Journal of Secondary Psychological Studies

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Staff.

Letter from the Editor.

Dear Readers,

The editorial board of the *Journal of Secondary Psychological Studies* is proud to present the first issue of the fifth volume of our publication. I am extremely privileged to have worked with such passionate researchers and dedicated staff to create this excellent edition.

As the world strives for more justice and inclusivity than ever before, we are forced to acknowledge hard truths and face difficult problems. In this issue, the innovators of tomorrow begin to tackle the problems of today, investigating important topics such as student burnout and the impact of race on perceived patriotism. These authors have worked hard to share meaningful insights, and we are honored to feature them.

Likewise, our staff have gone above and beyond to collaborate with the authors and ensure the quality of this issue. New strategies were implemented to improve communication and optimize the editing process, allowing us to work with new formats and better interact with researchers from across the globe.

With the future rapidly approaching, the time for change is now. We hope this edition showcases the value research can possess and inspires students to use their skills to make powerful discoveries that leave a lasting impact.

Arya Sinha

Editor-in-Chief

The Effect of Race and the American Flag on Perceptions of Blind Patriotism, Constructive Patriotism, and American Identity

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Abstract

The present study explores the effect of displaying an American flag on perceptions of blind patriotism, constructive patriotism, and American identity in White, Black, and Asian men. Participants ($N = 360$) were recruited through Amazon Mechanical Turk and redirected to Qualtrics to complete the survey in which race and the presence of the flag were manipulated. Men pictured with a flag were seen as more blindly patriotic and American, and a White man was seen as significantly more blindly patriotic than a Black or Asian man. Interestingly, constructive patriotism was not affected by either independent variable. The results support the belief that the flag has become associated with those who support the United States unquestioningly but suggest that constructive patriotism, the belief that we need to work to make our nation better, may unite many Americans.

Patriotism has long been linked to a nation's flag. The American flag was created to give the Thirteen Colonies a patriotic symbol around which to unite. Recent years have seen a rise in disagreement about what the flag represents as well as what it means to be a patriot (Venugopal, 2018). These disagreements have often been linked to issues tied to the United States' unequal treatment of marginalized groups. Many see the quintessential American to be White, leading to unwelcoming attitudes and discrimination toward minority groups (Cheryan & Monin, 2005; Schildkraut, 2007). This study sought to examine whether displaying a flag and an individual's race influences perceptions of people's patriotism and American identity.

The last decade has seen increasing conflicts over what it means to be patriotic. In the most general terms, patriotism can be defined as the attachment of citizens to the country in which they live or how much love and pride they have for the country (Bar-Tal, 1993; Kosterman & Feshbach,

1989). However, that love of country can be expressed in various ways. Symbolic patriotism, for example, is a love for national symbols, like the flag and national anthem (Huddy & Khatib, 2007). Blind patriotism can be described as an unquestioning evaluation and lack of criticism of one's nation while, in contrast, constructive patriotism is described as an attachment to one's country while questioning and criticizing the country in order to improve it (Schatz et al., 2003).

Literature Review

The American flag is, perhaps, the main symbol of the United States. Displaying the flag has been associated with feelings of blind patriotism, although there is limited research on this topic. Prior to September 11th, the definitions of blind and symbolic patriotism were far more distinct, with symbolic patriotism representing one's love for their nation through symbols and blind patriotism being an ideological perspective that unconditionally supports institutions and policies

(Schatz, 1999). However, one study that compared symbolic and blind patriotism after September 11th by analyzing a 2002 survey with 535 adult participants found that the line between blind patriotism and symbolic patriotism has blurred with the increased use of the American flag as a political symbol (Parker, 2009). Another national survey with 605 American adult participants examined flag-display behavior after the terrorist attacks on September 11th and found that displaying a flag after September 11th was largely motivated by the desire to express blind patriotism (Skitka, 2005). Additionally, a 2007 study using a sample of undergraduates found that blind patriotism is associated with national symbols, like the American flag (Huddy & Khatib, 2007).

White Americans express symbolic patriotism more than members of marginalized groups. One study that analyzed the 2002 California Patriotism Pilot Study found that wearing flag pins, flying the flag in front of one's house, and putting a flag on one's car is more common among White Americans than among members of marginalized groups (Parker, 2009). In fact, some have suggested that flags can be seen as threatening by members of marginalized groups. Venugopal (2018) wrote an article that described a Black man who felt unwelcome and unsafe in White-dominated neighborhoods that had a high presence of flags. Some have asserted that there is a cult of the flag in America in which people display the flag on every possible occasion, and many find the flag intimidating and a symbol of racial exclusion (Venugopal, 2018). Furthermore, an *NPR* article described a counter-protest to a Black Lives Matter protest in Illinois in which the American flag was weaponized by White Americans who drove by with American flags on their vehicles, thus using symbolic patriotism to combat and silence constructive patriotism (Mann & Daniel, 2020). Another study found that uneducated White people expressed higher levels of racial resentment linked to beliefs that Black people do not exhibit blind patriotism and do not respect American symbols and authority (Lacina, 2020). The belief that White Americans express more symbolic and blind patriotism than Americans of other racial groups leads to the question of how people would perceive members of marginalized groups who display the flag.

On the other hand, constructive patriotism has been found to be associated with membership in or sympathy toward members of marginalized groups. One study that reviewed over 400 social media posts regarding protests from Black NFL players found that Black players were associated with expressing more constructive patriotism than blind patriotism (Montez de Oca & Suh, 2019). Another paper that analyzed the existing literature on blind and constructive patriotism found that blind patriotism is linked to majority groups' opposition to minority groups, such as Middle Easterners, African Americans, and Jews. While constructive patriotism is associated with minority groups' inclusion and empowerment of these opposed groups (Schatz, 2018).

Research also indicates that Americans of all races, although primarily White Americans, tend to view members of marginalized groups as less "American" than White people. One study that measured how Americans of all races view American identity through responses to a survey found that being born in the United States, being White, respecting the law, blending into society, and being able to speak English were among the top factors that the 2,800 American participants from various races found important in determining American identity. As a result, people who do not fit into these criteria, are seen as less American (Schildkraut, 2007).

Hypotheses

Several studies have documented implicit biases that equate being American and being White. In one study using an implicit association test, Stanford students rated White American faces as significantly more American than Asian faces (Cheryan & Monin, 2005). In another study, undergraduates at Yale University were shown eight images in a random order that are associated with being American such as Mount Rushmore. They then had to associate the image with either White, Asian, or Black people. The participants then had to answer both explicit and implicit questions about the ties between the three ethnic groups and American culture. The study revealed

that participants implicitly associate White people with American symbols. However, in explicit questions about the "Americanness" of different groups, there was no significant difference (Devos & Banaji, 2005). Since displaying the American flag is an expression of symbolic patriotism and is linked to being perceived as more American and blindly patriotic, I wondered how such displays would affect the perceptions of members of marginalized groups. I also was curious about whether these biases would be found in a more explicit measure of blind patriotism, constructive patriotism, and American identity. This study tested the following hypotheses: *Hypothesis 1:* Compared to a person pictured on a neutral background, a person pictured with a flag in the background will be perceived as: a)more American b)more blindly patriotic c)less constructively patriotic. *Hypothesis 2:* Compared to an Asian and Black person, White person will be as depicted will be perceived as a)more American b)more blindly patriotic c)less constructively patriotic.

Method

Design and Procedure

The design of the study was a 3 (Race: Black, Asian, White) x 2 (Flag vs. No Flag) between-subjects factorial design, resulting in six conditions. Participants were shown a holiday card supposedly sent out by a local political candidate to increase his name recognition. The participants were randomly assigned to view a card that pictured either a Black, Asian, or White male candidate for public office; the card either had an American flag background or a neutral beige background. The two versions of the card can be seen in Appendix A. Participants were then asked to complete a survey evaluating the candidate and expressing perceptions of his blind patriotism, constructive patriotism, and American identity. Participants reported their demographic information and then completed a manipulation check which asked about the race of the person shown.

Participants

A power analysis showed the need for a sample of at least 158 participants in order to provide 80% power, assuming a moderately sized effect. After omitting those who failed the manipulation check, 190 participants remained for data analysis. Anyone who lived in the United States and was 18 or over on Amazon Mechanical Turk, an online platform, was able to enroll in the study. Due to online surveying, participants were recruited from a wide range of ages, genders, races, and ethnicities. In the sample, 72% of participants in the analysis were White, 8.1% were Asian, 7.6% were Black, 7.1% were Hispanic/Latinx, and the remaining 4% picked the option of "Other." For participant gender, 43.7% of participants were male, 54.8% were female, and the remaining 1.5% identified as another gender. The mean age of participants was 32 years.

Experimental Stimulus

Six versions of a holiday card were created for this study (see Appendix A). It included a photo of a man holding his dog against a background of either an American flag or a beige background. The application Faceapp was used to manipulate a photo into a Black, Asian, or White version. All other information was consistent across conditions, such as the background, dog, and text at the bottom of the holiday card. Alongside the holiday card were identical vignettes describing the person as someone running for public office in their local government who sent holiday cards to increase recognition.

Dependent Measures

The study had three different dependent measures: perceived blind patriotism, perceived constructive patriotism, and perceived American identity. Participants were asked to reflect upon several statements on a 5-point Likert scale with numbers ranging from "1" = "totally disagree" to "5" = "totally agree." For the blind and constructive patriotism scales, five items for each variable were used from the "Varieties of National Attachment" scale (Schatz et al., 1999); the scale can be found in

Appendix B. With a Cronbach's alpha of .84 for blind patriotism and .85 for constructive patriotism, these scales were reliable in this sample. Lastly, six items from the 5-point Likert "American Identity Measure" (AIM) scale were used such as 1) "This person understands pretty well what being American means to them" (Schwartz et al., 1992). This scale was reliable in this sample with a Cronbach's alpha of .87. Three items appeared immediately after the stimulus to measure participants' perception of the candidate. These results are not reported because this variable was not the focus of the study, and no significant differences among groups were found on it.

Data Analysis

Two-way ANOVAs were conducted to determine the effect of race and the presence of a flag on perceived American identity, blind patriotism, and constructive patriotism. Post hoc tests were conducted to explore whether there was a significant difference between the White, Black, and Asian males on the dependent variables. These analyses were run on the whole sample and on White participants only; because the results from the two analyses were so similar, only the data from the whole sample is reported in the paper.

Results

The Effect of an American Flag Background

The presence of the American flag significantly increased perceptions of the candidate's American identity, $F(1, 190) = 3.77$, $p = .05$, $\eta_p^2 = .02$. Figure 1 demonstrates that candidates who were pictured on the background of an American flag were perceived as significantly more American by participants compared to those with a neutral background.
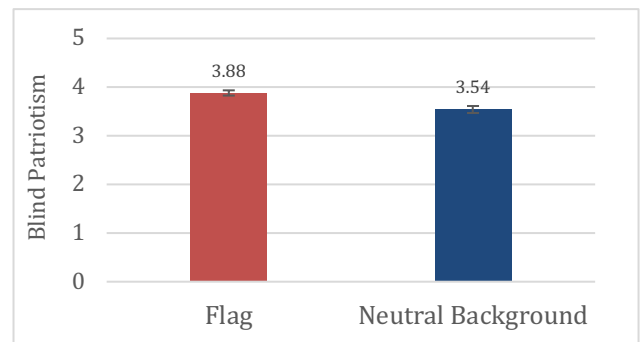
Figure 1. The Effect of the American Flag on Perceptions of American Identity
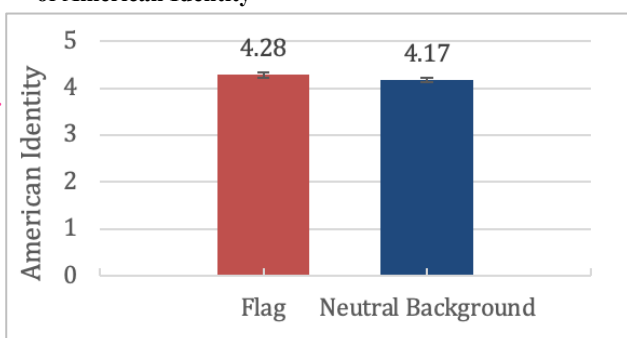
Note: Error bars represent ± 1 Standard Error

As hypothesized, there was also a significant effect of the presence of a flag on perceptions of blind patriotism, $F(1, 190) = 3.68$, $p = .04$, $\eta_p^2 = .03$. As shown in Figure 2, those who had the American flag in the background were seen as significantly more blindly patriotic than those with a neutral background.

Figure 2. The Effect of the American Flag on Perceptions of Blind Patriotism

Note: Error bars represent ± 1 Standard Error

However, the effect of the flag on constructive patriotism was not significant, $F(1,190) = -0.35$, $p = .56$, $\eta_p^2 = .00$. Those depicted with an American flag in the background had a mean constructive patriotism perception of 4.1, compared to those with a neutral background, who had a mean of 4.2.

Figure 3. The Effect of the American Flag on Perceptions of Constructive Patriotism
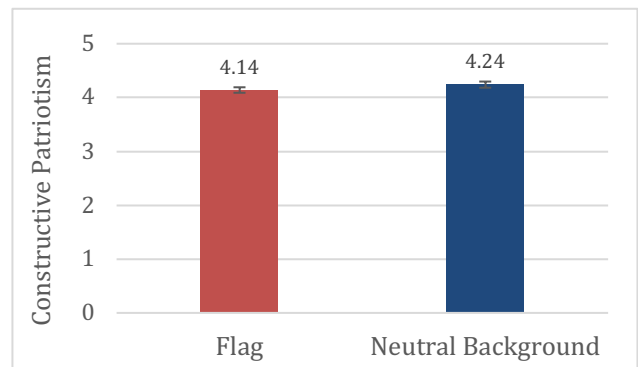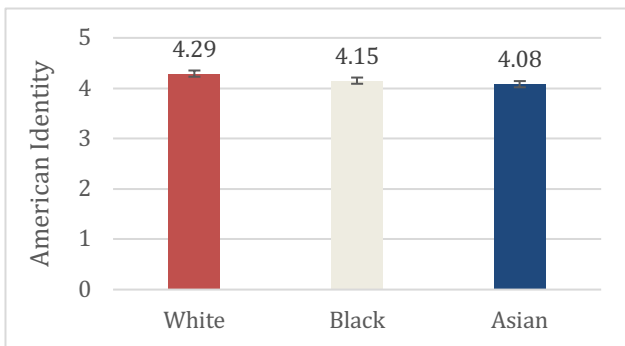

Note: Error bars represent ± 1 Standard Error

The Effect of Race

Contrary to the hypothesis, race did not have a significant effect on perceptions of American identity, $F(2, 190) = 1.25$, $p = .29$, $\eta_p^2 = .01$. Figure 4 shows that although the White candidate had the highest perceived American identity, there were no

significant differences between any of the race conditions.

Figure 4. The Effect of Race on Perceptions of American Identity

Note: Error bars represent ± 1 Standard Error

On the other hand, race did affect blind patriotism, $F(2, 190) = 7.95$, $p < .001$, $\eta_p^2 = .08$ (See Figure 5). Post hoc tests showed that the White candidate was seen as significantly more blindly patriotic than the Black candidate ($p < .01$) and the Asian candidate ($p = .013$); there was not a significant difference between the Black and Asian candidates, $p = .99$.

Figure 5. The Effect of Race on Perception of Blind Patriotism
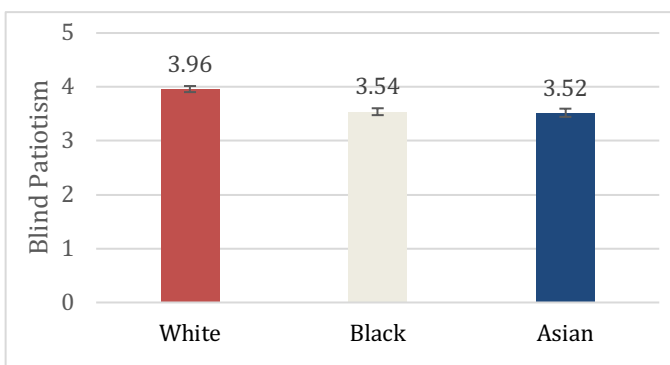
Note: Error bars represent ± 1 Standard Error

The effect of race on perceptions of constructive patriotism neared significance, $F(2, 190) = 2.93$, $p = .06$, $\eta_p^2 = .03$ (See Figure 6). A post-hoc revealed that the Black candidate was seen as having significantly lower constructive patriotism than the White candidate ($p = .05$) but not significantly different from the Asian candidate ($p = .99$).

Figure 6. The Effect of Race on Perceptions of Constructive Patriotism
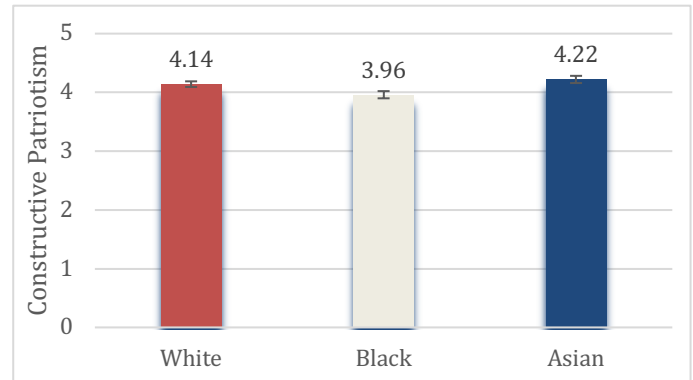
Note: Error bars represent ± 1 Standard Error

Discussion

The Effect of an American Flag Background

In support of the hypothesis, those pictured with an American flag were seen as more American than those with a neutral background. This finding suggests that expressions of symbolic patriotism such as displaying the flag result in people being seen as more American. Previous research has demonstrated that Americans see American identity as being able to blend into society, respecting laws, and being involved in politics, among other less important factors (Schildkraut, 2007). It is possible that people perceive those who raise the flag to embody these qualities. Additionally, people may equate displays of symbolic patriotism with having an American identity, and this interpretation creates a much broader definition of who can be seen as American. Immigrants can still be seen as American because American identity is not solely based on being born in the United States but through expressions of symbolic patriotism like raising the flag.

Those who raise a flag are not only seen as more American but also significantly more blindly patriotic than those with a neutral background, supporting hypothesis 1B. This finding is in line with previous literature which has demonstrated that blind patriotism is associated with a love of national symbols, such as the American flag (Huddy & Khatib, 2007). This result also suggests that the American flag has been co-opted by blind patriots. In the past, the flag anecdotally has been perceived as a symbolic weapon by blind patriots against protests (Mann, & Daniel, 2020), and the

present study provides some empirical support for this idea.

Interestingly, the presence of a flag did not affect perceptions of constructive patriotism. I hypothesized that displaying a flag would lead to lower perceptions of constructive patriotism. While constructive and blind patriotism are often viewed as opposites (Schatz et al., 2003), it seems that they are merely different. The results suggest that while displaying the flag does demonstrate blind patriotism, it does not affect perceptions of constructive patriotism. Not displaying a flag does not necessarily make someone more or less constructively patriotic.

The Effect of Race

Contrary to the hypothesis, race did not affect perceptions of American identity. Older studies demonstrated that White people are seen as the most American, followed by Black people and then Asian people (Cheryan & Monin, 2005; Devos & Banaji, 2005). One possible reason for the difference in findings may be due to how the attitudes were measured. Most of the earlier studies focused on implicit associations using an implicit associations test. One study found that participants implicitly linked being American with being White, but the participants did not explicitly hold these beliefs (Devos & Banaji, 2005). While the questions in the present study explicitly ask about participants' perceptions of the target person, the goal in asking them is less obvious due to the fact that participants only saw one version of the stimulus, which called less attention to racial differences. Alternatively, it may be that the last two decades have seen progress in racial equality in the United States.

On the other hand, the White candidate was seen as more blindly patriotic than the Black and Asian candidate. Studies have shown that Americans believe that members of marginalized groups do not blindly support their country and instead seek to change it (Lacina, 2020). Especially with the recent polarization of American society following the Black Lives Matter and Stop Asian Hate protests, there is a growing consensus among many White Americans on the idea that minorities

do not support their country unwaveringly (Lacina, 2020).

However, no differences were found in constructive patriotism due to the race of the candidate. This finding also suggests that constructive patriotism is not necessarily inverse to blind patriotism. It may be that although people who are blindly patriotic are generally assumed to be White, constructive patriotism is far more racially inclusive. Recent protests (e.g., BLM, Stop Asian Hate, pro-choice) have had a racially diverse group of supporters (Horowitz et al., 2020).

One potential limitation of this study is that the experimental stimulus was only of one specific male candidate (with race manipulated). The results of the study could be generalized to a larger population if I examined the perceptions of a woman, someone of different age, or someone who was not presented as a political candidate. Further study could include examining different presentations of the American flag, such as a flag pin or flying an American flag in front of one's house. Given the polarization of political parties in The United States and the potential co-opting of the flag by conservatives, it would be interesting to see how one's political party relates to flag-raising tendencies or perceptions of blind and constructive patriotism.

The results provide insight into how one's patriotism can be perceived based on one's race and flag-raising tendencies. While blind patriotism was associated with displaying the American flag and being White, constructive patriotism was equally likely to be associated with members of different racial groups and was not related to whether someone was pictured with the flag. In a time when our country is so polarized, this study suggests that a belief in the ability for our nation to grow and improve may be a value that unites many Americans.

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Art Therapy

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Abstract

In a world of rapid change, teenagers have been more stressed than ever. As a result, teenagers experience the detrimental mental and physical influences of stress. Thus, art therapy is a technique that has been increasingly utilized by professionals worldwide to combat this issue. Art therapy is a psychotherapy technique in which an individual uses different methods of art such as drawing, painting, or coloring in order to process their thoughts and emotions. To discover the most effective methods of art therapy in reducing stress, this experiment compares two art therapy methods separated by the amount of structure regarding the task's instructions. The respondents were divided into either the structured or non-structured group and were offered only five minutes to complete the task. Three hypotheses were tested in this study: 1) The majority of the studied population experience high levels of stress. 2) Art therapy will be effective in reducing the stress of this population. 3) Compared to structured art therapy, non-structured art therapy will be more effective in reducing stress. Since the purpose of art therapy is to process one's emotions through self-expression, it seemed most likely that when some of the self-expression was limited within the instructions of the task through the structured approach, it would be less effective in reducing stress. The results support the hypotheses that a majority of the participants had high stress levels and art therapy was effective in reducing stress. However, there was no difference between the scores of diminished stress between structured and non-structured groups. This study additionally supported that art therapy was effective in reducing stress within five minutes, and despite previous art experiences and abilities, all students experienced a decrease in stress. Henceforth, in spite of their busy schedules, art therapy has been shown to be effective, and many students may experience benefits by having art therapy practices being incorporated into their daily lives. Currently, there has been limited research on the most effective methods of art therapy, which is unfortunate because students require efficient methods of stress management that will fit into their schedules, while also, effectively reducing their stress levels before it becomes detrimental to their health. Therefore, this unique study was conducted to determine whether or not art therapy will diminish this population's acute stress under the limited time constraints of five minutes. Furthermore, the second goal of this study is to compare two art therapy methods based on the amount of structure each method requires by the nature of the techniques.

Literature Review

Stress

As asserted by the Mental Health Foundation, stress is the term commonly used to describe the natural sensation of immense mental or physical pressure an individual experiences (Stress, 2021). According to McEwen (2017) from the Laboratory of Neuroendocrinology, stress can exist in both the forms of chronic and acute stress. Acute stress is defined as short term stress: a quick rush of tension that dissipates just as fast. Chronic stress, however, requires more time to develop.

Unfortunately, due to education's current standards and society's high expectations, chronic stress is a sensation that many students come across.

Impacts of Stress on the Body

Although both McEwen (2017) and Aschbacher et al. (2013) agree that small portions of stress are essential for motivation and productivity, stress can have many detrimental impacts on an individual's wellbeing (American Psychological Association [APA], 2018; Parikh et al., 2019). For example, acute stress can cause the body to undergo physical responses such as rapid

heart rate, taut muscles, and shortness of breath (APA, 2018). If the individual's short-term stress is not monitored, it can transition into chronic stress (Rohleder, 2019), which can impair rudimentary functions of the human body like the digestive system and the circulatory system. In addition to impaired bodily functions, chronic stress can alter the brain pathways, the hippocampus being a primary example (McEwen, 2017). These alterations are problematic, especially for the hippocampus, because it is the part of the brain that controls memory. If pathways that travel to the hippocampus are changed or blocked, memory retrieval will become more difficult for that individual. Similarly, other blocked pathways will prevent signals from reaching vital sections of the brain, impairing certain functions (McEwen, 2017).

Moreover, chronic stress can cause other negative impacts on an individual's wellbeing. For example, McEwen (2017) also mentions a phenomenon called allocastic overload or allostasis. This is a phenomenon where the body is required to respond to its changing environment, in this case, stress. Consequently, an individual changes their daily behaviors in response to this stress such as eating and sleeping habits. Not only may these habits further amplify the stress response in an individual, but they also tend to be addictive and unhealthy, likley leading to a overall decrease in health.

Teenagers and Stress

As victims of the whirlwind of change, teenagers, often without means to combat their stress, are one of the groups who experience its most detrimental effects. Schulten (2021) and the APA (2014) state that a majority of teenagers' stress comes from academics. As a matter of fact, past data has stated that teenagers' stress levels were measured as 5.8 during the school year on a 10-point scale, 1.9 points higher than the standardized healthy level of stress (APA, 2014). Especially with all these changes that have occurred in the past few years due to the COVID-19 pandemic, teenagers' stress levels have become even more elevated. As a matter of fact, Generation Z was the most probable age group to declare a significant mental health decline as a result of stressors relating to the

COVID-19 pandemic, possibly due to the fact that adolescents' brains are not fully developed (APA, 2020). Henceforth, specifically when teenagers are stressed, their ability to make proper decisions is impaired because of their underdeveloped brains' reaction to elevated cortisol concentrations, a chemical produced when the brain experiences stress (Pabst et al., 2013). Similar to McEwen's (2017) claims about allostasis, teenagers' behaviors can change, causing them to make more unhealthy or reckless decisions; therefore, they tend to rely on alcohol or exacerbate their e-cigarette addictions as a coping mechanism (Chow et al., 2021; Pericot-Valverde et al., 2021). Instead of allowing students to rely on unhealthy addictions, we should determine how to alter common stress management strategies to become more impactful and efficient.

Art Therapy

Art therapy is a renowned therapy technique utilized by esteemed therapists to improve mental health and reduce stress through different methods of art such as drawing, painting, or coloring in order to process patients' thoughts and emotions (Odle, 2021). Since art therapy is a broad topic, a variety of different methods can be implemented to reduce the stress level of the patient. In agreement with Odle (2021), Curl (2008) determined that art therapy is effective in reducing stress and improving mental well-being. Curl's experiment provided 40 participants with materials for drawing and making picture collages. Participants' short-term stress levels were measured before and after the art therapy through the quantitative State Trait Anxiety Inventory and through measures of physical indicators, such as heart rate. Similar to Curl's study, Malboeuf-Hurtubise et al. (2021) conducted an art therapy experiment, but the participants were elementary school students during the COVID-19 pandemic. Hence, contact between the proctor and the participants was enacted through a form of live video communications. The students participated in art therapy for 45-minute sessions for five weeks. The researchers measured student mental health through the Behavior Assessment Scale for Children 3rd edition and found that after the experiment was conducted, student mental health significantly improved

Structure

Kamal et al. (2016) also determined that art therapy is successful in reducing stress. Their sample consisted of 39 adults who participated in 45-minute in-person sessions of art therapy for four months. The researchers reported that the participants had a significant decrease in cortisol levels after the experiment (Before: $M = 17.9$, $SD = 5.1$; After: $M = 14.8$, $SD = 5.1$). Cortisol levels were measured through saliva samples collected before and after the art therapy sessions. The participants in the study were given the opportunity of full creative freedom with the provided materials and were not required to complete any of their pieces.

On the other hand, researchers Yu et al. (2016), utilized a more structured method of art therapy in their study. In their experiment on prisoner pre-release anxiety, they employed the house-tree-person method (HTP) as their method of art therapy and measured anxiety through the Zung Self-rating Anxiety Scale (Before: $M = 62.6$, $SD = 9.5$; After: $M = 56.8$, $SD = 11.6$) and the Hamilton Anxiety Rating Scale (Before: $M = 24.36$, $SD = 9.11$; After: $M = 17.4$, $SD = 10.4$). The HTP method is a popular technique that consists of the participants drawing a house, tree, and a person (Yu et al., 2016). The HTP method allows for a certain amount of individuality, considering the participants can draw any type of house and person, but it is also structured as these elements are required as a part of their drawing. Although both Yu et al. (2016) and Kamal et al. (2016) had different amounts of structure required of the participants during their experiments, there has been no previous research comparing the effectiveness in reducing stress between two methods of art therapy that require different amounts of structure.

Method

Objectives

The objective of conducting this research was to establish whether the amount of direction provided during art therapy would impact the efficiency of reducing high levels of stress in high school students. Consequently, this study hypothesized that [1] The majority of the studied population experiences high levels of stress. [2] Art therapy will be effective in reducing the stress of this population. [3] Compared to structured art therapy, non-structured art therapy will be more effective in reducing stress than structured art therapy.

Participants and Ethical Considerations

Adolescents were selected as the demographic for this study because they consist of the generation that has been experiencing significantly harmful stress levels due to academics. This population is especially vulnerable to the negative impacts of stress because of their undeveloped brains. Rather than studying younger students who have to take art classes as part of a curriculum, studying the impact of art therapy on adolescents is what this research aims to do because it can be used for self-regulating one's own stress or possibly be implemented in a classroom environment.

To properly control environmental factors that may impact the results, the study had to be conducted in-person. To protect all individuals involved, only students from a northeastern high school were chosen to participate. Considering the need for in-person contact during this experiment, only students in grades nine through twelve from the northeastern high school participated in the study to prevent the transmission of Covid-19 as much as possible and guarantee the safety of the participants and the researcher. There were 50 participants in total with 18 students in Group A and 32 students in Group B. The collection process of the data was completely anonymous and only required basic information such as ethnicity and gender. Lastly, an in-school Institutional Review Board (IRB) reviewed the procedure to ensure ethicality and protection of human rights for this protected group beginning the study.

Procedure

The experiment was developed based upon the procedures of past research. First, it was established that two groups of participants were required: a group that participated in a structured (Group A) art therapy activity and another group

that participated in a non-structured (Group B) art therapy activity. Group A was asked to complete the house-tree-person (HTP) art therapy method, a method in which the participants were required at minimum to draw a house, person, and a tree. However, in an effort to produce better results, specific colors were required to be associated with different aspects of subjects' drawings to give more of a sense of structure. Contrarily, Group B was given full creative freedom with the provided materials (colored pencils and paper borrowed from the school's art department), meaning that they could use the materials during the five-minute art therapy session to their best interests.

Data was collected before and after the experiment using a self-made questionnaire that was based on questionnaires used in past research. The self-made questionnaire was influenced by reliable surveys such as The Perceived Stress Scale (PSS). As supported by Cohen et al. (1983), the PSS is effective in taking an overall diagnostic of perceived stress. Also, to certify the reliability of the survey questions, a Cronbach's Alpha was conducted. With slight alterations, the scores for all variables resulted as greater than 0.7, indicating that all variables were reliable.

Thirty-eight questions in total were included in the survey in which a 5-point Likert scale was utilized as a measure to receive analyzable data. Questions one through four and 28 through 30 of this questionnaire were demographic questions and were used to group and organize the data. Questions five through 17 were implemented to measure the perceived stress of this population. Questions 18 through 22 possibly induced stress in these students. Questions 23 through 27 and 31 through 35 are the same questions in a different order and were applied before and after the experiment to detect any changes in acute stress levels. Questions 36 through 38 were incorporated to document participants' personal reflections about their thoughts on the art therapy session.

Data Analysis

First, the data was imported from an excel spreadsheet into SPSS for statistical analysis. The perceived stress variable was partitioned into three groups: low stress, moderate stress, and high stress

based on natural breaks in the data. In addition, the personal reflection variable was also separated into three questions, and the data of each question was separated in a similar manner. One paired-samples *t*-test was conducted to compare the overall acute stress levels before and after the art therapy. Two independent samples *t*-tests were conducted to determine if the type of art therapy affected the outcome of the amount of stress that was reduced and to see if the type of art therapy affected the participants' personal reflections about the art therapy. Lastly, a Pearson's correlation was conducted to determine if prior experiences with art therapy had any correlations with the amount of stress diminished.

Results

Hypothesis 1: The majority of this population of students have high stress levels.
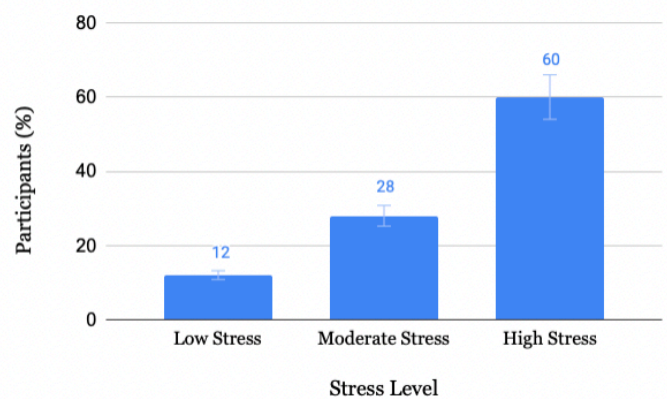
The 50 participants were asked a series of questions in which the data would be analyzed to determine their general perceived level of stress. 30 students (60%) were evaluated to have high stress, 14 students (28%) were evaluated to have moderate stress, and 6 students (12%) were evaluated to have low stress. Therefore, the first hypothesis was accepted.

Hypothesis 2: Art therapy will be effective in reducing the stress of this population.

Figure 2. Stress Levels Before and After Art Therapy
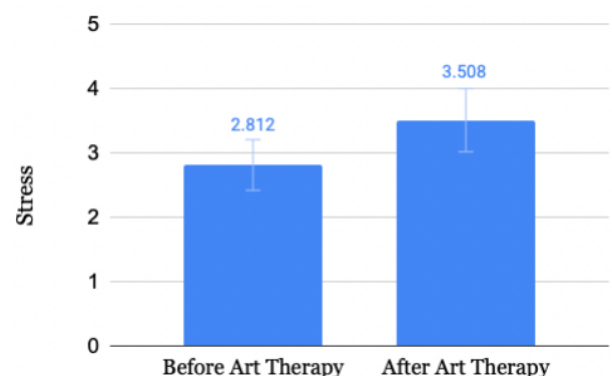
A paired-samples *t*-test was conducted to compare the acute stress levels of all participants pre-art therapy and post-art therapy. There was a significant difference in the scores for pre-art therapy (*M* = 2.8, *SD* = 0.7) and post-art therapy (*M* = 3.5, *SD* = 0.7), *t*(49) = -8.13, *p* < .001. Therefore, the second hypothesis was accepted.

Figure 3. Stress Differential vs. Average of Familiarity with Art
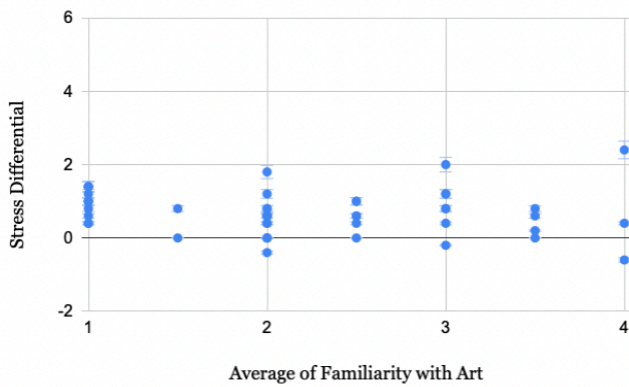
A Pearson's correlation was computed to assess the relationship between the stress differential of all participants and familiarity with art. Based on the results of the study, the stress differential of all participants has no relation with familiarity with art r = .09, p > .05. Thus, art therapy was effective no matter the participants' previous experience with art.

Hypothesis 3: Compared to structured art therapy, non-structured art therapy will be more effective in reducing stress.
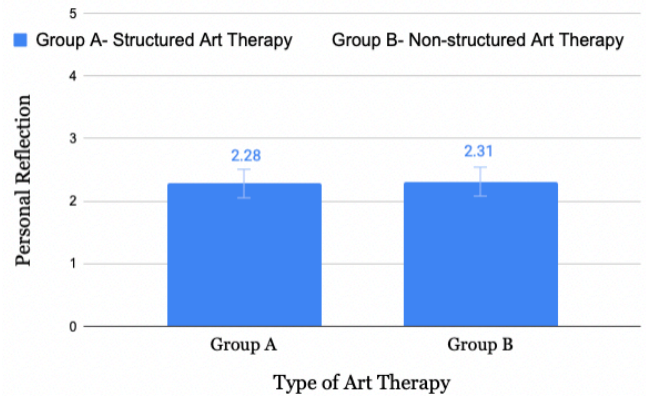
Figure 4. Stress Differential vs. Type of Art Therapy
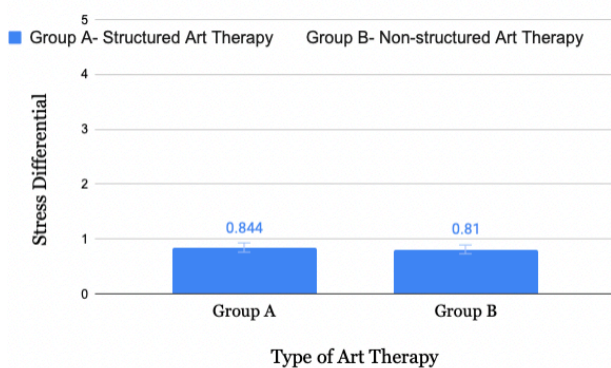
An independent-samples *t*-test was conducted to compare the stress differential in non-structured and structured art therapy conditions.

There was not a significant difference in the scores for non-structured (*M* = 0.6, *SD* = 0.6) and structured art therapy (*M* = 0.9, *SD* = 0.7) conditions, *t*(48) = 1.31, *p* > .05. Therefore, the third hypothesis was not supported.

Figure 5. Personal Reflection vs. Type of Art Therapy

An independent-samples t-test was conducted to compare the personal reflection variable in non-structured and structured art therapy conditions. There was not a significant difference in the scores for non-structured (M = 2.3, SD = 0.6) and structured art therapy (M = 2.3, SD = 0.8) conditions; t(48) = -0.16, p > .05. Therefore, the art therapy method did not affect the outcome of the enjoyableness of the art therapy, personal perception of the effectiveness of the art therapy, and likelihood to use art therapy to manage stress in the future.

Figure 6. Personal Reflection: Enjoyableness of Art Therapy
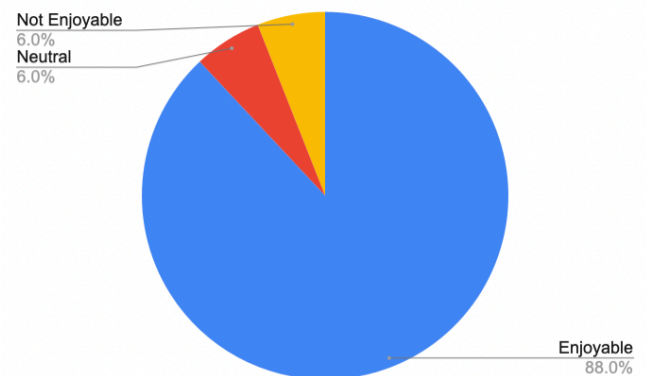
The 50 participants were asked to reflect on how much they enjoyed the art therapy session. 88% of
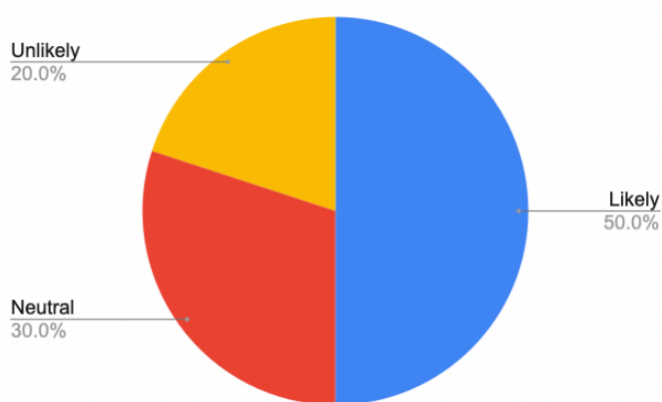
students enjoyed the art therapy, 6% had neutral opinions about the experience, and 6% did not enjoy the experience. Therefore, a majority of the participants enjoyed the art therapy, indicating that this population enjoys doing creative practices to manage their stress and are more likely to utilize it in the future.

Figure 7. Personal Reflection: Perceptions on Effectiveness of Art Therapy
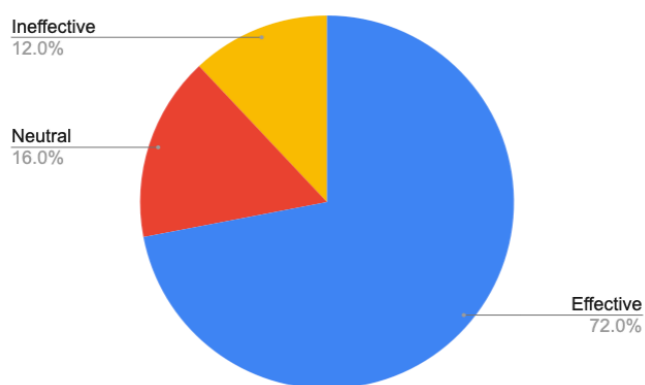
The 50 participants were asked to reflect on whether they believed the art therapy was effective in reducing their stress. 72% of participants believed that art therapy was effective in reducing their stress, 16% had neutral opinions, and 12% believed that art therapy was ineffective in reducing their stress. Therefore, a majority of students believed that art therapy was effective in reducing their stress, indicating that their opinions agree with the statistical results of the experiment.

Figure 8. Personal Reflection: Likeliness to Use Art Therapy to Manage Stress in the Future

Discussion

The first hypothesis of this study states that the majority of adolescents experience high levels of stress. As presented by Figure 1, hypothesis one was supported by this study probably because of students' busy schedules and the pressure that is forced on them to be successful. Furthermore, hypothesis three states that compared to structured art therapy, non-structured art therapy will be more effective in reducing stress. Figures 4 and 5 reveal that there was very little difference in the means when comparing the non-structured and structured art therapy's stress differentials and little difference in the responses of the participants for their personal reflection on the art therapy depending on their group. Therefore, hypothesis three was not supported likely because both experiences provided students with an opportunity to express and organize their innermost thoughts and emotions in a meditative way. However, hypothesis two was supported.

Hypothesis two states that art therapy will be effective in reducing the stress of the participants. These results remain in agreement with Curl (2008), Malboeuf-Hurtubise et al. (2021), and Kamal et al. (2016). According to Figure 2, there are significant results in the means of acute stress before and after the subjects participated in the art therapy within the five-minute time period. This is very important because it indicates that art therapy is effective within a short time period and can be incorporated into students' busy schedules unlike the research from past studies. To summarize, the art therapy sessions seemed to be effective in reducing stress because it offered students a safe space without any high stakes to thoroughly express themselves through a simple practice that did not greatly interfere with their schedules.

In addition to the time period, this study also discovered that previous art experiences had no impact on the amount of stress diminished by the art therapy, evidenced by Figure 3, indicating that art therapy was effective in diminishing stress among students despite whether they had artistic backgrounds or not. Ultimately, this study was equally effective in reducing the stress of participants no matter which art therapy method they participated in, the short amount of time, and

their familiarity with doing art. This study may have been effective for everyone because of the lack of judgement from others of artistic skills when asked to doodle either what they want to or a simple drawing.

Upon completion of the experiment, participants were asked to answer a series of personal reflection questions. Figure 6 reveals that a majority of participants enjoyed the art therapy session. Moreover, Figure 7 reveals that a majority of subjects believed that art therapy was effective in reducing their stress. These two factors would most likely indicate that a majority of the tested population would start implementing art therapy practices into their daily lives, but it seems that this is not the case. As supported by Figure 8, only half of the participants said that they were likely to use art therapy to manage their stress in the future, which is surprising because students generally had positive opinions about the art therapy.

From these results the ultimate conclusions we can come to are: [1] Art therapy is effective in reducing stress, [2] Art therapy is effective even within 5 minutes of time, and [3] art therapy is effective no matter previous art therapy experience. If students properly manage their stress levels, they likely won't undergo the many detrimental effects that stress has upon the human body. Furthermore, students will be less likely to make reckless decisions and experience allocastic overload (McEwen 2017), regarding eating, alcohol consumption, and sleeping habits.

Limitations

This experiment required there to be two groups: Group A and Group B. When students first signed up to be part of the study, they were offered multiple time slots so each group could be tested separately. Since more students signed up for one time slot compared to another, it inevitably resulted in a non-randomized and unequal sample of participants in each group. Moreover, a majority of the participants identified as Asian and female and were from an affluent suburban high school, so this study may not apply to every high school student, gender, or ethnicity. Furthermore, the different times at which the groups were tested could have an impact on the results.

Future Study

Since only 50% of students believed that they were likely to use art therapy in the future to manage their stress, researchers need to determine a method that will engrain art therapy practices in students' daily lives. If art therapy is incorporated into the school day and is reinforced throughout school districts, many students will be more likely to utilize art therapy and manage their stress levels before their acute stress transitions into chronic stress. Art therapy can be integrated into the education system by a variety of methods. For example, despite balancing the groups, testing a larger, more diverse sample of participants to address, utilizing more mediums of art during art therapy, or even conducting the experiment in a quieter environment, future research can look into the impact of doodling in class on academic performance and stress levels.

Another option for future research is testing if art students are less stressed than students who are not enrolled in any art courses, which can determine if schools should give art education more of an importance in today's society for schools that mainly focus on topics such as science and math. Future studies can also focus on implementing five-minute art therapy sessions throughout the day and determine its impacts on stress levels and academic performance. If these studies are soon tested, they will add more to the current body of knowledge and may provide solutions to an urgent long-term problem.

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The Perception of Foreign Gendered Nouns by High School Students

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Abstract

Several studies, such as Sabourin et al. (2006) and Prewitt-Freilino et al. (2012), have agreed that gendered language and gender bias have a significant relationship. However, many studies have potential confounding factors, such as the participants' culture and character, as well as noun meanings, which can affect the measured bias and perception of genders. The purpose of the study was to eliminate these confounding factors and understand how high schoolers associate a socially gendered referent, a person noun, to a foreign grammatically gendered noun in Norwegian, Polish, and Romanian. A questionnaire with 15 one-sentence scenarios in English was administered. Participants were split into groups by the gender of the referent in the scenario: Group One having female, Group Two having male, and Group Three having neutral. The participants were given the choice of a masculine, feminine, or neutral noun to fit the sentence. Group One frequently chose neutral nouns, Group Two frequently chose feminine nouns, and Group Three frequently chose either neutral or masculine nouns, results that were statistically significant. These findings suggest that genders and foreign gendered nouns can be associated, though the genders may not agree.

In today's society, gender stereotyping is still a serious issue, in which certain ideas, behaviors, and mental representations are associated with specific genders. According to certain findings, gendered language could play a role in this. There are three different categorizations of world languages, including grammatically gendered languages, naturally gendered languages, and gender-neutral languages (Prewitt-Freilino et al., 2012). Grammatically gendered languages, unlike the other categorizations, have gendered nouns for inanimate objects which can have a feminine, masculine, or neutral grammatical gender. However, research has indicated that countries that speak gendered languages have an increased Global Gender Gap (GGG) possibly due to the affected perceptions of the different genders (Prewitt-Freilino et al., 2012).

This discovery increased discussion on the negative effects of gendered vocabulary on society. Prior to that study, gendered nouns in Romance languages had already been studied by Sabourin et al. (2006), who focused on how people associated gendered animate or inanimate nouns and a certain human gender. They specifically tested speakers of German, English, and Romance languages on nouns in Dutch, their second language. The study's findings were that all participants, to some extent, could learn gender agreement, meaning the gender of the noun agreed with the human gender. The speakers of a genderless language, English, however, were not being able to learn gender agreement as well as the other language categories. Accordingly, the current body of literature supports that to some extent, gendered nouns create an unconscious association between the gender of the nouns and mental perception of that gender.

Literature Review

A History of Gendered Language

To give further context, historically, gendered language has been seen to exacerbate the effect of gender roles. Meyerowitz (2008) explored

gender representations over the years in different cultures and historical backgrounds. She concluded that there were specific historical trends that could explain gender inequality in today's society, suggesting that language was an important factor that established androcentric, or male-centered, hierarchies. Additionally, one paper noted that throughout history, English speakers' views were often shaped by gendered language, creating disparity and dichotomous perceptions, developing the conceptual framework regarding linguistic practices and theory behind sexism in language (Bigler & Leaper, 2015). Similar results were found in Italian and Spanish, supporting that grammatical gender can predict traditional gender roles in societies as native speakers of a grammatically gendered language are associated with low labor participation for women (Jakiela & Ozier, 2020).

Gender Stereotypes

As a result of established gender roles in the past, stereotypes of different genders have been deeply rooted, leading to implicit and explicit bias. Vigliocco (2005) analyzed the effect of grammatically gendered language on people's thoughts, behavior, and mental perceptions, specifically investigating Italian and German. Through a series of experiments having participants create word associations, Vigliocco observed a general trend of gender association with speech. Wasserman and Weseley (2009) also concentrated on how grammatically gendered languages can increase sexism in high school students. The study found that languages with grammatical gender can increase sexist beliefs, as participants were more frequently required to highlight the disparity when using different gendered vocabulary or pronouns. Moreover, Zakrisson et al. (2012) focused on how adults, industry employees, and high school students viewed sexism in the Swedish language and measured their attitudes towards the gender gap. The study found that sexist attitudes are associated with education and exacerbated by adolescence, with high school students having the highest rates, which may be important to consider when choosing a population sample.

Bilingualism/Second Language Learning

Furthermore, it generally agreed that the previous language learning of the participants may affect their perception of genders. One research study examined the effect of human referents, the facial expressions, with a specific gender on bilingual participants that knew French, which is a gendered language, or English, which is a naturally gendered language (Sato et al., 2013). By presenting subjects with stereotypical gendered nouns paired with male and female faces, the study found that switching the language of a noun can also switch the mental representation associated with that information. This shows that the multilingualism of the participant may be an important secondary factor to consider because the knowledge of different language systems could potentially affect the extent of bias subjects have towards different social genders.

Natural Language

In order to mitigate the effects of gendered language, a myriad of studies have proposed using neutral language instead in order to promote gender equality (Gygax et al., 2021). For example, Gabriel et al. (2018) measured the impact of different methods of neutralizing language in order to not allude to gender stereotypes. Previously, they found that masculine gendered languages, both inanimate and animate, often have generic and specific meanings, while feminine gendered language, both inanimate and animate, often refer to their visible appearance. Therefore, the authors proposed to use feminization in gendered language, but neutralization for non-gendered languages. This will allow more visibility for women in societies that speak gendered languages and remove the effect that gender could have on societies without grammatically gendered languages. On the other hand, research by Sarrasin et al. (2012) disagreed with the proposal of using neutralization, which found that there was an association between sexist beliefs and negative attitudes towards gender-neutral language (Gabriel et al., 2018). The researchers asserted, however, that gender-neutral vocabulary would still be beneficial towards removing sexist beliefs, in order to combat the

opposition. Overall, there is some controversy in the body of knowledge regarding the effect of neutral language, but may be another important consideration.

Research Gap

Gendered language has been proven to magnify sexist perceptions by assigning different ideas and nouns to certain genders, calling for the need to understand the specific effect of language structure on high school students. Previous studies with similar experiments have arguably introduced bias as confounding factors in their results, not considering the personalities and cultures of the subjects themselves which could affect the extent of gender bias they exhibit; thus, it is necessary to remove this bias by using foreign nouns with an unknown meaning that cannot be associated with a social gender. These factors will reveal data that will introduce a new depth to the existing body of knowledge. Therefore, the proposed research question is, "To what extent will high school students associate a certain human gender (female, male, neutral) to a grammatically gendered noun in a foreign European language (Norwegian, Romanian, Polish)?" The purpose of the research is to observe the effect of language structure on gender association by examining initial language learning and using foreign nouns that force participants to make associations to the grammatical gender. The participants will be high school students, as they are shown to frequently exhibit sexist beliefs (Zakrisson et al., 2012). Based on previous studies on gender agreement, it is hypothesized that participants will associate a foreign grammatically feminine noun with a female human referent, a foreign masculine noun with a male referent, and a foreign gender-neutral noun with a gender-neutral referent. Although the participants are given foreign gendered nouns, the study will discover whether they will be able to make assumptions based on suffix patterns even when they do not know the meaning of the noun, which will consequently lead them to correlate the same gendered noun to the same gendered referent. Overall, it is important to understand the effect of language structure on high school students in order to understand the history of and develop solutions for gender stereotyping.

Method

Participants

Subjects were students from a Delaware high school, selected for the study in a purposeful sampling procedure. This age group and organizational setting was used because of a study by Zakrission et al. (2012), which found that high school students, compared to other age groups and organizational settings, scored the highest in ambivalent sexism. The subjects were gained by sending an initial Google Forms survey asking for participation and then distributing the invention Google Forms survey through the emails provided. There were 16 people per experimental group, resulting in a total of 48 subjects in the study. A relatively small sample was reasonable because of the constraint that the participants could not be fluent in Norwegian, Polish, or Romanian, as well as other studies in the field having similar sample numbers. Participation was voluntary and all survey responses were anonymous.

Experimental Manipulation

A quantitative research approach and experimental method was used. In order to study the specific factors that contribute to sexism, the study tested how frequently participants would associate a certain gender, assumed by the human referent, to certain foreign gendered nouns in one-sentence scenarios. Thus, participants were split into three groups, each receiving different interventions. Group One received female human referents, Group Two received male human referents, and Group Three received gender-neutral human referents. The first two groups were necessary so that the effect of the gender of the human referent could be clearly evaluated, with Group One receiving common feminine names such as "Mary" or "Jennifer," and Group Two receiving common masculine names such as "Mark" or "Christopher." Group Three received common gender-neutral names, such as "Avery" or "Emerson," which acted as the neutral gender effect for the experiment. The names were taken from the most popular female, male, and unisex names in the United States from the Social Security Administration.

Data Collection

The data was obtained by distributing a questionnaire to the three experimental groups through Google Forms. The first part of the questionnaire addressed demographics, such as the participants' gender and multilingualism, which were secondary factors that could affect the study's results. Participants were asked to state the gender they most identified with and the other languages that they were additionally fluent in. The second part of the questionnaire consisted of 15 different one-sentence scenarios with a gendered human referent, differing depending on experimental group. Participants were also given three gendered noun choices. The questions were in English while the noun choices were Romanian for five of the questions, Polish for five of the questions, and Norwegian for five of the questions. The participants were asked to fill in the noun choice that they thought best fit the scenario, given one feminine, one masculine, and one gender-neutral noun per scenario.

Data Analysis

Basic frequency distribution data was gained from Google Forms in regard to how frequently each noun was chosen in the questionnaire. A two-way table was used with frequency as the column variable and foreign language (Romanian, Norwegian, Polish) as the row variable. In order to study the relationship between the gendered human referent and gendered noun choice, a chi square test of homogeneity was used with an alpha value of .05. Additionally, an ANOVA was used to see the differences between the three different languages used in each experimental questionnaire. For secondary variables, two chi-square tests of independence were run to understand how the multilingualism (monolingual, multilingual in European languages, or multilingual in European and non-European languages) and gender of the participant could affect the results. All ANOVA tests were also conducted with an alpha value of .05.

Results

Summary

The overall frequency of the noun choice per group was measured and recorded in the graph below.

Figure 1. *Frequency of Gendered Noun Choice vs Experimental Group*
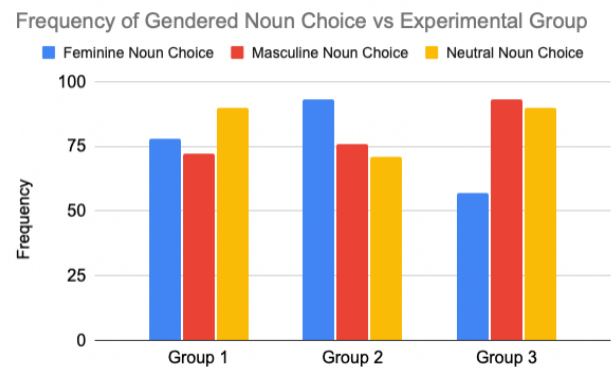
Pertaining to the quantitative data shown above in Figure 1, the key data displayed was that participants in Group One, with female referents, chose feminine nouns 32.6% of the time, masculine nouns 29.7% of the time, and neutral nouns 37.7% of the time. Group Two, with male referents, chose feminine nouns 38.8% of the time, masculine nouns 31.7% of the time, and neutral nouns 29.6% of the time. Group Three, with neutral referents, chose feminine nouns 23.8% of the time, masculine nouns 38.8% of the time, and neutral nouns 37.5% of the time. By basic association analysis, participants given female referents were shown to most likely choose neutral nouns, participants given male referents were shown to most likely choose feminine nouns, and participants given neutral referents were shown to most likely choose either masculine or neutral nouns. Moreover, a chi square test of homogeneity was performed to further study the relationship between the gendered human referent and gendered noun choice. The results were shown to be significant, $F(4, 720) = 15.10, p = .004$, meaning that the gender of the referent did have some impact on the participants' noun choice.

Differences Per Language

There were three different foreign European languages used in the study: Polish, Norwegian, and Romanian. A one-way analysis of variance (ANOVA) was performed for Group 1, Group 2, and Group 3, shown in Tables 1, 2 and 3 [Appendix A]. As demonstrated, language had no effect on noun choice in Group One, $F(2, 6) = 0.01$, $p > .05$; Group Two, $F(2, 6) = 0.00$, $p > .05$; nor Group Three, $F(2, 6) = 0.00$, $p > .05$. Thus, the three different European languages chosen for the study did not have much effect on the participants' noun choice.

Secondary Factors

To investigate secondary factors, two chi square tests of independence were used to study the effect of identified gender and multilingualism of the participant. This data is shown below, in Tables 4 – 5 [Appendix A].

There were no significant results in regard to gender of the participant, $F(4, 709) = 2.43$, $p > .05$, which demonstrates that it did not have an impact on noun choice. There were also no significant results in regard to multilingualism, $F(4, 720) = 4.11$, $p > .05$, showing that it did not have an impact either. Thus, these factors were not confounding to the experiment.

Discussion

These results show, by basic frequency, that when participants were given a female human referent in their one-sentence scenarios, they were more likely to choose a foreign neutral noun. When given a male human referent, they were more likely to choose a foreign feminine noun. These results disagreed with the hypothesis, as a study by Fathi and Lowenstamm (2016), discussing the gendering of object nouns, observed the effect of gender assignment. This meant that female referents generally influenced choice of feminine nouns, and male referents generally influenced choice of masculine nouns, which is contrasting to this study. This could be due to the fact that the gendered nouns were in foreign European languages, meaning the nouns had language patterns that might have differed from the knowledge of the participant. For

example, in Polish, masculine nouns usually end with a consonant, feminine nouns with -a or -i, and neutral nouns with -o or -e. In Romanian, masculine and neutral nouns usually end with -u and feminine nouns with -a. Norwegian does not always have a clear rule for gendered noun patterns. Therefore, participants may have been confused because of their limited knowledge of foreign gendered suffixes of those specific foreign languages. Languages more similar to English, such as Spanish and French, could have been used in the study instead. For Group Three, when given a neutral referent, participants were more likely to choose either a foreign neutral or masculine noun to fit the scenario. These results agreed with Gygax et al. (2021), who explored male-biased gender representation in languages, finding that ambiguous entities are often labeled as masculine. Thus, most likely, some participants chose masculine nouns because they assumed that the scenario was referring to a male entity, and neutral nouns because it followed gender agreement. By one-way ANOVA, the results also explain that the differing European languages used in the questionnaire did not have an effect on the participant's noun choice. In addition, the gender and multilingualism of the participants had a limiting effect on the results.

Significance and Implications of Results

Overall, results support that high school students were able to associate gendered referents to a gender noun in a foreign language, although the gender of the referent and gender of the noun did not match. This is significant because it shows how deeply rooted gender bias is within language structure, as subjects were able to make assumptions of the grammatical gender when they could not use the meaning of the noun to make an association to the gendered referent. This can be used to understand the basis of gender stereotyping today, reinforced by gendered language structure and unconsciously learned assumptions. This effectively filled the research gap of studying the association between gendered referents and gendered nouns when only considering structure. Furthermore, the results could be used for future policies on mitigating the effects of gendered language, as there should be a considerable focus on

grammatical gender forms. This can add to solutions proposed by Gabriel et al. (2018) on feminization and neutralization of different languages. While the results were unexpected, a possible explanation could be that the knowledge of language structure, such as gendered suffixes, could be secondary to social knowledge of the meaning of the nouns. Therefore, future studies could be recommended to focus more on social meaning rather than language structure.

Limitations and Further Research

In regard to the limitations of this study, data collection was done in an uncontrolled environment for the convenience of subjects. Accordingly, this could have affected the results since subjects may have taken differing efforts in answering the questionnaire. Moreover, while subjects were encouraged to not use an online dictionary to answer the questionnaire, they may have done so because their environment during participation was not regulated. In regard to subjects, since only age group and organizational setting was targeted, this led to a disproportionate number of females in sample size, so it was not very representative of the high school population. Finally, within the questionnaire, what is considered a gender-neutral name could be subjective or generational, which could have affected the results for Group Three.

This study, with its limitations and results, leaves various questions unanswered. Further research should be conducted on the effect of using foreign gendered nouns specifically. Future researchers can have a control group of English gendered nouns in order to understand how changing the foreign language can impact gender agreement. Researchers could also use a larger sample size than the 48 participants used in the study and differ the organizational setting to colleges, company settings, etc.

Conclusion

This study's objective was to focus solely on language structure rather than social meaning of gendered nouns, choosing foreign languages that participants were not fluent in. The method tested the extent in which high school students associated foreign nouns to gendered referents in one-sentence scenarios. After analyzing the results, it was found that the gendered noun choice of the subjects did have an effect on the noun choice. Generally, when given female referents, neutral nouns were associated, when given male referents, feminine nouns were associated, and when given neutral referents, either neutral or masculine nouns were associated. As these results are statistically significant, this shows that even though the subjects were not fluent in the three European languages, they were still able to make an association. In the field of study, this introduces a new perspective on gender agreement, as well as demonstrating how deeply rooted gender bias is in language. By researching the created associations between referents and foreign gendered nouns, specifically focusing on language structure, this can help understand how gendered language can continue to reinforce gender stereotyping today.

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How do Gifted Student Burnout and Common Academic Burnout Differ?

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Abstract

Gifted student burnout is a form of chronic exhaustion that stems from a discrepancy between the individual and their current educational environment. The purpose of this paper is to raise awareness about burnout syndrome, specifically gifted student burnout syndrome, which is a frequently overlooked mental illness and seldom discussed in schools. How do gifted student burnout and common academic burnout differ? One of the top environmental conditions harming the well-being of adolescents is an excessive pressure to excel, and the very phrase "gifted student burnout" was constructed by gifted students themselves to describe their feelings of perfectionism and low self-esteem. The paper consists of two main parts: the first, a description of an online survey conducted on the topic, in which participants were asked to specify their labelled level of giftedness, and subsequently asked questions about their level of burnout. The second part is literary research, conducted using already existing material written about gifted student burnout (in opposition to common academic burnout). As the paper discovers, the gifted student is constantly striving for unreachable perfection, so much so that they develop such an extreme fear of failure which they do not know how to cope with, thus turning to unhealthy coping mechanisms. The gifted student feels that they must live up to the expectations set before them, so the pressure to perform well academically manifests itself not only in a typical fear of failure that most people have, but in a fear of disappointing those who believe in them by not living up to the potential that they are so constantly reminded they possess.

The National Commission on Excellence in Education (1983) warned educators of the fact that over half of gifted students do not match their tested ability with academic results. According to The Davidson Institute (2021), gifted student burnout is a form of chronic exhaustion that stems from a discrepancy between the individual and their current educational environment. The label given to children at a young age (whether it be positive or negative) stays with the child perhaps their entire life, particularly if the child is constantly reminded of that label (Peck, 2022).

According to a study conducted by The Robert Wood Johnson Foundation, one of the top environmental conditions harming the well-being of adolescents is an excessive pressure to excel. The very phrase "gifted student burnout" was constructed by gifted students themselves to describe their feelings of perfectionism and low self-esteem (Salmela-Aro et al., 2009).

At this stage, this paper hypothesises that gifted students have a higher chance of experiencing burnout in their adolescence compared to less gifted and average students and that gifted student burnout and common academic burnout differ in cause and severity of certain symptoms. The first part of this research paper will discuss the results of the conducted survey and then subsequently draw a conclusion based on the survey results. The second part, however, will focus on literary research of previous studies conducted and connect these results to those of the survey. The purpose of this paper is to raise awareness about burnout, which is a frequently overlooked mental illness seldom discussed in schools.

Method

Questions and Methodology

Participants were presented with nine questions regarding gifted student burnout. They were first asked their age and level of education. The majority of participants were aged 17 (36%) and 18 (28.8%), followed by those aged 16 (14%), 19 (8%), 20 (4%), 15 and 21 (2%), 13 and 22 (2%), and 14 and 24 (1%). As for their level of education, 75% were high school students, 12% were university students, 9% were high school graduates not enrolled in university, 2% were university graduates, and 2% were elementary school students. Participants were subsequently asked to rate four statements in accordance to how much they agree with them on a scale of 1 to 5; 1 being "Completely disagree" and 5 being "Completely agree." The statements, in order, were: *"Others (family members, teachers, etc.) have frequently referred to me as academically gifted from a young age," "I myself grew up perceiving myself as academically gifted," "I put a lot of pressure on myself to do well in school,"* and finally, *"I determine my self-worth in accordance to my academic success."*

They were then asked to select all of the mentioned symptoms connected to academic burnout that they often experience, the symptoms being: feeling exhausted regardless of the amount of sleep they get, lack of motivation to attend classes or do their schoolwork, taking their frustration out on their loved ones, experiencing low self-confidence regarding their intelligence and/or academic abilities, difficulty concentrating, headaches and/or muscle pain, insomnia, anxiety, feeling depressed, finding no joy/comfort in activities that they previously used to enjoy, picking up unhealthy habits, such as nail-biting, overeating, and not eating enough.

Following the previous question, they were given the chance to write down some of their experiences that were not mentioned on the list but that they still regard as symptoms of burnout, after which they were asked to write down whether they have any coping mechanisms in dealing with burnout.

The survey was conducted online, using Google Forms. It was 100% anonymous and was randomly sampled to avoid biases.

The aim of these questions was to see whether there is a connection between being labelled as gifted early on and experiencing academic burnout in adolescence, as well as how gifted student burnout and common academic burnout differ. After 125 responses, the results were statistically analysed. The Cronbach's Alpha value for this scale is .11.

Results

The majority of people that voted that they agree to a great extent (5 or 4) with the first statement (being often labelled as academically gifted from a young age) also voted high that they put a lot of pressure on themselves to do well in school and that they determine their self-worth in accordance to their academic success, whereas the majority of those who voted low agreeance (2 or 1) with the first statement voted considerably lower for the mentioned statements. Those who voted "3" for the first statement voted that they put a lot of pressure on themselves almost in the same extent as the group of 5s and 4s, however voted considerably lower for the latter statement. After running a Pearson's correlation test for the level of giftedness in correlation to the level of pressure that individuals put on themselves and the level of which they determine their self-worth in accordance with academic success (For the correlation between the level of giftedness and level of pressure the result was $r = 0.12$, for the correlation between the level of giftedness and determining self-worth in accordance with academic success, $r = 0.10$.

Figure 1. correlation between the level of giftedness and the amount of pressure the individual places on themselves.

Figure 2. correlation between the level of giftedness and the extent to which the individual determines their self-worth in accordance to their academic success.
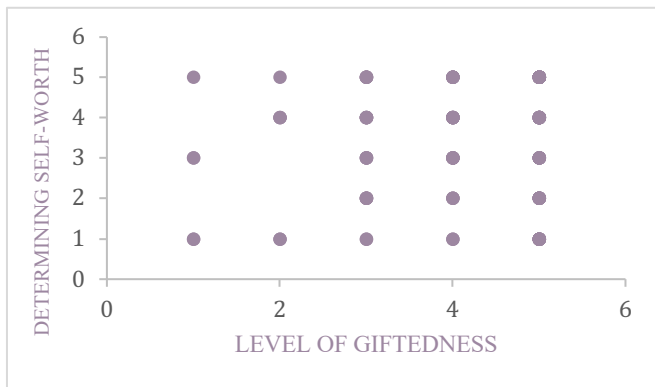

A chi-square goodness of fit test was performed to examine the number of symptoms reported by members of the three groups (the gifted students, who voted "5" and "4," the somewhat gifted, who voted "3," and the average or non-gifted, who voted "2" and "1"). The result was not significant ($p = .93$), meaning that the number of symptoms that the members of all three groups checked off was somewhat similar. However, when asked whether participants deal with more struggles that they deem to be symptoms of burnout that were not mentioned on the survey, the majority of the responses on that question were recorded by the gifted students. The responses include, but are not limited to, feeling unable to help loved ones due to own personal struggling, difficulty socialising, physical sickness, having an emotional burnout, feeling drained, feeling detached, alone, isolated, having nervous breakdowns, experiencing self-doubt, having a creative blockage, extreme procrastination, etc.

Aside from this, most of the unhealthy coping mechanisms reported in the survey were reported by gifted students (Figure 3). The mentioned coping mechanisms include, but are not limited to, stress-eating or eating unhealthy food, making impulsive decisions regarding changing their appearance (such as getting piercings), avoiding responsibilities, using phone/social media to a high extent, self-harm, and, by far the most reported coping mechanism, substance abuse, including caffeine, nicotine, alcohol and even other drugs.

Conclusion

Judging by the number of symptoms recorded from members of all three groups, gifted children were not found to be more likely to experience academic burnout in their adolescence, contrary to the primary hypothesis. However, common academic burnout and gifted student burnout do differ. Putting pressure on oneself can be positive if it is to a healthy extent, however, the gifted student puts so much pressure on themselves that they start to see their self-worth and their academic success as one and the same. They experience most of the symptoms of common academic burnout, but also some more intense symptoms that the somewhat gifted and average student will seldom face. Desperate times call for desperate measures, so the gifted student will turn to unhealthy coping mechanisms to try and deflect from the overwhelming reality they exist

Figure 3. Coping Mechanisms Reported by Average Non-Gifted Students, Moderately Gifted Students, and Gifted Students
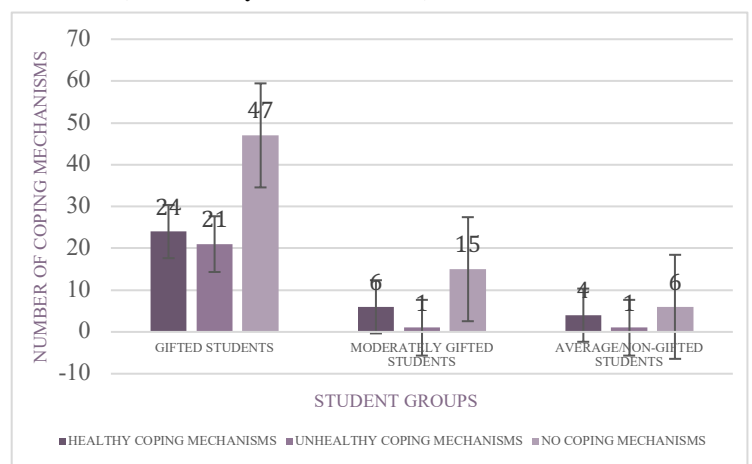
Literary Research

At this stage the paper hypothesises that it is most likely the very high amount of pressure that gifted students put on themselves to perform well academically that is the main differentiator between gifted student burnout and common academic burnout.

Causes of Gifted Student Burnout

The core stress component of burnout syndrome is the emotional exhaustion (Rahmati, 2015). The gifted student's self-doubt, which grows

into the imposter syndrome, extremely pressures them to excel in order to prove their giftedness, which is extremely draining and leaves one constantly striving for perfection (Kaplan, 1990). Perfectionism is considered to be one of the main characteristics of gifted students (Alodat et al., 2020). There are two types of perfectionism: adaptive (positive) perfectionism and maladaptive (negative) perfectionism. Those with adaptive perfectionism are motivated to do the best they can and strive towards their goals in a healthy manner, in opposition to those struggling with maladaptive perfectionism, who recognise only complete success and complete failure as the possible outcomes of their work, due to which they try to avoid making any mistakes and set excessively high standards for themselves (Clevenger, 2022). Perfectionism can make one feel unhappy and can lead to serious mental illnesses, such as depression, anxiety, eating disorders, and even self-harm. The gifted individual becomes tired of dealing with the pressures of perfectionism that have been placed on them at a young age (Peck, 2022). Eventually, perfectionism can lead one to stop trying to succeed.

Similarly, multipotentiality can lead students to put too much pressure on themselves in order to live up to everyone's expectations. Making career and personal choices can become difficult for a student who has many talents, interests, and abilities. The gifted individual feels as though they will disappoint if they do not excel in a particular area, so they try to succeed in everything. This leads to their energy becoming diffused, and then them being less likely to reach their full potential in any area (Blackburn & Erickson, 1986).

Underachievement as a learned behaviour can also be the cause of burnout (Blackburn & Erickson, 1986). During early years of education, the gifted student may exercise using minimum effort, and achieving the desired results. This may lead to the student developing the belief that their giftedness means that they are blessed with the gift of instant and easy learning, and that outstanding achievement just naturally follows, despite the low effort (Kaplan, 1990). When the student reaches their later years of education and the study materials become more challenging for them to grasp, they are met with the need to complete more work and

study harder, which they are not used to doing. This leads to them feeling less confident about their academic ability (Clevenger, 2022) which the survey also showed since almost 60% of gifted students voted that they experience low self-esteem when it comes to their intelligence and academic ability.

Possibly in order to try and see if they are still capable of performing well solely on their intelligence, or because they are simply not used to the extra work and never really learned how to efficiently study, students will not put in the work necessary to succeed, and when they are faced with the subsequent failure, they attempt to find an excuse for that failure in a series of external factors (Clevenger, 2022). This practice is known as self-handicapping. Self-handicapping can be defined as any action that used in an attempt to excuse one's failure and draw other people's attention from their low performance to the external factors that stood in the way of success. This way, the gifted student protects their reputation and self-esteem (Alodat et al., 2020). A maladaptive perfectionist and self-handicapping attitude may lead to extreme exhaustion and a lack of drive and motivation (Clevenger, 2022), which could be another possible definition of gifted student burnout.

The Difference Between Common Academic Burnout and Gifted Student Burnout

It was discussed in the previous section of this paper that perfectionism is considered to be one of the main characteristics of gifted students. Gifted students are more sensitive to criticism due to it giving them a feeling of imperfection (Palay, 2021). Many of them become sensitive and depressed when they become aware of their own shortcomings and when they feel they are unable to live up to the expectations set before them (Strang, 1951).

Adolescents who believed that both of their parents valued character traits as much or more than academic excellence exhibited better outcomes at school, better mental health, and less rule-breaking behaviour than their peers who believed that their parents valued their academic achievements over all else (Peck, 2022). Gifted individuals have the potential to be more susceptible to school-related stress because they have a heightened sensitivity to

their surroundings, including expectations that they and others set for them (Kaplan, 1990). The gifted student has a more intense interaction with the environment, which may cause additional conflicts that the average student may not face (Strang, 1960). Stress can become a debilitating factor that can affect the self-esteem and subsequent success of many gifted individuals (Delisle, 1982). Gifted children studied over the course of two years were shown to be less likely to engage in challenging coursework, feel less competent, and exhibit the most reliance on teacher guidance (Delcourt et al., 2007).

Discussion

Most people do not wish to fail, and will try their best to prevent it, so, naturally, they put a bit of pressure on themselves to perform well academically, and to, later in life, perform well in their workplace. However, the pressure that the gifted student puts on themselves is different, stronger. As the survey shows, gifted students are more likely to put a great deal of pressure on themselves, as well as determine their self-worth in accordance to how well they perform academically. The gifted student feels that they must live up to the expectations set before them, so the pressure to perform well academically manifests itself not only in a typical fear of failure that most people have, but in a fear of disappointing those who believe in them by not living up to the potential that they are so constantly reminded they possess. The gifted student constantly striving for perfection most likely does not know how to cope with any negative feelings just as much as they do not know how to accept any imperfections and mistakes in their work, because those feelings are also a form of imperfection and distract them from their goals, so when their stress culminates, they turn to unhealthy habits in order to cope.

Overall Conclusion

The survey and the literary research done in order to execute this paper together show that there is a difference between common academic burnout and gifted student burnout, and that the two should not be treated as one and the same. As mentioned,

someone struggling with maladaptive perfectionism views absolute success and absolute failure as the only two possible outcomes of any endeavour, meaning that anything short of perfection is in their eyes seen as failure (Clevenger, 2022). As self-worth and academic success are often connected in the eyes of the gifted student, failure may lead to disappointment, and ultimately, burnout syndrome.

Students of all levels of giftedness can experience burnout syndrome, however the main factor that differentiates gifted student burnout from common academic burnout is the cause. One of the main causes of gifted student burnout is maladaptive perfectionism and pressure that the gifted student experiences, as opposed to the "average" student. The symptoms are pretty much the same, but the gifted student takes the experience of burnout worse than the average student (thus turning to unhealthy coping mechanisms).

Gifted students must be taught that, despite being gifted and intelligent, making mistakes is alright and normal and that they are not expected to be on top of everything all the time, and that their happiness and mental health and wellbeing is a much more important achievement than the elusive perfection that they are constantly aiming towards.

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