

GENDER DIFFERENCES IN THE ACCEPTABILITY  
OF MALINGERING

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of the Requirements for the Degree  
of Master of Science in Psychology

By  
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CERTIFICATION OF APPROVAL

GENDER DIFFERENCES IN THE ACCEPTABILITY  
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## DEDICATION

This thesis is dedicated to my immediate family: Eileen, Phillip, and Leigh Donath. Each one of you encouraged and supported me in so many different ways. Without your love and support (throughout my many years of school) I would have never made it this far. For that and so very much more, I love you. Thank you.

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## ABSTRACT

The present study examined participant's ratings on the acceptability of malingering physical pain within three situational contexts (i.e., malingering to obtain prescription pain medication, to avoid work, and to be given a lighter work duty in the military). First, it was predicted that male participants would rate it more acceptable for females to malingering to be given a lighter work duty in the military than female participants. Second, it was predicted that malingering to obtain prescription pain medication would be the least accepted form of malingering regardless of the sex of the participant or the character within the vignette. Third, it was predicted that malingering to avoid work would be the most accepted form of malingering in this study. Participants ( $N = 504$ ) rated the degree of acceptability on one randomly assigned vignette involving malingering and filled out a demographic questionnaire. All forms of malingering explored in this study were found to be uniformly unacceptable, and none of the hypotheses were supported. Exploratory analyses revealed that males showed a higher overall acceptability of malingering among the three vignettes compared to females. Male participants found it more acceptable to malingering to obtain prescription pain medication compared to females. Finally, it was found that female participants also found it more acceptable to malingering in order to avoid work compared to getting pain medication or to be given a lighter military work duty. The unexpected findings within this study suggest psychological research should be conducted on the topic of the acceptability of malingering.

## INTRODUCTION

In the *Diagnostic and Statistical Manual of Mental Disorders* (5<sup>th</sup> ed.; DSM-5; American Psychiatric Association [APA], 2013), malingering is defined as the fabrication of psychological or physical symptoms for secondary gain. Secondary gain refers to advantages or external gains that an individual received by engaging in a specific behavior. Motives for secondary gain include financial compensation, to be awarded disability, win a lawsuit, avoid criminal prosecution, obtain prescriptions, or avoid work, school, and military duty.

Although it is not considered a mental disorder, malingering could sometimes be the focus of clinical attention. On the basis of the *DSM-5*, clinicians should suspect malingering from clients within certain circumstances. These circumstances include from whom the client was referred for assessment (e.g., a client sent to you by an attorney who is involved in a lawsuit), the presence of discrepancies between the distress claimed by the client and the results of objective testing (e.g., clients claiming back pain, but the test results indicate no cause for the pain), poor cooperation from the client during the evaluation process or with the prescribed treatment (e.g., clients who refuse to participate in the treatment or assessment process, but who claim they want help for their presenting issue), and clients who have been diagnosed with Antisocial Personality Disorder (APD; APA, 2013).

Resnick (1997) proposed that there are three different types of malingering. The first type is known as “pure malingering” in which symptoms are fabricated for

secondary gain. An example of pure malingering would be someone who was faking symptoms of physical pain to obtain prescription pain medication, but in reality they felt no physical pain. The second is known as “partial malingering” in which the current symptoms are over-reported. An example of partial malingering would be someone who was actually feeling ill, but they called into work claiming they were very sick in order to avoid work. The third is known as “false imputation” in which the symptoms were intentionally misattributed to a traumatic event. An example of false imputation could be someone faking symptoms of Posttraumatic Stress Disorder (PTSD) after actually being involved in a car accident.

Malingering should be distinguished from factitious disorder, conversion disorder, and somatic symptom disorder. The symptoms of malingering are created for secondary gain, but the symptoms exhibited by someone with factitious disorder lack clear external incentives. Secondary gain and external incentives are also absent in people who have somatic symptom disorder or conversion disorder (APA, 2015).

Even though malingering represents a significant problem to the economy and justice system, there have not many publications focused on people’s perception of the acceptability of malingering certain symptoms for secondary gain. One of the current gaps in psychological research involving malingering had to do with sex differences. No scientific literature that has found a significant difference between sexes when it comes to malingering was located. Given the large impact that malingering has on our economy; it would be beneficial to know what contextual factors promote people to feel it is acceptable to malingering specific symptoms.

Contextual factors include the setting in which the malingering takes place, the specific type of malingering, and the specific secondary gain the person malingering is trying to achieve. It would also be beneficial to know if there were any sex differences in the various contextual factors that lead people to be more accepting of malingering.

The exact prevalence rates of malingering are difficult to determine for several reasons. In a clinical setting, practitioners usually accepted their patients' reports of symptoms, so malingering may not be suspected (Cunniën, 1997). Patients are often not suspected or assessed for malingering outside of a forensic setting (Rogers, 1997). People within forensic settings, such as prisons, jails, or referrals for legal purposes, often required assessment due to complaints about various physical or psychological symptoms. Because there was a high prevalence rate (between 17–25 %) of APD within forensic settings (Rogers, 2008), this could lead evaluators to falsely diagnose malingering more often in this population (Pierson, 2011). The *DSM-5* recommendation to be suspicious of malingering of someone with APD could be leading to more false-positive assessments of malingering. When clinicians did not assess for malingering, the overall prevalence rates varied. Also malingering may take place outside of a clinical or forensic setting.

It can be difficult to determine a person's true intentions to malingering symptoms, but more research on the topic could shed light on this topic. Having an understanding of which situations people find it more acceptable to malingering symptoms could result in easier detection of malingering for professionals. Clinicians

would be aware of specific situations, contexts, or conditions where malingering may be more likely to occur. If these advances were to happen, fewer people would be able to successfully malingering. This could benefit society by possibly prompting more research, and it could possibly make the scientific community aware that there needs to be better measures and protocols for detecting malingering.

Although malingering can be difficult to evaluate, there has been some noteworthy research conducted on malingering. The faking of various illnesses for external gain has been present for centuries (McDermott, 2012). Corsini (1999) stated that malingering could be defined as the deliberate feigning of illness, disability for financial gain, or to escape responsibility. By definition, malingering involves presence of secondary gain or external incentives present as the main motivation for the client's symptoms. The incentives for malingerers include financial compensation, medication, a reduced legal sentence, or avoiding work (McDermott, 2012). Malingering is common within both forensic and non-forensic settings.

### **Malingering Within Forensic Settings**

The majority of research done on malingering has involved clients within forensic settings, such as prison, jail, forensic hospitals, or legal proceedings. Malingering assessment is a crucial part of any criminal evaluation. If there is a failure to successfully detect malingering of a psychological disorder, there could be serious negative consequences for the justice system. People who successfully malingering symptoms to avoid criminal prosecution can be found not guilty due to insanity, incompetent to stand trial, guilty but mentally ill, and they can consequently

be acquitted of all criminal charges. Successfully malingering symptoms during legal sentencing could also result in shorter or lighter sentences due to the consideration of the manufactured symptoms (Kucharski, Duncan, & Egan, 2006).

When Rogers, Sewell, and Goldstein (1994) conducted a study of forensic and non-forensic professionals who were trained to assess for malingering, results indicated forensic patients had a 15.7% overall base rate of malingering compared to a base rate of only 7.4% for non-forensic patients. Personal injury lawsuits can also involve people malingering symptoms in hopes of a specific desired verdict. Malingering psychological symptoms during a personal injury lawsuit range from 1% to 50% (Hickling, 1999). This large range could be due to different types of malingering assessed for and different total populations within the studies looked at by Hickling. When looking at people seeking financial compensation in lawsuits, it was found that 20-30% of claimants were faking posttraumatic symptoms in the hopes of receiving compensation (Lees-Haley, 1997). This was determined by the results of objective psychological testing with the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Arbisi & Ben-Porath, 1995) from a large sample ( $N = 492$ ) of personal injury plaintiffs.

Due to the reasons mentioned above, the *DSM-5* warned clinicians to be suspicious of malingering when it occurs within a legal or forensic setting. The *DSM-5* also suggested that evaluators be highly suspicious of malingering in patients who have been diagnosed with Antisocial Personality Disorder (APD; APA, 2015). APD is characterized by disregard for other people's rights, the failure to conform to social

norms in terms of lawful behaviors, deceitfulness for personal gain, impulsivity, aggressiveness as shown by frequent physical fights, disregard for other people's safety, consistent patterns of irresponsibility, and a lack of remorse at hurting or mistreating others. However, this recommendation could have been resulting in evaluator bias.

Huss (2009) found that the prevalence of APD ranged between 50-80% within inmate samples. APD was also found to be present in 25% of legal forensic referrals (Cochrane, Grisso, & Frederick, 2001). The suspicion that malingering was present within any medicolegal setting, or the presence of APD, could lead to many false positive diagnoses of malingering (Rogers, 2008). In a study conducted by Rogers (1990), it was found that there was a false positive rate of 79.7% of malingering by forensic evaluators of patients ( $N = 224$ ) referred for forensic evaluation involving mental health issues. The high error rate in this study was greatly influenced by the prevalence of diagnosed APD within the sample. Rogers proposed that researchers assumed malingering more often when evaluating populations with a high prevalence rate of APD.

Although Rogers (1997) found a high prevalence rate of malingering within forensic settings, more recent research suggested that a person with APD was not more likely to malingering symptoms (Pierson, Rosenfeld, Green, & Belfi, 2011). When a clinician knows that the patient has APD, this seems to have a confounding effect on correctly determining malingering.

Given the high prevalence rate of APD in psychopathy, research has been conducted examining the relationship between people who exhibit characteristics of psychopathy and malingering. Kucharski et al. (2006) found that psychopathy did not serve as a clinically significant indicator of malingering. Researchers classified a forensic sample ( $N = 207$ ) of criminal defendants as low, medium, and high on levels of psychopathy as measured by the Hare Psychopathy Checklist – Revised (PCL-R; Hare, 1991). They then compared their scores on the PCL-R to frequently used measures to detect malingering such as MMPI – 2 (Arbissi & Ben-Porath, 1995), the Structured Interview of Reported Symptoms (SIRS; Rogers et al., 1991), and the *Personality Assessment Inventory* (PAI; Morey, 1991). In their statistical analysis it was found that defendants who scored higher on the measure of psychopathy were actually not more likely attempt to fake psychiatric disorder.

This finding is a contradiction of the *DSM-5*'s malingering guidelines to be highly suspicious of the presence of malingering in populations diagnosed with APD (APA, 2013). While the *DSM-5* has noble intentions, research suggests that the warning that clinicians be highly suspicious of malingering in people diagnosed with APA often leads to people being diagnosed as malingering when in fact they are not. Not relying on every warning and suggestion the *DSM-5* mentions could lead to a more accurate assessment of malingering. Professionals conducting assessment for malingering may find it more useful to simply keep the *DSM*'s recommendations for when to be suspicious of malingering in mind, and not automatically take it as proof

that someone is malingering if they happen to qualify for one of the DMS's suspicious recommendations.

Implementing physical examinations and neuroimaging tests could be used more frequently to assess for malingering in order to avoid evaluator bias, and this could possibly lead to accurate assessment of a person's symptoms. Such a suggestion is highly controversial. Research has also been performed examining malingering outside of forensic settings.

### **Malingering in Non-Forensic Settings**

McDermott (2012) proposed that estimates of malingering would be higher in civil settings compared to criminal medicolegal settings, because of financial incentives (McDermott, 2012). Rohling, Binder, and Langhinrischen-Rohling (1995) found that malingering was directly related to the magnitude of the financial reward the person was seeking. This suggests that the greater potential financial pay out a person stands to gain for successfully malingering – the more likely a person was to malingering symptoms. This is just one of the things that complicates research in their area.

Larrabee (2003) reviewed 11 previous studies involving the overall base rate of malingering. It was found that out of 1,363 patients seeking compensation within the 11 studies (primarily for traumatic brain injury), 548 of the patients (40%) were malingering symptoms. The prevalence rate for each study was determined by matching the participant's final scores on five different psychological and neuropsychological tests to the predetermined clinical cut off scores that indicated the

presence of malingering on each of the five assessment measures. The overall prevalence rates of malingering combined both the probable and definitive percentages, which might have over-inflated the results.

The probable prevalence percentages may not accurately represent the number of individuals who actually malingered, just those that are suspected of malingering. Therefore, it is difficult to accept that the overall prevalence of malingering is truly around 40% when it is computed using suspected data not confirmed data, but currently this is the best estimate provided by the field of research on malingering.

If this malingering prevalence rate is accurate, due to the possible financial incentives, malingering could have large effects on the United States' economy. Chafetz and Underhill (2013) proposed that malingering involving Social Security Disability could cost the United State Economy up to 20.02 billion dollars annually. Chafetz and Underhill estimated this number by taking the proposed 40% prevalence rate of malingering in adult cases discovered by Larrabee (2009), and applying it to the total number ( $N = 8,575,544$ ) of people in the SSDI system in 2011. Of the beneficiaries, 32.3% ( $N = 2,768,928$ ) were claimants for mental disorders. People included in the in the Chafetz and Underhill study had one of the following mental disorders qualifying them to receive SSDI benefits: mood disorders ( $N = 1,304,851$ ), intellectual disability ( $N = 369,093$ ), organic mental disorders ( $N = 302,036$ ), psychotic disorders ( $N = 435,929$ ), autistic disorders ( $N = 11,269$ ), developmental disorders ( $N = 6750$ ), and childhood – adolescence disorders not otherwise classified

(including ADHD) ( $N = 5937$ ), or another kind of mental disorder ( $N = 333,063$ ). Chafetz and Underhill (2013) then estimated costs by multiplying the monthly average disability award for specific mental conditions (that would qualify a person to be awarded SSDI) by twelve (for a years worth of awards). It is important to note that accuracy of these estimates rests on the assumption that the proportion of malingering estimated by is correct. If (2009) was correct, false claims could be costing a great deal of money for the US government (Chafetz and Underhill, 2013). It also needed to be mentioned that malingering itself is difficult to prove, even with sophisticated psychological testing. Larrabee's 40% prevalence rate for malingering is difficult to prove because we can never really know for sure if someone is malingering symptoms with one hundred percent accuracy.

Malingering physical symptoms within the medical field is also common. Fibromyalgia, chronic fatigue syndrome, symptoms of physical pain, neurotoxic disorders, electrical injury, and seizure disorders were found to be commonly malingered within the medical profession (Mittenberg, Patton, & Canyock, 2002). Malingering of chronic pain, for example, was found to have a prevalence rate of 20% to 50% in a study of 508 patients seeking financial compensation (Greve, Ord, & Bianchini, 2009). The prevalence of patients malingering symptoms of lower back remains unclear; results of published research ranging from 1% to 75% (Leavitt & Sweet, 1986) depending on the population used to determine the prevalence rate. Pain symptoms in general were also thought to be malingered in the hopes of being prescribed pain medication as well as possible financial compensation for an injury.

This may have been due to participant addiction, the general pleasant effect of prescription pain medication, or for the purposes of winning a lawsuit.

Money and medication are not the only incentives for malingering. People often malingering symptoms to be awarded disability status. When the rate of veterans receiving disability for PTSD increased by 222% between 1999 and 2010 (Marx & Holowka, 2011), researchers explored the reasons behind this drastic increase. Prior to that increase Gold and Frueh (1999) found that within a sample of veterans that were referred for psychological assessment for PTSD, 14% to 22% of the veterans fell within the “extreme exaggerators” scoring range within the MMPI – 2. Studies suggest that 30% of people are malingering disability when seeking disability (Frueh, Hamner, & Cahill, 2000). When researching specific mental health disorders that were likely to be malingered among veterans, Freeman et al. (2008) found that PTSD was a condition that was very likely to be exaggerated when compared to other mental disorders. The concept of malingering PTSD is controversial given the high suicide rates among military veterans; not to mention millions of soldiers that have been deployed to warzones (many multiple times) within the past decade alone. When looking at disability, one study found that 19% of social security claimants ( $N = 167$ ) were malingering symptoms in order to be awarded disability (Griffin et al., 1996). Reports estimated the cost of disability malingering were greater than 180 billion dollars annually (Chafetz & Underhill 2011).

College students have also been found to show malingering behaviors in order to be awarded special status within school settings. Special status included such

things as priority registration, the use of special tools during exams, and a longer time allotted to take exams. When looking at college students seeking to be awarded special accommodations provided through the Americans with Disabilities Act (ADA; 1990), it was found that 43.5% of students who were reporting symptoms related to learning disabilities and ADHD were malingering symptoms. The prevalence rate for this study was determined by matching participant's ( $N = 102$ ) test/re-test discrepancies on intelligence and attention based psychometric tests over a five-year academic period. (Wierzbiki & Tyson, 2007). The chance that the participant's scores may have differed year-to-year because they improved (due to treatment or otherwise) was not discussed by the authors in this article. In a recent study examining the rate that college undergraduates ( $N = 232$ ) engaged in lying, it was found that 82.76% ( $N = 192$ ) had told at least one lie in the past year, and there was a rate of 0.824 for daily lying occurrences (Chiu, Hong, & Chiu, 2016).

Malingering also represents a challenge to the everyday workforce. Employees can fake physical injuries or ailments in order to receive lighter work duties or to be awarded other special work related accommodations (Cramer & Davidhizar, 2001).

### **Assessment of Malingering**

In order to accurately determine if an individual is malingering, an extensive evaluation is required by a trained clinician. Frequently used psychometric tests for determining the presence of malingering include: The SIRS (Rogers et al., 1991) and the Infrequency Psychopathology Scale F(p) of the MMPI-2 (Arbissi & Ben-Porath,

1995). The Rey 15-Item Memory Test (Back et al., 1996) is also used to detect feigned memory impairment, and the Test for Memory Malingering (TOM; Tombaugh, 1996) is also used to evaluate for the malingering of memory impairments. These tests are used to assess for the possible malingering of cognitive and memory related symptoms. Although we have psychological tests used to attempt to assess for the presence of malingering within an individual, it still remains difficult to detect. There is no assessment measure that is perfect when it comes to successfully detecting malingering, and we cannot know for certain without doubt that someone is lying by malingering his or her symptoms.

### **Other Factors Related to Current Study and Malingering**

**Prescription pain medication.** Due to the pleasurable effects of prescription pain medication, they are likely to be abused (Sehgal, Manchikanti, & Smith, 2012). The availability of prescription pain medication has been said to have significantly contributed to the abuse of such drugs for both medical and recreational purposes (McCabe, Teter, & Boyd, 2006). In 2009 alone, there were 7 million people who used prescription drugs in a nonmedical manner within a one-month timeframe. A large scale study ( $N = 705$ ) conducted within the United States health care system found that 26% of a sample of outpatients receiving long-term opioid therapy was actually abusing their opioid medication (Boscarino et al., 2010). It is important to note that rates of opioid abuse may be higher in populations that are legitimately already taking such medications compared to the general public.

Recent studies have shown gender differences in the reason for abuse of prescription opioids. Jamison et al. (2010) suggested that women were at a greater risk of abusing opioids to cope with emotional distress, such as sadness or guilt, and men were more likely to abuse opioids to cope with various problematic behavioral issues, such as anger and aggression. In a study conducted by the National Survey of Drug Use and Health, it was found that within their lifetime more men (15.9%) compared to women (11.2%) had abused opioids (Back et al, 2010). The widespread abuse of prescription pain medication has gained public attention. Due to the stigma associated with drug abuse, addiction is often negatively viewed by society. It is also important to note that someone could have legitimate pain, but overtime they build a tolerance to their current pain medication. This could lead an individual to exaggerate their existing symptoms in order to be prescribed more or a stronger pain medication. Given the above research on the overall high prevalence rate of the abuse of opioid prescription pain medication, I predicted that this would be the least accepted form of malingering explored in this study.

**Military.** During 2013, the U.S. Department of Defense prepared an official demographic report detailing all active-duty military service members. The total number of people currently in the military was over 3.6 million. This included those on active duty as well as people in various reserve branches. There were a total of 203,895 women (14.9%), and 1,116,434 men (85.1%) within the Department of Defense Active Duty Force. Within the selected Reserve Force there was a total of 155,589 women (18.5%) and 686,918 (81.5%) men. Women represent a growing

presence within all military settings. Although men and women in the military work together for the same goals, women often reported a very different experience during their service time compared to men.

Women who are in the military often face sexual harassment and even sexual assault. Firestone and Harris (1999) conducted a large-scale study of active military members, and their results showed that 55% ( $N = 28,296$ ) of the females reported experiencing at least one occurrence of unwanted sexual attention the previous year. The results of this study were determined by comparing responses on the 1995 Armed Forces Sexual Harassment Survey to responses on an earlier 1998 edition of a measure called Survey of Sex Roles. A 1998 study ( $N = 1365$ ) showed that 84% of women ( $N = 305$ ) and 74% of men ( $N = 1060$ ) within the Army had experienced at least one form of unwanted sexual behavior (e.g., touched you in a way that made you feel uncomfortable, implication for better treatment for being sexually cooperative, made it necessary to respond positively to sexual invitations, etc.) within the prior year (Rosen & Martin, 1998). A recent psychological study found that women were more likely to experience more sexual harassment while in the military than in other work related settings (Ilies, Hauserman, Schwochau, & Stibal, 2003). Vogt Bruce, Street, and Stafford (2007) found that males reported slightly less positive attitudes regarding the acceptance of women in the military compared to their specific personal beliefs about women's abilities. Within this same study, 70% of male's responses were either negative or neutral when it came to questions regarding women having dual roles as mothers while being in the military. When looking at this article, it was

impossible to separate negative and neutral views on this topic. This was a clear disadvantage because the researchers summed those two together into one value, yet positive views had its own separate value. It was unclear exactly what percentage of the participants had negative views on women in the military. It is also important to mention that within this same study, women's overall responses were more positive than male's in regards to their feelings about being female in the military, but their responses were not uniformly positive. Some female participants also reported having negative views on females being in the military. This could have been due to the tendency for women to adopt negative feelings about their own reference group while being a part of a male dominated work environment (Biernat, Vesico, & Green, 1996). Some researchers suggested that male resistance regarding women in the military could be linked back to men's sexist beliefs (Ivarsson, 2005), and that this was one of the main reasons why females faced great resistance when assuming positions within branches of the military (Berggren, 2002; Herbert, 1998). Given men's mixed feelings about women in the military it is possible men would find it more permissible for females to malingering symptoms to get out of military serviced compared to males. This could be because the men with such viewpoints view it as women not being able to handle the work demands involved in military service, so they may find it more permissible for females to fake pain in order to be given light work duties.

**Malingering and work absenteeism.** There has been some noteworthy research looking at why people lie, and how people view people who lie that are

relevant to the work setting. Although lying may be commonplace in our everyday lives, it is a subject that promotes moral judgments and factors into people's moral values (Bendassolli, 2013). Although it may be common, people have different motivations for lying to others. Yet, lying in general tends to be viewed negatively by the general society across cultures. Baumeister, Dori, and Hastings (1998) suggested that a strong motivation for lying is people's desire for self-enhancement, which is fundamental to an individual's social life. These factors into research conducted by Mead, Baumeister, Gino, Schweitzer and Ariley (2009) that suggested that people were at a greater likelihood to deceive people when they were ego-depleted. Egoistic lies were often associated with the person being lied to experiencing a negative reaction to the lie, and it was found that lies made to directly benefit the liar were also viewed more negatively by the people being lied to (Inglehart et al., 1998). Lying has also been found to have serious effects on relationships with others. Research conducted by Schweitzer, Hershey, and Bradlow (2006) suggested that deception has negative consequences on interpersonal trust. Barbour, Rosaline, and Kitzinger (1999) found that the act of lying affected the quality, durability, and closeness of two people in relationships (the person who lies and who is lied to), and that this quality was the most damaged in when lies occur within close relationships.

People who malingering often had a history of behavioral problems within a variety of settings including the workplace (Hall, 2006). There has been substantial research done looking at workplace absenteeism, which could be tied to possible malingering. In 2005 the United States Department of Labor conducted a study using

data from the national current population survey on absence rates among groups of occupations of full-time workers. It was found that service occupations including sales and office jobs held the highest average absence rates (3.7%), and specifically within the service occupational group health care support workers held the highest absence average of 5.1%. Workers within maintenance, construction, and natural resource occupations held the lowest rate of absenteeism (2.8%). Workers within management, professional, and related occupational fields held an average absence rate of 3.0%. It is important to note that the above study did not explore the nature of employee's absences or their legitimacy. Research has also suggested a correlation between occupational dissatisfaction and absenteeism.

Nelson and Quick (2008) found that the employees that are absent the most frequently were more dissatisfied with their jobs. The researchers also found that the specific type of dissatisfaction that led employees to miss work most frequently was dissatisfaction with the work itself. In a large-scale study ( $N = 6500$ ) conducted by Harris Interactive for CareerBuilder in 2008 it was found that three out of every ten employees called in sick to the office to get out of work when they were not really sick. This study found that these numbers were even higher (33%) during the holiday season. This type of behavior can be considered malingering because participants got out of work by lying about having symptoms of illness

If someone misses work, he or she may be expected to produce a doctor's note excusing them from the days missed. Even though people were faking their illness, Patel (2011) suggested that getting such a note would not be difficult. Patel suggested

that doctors often agree to give people sick notes when they know they were not really sick in order to maintain a functional long-term relationship as doctor and patient. Refusing to give the supposed malingering employee a note could damage their rapport and negatively impact their future relationship. While Patel's thoughts make sense, the ethical implications on this issue are complex. Excusing patients from work for being sick, when in reality they were not, could reinforce their dishonest behavior.

There was also some interesting research exploring gender differences when it comes to workplace absenteeism. Research conducted by the United States Department of Labor in 1998 found that there was a significant difference when it came to absenteeism between males and females. It was found that 5.1 percent of women (including 5.6 percent of women from the ages of 20 to 24) were absent during the average workweek, compared to 2.7 percent of men. Within the same study it was found that absence rates did not vary significantly by age. The lowest absence rate was 3.7 percent (among workers ages 25 to 54), and the highest absence rate (4.2 percent) was found within workers ages 55 and older. Workers ages 16 to 19 had an absence rate of 4.0 percent, and workers ages 20 to 24 had an absence rate of 3.9 percent. The previously cited study did not investigate the reason or motivation for employee absence.

Work can be difficult, draining, and stressful. It is not uncommon for people to not want to show up to work, but doing so can result in penalty or possibly even termination from their job. Missing work due to a medical reason could reduce the

possibility of being penalized by your employer for your absence, especially if you could substantiate your absence with a doctor's note. Calling in sick for work by reporting symptoms of an illness could also be seen as someone taking an employee mental health day, while at the same time not disclosing the need for one.

Since missing work for a medical reason was seen as more common and permissible reason to be absent from work, it would be reasonable to assume that malingering symptoms of physical pain to avoid work would be the most accepted form of malingering among both male and female participants. From the research mentioned above we could also suspect that malingering by females in order to miss work will be rated as more accepted by male participants. While it is very hard to know a person's true intentions for malingering various symptoms, more research within this area could possibly lead to beneficial understandings and developments within the field of malingering detection.

### **Proposed Study**

The purpose of the current study was to explore gender differences within three situational contexts where participants may find it more acceptable to malingering symptoms of physical pain. The three situational contexts that would be explored in this study were: (a) malingering physical pain to obtain prescription pain medication, (b) malingering physical pain to avoid work, and (c) malingering physical pain to lessen their military workload.

Each of the situational contexts above was in the form of a vignette. Each vignette had either a male or a female character that were malingering their

symptoms. Participants were randomly assigned only one vignette that featured either a male or a female character within their vignette. In addition, I explored the above situational contexts with three participant variables to see how they may have influenced the acceptability of malingering. The three participant variables were the following: (a) current medication, (b) sex, and (c) military status.

**Hypothesis 1.** I hypothesized that malingering symptoms for the purpose of obtaining prescription pain medication would be the least accepted form of malingering explored in this study for both males and females. I suspected this to be true due to the overall negative view on the abuse of prescription drugs and addiction in general.

**Hypothesis 2.** I predicted that male participants would be more in favor of females malingering symptoms to lighten their military workloads compared to males. I suspected this to be true due to the negative attitudes regarding women in the military reported by males.

**Hypothesis 3.** I hypothesized that malingering symptoms to avoid work regardless of the sex of the participant or the gender of the character within the vignette would be the most accepted form of contextual malingering explored in this study. I suspected this to be true due to the fact that work place absenteeism is extremely prevalent.

## METHODOLOGY

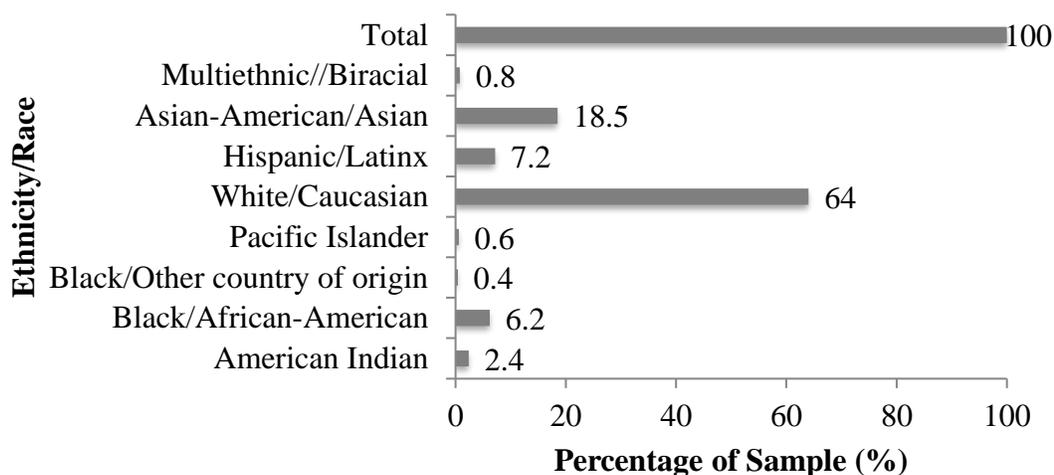
### Participants

A total of 532 participants took part in the study; data from 28 participants were excluded. Participants were excluded due to failing to indicate their gender ( $N = 24$ ), failing to rate their level of acceptability on the malingering vignette ( $N = 1$ ), and for having no data in their finished survey at all ( $N = 3$ ). After the above-mentioned participants were removed, there were a total of 504 total participant responses used for the data analysis.

Within the total participants there were 277 (55.0%) who identified as male, and 227 (45.0%) who identified as female with a total age range of 18 to 69 ( $M = 33.72$ ,  $SD = 10.57$ ). The majority of the participants reported that they were Caucasian/White (64%). The second largest racial group within the sample was Asian American/Asian (18.5%), and the third largest was Hispanic/Latinx (7.2%; see *Figure 1*).

The majority of the participants identified as heterosexual (85.5%). Smaller percentages of participants identified as bisexual (9.9%), homosexual (4%), and asexual (0.6%). Regarding marital status, 270 participants reported being single or never married, 199 reported being currently married, 29 reported being divorced or separated, and 4 reported being widowed (see Table 1). When asked about their current level of education, 42 participants reported having graduated high school, 164 reported having some college/AA degree, 215 reported having a bachelor's degree,

and 71 reported having a master's degree 10 reported having a doctoral degree. When asked about their current employment status, 432 (85.5%) participants indicated that they were employed and 72 (14.3%) indicated that they were not employed. Of those who were employed, 351 (76.3%) stated that they enjoyed their work while 109 (23.7%) stated that they did not enjoy their work (see Table 2).



*Figure 1.* Race/ethnicity information of the participants in the sample ( $N = 504$ ).

When participants were asked if they were currently on pain medication, 11.7% ( $N = 59$ ) indicated that they were and 88.3% ( $N = 444$ ) were not. When looking at participants who indicated they were on pain medication, the length of time they reported being on that medication ranged from 0 to 110 months, ( $M = 10.09$ ,  $SD = 19.24$ ). When asked if the pain medication was helpful, 50.4% ( $N = 59$ ) said yes and 49.6% ( $N = 58$ ) reported that it was not helpful.

Table 1

*Participant Marital Status as a Percentage of the Sample*

Marital Status	<i>N</i>	%
Single, never married	271	53.8
Married	199	39.5
Divorced/separated	29	5.8
Widowed	4	0.8
Your Preference	1	0.2

Table 2

*Participant Employment Status as a Percentage of the Sample*

Employment Status Questions		<i>N</i>	%
Are you currently employed?	Yes	432	85.7
	No	72	14.3
If you are currently employed, do you enjoy your work?	Yes	351	76.3
	No	109	23.7

Participants reported being on opioid/narcotic medication ( $N = 11$ ) and anti-inflammatory medication ( $N = 7$ ) the most frequently. Over the counter medication ( $N = 5$ ) and other non-narcotic ( $N = 2$ ) were also reported. After categorizing responses for what type of pain participants were taking pain medication for, back pain ( $N = 12$ ) was the most frequently reported reason. Other types of pain that participants were

taking pain medication included head pain ( $N = 10$ ), pain related to fever ( $N = 6$ ), hand pain ( $N = 4$ ), ankle pain ( $N = 3$ ), pain related to neuropathy or nerves ( $N = 2$ ), endometriosis ( $N = 1$ ), and physical pain/not otherwise specified ( $N = 4$ ).

Participants were asked how many times they visited a doctor in the past 12 months their responses ranged from 0 to 60 visits, with a mean of 2.70 ( $SD = 5.00$ ). When asked about whether they or someone they knew had been diagnosed with a serious illness in the past 12 months, the majority of participants reported that they had not. The same was true for when participants were asked whether they had ever been formally diagnosed with a psychological disorder (see Table 3).

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Table 3

*Participant Medical Diagnoses as a Percentage of the Sample*

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Question Regarding Diagnoses		<i>N</i>	%
Have you been diagnosed with a serious illness in the past 12 months?	Yes	55	10.9
	No	449	89.1
Has anyone you know been diagnosed with a serious illness in the past 12 months?	Yes	141	28.0
	No	362	72.0
Have you ever been formally diagnosed with a psychological condition?	Yes	163	32.5
	No	339	67.5

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## Measures

**Demographic questionnaire.** This questionnaire asked participants about the following areas: their sex, which gender they identify with, their sexual orientation,

marital status, age, race/ethnicity, current level of education, if they were currently employed, if they enjoyed the work they do if they were currently working, if they had been diagnosed with a serious illness in the past 12 months, if anyone they know had been diagnosed with a serious illness in the past 12 months, the number of times they had visited the doctor in the past 12 months, if they were currently taking pain medication, what type of pain medication they were taking, what kind of pain the medication was for, the length of time on the pain medication (in months), if they felt that the pain medication was helping them, if they had ever been formally diagnosed with a psychological condition, if they were currently a member of the United States military, and if they had ever been a member of the United States military (see Appendix A).

**Malingering Vignettes.** Vignettes were designed by the researcher to explore malingering in different contextual situations (see Appendix B). Participants were given one vignette and asked to rate how acceptable they felt it was for the person within the vignette to malingering symptoms. Ratings for the vignettes were on a Likert scale from 1 to 5. A participant score of 1 meant “not acceptable at all,” and a score of 5 meant “completely acceptable”. The minimum total score that a participant could obtain was 1. The maximum score a participant could obtain was 5.

**Vignette 1.** Malingering to obtain prescription pain medication. “Seeking to obtain prescription pain medication a man/woman reports physical pain to his/her medical doctor. The medical doctor is unaware that their symptoms are purely made-up, and he/she is given a prescription for pain medication.”

**Vignette 2.** Malingering to avoid work. “Seeking to avoid work a man/woman reports physical pain to their boss. The boss is unaware that their symptoms are purely made-up, and he/she is given permission to miss work without consequence.”

**Vignette 3.** Malingering to avoid military service. “Seeking a lighter work duty a male/female active duty service member reports physical pain to their medical doctor. The medical doctor is unaware that his/her symptoms are purely made-up, and he/she is given lighter work duties.”

### **Design**

This study had two independent variables (IV). IV #1: The sex of the character within the vignette. The sex of the character within the vignette was randomly assigned as either male or female. This IV was measured between-subjects. IV #1 had two levels. These levels included: (1) male and (2) is female. IV #2: The vignettes each involving malingering in different situational contexts. IV # 2 had three levels. These levels included: (1) malingering to obtain prescription pain medication, (2) malingering to avoid work, and (3) malingering to receive military service. IV # 2 was measured within-subjects.

This study had three participant variables. The three participant variables were the following: (1) the participant was currently taking pain medication, (2) if the participant was currently employed, and (3) if the participant was currently or had even been a member of the military. Each participant variable was measured categorically as either yes or no.

This study had one dependent variable (DV). The DV was the level of acceptability of malingering within the given vignette. This was measured on an interval scale. Each participant was asked to rate each vignette involving malingering on a Likert-scale from 1 to 5. A participant score of 1 meant “not acceptable at all,” and a score of 5 meant “completely acceptable”.

The sex of the character and the scenario within the vignettes was randomly assigned to participants. Participants rated their opinion on one vignette only, and then they completed the demographic questionnaire.

### **Procedures**

This study was conducted online. All participants were recruited through Amazon Mechanical Turk. Informed consent was obtained from all participants. Participants had the option to stop the study at any time. In order to ensure confidentiality, no identifying information was obtained from participants throughout this study. Participants were compensated fifty cents for taking part in this study. Financial compensation was in the form of a credit code provided by Amazon, which the participant could apply to their Amazon account to purchase goods.

Participants selected the study after logging into Amazon Mechanical Turk. Participants were given the consent form via the website, and they had the option to stop the study at any time (see Appendix C). Participants were shown a page telling them the purpose of the study, and giving them instructions on how to participate in the online study (see Appendix D). Participants rated their feelings of acceptability on one of the vignettes involving malingering. Then participants completed a

demographic questionnaire. At the end of the survey, participants were shown a debriefing page including the purpose for this study (see Appendix E). After completing the survey, the participants recruited through Amazon Mechanical Turk were provided their reward code for \$0.50 USD to be applied to their Amazon account.

### **Data Analysis**

A factorial ANOVA statistical analysis was performed on the data collected from the proposed study. Participant's ratings on the acceptability within the vignettes were technically being measured within subjects; therefore, mixed ANOVA was the most appropriate statistical analysis to use to synthesize collected data. Since the proposed study has a factorial design of 2 x 2 x 3, this allowed us to obtain a mean score on acceptability for male and female participant's ratings of the vignettes featuring male and female characters.

## RESULTS

The means and standard deviations for the male participants' rating of acceptability across all vignette conditions and characters can be found in Table 4. These descriptive statistics for female participants' acceptability ratings are in Table 5.

Table 4

*Descriptive Statistics for Male Participants' Acceptability Ratings Across Vignette Conditions*

Vignette Scenario	Vignette Character	Min	Max	N	Acceptability Ratings	
					M	SD
Pain Medication	Male	1	5	50	2.32	1.41
	Female	1	5	46	2.22	1.38
	Total	1	5	96	2.27	1.39
Avoid Work	Male	1	5	47	2.26	1.31
	Female	1	5	50	1.84	1.13
	Total	1	5	97	2.04	1.23
Military Service	Male	1	4	41	2.02	1.15
	Female	1	5	43	1.84	1.15
	Total	1	5	84	1.93	1.15

Total	Male	1	5	138	2.21	1.30
	Female	1	5	139	1.96	1.23
	Total	1	5	277	2.09	1.27

Table 5

*Descriptive Statistics for Female Participants' Acceptability Ratings Across Vignette Conditions*

Vignette Scenario	Vignette Character	Min	Max	N	Acceptability Ratings	
					M	SD
Pain Medication	Male	1	5	33	1.88	1.32
	Female	1	5	36	1.50	1.06
	Total	1	5	69	1.68	1.19
Avoid Work	Male	1	5	39	1.97	1.16
	Female	1	5	35	2.34	1.45
	Total	1	5	74	2.15	1.31
Military Service	Male	1	4	38	1.61	0.95
	Female	1	5	46	1.80	1.24
	Total	1	5	84	1.71	1.12
Total	Male	1	5	110	1.82	1.14

Female	1	5	117	1.87	1.29
Total	1	5	227	1.71	1.22

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### Hypothesis Testing

A 2 (participant gender: male vs. female) x 2 (vignette character: male vs. female) x 3 (vignette scenario: pain medication vs. avoid work vs. military service) factorial ANOVA was conducted to examine the effects and interactions of these three variables. Results are shown in Table 6. The results of the Levene's Test of Equality of Error Variances was violated,  $F(11, 492) = 2.72, p = .002$ . This indicates that there may be a possible variable not accounted for that influenced the differences in the acceptability ratings.

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Table 6

*Univariate Analysis of Variance of Acceptability Ratings for Participant Gender, Vignette Scenario, and Vignette Character*

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Source	<i>df</i>	<i>F</i>	<i>p</i>	$\eta^2$
Participant Gender	1	4.33	.038*	.009
Vignette Scenario	2	2.24	.108	.009
Vignette Character	1	0.60	.439	.001
Gender * Scenario	2	3.19	.042*	.013
Gender * Character	1	1.79	.181	.004
Scenario * Character	2	0.48	.618	.002
Gender * Scenario * Character	2	1.91	.149	.008
Error	492			

Total	504
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*Note.* \*  $p < .05$

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**Testing hypotheses 1 and 3.** In the first hypothesis it was predicted that the malingering in order to obtain prescription pain medication vignette would be rated the least acceptable vignette regardless of the sex of the participant and sex of the character within the vignette. The scenario of the vignette did not have a significant main effect,  $F(2, 492) = 2.24, p = .108, \eta^2 = .009$ . I also predicted that the vignette involving malingering to avoid work would be the most accepted scenario regardless of the sex of the participant or the sex of the character within the vignette compared to the other two scenarios. As shown in Table 3 the main effect of the scenario was not significant.

**Testing hypothesis 2.** I predicted that male participants would rate the vignettes involving female characters malingering to be given a lighter work duty in the military as higher on acceptability compared their ratings of the same vignette involving a male character within the scenario. This hypothesis was not supported because the three way interaction was not significant,  $F(2, 492) = 1.91, p = .149, \eta^2 = .008$ .

### **Exploratory Analyses**

A significant main effect for gender was found,  $F(1, 492) = 4.33, p = .038, \eta^2 = .009$ . Participants who identified as male ( $M = 2.09, SD = 1.27, N = 277$ ) scored the acceptability of malingering as higher overall compared to the participants who

identified as female ( $M = 1.85$ ,  $SD = 1.22$ ,  $N = 227$ ). There were no other significant main effects (see Table 3).

Participant gender also had a significant interaction with the vignette scenario,  $F(2, 492) = 3.19$ ,  $p = .042$ ,  $\eta^2 = .013$ . Simple effects analysis revealed that for those who read the pain medication vignette, male ( $M = 2.27$ ,  $SD = 1.39$ ,  $N = 96$ ) participants rated malingerer as more acceptable than female ( $M = 1.68$ ,  $SD = 1.19$ ,  $N = 69$ ) participants,  $F(1, 498) = 9.10$ ,  $p = .003$ , 95% CI [0.21, 0.97]. There were no other significant interactions found.

The simple effects analysis also showed that there was significant differences between all three scenario for female participants,  $F(2, 498) = 3.30$ ,  $p = .038$ . Female participants rated the avoid work ( $M = 2.15$ ,  $SD = 1.31$ ,  $N = 74$ ) vignette as moderately more acceptable than both the pain medication ( $M = 1.68$ ,  $SD = 1.19$ ,  $N = 69$ ;  $p = .074$ , 95% CI [-0.03, 0.97]) and military service ( $M = 1.71$ ,  $SD = 1.12$ ,  $N = 84$ ;  $p = .085$ , 95% CI [-0.04, 0.91]) vignettes. Interaction can be seen in *Figure 2*.

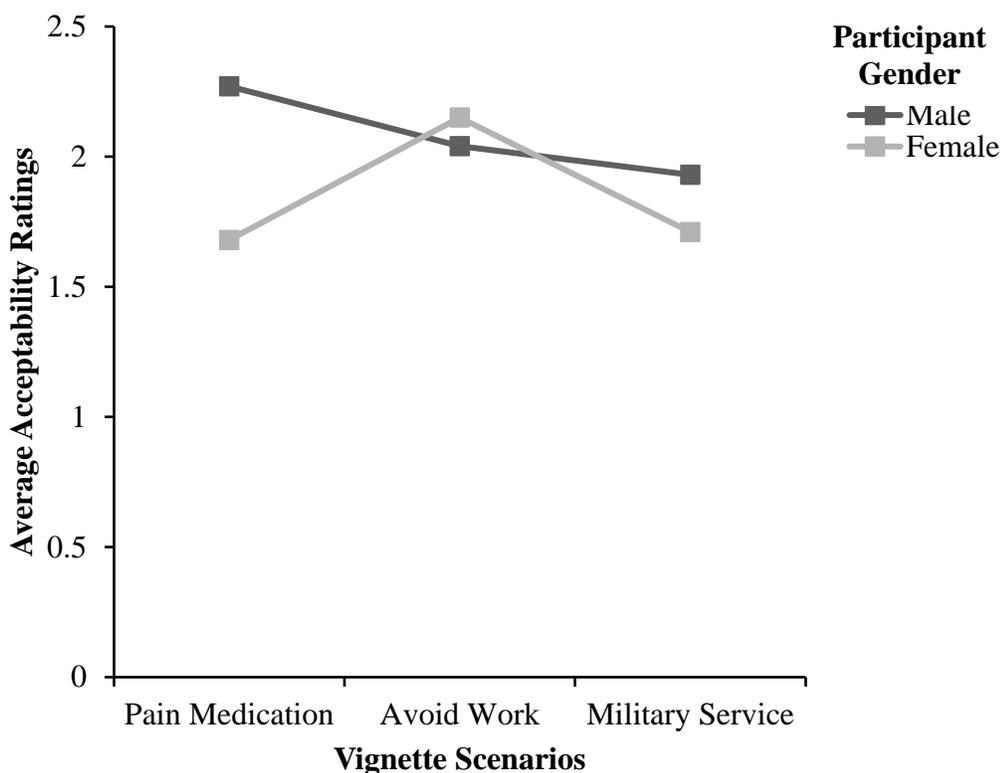


Figure 2. Interactions between participant gender and vignette scenarios on the average acceptability of malingering ratings.

After running a 2 (currently employed: yes v. no) x 3 (vignette scenario: pain medication v. avoid work v. military service) factorial ANOVA examining the acceptability across all three scenarios based on whether the participant was currently employed, there was significant main effect that was found for participants were currently employed,  $F(1, 497) = 9.25, p = .002, \eta^2 = .018$ . Those participants who were currently employed ( $M = 2.04, SD = 1.29, N = 431$ ) had a higher mean acceptability compared to those who were not ( $M = 1.57, SD = 0.92, N = 72$ ). There was no significant interaction found between current employment status and vignette scenario on acceptability ratings,  $F(2, 497) = 0.48, p = .622, \eta^2 = .002$ .

A 2 (currently taking prescription pain medication: yes v. no) x 3 (vignette scenario: pain medication v. avoid work v. military service) factorial ANOVA was run to examine the acceptability across all three scenarios based on whether the participant was taking prescription pain medication, there was significant main effect that was found for participants who were currently taking pain medication,  $F(1, 497) = 18.08$ ,  $p < .001$ ,  $\eta^2 = .035$ . Those participants who were currently taking prescription pain medication ( $M = 2.61$ ,  $SD = 1.59$ ,  $N = 59$ ) had a higher mean acceptability compared to those who were not ( $M = 1.89$ ,  $SD = 1.18$ ,  $N = 444$ ). There was no significant interaction found between current pain medication use and vignette scenario on acceptability ratings,  $F(2, 497) = 0.39$ ,  $p = .678$ ,  $\eta^2 = .002$ .

## DISCUSSION

The purpose of the present study was to determine whether participants' ratings on acceptability of malingering would be impacted by either the scenario (i.e. malingering to obtain prescription pain medication, to avoid work, and to be given a lighter work duty in the military) or the gender of the character described in the scenario. The participant's gender was also accounted for when examining these two factors.

There were three main hypotheses. First, it was predicted that malingering symptoms for the purpose of obtaining prescription pain medication would be the least accepted form of malingering explored in this study for both males and females participants and characters. Not only was this specific hypothesis not supported, but also the results showed that all forms of malingering were not considered significantly acceptable. One of the vignettes explored malingering to obtain prescription pain medication, and since addiction is typically viewed negatively by society for a variety of reasons this may have impacted how the participants rated malingering for pain medication (Back et al, 2010 & Jamison et al., 2010). While malingering to obtain pain medication was rated as unacceptable for both genders, men rated it as more acceptable compared to women to malingering to obtain pain medications.

Second, it was hypothesized that male participants would rate the malingering of symptoms by females' to lighten their military workloads more favorable than males malingering to lighten military workload. The hypothesis was not supported.

The lack of support for the hypothesis involving malingering to be given a lighter work duty within the military could have been influenced by the small number of participants that indicated that they were currently or had ever served in the military. Acquiring data from a sample of participants who currently were or had ever been in the military may have yielded different results. Conducting a similar research study with a military population would help use get a better understanding as to how this population views malingering to be given a lighter military work duty. Researchers (Berggren, 2002; Herbert, 1998; Vogt Bruce et al., 2007) have found that males in the military hold negative opinions towards women who are serving in the military. Additionally, Ivarsson et al., (2005) suggested that men's negative views of women in the military could stem from male's sexist beliefs. The results of the current study demonstrated that men found it equally unacceptable for both male and females to malingering in order to obtain a lighter military work duty. It is possible that if participants held negative views towards women being in the military, then they were more likely to rate the malingering within that scenario by women as unacceptable. These sexist beliefs that women should not be in the military may have caused participants to rate the malingering as unacceptable. However, this proposition requires additional research.

Last, it was hypothesized that malingering symptoms to avoid work would be the most accepted form of malingering, regardless of the sex of the participant or the gender of the character within the vignette. The results found that malingering to avoid work was not rated as more acceptable than the other three conditions.

Although past research demonstrated that work absenteeism is relatively prevalent with almost 30% of employees malingering symptoms of illness to avoid work (CareerBuilder, 2008). It is not clear why participants did not rate this form of malingering as more acceptable due to the overall frequency of malingering to avoid work in society. One possibility is that people hold different standards for their own behavior compared to the behavior of others. This concept is sometimes referred to as the fundamental attribution error (Gawronski, n.d.). This refers to a difference in interpretation between a person's own behavior and the behavior of others. This is regard people place undue focus on their internal characteristics (intention or character), as opposed to external factors when attempting to explain other people's behavior.

In summary, the three hypotheses were not supported. There are several possible explanations for the non-significant findings. The results of the analyses showed that across all scenarios, regardless of the sex of the participant or the character within the vignette, that malingering was viewed as unacceptable. Unacceptability was determined due to the mean acceptability scores of the three vignette scenarios only ranging from 1.93 to 2.27, which shows that participants typically rated malingering as either not acceptable at all or somewhat unacceptable. This overall rating of unacceptability was supported by previous literature that found lying in general was viewed negatively, especially if the person lying was doing so to gain incentives (Bendassolli, 2013; Inglehart, 1998).

Although the main hypotheses were not supported, exploratory analyses yielded some interesting findings. Overall, males significantly rated malingering as more acceptable compared to females. More specifically, men found it more acceptable compared to women to malingering symptoms to get prescription pain medication. The result that men rated malingering for pain medication as more acceptable than women was particularly interesting, because, even though relationship was not initially predicted, previous research does support this finding. Back et al. (2010) reported men as having a higher lifetime rate of opioid usage compared to women, which might lead one to logically assume men would rate the malingering for pain medication as more acceptable.

Participants who were employed rated all three vignettes of malingering as more acceptable compared to participants who were not employed. This could be because people who are employed might have found malingering as more acceptable due to understanding the pressures involved in the workplace and possible motivations for malingering. Females, in particular, rated malingering to avoid work as more acceptable than to get pain medication or a lighter work duty in the military. Women might have identified more with the characters who malingered to avoid work, because this type of situation is more pervasive than malingering for a lighter military work duty or to obtain pain medication. Also, women are more present in the general workforce than in the military, which would increase their ability to understand the motivations to malingering to avoid work, as this might be something they would do themselves.

When asked if they were currently taking pain medication, the vast majority of participants (88.3%) said they were not. When looking at the participants who were on pain medication, the length of time on medication ranged from very recently to many years. The majority of participants who were on pain medication reported it being helpful with managing their pain. When looking at what kind of pain medication participants were taking, participant responses were grouped into medication classes. Participants reported being on opioid/narcotic (e.g., hydrocodone, Percocet, Vicodin) and anti-inflammatory (e.g., ibuprofen, Motrin) medication the most frequently. Back pain was the most reported reason for why participants were currently taking pain medication. The number of doctors visits in the past twelve months reported by participants ranged from none to several per month. Respondents who indicated they were currently on pain medication rated higher on acceptability of malingering on all vignettes. This may have occurred within the sample because taking pain medication may have impacted their perception, and these participants may relate more to the malingering of physical pain due to their own experiences with pain.

When looking at the demographic information, a total of 32.5% (N = 163) participants indicated that they had been diagnosed with a mental illness and 10.9% (N = 55) reported they had been diagnosed with a serious illness within the past twelve months. The added element of a participant having a mental disorder or serious illness could have impacted their feelings in regards to people who malingering. Participants struggling with an illness may have found it more permissible for

someone to malingering within the three situational contexts explored in the vignettes. The same could have shown to be true for those participants who indicated that they at been diagnosed with a mental illness at some point of their lives.

Research suggests that one of the most common reasons to malingering is to obtain financial compensation (Leavitt & Sweet, 1986; McDermott, 2012; Rohling et al., 1995). The three scenarios looked at malingering to obtain prescription pain medication, to obtain a lighter work duty in the military, to avoid work, but none of the situations emphasize malingering to gain financial reward. If malingering for financial compensation is as crucial as research supposes, then not including this source of motivation may have resulted in the present study not finding significant differences in acceptability scores.

### **Limitations**

This study has several limitations. The first set of limitations involves issues with the demographics within the sample. First, every participant who took part in this study had at least a high school education, and results may have differed if participants with lower levels of education had been included. Second, participants were offered \$0.50 to complete the survey. While participants benefit from monetary incentives, their responses may have been influenced by their desire to attain that monetary incentive. Third, the study was conducted online outside of a controlled environment. The researcher could not control for such things as participant distractors, the presence of substances, or participant's responses being influenced by another person at the time of the survey. Fourth, if a larger number of participants

indicated that they were currently taking prescription pain medication had been reported, and this may have impacted their views on the medication vignette. Fifth, the lack of participants who indicated they were currently or had ever been in the military could have affected whether significant differences in acceptability ratings could be detected as the sample size was too small. All of these things could have influenced a participant's responses to the study items.

The second set of limitations involves the measure to collect data. First, only three situational contexts were explored in the study; this is a limited range of situations where malingering could have occurred. Additionally, this study only included characters malingering physical pain. Participants may have found it more acceptable for characters to malingere symptoms of various psychological disorders compared to physical pain. Second, certain questions on the demographic questionnaire could have been worded differently in order to avoid participant confusion. The demographic question asking what kind of pain medication participants were taking could have been structured differently. For instance, the question may have proven to be more useful if it involved having participants select what class type (i.e. narcotic, over the counter, anti-inflammatory) medication they were currently taking instead of having them fill in the text box for indication. Similarly, the demographic question involving what kind of pain participants were taking the medication for could have also been more specific by making participants choose from categories involving types of pain (e.g., back, head, stomach) instead of having participants fill in a text box to indicate their answer.

Finally, past research (Chafetz and Underhill, 2013; Larrabee 2003; McDermott, 2012; Rohling, Binder, and Langhinrischen-Rohling, 1995) has shown that the most common reason why people malingering is for financial gain, but the measure within this study does not explore that construct. Not researching this motivation for malingering may have contributed to the non-significance in findings. The overall motivations for malingering within the vignettes were limited. Participants may not have seen the rewards for malingering explored in this study as significant enough to prompt higher acceptability ratings compared to other research that has examined malingering to obtain various financial incentives.

Due to the lack of published research on the topic of malingering directly related to gender, it is difficult to gain clear conclusions from the results of this study. Since much of the research on this topic remains unpublished, it is difficult to compare similarities and differences between samples involving such studies.

### **Future Research**

Results of the current study suggest that further research is needed on the topic of the acceptability of malingering. The results of the study indicated that the gender of the person who is doing the malingering within a given context does not play a significant role in determining the level of acceptability. However, the study results suggest there are some significant differences between how participants of different genders view the acceptability of malingering within specific situational contexts. Future research on this specific topic may prove to be noteworthy in terms of determining why one gender found it more or less acceptable to malingering

compared to another in certain contexts. One way the influence of gender could be explored would be through the measuring specific characteristics associated with gender (i.e., traditional masculinity and femininity) along with the level of acceptability within a given situational context involving malingering.

Additionally, the exploration of malingering acceptability and specific participant traits might prove to yield interesting results. Measuring participant's scores on measures looking at character traits, such as deceitfulness or overall level of morality, may provide insight as to why some participants find it more or less acceptable to malingering symptoms. The addition of a social desirability scale could help researchers understand participant's motivations between trying to present well versus honestly in terms of their responses to ratings of acceptability.

The topic of malingering should be explored further with a current active military population. Given past research on male's negative views of women in the military (Vogt Bruce, Street, and Stafford, 2007), it may prove to be beneficial for researchers to look at the role that gender stereotypes may play in participant ratings of acceptability to malingering symptoms to gain incentives within a military situational context. Comparing participant level of acceptability when they are presented with images of stereotypically portrayed women versus a non-stereotypically portrayed women may yield discrepancies in acceptability ratings. Furthermore, discrepancies in acceptability ratings may be evident when comparing this population's views towards traditional masculinity versus portrayals of masculinity that deviate from that traditional viewpoint. Moreover, malingering acceptability could even be broken

down into branches of the military, determining whether the type of military service affects perceptions of malingering acceptability.

The current study only explored ratings of acceptability of malingering physical pain. Exploring participant's feelings in regards to the malingering of other types of pain or mental disorders may lead to interesting results. Research conducted on malingering within forensic settings frequently focuses on the malingering of mental disorders (Hickling, 1999; Lees-Haley, 1997; Chafetz and Underhill, 2013; Huss, 2009; Cochrane, Grisso, & Frederick, 2001). Exploring which mental disorders people find it most acceptable to malingering may prove to be beneficial to clinicians assessing for malingering. This may prompt more exploration into the types of possible malingering that occurs most often, and could possibly lead to the development of more efficient measures used to assess for the presence of malingering during psychological assessment.

The wording of the vignettes could be altered in a way as not to possibly influence a participant's response to their feelings of acceptability of the malingering taking place within a given vignette. This could include changing the vignette wording from "how acceptable do you feel" to "would you" when asking if they would lie in the situation stated in the vignette. Such working could illicit more of a personal opinion because it asks the participants to directly imagine themselves in the situation involving malingering. A post test question could be asked directly following the vignette to ask if a participant had actually malingered in such a way like the one in the vignette they just responded to.

Demographic questions could be redesigned to force participants to select what job group they currently belong to (i.e. manual labor or management related jobs). The same forced choice grouping method may also prove to be helpful with type of drug participants are currently taking for pain (i.e. over the counter or narcotic). Wording the demographic questions in this way could make it easier for future researchers to run statistical analyses examining the possible correlations between current participant drug type and job group in regards to ratings of acceptability of malingering.

Researchers could also benefit from asking participants if they currently have children and how that relates to their feelings of acceptability of malingering to avoid work. A participant having children have influence their responses in malingering to avoid work if a vignette involved a parent calling in sick to avoid work to take care of their ill child.

## **Conclusion**

This study attempted to determine the effect that participant and character gender could have on the overall ratings of acceptability of malingering within three contexts (i.e., to obtain prescription pain medication, to get out of work, or to be given a lighter work duty in the military). While the study's main hypotheses were not supported by the findings, exploratory data analysis revealed several significant findings. For example, male participants rated acceptability of malingering as higher in each of the situation contexts. Men also found it more acceptable to malingering in order to be given prescription pain medication, and this finding was supported by past

research showing that men have a higher lifetime rate of usage of pain medication (Back et al, 2010 & Jamison et al., 2010). Females found it most acceptable to malingering in order to avoid work compared to the other two situational contexts. Participants who were employed rated all three scenarios as more acceptable compared to those who were unemployed. A higher overall acceptability was found across the three vignettes were found for participants who were currently on pain medication compared to those who were not.

Although this study focused only on malingering physical pain within three situational contexts, it may be valuable for future research to explore specific participant traits in relation to their level of acceptability on malingering within a given context. The results of this study demonstrate that there are differences between how people of differing genders view the level of acceptability of malingering within three situational contexts. Exploring gender stereotypes may also give researchers more insight as to why men and women find it more or less acceptable to malingering certain symptoms within given situational contexts. Malingering research is critical to ensuring the effectiveness of the legal system, proper appropriation of government funds, and it can help us understand why people view it as acceptable to malingering in certain situations over others. This study supports the idea that malingering is a complex and multilayered issue that still remains mostly unexplored within psychological research.

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## APPENDICES

APPENDIX A  
DEMOGRAPHIC QUESTIONNAIRE

Instructions: Please answer the following demographic questions.

1. Which gender do you identify as?
  - Male
  - Female
  - Your Preference: \_\_\_\_\_
2. What sexual orientation do you identify with?
  - Heterosexual (Straight)
  - Homosexual (Gay or Lesbian)
  - Bisexual
  - Your Preference: \_\_\_\_\_
3. What is your marital status?
  - Single, never married
  - Married
  - Divorced/Separated
  - Widowed
  - Your Preference: \_\_\_\_\_
4. What is your age in years? \_\_\_\_\_
5. What is your race/ethnicity?
  - American Indian
  - Black, other country of origin (e.g., Caribbean)
  - Pacific Islander (e.g., Filipino)
  - Middle Eastern (e.g., Syrian)
  - White/Caucasian
  - Hispanic/Latinx
  - Asian-American/Asian
  - Multiethnic/Biracial – Please Specify: \_\_\_\_\_
  - Other – Please Specify: \_\_\_\_\_
6. What is your current level of education?
  - High School or equivalent (GED)
  - Some college/AA degree
  - Bachelors degree (BA/BS)
  - Masters degree (MA/MS/MFA/MBA)

- Doctoral degree (JD/MD/Psy.D/Ph.D)
7. Are you currently employed?  
 Yes  
 No
8. If you are currently employed, do you enjoy your work?  
 Yes  
 No
9. Have you been diagnosed with a serious illness in the past 12 months?  
 Yes  
 No
10. Has anyone you know been diagnosed with a serious illness in the past 12 months?  
 Yes  
 No
11. How many times have you visited a doctor in the last 12 months? \_\_\_\_\_
12. Are you currently taking prescription medication for pain?  
 Yes  
 No
- If you answered yes to the above question, please answer questions 13 through 16.
13. What type of pain medication? \_\_\_\_\_
14. What kind of pain are you taking the medication for? \_\_\_\_\_
15. Length of time on pain medication (in months)?
16. Is the pain medication you are taking helpful?  
 Yes  
 No
17. Have you ever been formally diagnosed with a psychological condition?  
(Such as depression or anxiety.)  
 Yes  
 No
18. Are you currently a member of the United States military?  
 Yes  
 No
19. Have you ever been a member of the United States military?  
 Yes  
 No

## APPENDIX B

## MALINGERING QUESTIONNAIRE

**Instructions:** Please answer the following questions concerning the following vignettes.

1. Seeking to obtain prescription pain medication a man/woman reports physical pain to his/her medical doctor. The medical doctor is unaware that their symptoms are purely made-up, and he/she is given a prescription for pain medication.

Please rate how acceptable you feel the person's behavior was in the above vignette on a scale of 1 (meaning not acceptable at all) to 8 (meaning totally acceptable).

1	2	3	4	5
Not Acceptable At All	Somewhat unacceptable	Neutral	Somewhat Acceptable	Completely Acceptable

2. Seeking to avoid work a man/woman reports physical pain to their boss. The boss is unaware that their symptoms are purely made-up, and he/she is given permission to miss work without consequence.

Please rate how acceptable you feel the person's behavior was in the above vignette on a scale of 1 (meaning not acceptable at all) to 8 (meaning totally acceptable).

1	2	3	4	5
Not Acceptable At All	Somewhat unacceptable	Neutral	Somewhat Acceptable	Completely Acceptable

3. Seeking to avoid military service a male/female active military service member reports physical pain to their medical doctor. The doctor is unaware that his/her symptoms are purely manufactured, and he/she is given lighter work duties.

Please rate how acceptable you feel the person's behavior was in the above vignette on a scale of 1 (meaning not acceptable at all) to 8 (meaning totally acceptable).

1	2	3	4	5
Not Acceptable At All	Somewhat unacceptable	Neutral	Somewhat Acceptable	Completely Acceptable

## APPENDIX C

## INFORMED CONSENT

1. **Summary:** The purpose of this study is to examine different perspective on people's behavior. If you agree to participate in this study, you will be asked to read one short scenario about a person's behavior and you will be asked rate how acceptable you feel the character's behavior was. You will first be asked information about yourself including age, gender, education, and various life experiences you might have had.
2. **Your Right to Withdraw/Discontinue:** As a participant you are free to stop the survey at any time without penalty. You are also free to skip questions within the survey if they make you uncomfortable, or if you don't wish to answer them. If you decide to withdraw from this study, you will still receive any entitlements/rewards that have been promised to you in exchange for your participation, such as a credit code for Amazon.com.
3. **Benefits:** Although no participation is not anticipated to benefit you, participation in this study guarantees you the rewards promised to you in the form of an Amazon.com credit code for \$0.50 USD.
4. **Time Commitment:** If you consent to participate in this study, it will take about 15 minutes to complete.
5. **Guarantee of Confidentiality:** All of your responses and data from this study will be kept strictly confidential to avoid any inappropriate disclosure. Data and participant responses will only be accessible to the researcher and their appointed faculty advisor.
6. **Risks:** The following study was designed to reduce the possibility of any negative experiences that may result from participation in this study. However, if your participation in this study causes you any distress, anxiety, or negative emotions please contact the National Alliance on Mental Illness (NAMI) at 1-800-950-6264 to discuss your concerns.
7. **Researcher Contact Information:** This research study is being conducted by Samuel Donath. His appointed faculty advisor is Dr. Jessica Lambert. If you have any questions or concerns about your participation in this study, please contact the researcher at sdonath@csustan.edu or Dr. Lambert at jlambert@csustan.edu.
8. **Campus Compliance Officers Contact Information:** If you have any questions or concerns about your rights as a research participant in this study, please contact the Psychology IRB chair at California State University, Stanislaus at kcotter@csustan.edu.
9. **Personal Copy of Consent Form:** If you choose, you may print an unused copy of this consent form for your records at the beginning of the study.

10. **Verification of Age:** By selecting, “Yes, I give my consent”, you attest that you are at least 18 years old or older.
11. **Verification of Consent:** By selecting, “Yes, I give my consent”, you are indicating that you have freely consented to participate in this research study.
- Yes, I give my consent.
  - No, I do not give my consent.

## APPENDIX D

### PURPOSE OF STUDY AND INSTRUCTIONS TO PARTICIPATE

**Purpose of Study:** The purpose of this study is to explore the relationship between gender differences in relation to participant's ratings on the acceptability of malingering symptoms of physical pain.

**Instructions to Participate in Study:**

To participate in this study please answer the corresponding questions on the following pages. You will come to an informed consent page. If you choose not to give your consent, you will be taken to the end of the survey. If you choose give your consent, you will be taken to pages with a demographic questionnaire and a malingering vignette. Following the vignette, you will be taken to a final debriefing form at the end of the study.

## APPENDIX E

### DEBRIEFING FORM

Thank you for agreeing to participate in this research study! I'm interested in understanding the relationship between gender differences in the acceptability of malingering symptoms of physical pain. Malingering is defined as the intentional faking or exaggerating of physical or psychological symptoms for secondary gain. Examples of secondary gain include money, medication, to win a lawsuit, or to receive a lighter prison sentence. The sex of the characters and topics within the scenarios within the vignettes were randomly assigned to participants. This was done to further explore the gender differences on the acceptability of malingering.

After looking at past research, I predict the following results from this study. (1) I hypothesize that malingering symptoms for the purpose of obtaining prescription pain medication will be the least accepted form of malingering explored in this study for both males and females. I expect this to be true due to the widespread coverage of the prescription drug epidemic in this country. (2) I hypothesize that the sex of the participant will influence their rating of malingering symptoms to avoid military service. (3) I predict that male participants will be more accepting of females malingering symptoms to avoid military service compared to males. (4) I hypothesize that malingering symptoms to avoid work regardless of the sex of the participant or the character in the vignette will be the most accepted form of contextual malingering explored in this study. I expect this to be true due to the common practice of lying to get out of having to go to work. My goal is not to look at specific people's responses, but to see if there are any correlations between groups of people and responses to given topics explored within the study.

I request that you please do not discuss this study with anyone else in order to avoid influencing future participant's responses. Such disclosure of information could alter the way in which participants respond to the study questions, and that could have an invalidating effect on the results of the study.

If you have any further questions, you may contact me through my school email at [sdonath@csustan.edu](mailto:sdonath@csustan.edu). Contact the chair of the psychological IRB Dr. Kelly Cotter at [kcotter@custan.edu](mailto:kcotter@custan.edu) to address additional concerns. If participating in this study has caused distress or negative emotions, please contact the National Alliance on Mental Illness (NAMI) at 1-800-950-6264 to discuss your concerns.

Included below are some reference links if you'd like to learn more about the topic of malingering.

Psychology Today:

<https://www.psychologytoday.com/conditions/malingering>

EMedicine:

<http://emedicine.medscape.com/article/293206-overview>

Psychiatric Times:

<http://www.psychiatrictimes.com/forensic-psychiatry/malingering-key-points-assessment>

