Examining Correlation Between Anxiety, Depression, and Political Participation in Young Adults



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Abstract

Political participation is essential to maintaining and developing a strong, robust democracy. However, recent data has found U.S. citizens' political engagement to be concerningly low, with 18-25 year olds demonstrating the lowest levels of participation. Previous research has suggested a correlation between mental health and political participation, but does not specifically address how anxiety and depression may affect the political involvement of young adults. In this study, we used an internet survey to test the correlation between symptoms of anxiety and depression and political participation in a sample of adults aged 18-25. We used the Beck Anxiety Inventory (BAI) to measure participants' anxiety levels, and the Beck Depression Inventory (BDI-II) to measure depression levels. A Political Participation Survey was used to assess participants' political participation across four different areas of focus: participation in elections, engagement with political news media, social media engagement, and political activism. No significant correlation was found between anxiety and political participation or between depression and political participation. The findings of this study demonstrate a need for researchers to continue investigating the relationship between political participation and mental health.

Keywords: political participation, young adults, mental health, anxiety, depression

Examining Correlation Between Anxiety, Depression, and Political Participation in Young Adults

The United States is widely considered to be a democracy. U.S. citizens enjoy many freedoms associated with living in a democracy, including the right to organize, petition, and speak freely about their beliefs. Being a member of a democracy entails several rights and responsibilities, one of which is political participation. As emphasized by political philosopher Ronald Dworkin (2006), in order for a nation-state to be considered a democracy, all citizens must have both the right and the ability to have a say in the political decisions that govern society. Furthermore, political participation is not only both a right and responsibility of citizens living within a democracy, but is *necessary* for a regime to remain democratic. In order for a democracy to be robust and legitimate, all members within the democracy must be able to exercise their political voice. Schlozman and colleagues (2018) have defined the exercise of political voice as "any activity undertaken by individuals and organizations that has the intent or effect of influencing government action" (Schlozman et al., 2018, pp. 24). Political participation may include, but is not limited to, actions such as voting in elections at local, state, and national levels, political organizing, participating in protests or demonstrations, contacting public officials, and contributing to candidates and parties' campaigns (Schlozman et al., 2018). In recent years, social media has taken rise as a popular tool for individuals to become more involved politically (Kim & Khang, 2014; Vaccari & Valeriani, 2021). Citizens' committed engagement in the aforementioned activities is essential, as it allows members of a democracy to have a voice in the political decisions– and decision-makers– that shape their everyday lives. Democracy entails that all citizens' political preferences are considered in the decision-making process (Schlozman et al., 2018). Ultimately, widespread participation in political activities is

key to maintaining and developing a fair, robust democracy in which the interests of all citizens are represented.

Unfortunately, widespread and equal participation in politics does not seem to be the norm in our current society. The most recent presidential election in 2020 reported a 66 percent voter turnout, which was considerably high compared to other recent presidential elections in which the voter turnout rate usually falls between 50 and 60 percent (U.S. Census Bureau, 2022). This still leaves a larger portion of the eligible voting population in the U.S. whose voices have not been accounted for in recent presidential elections. Congressional and midterm elections have, in recent years, reported much lower voter turnouts than presidential elections, with only about 30-50 percent of each district's eligible voting population participating in the 2018 Congressional elections (U.S. Census Bureau, 2022). Studies have repeatedly found that demographic disparities in political participation exist between communities, with marginalized groups showing overall less participation. Women tend to be less politically active than men (Burns et al., 2001), people of color report lower voter turnout than white people (Fisher, 2014; Schlozman et al., 2018), and members of lower socioeconomic classes are often more disconnected from politics than wealthier citizens (Schlozman et al., 2018). These group differences have frequently been attributed to systemic factors such as stratified differences in civic education, unequal opportunities for participation (i.e. uneven distribution of polling places, lack of access to news media), and overall exclusion of minorities from politics (Burns et al., 2001; Fisher, 2014; Schlozman et al., 2018), as well as the three tenants of the Civic Voluntarism model presented by Verba et al. (1995) which will be discussed later.

It is of great concern to political scholars that such as large fraction of U.S. citizens remain absent from elections and everyday civic engagement, as the participation of all citizens

in political processes is one of the key tenets of democracy (Dworkin, 2006; Levine, 2007; Schlozman et al., 2018). One of the hallmarks of democracy is that all citizens' concerns are given equal consideration in the decision-making process (Schlozman et al., 2018). When individuals or groups do not participate in politics, they are not able to have their voices heard or their interests represented within a society. Many authors propose actions that should be taken to increase political participation across all groups, including improving civic education in public schools, expanding access to political organizations within communities, and increasing representation of minority groups in visible politics (Kiesa, 2007; Levine, 2007, Verba et al., 1995).

Age & Political Participation

Not only have concerningly low levels of political participation been observed among the American population in recent decades, but political researchers have found a correlation between age and political participation. Specifically, younger populations (i.e. 18-25 year olds and college students) have been found to be the least politically active age group (Fisher, 2014; Kaid et al., 2007; Kim & Khang, 2014; Levine, 2007). Since 1980, citizens under the age of 25 have voted at rates ranging from 30-45 percent– which is overwhelmingly low compared to those 45 and older, who have consistently voted at rates in the 60-70 percent range (Fisher, 2014). This generational gap in voter turnout has been observed in recent elections. For example, during the 2012 presidential election, polls measured voter turnout among 18-25 year olds at its lowest point since 18 year olds were granted the right to vote in 1972 (Kim & Khang, 2014; Wirth, 2012). In the past two presidential elections in 2016 and 2020, youth voter turnout has increased from 2012, but still remains significantly lower than all other age groups. In 2016, 18-29 year olds voted at a rate of 39 percent, which is very low compared to the overall voter

turnout of 61 percent (US Census Bureau, 2022). The 2020 election reported a significantly increased voter turnout of approximately 50 percent from 18-29 year olds, yet this still only accounted for 16.5 percent of the total votes and was the lowest of all age categories (US Census Bureau, 2022). In the 2022 midterm election, it was estimated that only about 27 percent of voters between the ages of 18-29 cast a ballot (Lopez, 2022).

Young adults' lack of involvement in politics is not only a recent phenomenon, but it is a trend that has been observed throughout the past several decades. In 1993, the Charles F. Kettering Foundation published a study on the political attitudes and involvement of college students from ten different campuses across the United States (Creighton & Harwood, 1993; Kiesa, 2007). The researchers interviewed students to assess their knowledge and attitudes toward American politics, as well as their involvement in politics within their universities. Findings ultimately showed that college students considered politics "irrelevant" to their lives, and were, as a whole, withdrawn from political activities (Creighton & Harwood, 1993).

A decade and a half later, Kiesa et al. (2007) revisited the findings of Creighton & Harwood (1993) and investigated whether or not college students were still as politically withdrawn as the previous generation. Researchers interviewed 368 student participants from 12 different four-year colleges and universities across the United States (Kiesa, 2007). Students were placed in focus groups in which they discussed political issues that concerned them, and their overall commitment to civic engagement. Upon analyzing the results, Kiesa (2007) found that Millennials were more politically engaged than Generation X was. The sample, as a whole, displayed greater knowledge of and concern for political matters, and were more likely to be involved in political activities within their colleges. The study also found that, in general, college students of this generation tended to be much more involved in local political affairs than

those of previous generations, but remained ambivalent when it came to formal politics (Kiesa, 2007). To support and provide potential explanation for these findings, Kiesa (2007) gathered through the series of interviews that colleges and universities provided unequal opportunities for political learning and civic participation. Students at universities with greater opportunities for civic learning and involvement in political activities demonstrated greater efficacy and engagement in politics, while students at universities that lacked these opportunities tended to remain indifferent to political matters. This accounts for the overall ambivalence regarding formal politics and the stratification of college students' political engagement that Kiesa (2007) observed.

However, in contradiction with Kiesa's (2007) finding that Millennials were more politically engaged than Generation X was as young adults, Levine (2007) noted a one-third decline in turnout by voters age 18-25 over the timespan of 1972-2000. There was no decline, however, in voter turnout by citizens over the age of 25. Levine (2007) also observed a decline in political news consumption during the same time period, suggesting that young people are consistently less interested in news media than older generations. Similarly, the number of young adults involved in protests and political organizing groups had also declined since 1972 (Levine, 2007). Levine's (2007) findings suggest that overall political participation by 18-25 year old citizens may actually have declined over a similar time period as studied by Kiesa (2007). Levine (2007) also shows that not only do young adults demonstrate lower voter turnout rates than older generations, but the age gap tends to present itself in other forms of political participation, as well.

Today, the comparatively low levels of adolescent political participation identified by the U.S. Census Bureau and various researchers demonstrate that the implications of these

phenomenons still hold true in current society. The overall indifference toward politics that was observed by Creighton & Harwood (1993) may still account for the low levels of political participation by young citizens identified in recent years (Fisher, 2014; Lopez, 2022; US Census Bureau, 2022). Specifically, it can be inferred that young adults today may often refrain from civic engagement because they do not consider politics to be relevant to their own lives (Creighton & Harwood, 1993). Another potential explanation for low political participation among this age group today may be because they still do not have the educational opportunities to gain civic skills necessary for political engagement (Kiesa, 2007).

Why is young adults' political participation important?

The continuous issue of low levels of political engagement by younger generations compared to those of their elders is one that is of particular concern to political scholars and advocates of democracy. In "The Future of Democracy: Developing the Next Generation of American Citizens," Levine (2007) discusses why and how we should prepare young people to be active and responsible citizens. As highlighted previously, a strong, just, and robust democracy requires the committed participation of its citizens (Dworkin, 2006; Levine, 2007). Civic skills and habits are much easier to learn at a younger age, and those who start participating in politics when they are young are more likely to continue doing so as they grow older (Levine, 2007). Therefore, it is essential that young adults become actively involved in political life, as they constitute the future generation of voters and political activists, and are thus necessary for maintaining a just and legitimate democracy.

Not only is it essential that good civic habits are established at young ages, but it is important and impactful for younger voters to have their voices heard in politics. Levine (2007) and Fisher (2014) both presented evidence that young people, as a category, tend to have

interests that conflict with those of older generations. For example, younger age groups tend to vote more Democratic, while older populations are more likely to vote for Republican candidates (Fisher, 2014). Age groups' overall policy preferences often differ on matters of immigration policy, economics, LGBTQ+ rights, and abortion, with younger generations tending to support more liberal policies (Fisher, 2014). It is very important for these younger generations to organize politically and have their arguments heard within the political sphere, as older generations are already doing so at higher rates. Young adults deserve to have equal influence on the political decisions that affect their everyday lives, yet evidence has shown that they are continually neglecting to do so with the same frequency and robustness as their older counterparts (Fisher, 2014; US Census Bureau, 2022).

Moreover, civic engagement has been proven to have psychological and developmental benefits for adolescents and young adults (Levine, 2007; Davila & Mora, 2007). Studies have found that being involved in political groups/clubs and community organizing enhances college students' physical and psychological wellbeing (Levine, 2007). Furthermore, individuals who are involved in these activities are less likely to drop out of school, use illegal drugs, engage in violence, or have unprotected sex than those who are not politically involved (Levine, 2007). A study conducted by Davila and Mora (2007) even found that individuals who have experiences with community service, student government, and other voluntary forms of civic engagement at a young age are more likely to attend and complete college. These findings were observed even when background factors such as race and social class were controlled for. Political activism by young citizens is not only crucial to society, but is highly beneficial to their own well-being.

As outlined by Levine (2007), adolescents, college students, and young adult populations generally live within spheres of society that are, to a degree, autonomous. The behavior and

actions of these individuals– including political behavior– is highly consequential for both themselves and their peers (Levine, 2007). With all things considered, it can ultimately be said that participation in political activities– including voting, consumption of news media, and political organizing– is necessary from all age groups, including 18-25 year olds, in order to maintain a just and robust democracy that is reflective of all of its citizens' interests.

Why might some citizens refrain from politics?

Previous political scholars have examined some of the factors that may lead to low levels of political participation among different communities. Some recent research has focused specifically on college students and younger populations. One study, conducted by Kim and Khang (2014), uses the civic voluntarism model first introduced by Verba et al. (1995) to investigate three predictors of college students' online and offline political participation. College students make up 60 percent of the 18-29 year old eligible voters in the United States (Kim & Khang, 2014). Kim and Khang (2014) argue that there are three main factors that influence college students' participation in political activities: resources, psychological engagement, and recruitment.

Resources

Scholars highlight resources as one of the civic voluntarism factors that determines political participation. Resources may include money, time, education, and civic skills, and are often directly related to conditions such as gender, race, and socioeconomic status (Verba et al., 1995). Research suggests that individuals who have greater access to these resources are more able and likely to participate in political activities. Upon surveying a broad sample of undergraduate students, Kim and Khang (2014) have identified a positive relationship between access to resources (i.e. household income, access to technology) and political engagement via

social media among young citizens, with social media usage serving as a mediator for offline political participation.

Psychological Engagement

Psychological Engagement has been highlighted by scholars as another factor that impacts individuals, specifically younger populations' willingness to participate in political processes. Verba et al. (1995) has suggested that a cognitive interest in politics tends to motivate people to actively participate in political activities. Furthermore, political participation relies on individuals' own "voluntariness" or motivation to participate, and many individuals fail to participate in political activities simply because they have no desire to, or have no strong affiliation with a party (Verba et al., 1995; Zaller, 1992). Political efficacy– the feeling that one's own political participation is valuable and makes a difference– has also been highlighted as a key component of psychological engagement (Verba et al., 1995). To test Verba et al.'s (1995) claims on younger adults, Kim and Khang (2014) used a web-based survey to measure 319 undergraduate students' political interest, efficacy, and trust, as well as their political participation on Facebook and Twitter. They found that students who demonstrated higher levels of psychological engagement had overall higher rates of participation via these social media platforms (Kim and Khang, 2014).

Recruitment

Scholars have additionally highlighted recruitment as one of the main determinants of individuals' involvement in political activities. Recruitment occurs when one is encouraged by others within their community to participate in political activities (Verba et al., 1995). It typically occurs in environments that cultivate strong social networks, such as churches, workplaces, and organizations. Verba et al. (1995) suggests that one reason that some

individuals may refrain from participating in politics or contributing their political voices is simply because they are not asked. Kim and Khang (2014) also surveyed the degrees to which students were recruited by others within their communities to take active roles in political activities, such as making campaign contributions or taking part in demonstrations. Kim and Khang (2014) observed a positive correlation between recruitment and social media-based political participation in the sample of college students.

Verba et al. (1995) ultimately assesses that all three factors of the civic voluntarism model– resources, psychological engagement, and recruitment– serve in combination as predictors of political participation, and Kim and Khang's (2014) research on college students reiterates these findings in the context of political participation via social media. Kim and Khang (2014) also found political participation among college students to be a predictor of other, offline forms of political participation. With that being said, implications of Kim and Khang's (2014) research suggest that low levels of recruitment, psychological engagement, and resources may, in part, account for the low levels of involvement in a wide range of political activities by college-aged populations that has been observed over recent decades.

Health Factors

A few past scholars have also studied the relationship between health and political participation, examining some of the physical and mental health factors that may be related to individuals' political attitudes and behavior. Burden et al. (2016) analyzed a data set that included objective measures of cognitive and physical well-being as well as measures of political participation. Drawing off of existing evidence that health influences individuals' participation in other major institutions such as school and work (Fletcher, 2008; Haas & Fosse, 2008; Pelkowski & Berger, 2004), Burden et al. (2016) aimed to fill gaps in Verba et al.'s (1995)

assessment that psychological engagement is a predictor of political participation by designing a longitudinal model that tested the effects of health on political involvement in adults aged 40-104. Three different objective measures of health– physical functioning, cognitive functioning, and overall well-being – were obtained using data from the Wisconsin Longitudinal Survey (WLS), a long-term survey of older individuals who have been interviewed at several points throughout their lives (Burden et al., 2016). The study focused on two different forms of political participation: voting and donating to campaigns and parties. Upon analyzing objective and self-reported data obtained from surveys, Burden et al. (2016) found that physical, cognitive, and overall health each had a powerful effect on electoral participation. This observed effect was similar in magnitude to previously studied predictors of participation, such as education, discussed by Levine (2007). Contrarily, cognitive functioning was found to have a much less significant effect on campaign contributions, with physical health having little to no effect on individuals' tendencies to donate to political campaigns and parties (Burden et al., 2016). These findings are of great importance in answering the question of which factors determine political participation, as they prove that both mental and physical health can affect voting behavior. Therefore, previously discussed rates of voter turnout (Fisher, 2014; Schlozman et al.; US Census Bureau, 2022) may be attributed, in part, to health factors.

Further research has continued to test the relationship between mental health/cognitive functioning and political participation identified by Burden et al. (2016). The scholarly conversation has shifted toward specific mental health conditions, and how their symptoms may influence political attitudes and behavior. A study conducted by Ursy (2019) analyzed the "political consequences of combat" (Ursy, 2019), using an interview method to gauge the political attitudes of 1,637 Vietnam theater veterans and draw conclusions regarding the effects

of Post-Traumatic Stress Disorder (PTSD) on political behavior. This population was of particular interest as veterans exposed to combat trauma have demonstrated low political participation in comparison to others within the same age, race, and socioeconomic groups (Ursy, 2019; Teigen, 2006). During the study, Vietnam theater veterans were interviewed to assess their exposure to combat and experience of post-traumatic stress symptoms, as well as their political efficacy (Ursy, 2019) – which is defined as one's trust in government, or feeling that their participation can make a difference (Verba et al., 1995). Exposure to combat was measured on three indices– the Combat Danger index, the Combat Trauma index, and being awarded a Purple Heart medal for injuries sustained in combat. PTSD symptoms were assessed using the M-PTSD Scale, a 35-item diagnostic tool commonly used by mental health professionals (Ursy, 2019). Veterans were then asked seven questions related to their personal perceptions of government and politics, and scored on an index of political efficacy ranging from 7-35. Results of the study indicated that veterans who were exposed to severe trauma during combat or who exhibited symptoms of PTSD had significantly lower levels of political efficacy and trust, and tended to be more alienated from politics (Ursy, 2019). Previous scholars have consistently observed a strong positive correlation between political efficacy and political participation (Kim & Khang, 2014; Verba et al., 1995; Weinschenk et al., 2021). Thus, Ursy's (2019) findings hold strong implications for the voting behavior of veterans who have been exposed to combat trauma, suggesting that PTSD symptoms may explain in part why this population is less likely to vote.

Mental Health in Young Adults

Scholars such as Burden et al. (2016) and Ursy (2019) demonstrate a relationship between mental health and political participation, with Ursy (2019) focusing specifically on how

PTSD is negatively associated with the political efficacy of Vietnam veterans, suggesting that this disorder may be a predictor of low electoral participation. However, very limited research has been done on how mental health conditions or symptoms may affect the political attitudes and behavior of young adults– another population which has been consistently observed to also have lower rates of political participation (Fisher, 2014; Kim & Khang, 2014; US Census Bureau, 2022). This is surprising considering that many of the symptoms associated with Post-Traumatic Stress Disorder– such as withdrawal from social activities and excessive fear or worry– coincide with symptoms of anxiety, depression and other conditions that are more commonly found in younger populations (American Psychological Association, n.d.; Fried & Nesse, 2015).

Evidence suggests that certain mental health disorders– or symptoms of these conditions– can be especially prevalent among young adult populations. Causes have been linked to stress– often coming from colleges or other educational institutions, work, family life, and social factors– and these symptoms have been proven to affect individuals' engagement with these institutions (Bamber & Schneider, 2016). This research focuses on two of the most common DSM-5 diagnoses: Generalized Anxiety Disorder and Major Depressive Disorder.

Anxiety

Generalized Anxiety Disorder, often known in common language as anxiety, refers to recurring feelings of tension, worry, and fear, typically accompanied by physical symptoms (American Psychological Association, n.d.). Common symptoms of anxiety include sweating, dizziness, rapid heartbeat, fatigue, feelings of restlessness, headaches and muscle pains, irritability, sleep disturbances, and excessive fear or worry. These symptoms, regardless of whether one has been clinically diagnosed with an anxiety disorder, have been found to affect

individuals' school performance, work performance, and social relationships. Evidence has repeatedly suggested that individuals with anxiety disorders or who display several symptoms of anxiety tend to avoid certain social and professional situations out of fear, and are hindered by their symptoms in their abilities to accomplish daily tasks (American Psychological Association, n.d.).

Recent studies in psychology have found that anxiety disproportionately affects young adults, college students, and adolescent populations. A survey administered to a vast sample of college students in 2016 reported that 56.9 percent of students had experienced "overwhelming anxiety" in the previous twelve months, with 21.9% reporting that anxiety had negatively impacted their academic performance (Bamber & Schneider, 2016). Evidence has shown that college students who display symptoms of anxiety tend to have affected levels of academic performance. While mild levels of anxiety can increase productivity and intellectual functioning, high levels of anxiety are strongly associated with poor time management skills, poor performance on tests, and thus increased risk of academic failure (Bamber & Schneider, 2016). Additionally, symptoms of anxiety have been found to reduce college students' likelihood to participate in school events, clubs, or extracurricular activities (Bamber & Schneider, 2016). Anxiety in college students and young populations is a topic of growing concern to psychologists due to the negative effects that its symptoms have been shown to have on individuals' functioning and performance.

Depression

Major Depressive Disorder, or better known as depression, is a mental illness that affects the way one feels, thinks, and acts, and is typically characterized by feelings of sadness or loss of interest in activities one once enjoyed (American Psychiatric Association, n.d.). It is one of the

most common psychiatric disorders in the U.S., with an estimated lifetime prevalence of 16.2 percent (Fried & Nesse, 2015). Symptoms of depression, as listed in the DSM-5, may include a sad or depressed mood, loss of interest or pleasure in daily activities, disturbances to sleep and appetite, fatigue, concentration difficulty, feelings of worthlessness, and suicidal thoughts or ideation (Fried & Nesse, 2015). An individual must exhibit at least five symptoms in order to qualify for a diagnosis (Fried & Nesse, 2015). Regardless of whether a diagnosis is present, portrayal of these symptoms often negatively impacts individuals' school and work performance, family life, peer relationships, and overall personal achievement (American Psychiatric Association, n.d.).

Much like anxiety, depression and depressive symptoms tend to disproportionately affect younger populations, including high school and college students. Guo et al. (2020) estimate that the prevalence of depression among high school and university students is around 40 percent– a much higher prevalence than the general population. Research conducted by Fletcher (2008) has found that adolescents who exhibit symptoms of depression experience greater hindrances to educational attainment, including poorer performance on tests and assignments, behavioral disruptions at school, and greater difficulty forming peer relationships. Additionally, evidence suggests that students who experience stronger depressive symptoms are significantly more likely to drop out of high school and less likely to attend college (Fletcher, 2008). Similar effects have been observed in college students. Depression-related symptoms in college students have been found to be associated with low academic achievement, lack of involvement in extracurricular activities, and withdrawal from social relationships (Guo et al., 2020). Both Fletcher's (2008) and Guo et al.'s (2020) findings are concerning, as educational performance has strong implications for one's outcomes later in life, including their work performance,

socioeconomic status, and family life (Fletcher, 2008). Early onset depression– depression manifesting prior to the age of 21– has been an area of particular concern to psychologists, as adolescents tend to experience more severe symptoms, higher rates of recurrence later in life, and higher rates of comorbid disorders, especially anxiety and substance abuse disorders (Fletcher, 2008).

The Current Study

Past research covers many of the factors that can lead to low political participation in the United States. The Civic Voluntarism model presented by Verba et al. (1995) highlights resources, recruitment, and psychological engagement as strong predictors of political participation. Systemic factors such as education, wealth, and access to information– all falling under the resources component of Verba et al.'s (1995) Civic Voluntarism model– have also been proven to impact the rates at which citizens engage in political activities. However, Verba et al.'s (1995) treatment of participation ignores the consideration that health factors may influence the role of resources, recruitment, and psychological engagement in predicting political behavior. Burden et al. (2016) picks up where Verba et al. (1995) left off, discussing both the physical and psychological health factors that can influence individuals' engagement in politics and proving that health is directly related to voting behavior. Ursy (2019) builds off of Burden et al.'s (2016) research to find that symptoms specifically related to PTSD are strongly associated with political alienation in veterans.

Burden et al. (2016) and Ursy (2019) studies both focus on older adults, suggesting mental health as a predictor of political participation in these populations. There are no modern studies that focus specifically on the relationship between young adults' mental health and political participation rates. Kim & Khang (2014) use Verba et al.'s Civic Voluntarism model to

show that psychological engagement can influence college students' political involvement, but do not discuss any of the mental health factors that may contribute to this. This is surprising and rather concerning, as 18-25 year olds have been found to be the least politically active age group (Fisher, 2014; Kim & Khang, 2014; Levine, 2007). There is also limited research specifically on how symptoms of anxiety and depression, which are frequently observed in this age group, may be associated with participation in politics. Many of the symptoms commonly associated with both anxiety (American Psychological Association, n.d.) and depression (Fried & Nesse, 2015) overlap with PTSD symptoms, which are proven predictors of efficacy and participation (Ursy, 2019). Considering previous findings, it would make sense that anxiety and depression would be negatively correlated with political participation, as mental health has been shown to affect both electoral participation (Burden et al., 2016) and political efficacy (Ursy, 2019) – which is a predictor for participation across multiple forms (Kim & Khang, 2014; Verba et al., 1995). Furthermore, since young adults' participation is typically low compared to other age groups (Fisher, 2014), and their anxiety and depression levels are comparatively high (Bamber & Schneider, 2016; Guo et al., 2020), we would expect this correlation to be particularly true in younger adults. Because anxiety and depression have been proven to affect young adults' involvement in several other social institutions (Bamber & Schneider, 2016; Fletcher, 2008; Guo et al., 2020), we can predict that these symptoms may have the same effect on political participation.

It is somewhat surprising that this question has not previously been studied, given that political participation is a key tenet of democracy and is a topic of growing interest and concern for political scientists. Since political participation– especially by younger citizens– is vital to the survival of democracy, it is important to examine the relationship between young adults'

political participation and other factors such as mental health. The current study builds off of scholars such as Kim and Khang's (2014), Burden et al.'s (2016), and Ursy's (2019) findings on political participation, using a survey method to determine if a correlation exists between self-reported symptoms of anxiety and depression and political participation among 18-25 year old US citizens. We used the Beck Anxiety Inventory (Julian, 2011) and Beck Depression Inventory (Smarr & Keefer, 2011) to measure 34 young adults' levels of anxiety and depression. Political participation was assessed using a survey with four different categories pertaining to different forms of participation.

Hypotheses

Based on the previous findings as stated above, it was hypothesized that high levels of anxiety among 18-25 year old citizens would be negatively correlated with these individuals' political participation. It was predicted that a relationship would be observed between anxiety and political participation in each of the four categories surveyed, and that the relationship between anxiety and total political participation score would be overall negative. Likewise, it was hypothesized that high levels of depression would be negatively correlated with political participation scores, and that the relationship between depression and political participation in each of the four categories, as well as overall score, would be negative. It was also hypothesized that individuals with high levels of both anxiety and depression (combined BAI + BDI-II score) would report the lowest political participation scores (strongest negative correlation would be between BAI + BDI-II scores and political participation).

Method

Participants

Thirty-seven participants between the ages of 18-25 [$M = 22.35$, $SD = 2.01$] were recruited using Prolific. Of the participants, 48.65% were male, 48.65% female, and 2.7% identified as "other"; 67.57% of the participants were white, 10.81% were black, 10.81% were Asian, and 10.81% belonged to another race. Three individuals were excluded from the study, as one participant listed their age as over 25, one participant was not a U.S. citizen, and another participants failed to complete all of the measures to a point where meaningful data could be collected from their result. A total of $N = 34$ participants were included in the analysis of the results. The identities of all participants were kept anonymous. Each participant who completed the study was rewarded with $1.50 via Prolific.

Design

This study used a correlational research design. The independent variables in this study were levels of anxiety, which were measured using the Beck Anxiety Inventory (Julian, 2011), and levels of depression, which were measured by the Beck Depression Inventory (Smarr & Keefer, 2011). The dependent variable was political participation, which was assessed using a survey that scored participants based on their responses to questions in four categories. Confounding variables including gender, race, ethnicity, immigration status, level of education, sexual orientation, political affiliation, employment status, and physical disability were controlled for.

Materials/Measures

Demographic Questionnaire

All participants were asked to fill out a demographic questionnaire (Appendix E) online via Prolific prior to taking part in the study. The demographic questionnaire included a series of questions that disclosed information about the participants' age, gender, race, employment status,

immigration status, level of education, sexual orientation, and physical condition, all of which would later be controlled for when analyzing the results.

Anxiety

Participants' Anxiety levels were measured using the Beck Anxiety Inventory (Appendix B) [$\alpha = 0.95$, $M = 36.29$, $SD = 11.87$]. The Beck Anxiety Inventory is a self-reporting measure of anxiety that focuses on somatic symptoms, such as dizziness and inability to relax (Julian, 2011). This measure has traditionally been used by clinical psychologists to diagnose patients, but was not used diagnostically in this study– the purpose of using this tool was only to measure the extent to which participants "felt anxious" or experienced symptoms commonly associated with anxiety disorders. The BAI includes a total of 21 items, each of which are scored on a 4-point Likert scale to indicate how much the participant has been bothered by each symptom during the past week (0 = not at all; 3 = severely) (Julian, 2011). Total scores range from 0-63, and can be grouped into four categories: 0-9 = normal or no anxiety, 10-18 = mild to moderate anxiety, 19-29 = moderate to severe anxiety, 30-63 = severe anxiety. The BAI typically takes participants 5-10 minutes to complete (Julian, 2011).

Depression

Participants' depression levels were measured using the Beck Depression Inventory (BDI-II) (Appendix C) [$\alpha = 0.93$. $M = 40.29$, $SD = 13.40$]. The Beck Depression Inventory is a self-reporting measure that assesses symptoms and severity of depression in correspondence with DSM-IV criteria (Smarr & Keefer, 2011). This measure is also frequently used by clinicians to diagnose patients with Major Depressive Disorder, but has been used non diagnostically for the purpose of this study. The BDI-II contains a total of 21 items, and includes items that measure cognitive, affective, somatic, and vegetative symptoms of depression (Smarr & Keefer, 2011).

Each item is scored on a 4-point Likert scale which indicates the degree of severity of each symptom (0 = not at all; 3 = extreme form of symptom). Total scores may range from 0-63, and can be grouped into four diagnostic categories: 0-13 = normal or minimal depression, 14-19 = mild depression, 20-28 = moderate depression, 29-63 = severe depression. The BDI-II takes approximately 5-10 minutes to complete (Smarr & Keefer, 2011).

Political Participation

Participants' political participation was assessed using the Political Participation Survey (Appendix D), which measured individuals' involvement in various forms of political activity and assigned them a score from 30 to 158, with higher scores indicating higher levels of participation [$\alpha = 0.94$, $M = 61.85$, $SD = 21.05$]. The Political Participation Survey was divided into four categories: Participation in Elections [$M = 4.53$, $SD = 2.79$], Engagement with News Media [$M = 22.82$, $SD = 7.94$], Social Media [$M = 18.09$, $SD = 8.54$], and Political Activism [$M = 16.41$, $SD = 5.34$]. Each section included up to ten items in which participants ranked the degree to which they agreed or disagreed with statements regarding various activities, and answered questions disclosing how often they participate in various activities.

Participation in Elections. Questions in this section assessed how frequently participants participate, or intend to participate, in elections at local, state, and national levels. The eight items asked questions about whether or not participants were registered to vote and knew where and how to do so, have participated in past elections, and planned to participate in future elections. Answer choices were as follows: YES, NO, or N/A (meaning they were not eligible to participate), with "YES" answers each receiving one point when calculating participants' score out of eight on this section.

Engagement with News Media. Items in the section measured how frequently participants engage with various forms of news media. Participants were prompted with statements such as "I read news articles about current events," "I watch political debates on television," and "I see current candidates' political ads while watching television." Participants were told to rank each of the ten items on a scale of 1-5 based on how often they complete the activity (1 = almost never, 5 = daily or almost daily). Possible scores on this section could range from 10-50, with higher scores indicating greater engagement with news media.

Social Media. Items in the section measured how frequently participants engage in political activity via social media sites such as Twitter, Instagram, or Facebook. Participants were prompted with statements such as "I follow political candidates on Instagram/Twitter," "I share, retweet, or forward posts made by politicians" and "I post/tweet my own political opinions on my social media." Participants were told to rank each of the ten items on a scale of 1-5 based on how often they complete the activity (1 = almost never, 5 = daily or almost daily). Possible scores on this section could range from 10-50, with higher scores indicating higher levels of social media involvement in politics.

Political Activism. Questions in this section assessed participants' participation in various in-person forms of political activism, such as attending protests or demonstrations, speaking publicly about candidates or parties, and encouraging or helping others register to vote. Participants were told to rank each of the ten items on a scale of 1-5 based on how often they complete the activity (1 = almost never, 5 = daily or almost daily). Likewise, possible scores on this section ranged from 10-50, with higher scores indicating higher levels of political activism.

Attention Checks

Attention checks (Appendix F) were implemented throughout the study in order to ensure that participants were reading and answering the questions carefully and truthfully. Attention checks included items such as, "Answer 'C' for the question" or "Type the word 'Green' in the textbox." If a participant failed more than two attention checks, their results were to be eliminated from the study. All $N = 34$ participants answered all of the attention checks correctly.

Procedure

Each participant accessed the study voluntarily via Prolific. Exclusionary criteria were applied to ensure that each participant was over the age of 18, under the age of 25, a U.S. citizen, and currently residing in the United States. Participants were informed prior to beginning the survey that their participation was voluntary and could be discontinued at any point during the study, as well as that their responses would be kept anonymous. Each participant was presented with an informed consent form (Appendix A) and given the option to continue the study. Participants who chose to continue were then taken to the demographic questionnaire portion of the survey.

Each participant spent approximately 5 minutes answering a series of questions to provide basic demographic information. Information about the participant's race and ethnicity, gender identity, sexual orientation, immigration and employment status, political affiliation, and physical and mental health status were disclosed. Participants were permitted to decline to answer any question throughout the demographic questionnaire. At the end of the questionnaire, participants clicked the "continue" button in order to proceed to the mental health assessment portion of the study.

Participants then completed either the Beck Anxiety Inventory (BAI) or the Beck Depression Inventory (BDI-II). The order in which these two items were completed was

counterbalanced, but all participants were instructed to complete both measures. During the completion of the BAI, participants spent 5-10 minutes answering 21 questions in which they ranked somatic symptoms of anxiety on a 4-point Likert scale. At the end of the measure, participants were assigned a score of 0-63 based on their responses, with higher scores indicating greater levels of anxiety symptoms. During the administration of the BDI-II, participants spent 5-10 minutes answering 21 questions in which they ranked common symptoms of depression on a 4-point Likert scale based on severity. Participants were assigned a depression score of 0-63 based on their responses, with high scores indicating greater symptoms of depression.

Once both the BAI and BDI-II had been administered, participants were taken to the political participation survey. Each participant was shown a screen with a text box stating the following: "You will now be asked a series of questions regarding your participation and engagement in various political activities. Please respond to each statement in the way that best describes you." After reading this statement, participants clicked "continue" and were then directed to the survey. During the political participation survey, participants completed four categories of questions, each section taking approximately 3-5 minutes to complete and including an attention check question at the end of the ten survey items. At the end of each section, participants clicked a "continue" button to be taken to the next section of the survey. Once participants had reached the end of the political participation survey, they were presented with the debrief form (Appendix G) and thanked for their participation. Participants were granted their compensation from Prolific given that they had answered at least half of the survey questions and failed no more than two attention checks.

Results

A Pearson Correlation Analysis was used to determine the relationship between anxiety and political participation, as well as the relationship between depression and political participation. As shown in Table 1, the analysis described found no significant correlation ($p < .05$) between BAI Score and political participation across any of the four categories, nor did it find significant correlation ($p < .05$) between BDI-II Score and political participation. Likewise, statistical analysis of the data found no significant correlation ($p < .05$) between participants' combined BAI and BDI-II scores and political participation in any of the four categories or their total scores on the Political Participation Survey.

Table 1: Correlation between studied variables

	BAI Score	BDI-II Score	BAI + BDI-II	Electoral Participation	Engagement with News Media	Social Media Engagement	Political Activism	Total Political Participation Score
BAI Score	1							
BDI-II Score	0.764***	1						
BAI + BDI-II	0.937***	0.941***	1					
Electoral Participation	0.067	0.183	0.134	1				
Engagement with News Media	0.106	0.163	0.144	0.502*	1			
Social Media Engagement	0.253	0.342	0.318	0.326	0.632***	1		
Political Activism	0.134	0.270	0.216	0.429*	0.660***	0.615**	1	
Total Political Participation Score	0.192	0.300	0.263	0.563**	0.892***	0.871***	0.826***	1

Note: Variables of interest highlighted in yellow.
* $p < .05$
** $p < .01$
*** $p < .001$

Discussion

As outlined above, no significant correlation was found between participants' scores on either of the mental health measures and the Political Participation Survey. This does not support the hypotheses that anxiety and depression would both be negatively correlated with political participation in young adults. None of the previously discussed hypotheses were supported by the findings of this study.

Although significant correlation between the independent and dependent variables was not observed, findings were consistent with past research on anxiety and depression in young adults. Bamber and Schneider (2016) reported that over half of college students (who typically fall within the 18-25 year age range) experience high levels of anxiety in their daily lives. The 18-25 year olds surveyed in this study reported an average score of approximately 36 on the BAI. A score of 36 falls within the measure's range for one's symptoms to be considered "severe anxiety" (Julian, 2011). Likewise, Guo et al. (2020) estimate that around 40 percent of students experience depression. Participants in this sample reported an average score of approximately 40 on the BDI-II, a score which meets the criteria for "severe depression" provided by the measure (Smarr & Keefer, 2011). These averages were surprising even given past findings that suggest anxiety and depression levels to be relatively high in this age group– it can be said that the reported means on each measure were even higher than the previous data suggests. This may, in part, be related to the fact that the Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI-II) are outdated measures. Neither of these scales have been revised since the 1990s (Julian, 2001; Smart & Keefer, 2011), and what is considered a "normal" level of anxiety or depression may have changed in more recent years. However, both of these

measures are still used by psychologists in the present day, so it can be assumed that they are indeed still reliable measures of individuals' anxiety and depression symptoms.

On the Political Participation Survey, participants reported an average score of approximately 62. Participants' responses to the survey demonstrated a rather wide range of political activity within the sample, with some participants reporting very high levels of political involvement, while others demonstrating an almost total lack of participation in political matters. The average of 62 demonstrates a somewhat low level of participation across all categories. This may support past findings by researchers such as Fisher (2014) and Levine (2007) that young adults in this age group possess a tendency to abstain from civic engagement, however, it is illogical to draw conclusions about a large population's behavior from such a small sample. Moreover, previous research has continually suggested that 18-25 year olds display low rates of political participation *in comparison* to other age groups– therefore, it is impossible to determine whether findings about this sample's political engagement are consistent with Fisher's (2014) findings without using a between-groups research design to compare 18-25 year olds with an older age group. In addition, although significant correlations between variables of interest were not found, scores in all of the four categories of the Political Participation Survey were found to be positively associated with one another ($p < .05$) (Table 1). This tells us that individuals who are heavily involved in one area of political engagement (such as social media engagement) tend to also be involved in others– a finding not mentioned in the hypotheses but nonetheless worth noting.

Several possible explanations exist as to why no significant correlation was found between mental health and political participation in this sample of 18-25 year olds, the most plausible explanation being that the sample size ($N = 34$) was too small. Due to both financial

and time limitations on this study, we were unable to collect a greater number of participants. However, a larger sample size would be needed to observe meaningful correlation between variables. Therefore, repeating this study with a larger sample size may be beneficial.

Other possible explanations for the lack of significant correlation between the measured variables may include a lack of credibility in the participants' responses. In a study of this nature, it is very challenging to ensure that participants are reading and answering survey questions carefully and honestly. However, attention checks were implemented throughout the survey in an attempt to minimize this effect. All 34 participants answered all of the attention check questions correctly, so it is safe to assume that response bias was not a major issue, and thus the lack of correlation can more likely be attributed to the sample size.

Although hypotheses suggesting correlation between anxiety, depression, and political participation were not supported by the data, the issue of low political engagement among 18-25 year old adults that has been heavily discussed by political scholars still prevails in modern society (Fisher, 2014; Kim & Khang, 2014; Levine, 2007; US Census Bureau, 2022). While previous scholars highlight resources, psychological engagement, and recruitment (Kim & Khang, 2014; Verba et al., 1995) as well as health factors that mediate these aspects (Burden et al., 2016) all as factors that contribute to low level of political involvement, the question of depression and anxiety symptoms' role in young adults' civic engagement still remains. The field of political psychology will need to do more research to address why young adults frequently remain disengaged in civic life, and will hopefully continue to look for a relationship between anxiety symptoms, depression symptoms, and political participation.

The data collected by this survey also calls attention to the prevailing issue of high anxiety and depression levels among this particular age group, with participants' scores bringing

a sense of urgency to address these issues. As stated previously, surprisingly high levels of anxiety [$M = 36.29$, $SD = 11.87$] and depression [$M = 40.29$, $SD = 13.40$] were reported from the sample. Although the purpose of administering the BAI and BDI-II during the study was not to diagnose individuals with anxiety or depression, but rather to assess the extent to which participants experienced symptoms of common mental health disorders, the fact that the average score on each measure fell within the diagnostic range for "severe" anxiety and depression is still a concern due to the effects that these symptoms have been shown to have on everyday life. As studied by psychologists, both anxiety and depression can negatively impact individuals' academic performance, professional success, and relationships with others (Bamber & Schneider, 2016; Fletcher, 2008; Guo et al., 2020). Despite the fact that the BAI and BDI-II measures are somewhat outdated, this sample's overall high scores on these scales inform us that anxiety and depression are growing problems in today's society, and action should be taken to address and treat these concerns.

Further Considerations

Although this specific research did not support hypotheses about the relationship between mental health and political participation, this type of relationship may still exist. The question of whether or not symptoms of mental health conditions such as anxiety and depression play a role in any or all forms of political participation still remains open. If this relationship were to be tested again in the future, a larger sample size ($N \geq 100$) should be used in order to obtain a dataset from which trends can be more clearly observed. Adjusting the length of the survey may also be worth considering in order to reduce response bias. This study employs questions in four different categories of political participation, whereas many previous studies focused only on one category. While it was interesting to test correlation with mental health in all four of these

categories as well as with total political participation scores, doing so resulted in a very lengthy survey. In the future, it may be beneficial to narrow in on one particular aspect of political participation, such as voting or social media engagement, and focus specifically on how anxiety and depression may be related to participation levels in that area.

Conclusion

In conclusion, the relationship between mental health and political participation is one that is important to continue to study. As political participation is a key tenet of democracy, we must investigate many of the factors that may hinder citizens from engaging in political affairs, and work as a society to overcome these barriers to participation. Moreover, political participation is particularly important for young adults experiencing symptoms of anxiety, depression, and other mental health disorders, as they deserve a voice in the political decisions that may impact aspects of mental healthcare, including access to treatment and medication. We should continue researching this relationship as political participation, especially by young citizens, is not only valuable but is essential to the survival of democracy.

Appendix A: Informed Consent

Informed Consent

Examining Correlation Between Anxiety, Depression, and Political Participation in Young Adults
Allegheny College
Department of Psychology

Purpose of Research: The purpose of this study is to examine the correlation between mental health and political participation among young adults. This study will expand on past research suggesting that psychological engagement affects individuals' motivation and willingness to participate in political processes, such as elections, and seeks to determine if correlation exists between anxiety and political participation, as well as between depression and political participation.

Method/Procedure: I understand that I will be asked to complete surveys which disclose information about my mental health, including symptoms of Anxiety and Depression disorders, as well as my participation in various political activities.

Length of Participation: I understand that the questionnaire will take approximately 15-20 minutes.

Risks to the Individual: I understand that there will be no more risk other than what is normally experienced in everyday life.

Benefits of the Research: I understand that this research will expand the base of knowledge as to why political participation rates may be low in young populations by determining if a correlation exists between symptoms of common mental health disorders and participation in various political activities. This research may call attention to a need for politics– including elections, news media, and activism within communities– to be restructured to better include individuals with various mental health conditions.

Compensation: I understand that I may receive $1.50 as compensation for my participation in this research.

Confidentiality, Recording Information, and Data Security: I understand that all of the information provided will be kept anonymous. Only aggregate data will be reported in the results of this research, and all data will be stored and protected by the Allegheny College Department of Psychology. All data will be destroyed once the research is complete.

Voluntary Nature of Participation: I understand that I do NOT have to participate in this research project. Furthermore, I may choose to withdraw my participation at any time without penalty. I understand that I may skip any individual questions that I do not wish to answer, and I may choose not to participate in any part of the study without being questioned.

Results of Research Project: I understand that I am entitled to a copy of the results once this study is completed. A copy of the results may be obtained by contacting the researcher via email kwasnicaa@allegheny.edu.

Contact Information: If I have any questions about this research project, I can contact Anna Kwasnica at kwasnicaa@allegheny.edu or the research advisor, Dr. Ryan Pickering at rpickering@allegheny.edu. If I have questions or concerns about the treatment of research participants in this IRB-approved project, I can contact the Chair of the Allegheny Institutional Review Board (IRB) at IRB@allegheny.edu.

I understand that clicking "continue" indicates that I am at least 18 years of age at the time of my participation in this study, and that I have received a copy of this informed consent form. I have carefully read and understood the information on this form and all of my questions thus far have been answered.

☐ By choosing to continue, I consent to participate in the study.

Appendix B: Beck Anxiety Inventory (BAI)

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by each symptom during the PAST WEEK, INCLUDING TODAY, by answering NOT AT ALL, MILDY (it did not bother you much), MODERATELY (it was very unpleasant, but you could stand it), or SEVERELY (you could barely stand it) for each symptom.

1. Numbness or tingling.

Not at all Mildly Moderately Severely

2. Feeling hot.

Not at all Mildly Moderately Severely

3. Wobbliness in legs.

Not at all Mildly Moderately Severely

4. Unable to relax.

Not at all Mildly Moderately Severely

5. Fear of the worst happening.

Not at all Mildly Moderately Severely

6. Dizzy or lightheaded..

Not at all Mildly Moderately Severely

7. Heart pounding or racing.

Not at all Mildly Moderately Severely

8. Unsteady.

Not at all Mildly Moderately Severely

9. Terrified.

Not at all Mildly Moderately Severely

10. Nervous.

Not at all Mildly Moderately Severely

11. Feelings of choking.

Not at all Mildly Moderately Severely

12. Hands trembling.

Not at all Mildly Moderately Severely

13. Shaky.

Not at all Mildly Moderately Severely

14. Fear of losing control.

Not at all Mildly Moderately Severely

15. Difficulty breathing.

Not at all Mildly Moderately Severely

16. Fear of dying.

Not at all Mildly Moderately Severely

17. Scared.

Not at all Mildly Moderately Severely

18. Indigestion or discomfort in abdomen.

Not at all Mildly Moderately Severely

19. Faint.

Not at all Mildly Moderately Severely

20. Face flushed.

Not at all Mildly Moderately Severely

21. Sweating (not due to heat).

Not at all Mildly Moderately Severely

Appendix C: Beck Depression Inventory (BDI-II)

This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the ONE STATEMENT in each group that best describes the way you have been feeling during the PAST TWO WEEKS, INCLUDING TODAY. If several statements in the group seem to apply equally well, select the highest number for that group.

1. Sadness

   0 - I do not feel sad.
   1- I feel sad much of the time.
   2 - I am sad all the time.
   3 - I am so sad or unhappy that I can't stand it.

2. Pessimism

   0 - I am not discouraged about my future.
   1- I feel more discouraged about my future than I used to be.
   2 - I do not expect things to work out for me.
   3 - I feel my future is hopeless and will only get worse.

3. Past Failure

   0 - I do not feel like a failure.
   1- I have failed more than I should have.
   2 - As I look back, I see a lot of failures.
   3 - I feel I am a total failure as a person.

4. Loss of Pleasure

   0 - I get as much pleasure as I ever did from the things I enjoy.
   1- I don't enjoy things as much as I used to.
   2 - I get very little pleasure from the things I used to enjoy.
   3 - I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

   0 - I don't feel particularly guilty.
   1- I feel guilty over many things I have done or should have done.
   2 - I feel quite guilty most of the time.
   3 - I feel guilty all of the time.

6. Punishment Feelings

   0 - I don't feel I am being punished.

1- I feel I may be punished.
2 - I expect to be punished.
3 - I feel I am being punished.

7. Self-Dislike

0 - I feel the same about myself as ever.
1- I have lost confidence in myself.
2 - I am disappointed in myself.
3 - I dislike myself.

8. Self-Criticalness

0 - I don't criticize or blame myself more than usual.
1- I am more critical of myself than I used to be.
2 - I criticize myself for all of my faults.
3 - I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes

0 - I don't have any thoughts of killing myself.
1- I have thoughts of killing myself, but I would not carry them out.
2 - I would like to kill myself.
3 - I would kill myself if I had the chance.

10. Crying

0 - I don't cry any more than I used to.
1- I cry more than I used to.
2 - I cry over every little thing.
3 - I feel like crying, but I can't.

11. Agitation

0 - I am no more restless or wound up than usual.
1- I feel more restless or wound up than usual.
2 - I am so restless or agitated that it's hard to stay still.
3 - I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 - I have not lost interest in other people or activities.
1- I am less interested in other people or things than before.
2 - I have lost most of my interest in other people or things.
3 - It's hard to get interested in anything.

13. Indecisiveness

    0 - I make decisions about as well as ever.
    1- I find it more difficult to make decisions than usual.
    2 - I have much greater difficulty in making decisions than I used to.
    3 - I have trouble making any decisions.

14. Worthlessness

    0 - I do not feel I am worthless.
    1- I don't consider myself as worthwhile and useful as I used to.
    2 - I feel more worthless as compared to other people.
    3 - I feel utterly worthless.

15. Loss of Energy

    0 - I have as much energy as ever.
    1- I have less energy than I used to have.
    2 - I don't have enough energy to do very much.
    3 - I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

    0 - I have not experienced any change in my sleeping patterns.
    1a- I sleep somewhat more than usual.
    1b- I sleep somewhat less than usual.
    2a - I sleep a lot more than usual.
    2b - I sleep a lot less than usual.
    3a - I sleep most of the day.
    3b- I wake up 1-2 hours early and can't get back to sleep.

17. Irritability

    0 - I am no more irritable than usual.
    1- I am more irritable than usual.
    2 - I am much more irritable than usual.
    3 - I am irritable all the time.

18. Changes in Appetite

    0 - I have not experienced any change in my appetite.
    1a- My appetite is somewhat less than usual.
    1b- My appetite is somewhat greater than usual.
    2a - My appetite is much less than before.
    2b- My appetite is much greater than before.
    3a - I have no appetite at all.

3b- I crave food all the time.

19. Concentration Difficulty

    0 - I can concentrate as well as ever.
    1- I can’t concentrate as well as usual.
    2 - It’s hard to keep my mind on anything for very long.
    3 - I find I can’t concentrate on anything.

20. Tiredness or Fatigue

    0 - I am no more tired or fatigued than usual.
    1- I get more tired or fatigued more easily than usual.
    2 - I am too tired or fatigued to do a lot of the things I used to do.
    3 - I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

    0 - I have not noticed any recent change in my interest in sex.
    1- I am less interested in sex than I used to be.
    2 - I am much less interested in sex now.
    3 - I have lost interest in sex completely.

Appendix D: Political Participation Survey

Section I: Electoral Participation

Please answer each of the following questions in the way that best describes your behavior. If a question does not apply to you (i.e. you were not eligible to vote in the stated election) please select N/A.

1. I am registered to vote in my state of current residence.

   YES NO N/A

2. I know where my polling place is located.

   YES NO N/A

3. I voted in the 2020 Presidential Election.

   YES NO N/A

4. I voted in the Midterm Election on November 8, 2022.

   YES NO N/A

5. I voted in the last local election in my town or municipality.

   YES NO N/A

6. I am planning to vote in the 2024 Presidential Election.

   YES NO N/A

7. I am planning to vote in the next state-level election.

   YES NO N/A

8. I am planning to vote in my town's next local election.

   YES NO N/A

Section II: Engagement with News Media

Rank each of the following items 1-5 based on how often you engage in the following activities (1 = almost never; 5 = daily or almost daily)

1. I read news articles about current political events.

   1 2 3 4 5

2. I watch televised news to learn about current political events.

   1 2 3 4 5

3. I watch political debates and speeches on television.

   1 2 3 4 5

4. I see current candidates' ads while watching television.

   1 2 3 4 5

5. I see ads for current candidates while browsing the internet.

   1 2 3 4 5

6. I read news stories about candidates in upcoming elections.

   1 2 3 4 5

7. I listen to podcasts or radio programs that discuss political events.

   1 2 3 4 5

8. I sign petitions or donate to fundraisers and campaigns that I find out about via news media.

   1 2 3 4 5

9. I frequently check news sources for updates on current political events.

1 2 3 4 5

10. I make sure to research candidates who are running in upcoming elections.

1 2 3 4 5

Section III: Social Media

Rank each of the following items 1-5 based on how often you engage in the following activities (1 = almost never; 5 = daily or almost daily)

1. I follow political figures/candidates on Instagram, Twitter, or other social media platforms.

   1 2 3 4 5

2. I "like" posts made by political figures/candidates on social media platforms.

   1 2 3 4 5

3. I share, retweet, or forward posts made by politicians.

   1 2 3 4 5

4. I post my own political opinions on my social media platform(s).

   1 2 3 4 5

5. I comment on posts made by friends, family, or acquaintances about political events and perspectives.

   1 2 3 4 5

6. I follow political news accounts on Instagram, Twitter, or other social media platforms.

   1 2 3 4 5

7. I share, retweet, or forward posts about current events made by political news accounts.

1 2 3 4 5

8. I use my social media as a means to inform my peers about political events, fundraisers, demonstrations, etc. going on in my area.

   1 2 3 4 5

9. I use my social media as a means to encourage others to vote in upcoming elections.

   1 2 3 4 5

10. I read articles, sign petitions, or contribute to campaigns shared by peers via social media.

    1 2 3 4 5

Section IV: Political Activism

Rank each of the following items 1-5 based on how often you engage in the following activities (1 = almost never; 5 = daily or almost daily)

1. I attend political rallies or speeches.

   1 2 3 4 5

2. I attend organized political protests or demonstrations in my area.

   1 2 3 4 5

3. I attend political meetings on local or town affairs.

   1 2 3 4 5

4. I work or volunteer for political parties or candidates.

   1 2 3 4 5

5. I speak to others in-person about my political opinions or candidates that I support.

1 2 3 4 5

6. I encourage and help others to register to vote.

   1 2 3 4 5

7. I contribute money to candidates, parties, or political organizations.

   1 2 3 4 5

8. I sign petitions dealing with political and social issues.

   1 2 3 4 5

9. I contact national, state, and local government officials about issues that are important to me.

   1 2 3 4 5

10. I discuss current events and political issues with my friends and family.

    1 2 3 4 5

Appendix E: Demographic Questionnaire

1. What is your gender identity?
    a. Male
    b. Female
    c. Other/Prefer not to say

2. Current age:
    [answer textbox]

3. In which U.S. State do you currently reside?
    [answer textbox]

4. Race:
    a. Black/African-American
    b. White/Caucasian
    c. Asian
    d. Native American
    e. Native Hawaiian/Pacific Islander
    f. Other/Prefer not to say

5. Ethnicity
    a. Hispanic/Latino
    b. Non-Hispanic/Latino

6. Are you a current U.S. Citizen?
    a. Yes
    b. No

7. Were you born in the United States?
    a. Yes
    b. No

8. Highest level of education:
    a. Some high school
    b. High school graduate (GED)
    c. Some college
    d. Bachelor's degree (BA or BS)
    e. Master's degree
    f. PhD
    g. Other (please specify):

9. Do you identify as a member of the LGBTQ+ community?
    a. Yes
    b. No
    c. Not sure/prefer not to say

10. What political party are you [most] affiliated with?
    a. Democratic Party
    b. Republican Party
    c. Libertarian Party
    d. Green Party
    e. Other/I'm not sure

11. What is your current employment status?
    a. Student
    b. Employed part-time
    c. Employed full-time
    d. Unemployed
    e. Self-employed
    f. Unable to work
    g. Other/Prefer not to say

12. Do you have a physical disability that impairs your daily functioning?
    a. Yes
    b. No
    c. Not sure/Prefer not to say

13. Have you ever been diagnosed with any of the following psychological disorders? (Check all that apply)
    a. Anxiety Disorder(s)
    b. Depression/Major Depressive Disorder
    c. Bipolar Disorder
    d. Post-Traumatic Stress Disorder (PTSD)
    e. Schizophrenia
    f. Neurodevelopmental Disorder(s) (i.e. Autism or Intellectual Disability)
    g. Personality Disorders (i.e. Borderline Personality Disorder, Schizoid Personality Disorder, etc.)
    h. None of the above

Appendix F: Attention Check Questions

1. Select answer “C” for this question.
    a. A
    b. B
    c. C
    d. D

2. Type the word “green” in the textbox.
   [answer textbox]

3. Select answer “B” for this question.
    a. A
    b. B
    c. C
    d. D

4. Answer “YES” for this question.
    a. YES
    b. NO

5. Type the word “cart” in the textbox.
   [answer textbox]

6. Select answer “A” for this question.
    a. A
    b. B
    c. C
    d. D

Appendix G: Debriefing Form

Research Participation Debriefing Form

Examining Correlation Between Anxiety, Depression, and Political Participation in Young Adults

Allegheny College

Department of Psychology

Purpose of Research: The purpose of this research was to examine the correlation between mental health and political participation among young adults. This study will expand on past research suggesting that psychological engagement affects individuals' motivation and willingness to participate in political processes, such as elections, and seeks to determine if correlation exists between anxiety and political participation, as well as between depression and political participation. It is hypothesized that a correlation will be observed between both anxiety and political participation, and depression and political participation.

Compensation: All participants of the study will receive $1.50 compensation, given that they have completed at least 50% of the study and failed no more than two attention check questions.

Confidentiality: The data you provided for this research project will be confidential and your name will never be associated with your results. Furthermore, when your data is no longer needed, it will be deleted.

Additional Resources: To receive more information about anxiety, depression, and seeking mental health support, please consult the following websites:

Centers for Disease Control and Prevention: https://www.cdc.gov/mentalhealth

MentalHealth.gov: https://www.mentalhealth.gov

988 Suicide & Crisis Lifeline: https://988lifeline.org

Contact Information: If you have any questions about this research project, or wish to obtain a copy of the results, you can contact Anna Kwasnica at kwasnicaa@allegheny.edu or the research advisor, Dr. Ryan Pickering at rpickering@allegheny.edu. If you have questions or concerns about the treatment of research participants in this IRB-approved project, you can contact the Chair of the Allegheny Institutional Review Board (IRB) at IRB@allegheny.edu.

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Faculty Advisor: Ryan Pickering	E-mail: rpickering@allegheny.edu
IRB Committee Chair	E-mail: irb@allegheny.edu

References

American Psychiatric Association (n.d.). *What is depression?* Psychiatry.org. Retrived from https://www.psychiatry.org/patients-families/depression/what-is-depression

American Psychological Association (n.d.) *Anxiety.* APA.org. Retrieved from https://www.apa.org/topics/anxiety

Bamber, M.D., & Schneider, J.K. (2016). Mindfulness-based meditation to decrease stress and anxiety in college students: A narrative synthesis of the research. *Education Research Review, 18,* 1-32. doi:10.1016/j.edurev.2015.12.004

Burns, N., Schlozman, K. L., & Verba, S. (2001). *The private roots of public action gender, equality, and political participation*. Harvard University Press. doi:10.4159/9780674029088

Burden, B.C., Fletcher, J.M., Herd, P., Moynihan, D.P., & Jones, B.M. (2016). How different forms of health matter to political participation. *The Journal of Politics, 79*(1)*,* 166-178. doi:10.1086/687536

Creighton, J. A., & Harwood, R. C. (1992). *College students talk politics.* ERIC. Retrieved from https://eric.ed.gov/?id=ED364149

Davila, A. & Mora, M.T. (2007). *Civic engagement and high school academic progress.* ERIC Clearinghouse.

Dworkin, R. (2006). Is democracy possible? In *Is democracy possible here?: Principles for a new political debate,* 127–159. Princeton University Press.

Fisher, P. (2014). *Demographic gaps in American political behavior.* Westview Press.

Fletcher, J.M. (2008). Adolescent depression: diagnosis, treatment, and educational attainment. *Health Economics, 17*(11), 1215-1235. doi:10.1002/hec.1319

Fried, E.I. & Nesse, R.M. (2015). Depression sum-scores don't add up: Why analyzing specific depression symptoms is essential. *BMC Medicine, 13*(72), doi:10.1186/s12916-015-0325-4

Guo, S., Liu, F., Shen, J., Wei, M., & Yang, Y. (2020). Comparative efficacy of seven exercise interventions for symptoms of depression in college students. *Medicine (Baltimore), 99*(47). doi:10.1097/MD.0000000000023058

Haas, S.A., & Fosse, N.E. (2008). Health and the educational attainment of adolescents: Evidence from the NLS97. *Journal of Health and Social Behavior, 49*, 178–92.

Julian, L.J. (2011). Measures of anxiety: State-Trait Anxiety Inventory (STAI), Beck Anxiety Inventory (BAI), and Hospital Anxiety and Depression Scale-Anxiety (HADS-A). *Arthritis Care Res, 63*(11), S467-S472. doi:10.1002/acr.20561

Kaid, L. L., McKinney, M. S., & Tedesco, J.C. (2007). Introduction: Political information efficacy and young voters. American Behavioral Scientist, 50(9), 1093-1111. doi:10.1177/0002764207300040

Kiesa, A., Orlowski, A. P., Levine, P., Both, D., Kirby, E. H., Lopez, M. H., & Marcelo, K. B. (2006). *Millennials talk politics: A study of college student political engagement.* Center for Information and Research on Civic Learning and Engagement (CIRCLE). Retrieved from https://eric.ed.gov/?id=ED498899

Kim, Y. & Khang, H. (2014). Revisiting civic voluntarism predictors of college students' political participation in the context of social media. *Computers in Human Behavior, 36,* 114-121. doi:10.1016/j.chb.2014.03.044

Levine, P. (2007). *The future of democracy: Developing the next generation of American citizens.* Tufts University Press.

Lopez, A. (2022). *Turnout among young voters was the second highest for a midterm in the past 30 years*. Npr.org. Retrieved from https://www.npr.org/2022/11/10/1135810302/turnout-among-young-voters-was-the-second-highest-for-a-midterm-in-past-30-years

Pelkowski, J.M., & Berger, M.C. (2004). The impact of health on employment, wages, and hours worked over the life cycle. *Quarterly Review of Economics and Finance, 4,* 102–21.

Schlozman, K.L., Brady, H.E., & Verba, S. (2018). *Unequal and unrepresented: Political inequality and the people's voice in the new gilded age.* Princeton University Press. doi:10.2307/j.ctvc7772p

Smarr, K.L,. & Keefer, A.L. (2011). Measures of depression and depressive symptoms: Beck Depression Inventory-II (BDI-II), Center for Epidemiologic Studies Depression Scale (CES-D), Geriatric Depression Scale (GDS), Hospital Anxiety and Depression Scale (HADS), and Patient Health Questionnaire-9 (PHQ-9). *Arthritis Care Res, 63*(11), S454-S466. doi:10.1002/acr.20556

Teigen, J. M. (2006). Enduring effects of the uniform: Previous military experience and voting turnout. *Political Research Quarterly*, *59*(4), 601–607. doi:10.1177/106591290605900409

Ursy, K. (2019.) The political consequences of combat: Post-traumatic stress and political alienation among Vietnam veterans. *Political Psychology, 40*(5), 1001-1018. doi:10.1111/pops.12589

U.S. Census Bureau. (2022). *Voting and registration*. Census.gov. Retrieved from https://www.census.gov/topics/public-sector/voting.html

Vaccari, C. & Valeriani, A. (2021). *Outside the bubble: Social media and political participation in western democracies.* Oxford University Press. doi:10.1093/oso/9780190858476.001.0001

Verba, S., Schlozman, K.L., & Brady, H.E. (1995). *Voice and equality: Civic voluntarism in American politics.* Harvard University Press.

Weinschenk, A. C., Dawes, C.T., Oskarsson, S., Klemmensen, R., Norgaard, A.S., (2021). The relationship between political attitudes and political participation: Evidence from monozygotic twins in the United States, Sweden, Germany, and Denmark. *Electoral Studies (69),* 102-269. doi:10.1016/j.electstud.2020.102269

Wirth, A. (2012). *A democracy at risk.* The Huffington Post. Retrieved from https://www.huffpost.com/entry/millennial-voters_b_1974659

Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge University Press.