that managers should be aware of these potential relationships, and should make workplace decisions that cater toward introverts when possible. Small accommodations such as allowing opportunity for more privacy while working may decrease the possibility of burnout in employees, and assist with other managerial factors such as turnover and engagement.

Limitations

This study was limited in scope due to the time and resource constraints available. This study occurred in the academic year of 2018-2019, and therefore had to be a cross-sectional study instead of a longitudinal study that may have generated more meaningful data. In addition, due to being unable to acquire enough participants to generate results that could apply to the entire working population, these results can be applied most accurately to young adult white females. It is important to note that the respondents varied in how they identified whether their jobs were relevant to their future career,
which may bias the results as well. This being said, these results indicate phenomena that
may occur across various demographics in the US, and is worth further consideration.

Other concerns included the internal validity failing to reach the acceptable
threshold for most social science studies. The study approached the needed threshold for
internal validity, and given time constraints, it was used in the final questionnaire. One
option to increase internal reliability would be to add several more items for future uses.

Future Research

More research is needed to validate initial findings. Future studies should look at
improving upon the scale for Workplace Extraversion to make it more internally valid.
Collecting data on other variables would also allow for control factors that were not
considered in this study. It is advised to sample a larger population that is more diverse to
verify if this study’s results are applicable to more general environments as well.
References


University of Nevada, Reno. (n.d.). Retrieved on April 8, 2019, from https://www.unr.edu/


Appendix A
SONA Survey Cover Letter

Thank you for your interest in participating in this survey!

This questionnaire should take less than 15 minutes and will ask questions about you and your workplace in regards to your behavior. No personally identifiable information will be recorded, and your responses will remain completely anonymous. The information you provide will be used and studied in aggregate, not on an individual level. The only prerequisites for participating in this study is that you are an active UNR undergraduate student, 18 years of age or older, and you have a job outside of being a student.
Appendix B
Sample SONA Survey

Do you agree to continue with this survey given the terms above?

- [ ] I agree to participate in this survey
- [ ] I do not agree to participate in this survey

Are you an active UNR undergraduate student?

- [ ] Yes, I am an active UNR undergraduate student
- [ ] No, I am not an active UNR undergraduate student

How old were you on your last birthday?

- [ ] Under 18
- [ ] 18 - 24
- [ ] 25 - 34
- [ ] 35 - 44
- [ ] 45 - 54
- [ ] 55 - 64
- [ ] 65 - 74
- [ ] 75 - 84
- [ ] 85 or older

Do you have a full-time or part-time job other than being a student?

- [ ] Yes, I have a job other than being a student
- [ ] No, I do not have a job other than being a student
What is your gender/ gender identity?

- Man
- Woman
- Nonbinary

What is your ethnicity?

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other

My major is
_________________________________________________________________________________________

in the college of
_________________________________________________________________________________________

Where are you in your college career at UNR?

- First year
- Second year
- Third year
- Fourth year
- Fifth year
- Sixth year (or more)
How relevant do you consider your current job to be to your future career?

- Extremely relevant
- Moderately relevant
- Slightly relevant
- Neither relevant nor irrelevant
- Slightly irrelevant
- Moderately irrelevant
- Extremely irrelevant

Please respond to the following items as they feel that they describe you following the scale below:

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

1. I feel comfortable around people
2. I have little to say
3. I make friends easily
4. I keep in the background
5. I am skilled in social situations
6. I would describe my experiences as somewhat dull
7. I am the life of the party
8. I don't talk a lot
9. I start conversations
10. I avoid contact with others
11. I warm up quickly to others
12. I am hard to get to know
13. I talk to a lot of different people at parties
14. I retreat from
15. I don't mind being at the center of attention
16. I find it difficult to approach
17. I cheer people up
18. I keep others at a distance

Please chose the best option below based on how well it describes your current workplace.

1. In my workplace:
   - leaders take charge of the conversation
   - leaders are great listeners

2. In my workplace
   - people advance when they do hard work.
   - I must be outgoing in order to get a promotion.

3. In my workplace
   - individuals who stand out get the most recognition.
   - quiet individuals are acknowledged when they do well.

4. In my workplace
   - background noise is minimal.
   - I often overhear loud conversations or music.

5. In my workplace
   - I often see content on coworkers’ screens or devices that is not work-related.
   - my surroundings are mostly focused on work.

6. In my workplace
   - being well known by others in my department is not necessary.
   - networking and social connections are important in my department.
7. In my workplace
   ○ people frequently come by to have conversations with me.
   ○ I am left alone most of the time.

8. In my workplace
   ○ I am given lots of space while working.
   ○ I work in close proximity to others.

9. In my workplace
   ○ raises are given to those who assert themselves.
   ○ pay is based on performance, seniority, or another metric.

10. In my workplace
    ○ I present information to small teams.
    ○ I have to speak to large groups of people.

11. In my workplace
    ○ I need to interact with a lot of people for my job.
    ○ I can limit my interactions to a core work-group.

In the questions below, please choose the most accurate option for how you feel based on the scale below:

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
1. I feel emotionally drained by my job.
2. I feel used up at the end of a day at work.
3. I feel tired when I get up in the morning and I have to face another day at work.
4. Going to work is really a strain for me.
5. I feel burned out from my job.
6. I have become less interested in my job since I started working for my company.
7. I have become less enthusiastic about what I do.
8. I have become more cynical about the potential usefulness of my job.
9. I doubt the significance of my job.
10. I can effectively solve the problems that arise in my job.
11. I believe that I make an effective contribution in my workplace.
12. In my opinion, I am a good employee.
13. I feel stimulated when I achieve my goals.
14. I have learned many interesting things while working for my company.
15. During work I feel confident that I am effective in getting things done.