

Personality Type and Risk-Taking in the Context of High School Athletics at the Focus School

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SUMMARY

This study explores the relationship between personality traits—introversion, extraversion, and ambiversion—and risk-taking behaviors among high school athletes. Utilizing the Eysenck Personality Inventory to classify personality types, the researcher conducted a survey among 31 student-athletes from various sports to assess their propensity for risk-taking. Contrary to the hypothesis that introverted athletes would exhibit higher risk-taking behaviors due to sports serving as an outlet for more daring actions, the results indicated that extroverts were the most likely to take risks, followed by ambiverts, with introverts showing the least risk-taking behavior. The study underscores the importance of considering personality traits in coaching strategies and suggests that a larger sample size would be beneficial for future research.

INTRODUCTION

Introversion, extraversion, and ambiversion are all common and familiar terms used to describe one's personality or nature. Are you more outgoing? Are you more reserved? Are you an equal balance of both? Humans are naturally introspective and curious about their own nature. Our natures and personalities influence our way of thinking and our way of life. It has an impact on our attitudes and how we approach tasks. As a student with an interest in psychology and the social sciences, I am interested in the personalities of individuals and how that impacts their way of life and the choices they make. I knew I wanted to include introversion, extraversion, and ambiversion in my research.

TERMS AND DEFINITIONS

First, there are terms I need to define in

order to provide context for the rest of my paper. Introversion, according to the American Psychological Association, is "orientation toward the internal private world of one's self and one's inner thoughts and feelings, rather than toward the outer world of people and things. Introversion is a broad personality trait and, like extraversion, exists on a continuum of attitudes and behaviors. Introverts are relatively more withdrawn, retiring, reserved, quiet, and deliberate; they may tend to mute or guard expressions of positive affect, adopt more skeptical views or positions, and prefer to work independently" (Vandenbos 2018).

Extraversion, according to the American Psychological Association, is "characterized by an orientation of one's interests and energies toward the outer world of people and things rather than the inner world of subjective experience. Extraversion is a broad personality trait and, like introversion, exists on a continuum of attitudes and behaviors.

Extraverts are relatively outgoing, gregarious, sociable, and openly expressive. Extraversion is also one of the three personality dimensions in Eysenck's Dimensions" (Vandenbos 2018). Ambiversion, according to the American Psychological Association, is "the tendency to display characteristics of introversion and extraversion in approximately equal degrees. Such a person would be referred to as an ambivert" (Vandenbos 2018). Finally, the Eysenck Personality Inventory, or EPI for short "measures two pervasive, independent dimensions of personality, Extraversion-Introversion and Neuroticism-Stability, which account for most of the variance in the personality domain" (CHS 2020). For the sake of my research, I only concern myself with the introversion-extraversion result of the EPI.

THE GAP

My research topic was not solidified from the beginning, and I considered a variety of

different possibilities as I began researching. The possibilities were the types of personalities and behavior, the types of personalities and altruistic behavior, the types of personalities and music taste, the types of personalities and the tendency to show general risk-taking behaviors, and the types of personalities and risk-taking behaviors in the context of athletics. I found that these topics were either far too general or had already been researched, and discovered that the studies done on introversion, extroversion, and ambiversion and athletics only pertained to adults, and high-risk sports such as mountain climbing and high-diving. This leads me to my gap. There have been previous studies regarding risk-taking, sports, and personality, but they only include adults and/or high-risk sports such as rock climbing or snowboarding. So, I decided to make my research specific to student-athletes at my school, the focus school. I only include conventional sports found in high schools such as basketball, swim, and soccer, and chosen risks taken within one's sport. So my definition of risk-taking is making risky decisions within a sport that is not inherently high-risk, whereas within past studies I have read, risk-taking is participation in a high-risk sport.

RESEARCH TOPIC, HYPOTHESIS, AND RESEARCH QUESTION

I decided to combine two of my interests as a student-athlete and student of the social-sciences, and settled on my topic including the different personality types and risk-taking behavior in the context of athletics at my school, the focus school. In the context of my research and in the context of athletics, examples of risk-taking behaviors would be behaviors such as competing with a serious injury for the sake of winning despite the possibility of worsening the injury and not competing for a while, or deviating from a coaches' or teammates' game plan because you believed you thought of a better strategy despite possible failure or upsetting your coaches and teammates. The hypothesis I eventually developed is that introverted student athletes display the most risk-taking behaviors within their sport. This could possibly be due to the fact that athletics is an

outlet for them to be more willingly outgoing, assertive, and show characteristics more stereotypical of an extravert. My hypothesis was also based on my personal experience as a student-athlete. I am an introvert according to my EPI results, and view my sport as a way to be more daring and outgoing. My research question then became clear: Are student-athletes who score higher on the introversion scale more likely to engage in risk-taking behaviors in the context of athletics at the focus school?

LITERATURE REVIEW

There has been a significant amount of helpful research done regarding the different personality types tied to athletics. A study by Linda Paquette, Maggie Dumais, Jacques Bergeron, and Éric Lacourse, showed the correlation between sensation-seeking personality traits and impulsivity in adolescents, risk-taking behaviors, injuries, and athletics such as skiing and snowboarding. This study is quite similar to my own in that it includes personality traits and risk taking behavior of adolescents in various sports, although this study is more centered around non-student-athletes, winter sports, and risk-taking in relation to acquiring injuries. The method of data collection was similar in that a survey questionnaire specifically formulated for the study was used in addition to various scales including the Risk-Taking Scale in Snowboarding and Alpine Skiing, the Arnett Inventory of Sensation Seeking Scale, and the French Barratt Impulsiveness scale. This is similar to my use of my survey questionnaire that evaluates risk-taking behavior in addition to the Eysenck Personality Inventory. There has also been research regarding the different personality types and high risk sports. The study included the use of the Eysenck Personality Questionnaire, which I included as an aspect of my study as well. Although, his study is not specific to high school student-athletes and high-school athletics. Additionally, there was a study connecting psychology's Big Five Personality Traits: extraversion, agreeableness, openness, conscientiousness, and neuroticism and participation in high-risk sports by Sedar Tok. This study utilized the Five Factor Personality Inventory (FFPI) which is another online personality test, which

objectively determines which of the Five Factor Personalities a respondent has. This study was helpful in that I utilized a similar method when collecting data, but I instead used a different personality inventory, the Eysenck Personality Inventory, to suit my research. This study was also similar to my own in that it was focused on personality and athletics, but also very different given it was centered around high-risk sports, the Big Five Personality Traits, and was a detailed correlational study, analyzing the correlation between personality and participation in high-risk sports. There is also a study regarding the Big Five Personality Traits and their impact on athletic performance by Ying Shuai, Garry Kuan, Shaoshen Wang, Xian Lu, and Yee Cheng Kueh. This study utilized a different research method from my own, which consisted of a study selection process of different sources, and data extraction from these sources. Additionally, the variable of athletic performance meant “success” in a sport, meaning victories and achievements, not risk-taking behavior of an athlete, a variable in my study. Nonetheless, it still included personality and athletic performance, both factors in my own research study.

METHOD

I used a survey method with scaled feedback that can be quantified. First, I created an online survey questionnaire with yes or no questions to evaluate the risk-taking tendencies of student-athlete respondents at the focus school. Another example of a survey question is: “Have you ever challenged yourself to compete and/or train at a level beyond your current ability in hopes of winning or improving despite the possibility of losing, feeling defeated, and it negatively impacting your morale as an athlete?” I gave a point value to each question, and if a respondent answered yes, they received a point. The more questions a respondent answered yes to, the more points they had, and the greater a risk-taker they were. So the higher a respondent’s score on the survey, the more of a risk-taker they are. This was unbeknownst to the respondents. I included in my survey a link to the Eysenck Personality Inventory to objectively determine whether

each respondent was an introvert, extravert, or ambivert, and a question in the survey for them to tell me. I emailed the link to my survey out to every coach at my school, the focus school, for them to share with their athletes. I collected a total of 31 responses from athletes in a variety of sports, including: track, cross country, swim, lacrosse, soccer, basketball, football, song, and cheer. I then took my data, and presented it in pie charts showing the percentage of student-athletes at the focus school who are high risk-taking, medium risk-taking, and low risk-taking for each personality type, and compared the high risk-taking percentages to show which personality type had the most risk-taking tendencies. High risk-taking was represented by a score of 10-13 out of 13 on the survey questionnaire, medium risk-taking was represented by a score of 5-9 out of 13 on the survey questionnaire, and low risk-taking was represented by a score of 0-4 out of 13 on the survey questionnaire.

RESULTS

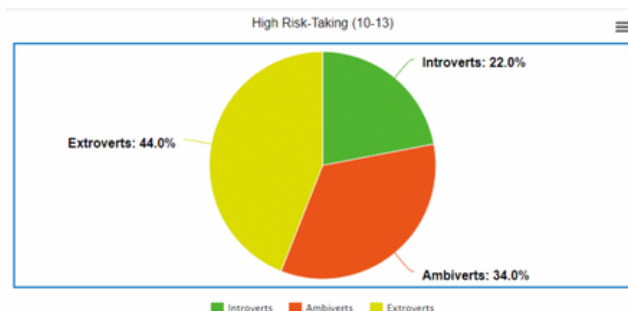


Figure 1 Results show that the most high risk-taking respondents were extroverts at 44%, followed by ambiverts at 34%, and then introverts at 22%.

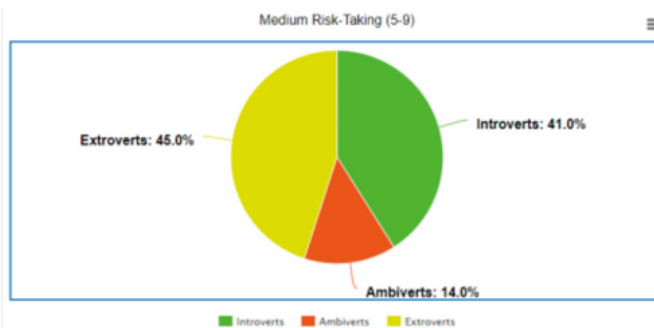


Figure 2 Extroverts have the most medium-risk taking respondents at 45% closely followed by introverts at 41% and then ambiverts at 14%.

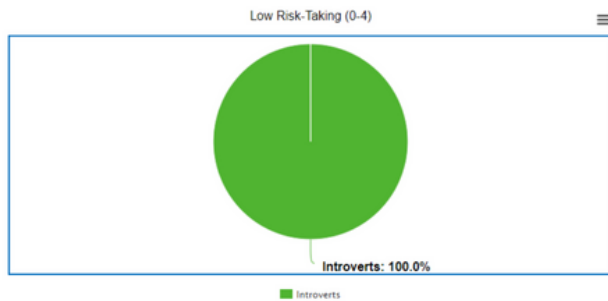


Figure 3 There was one respondent who was low risk-taking, and they were an introvert.

CONCLUSION AND UNDERSTANDING

My results do not support my hypothesis that student-athletes at focus school who were identified as introverts are most likely to engage in risk-taking behaviors in the context of athletics at focus school. As you can see, the most high-risk taking respondents were Extroverts by far. The results do not negate the fact that introverted focus school student-athletes or ambivert one's for that matter take risks, but most high risk-takers are extroverted focus school student-athletes and therefore are most likely to engage in risk-taking behaviors.

Weaknesses, Implications, and Future Research

If I could conduct this study again, ideally, I would have a larger sample size. I did everything possible to collect as many respondents as I could. I extended the deadline for responses, and emailed all focus school coaches multiple times, as well as reached out to friends and teammates, but I unfortunately did not have as many respondents as I would have liked. More respondents would have made my research more representative of student athletes at the focus school. Additionally, my findings can serve as a baseline for further research, and imply that there very well can be a correlation between the variables of the different personality types and risk-taking tendencies in the context of athletics at the focus school. The next steps would be to discover the correlations, by collecting respondents' specific scores on the introversion/extroversion scale result of the Eysenck Personality Inventory (EPI), in addition to their scores on my survey

questionnaire, and create scatter plots with the lines of best fit to see whether the the correlation is positive, negative, or nonexistent. Then, to measure the strength of the correlations, you would calculate the correlation coefficients.

Real World Application

I hope my research will help create more understanding relationships between coaches and athletes, and will encourage coaches to individualize their coaching based on the athlete, and their personal approach to their sport. I hope this research will be eye opening for many. My wish is for it to promote athlete self-awareness, and make athletes self-reflect, strengthening relationships between athletes and coaches, and strengthening athletes' relationships with themselves, thus improving the culture experienced by athletes and coaches alike. One of the greatest qualities an athlete should have is the ability to look inward, acknowledging their strengths, and recognizing opportunities for growth.

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