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Stigma, Empathy, and Perceived Stress Among Idaho Nurses Caring for those with Substance Use Disorder

by

Allison Rose Baker

A dissertation submitted in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy in the Department of Nursing

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To the Graduate Faculty:

The members of the committee appointed to examine the dissertation of ALLISON ROSE BAKER and find it satisfactory and recommend that it be accepted.

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Human Subjects Committee Approval

October 21, 2020

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MS 8101

RE: Study Number IRB-FY2021-92: Stigma and Empathy Among Rural Idaho Nursing Caring for those with Substance Use Disorder

Dear Ms. Baker:

Thank you for your responses to a previous review of the study listed above. These responses are eligible for expedited review under OHRP (DHHS) and FDA guidelines. This is to confirm that I have approved your application.

Notify the HSC of any adverse events. Serious, unexpected adverse events must be reported in writing within 10 business days.

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Sincerely,

Ralph Baergen, PhD, MPH, CIP
Human Subjects Chair

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Dissertation Abstract—Idaho State University (2021)

To better care for patients with substance use disorder, this research study provides an initial exploration of stigmatizing perceptions, and the relationship of empathy and perceived stress on these perceptions in nurses employed in health care settings in Idaho and caring for those with substance use disorder (SUD). SUD is increasing in the rural and urban United States and in Idaho. Research indicates that stigma perceptions of nurses towards those with SUD is common and can result in poorer outcomes. Given that the nurse patient relationship is a cornerstone to improved patient outcomes, stigmatizing perceptions of nurses in caring for those with a SUD can place a barrier to meeting healthcare needs, whereas nurse empathy may lead to improved outcomes.

This study was a nonexperimental cross-sectional survey of nurses employed in both rural and urban settings and who care for individuals with SUD. Variables explored included perceived stress, empathy, and stigma perceptions. Findings indicate that the influence of perceived stress and empathy on stigma perceptions are similar among rural and urban nurses in Idaho, and that there is an inverse relationship between empathy and stigma perceptions in that as empathy decreases, stigma perceptions increase. Perceived stress is negatively correlated with empathy in nurses caring for patients with SUD in this study. Future research directions include the impact of empathy training of students to care for those experiencing a SUD. In addition, more research is needed that is focused on specifically rural nurses, their challenges, and their perceptions in caring for those with SUD.

Keywords: rural nursing, stigma, empathy, stress, substance use

CHAPTER I: Introduction

The growing substance use epidemic costs human relationships and lives. There is an increasing number of individuals in this nation that suffer from substance use problems that impact daily life, families, and communities. Substance use disorder (SUD), also known as addiction, (Mayo Clinic, 2020), affects an individuals' physical status as well as their behavior. Substance use disorder results in continual use of a drug despite the potential harm. There are multiple negative consequences to substance use disorder or addiction. According to the National Institute on Drug Abuse (NIDA, 2018), substance use disorder in some form is the root cause of 50% - 80% of child abuse. In addition, prescription opioid abuse alone costs Americans $78.5 billion annually (Morland, 2019). Other health crises that can occur from this epidemic are an increase in number of human immunodeficiency virus (HIV) infections, hepatitis infections, and neonatal abstinence syndrome (NIDA, 2018).

It is well recognized in the current literature that substance use disorder is a serious public health problem across generations, with intervention needed to address the negative consequence of this epidemic. More needs to be done in the area of substance abuse and foundational to this, is mental health intervention and treatment and preventative efforts (SAMSHA, 2016; SAMSHA, 2021).

With increasing numbers of individuals fighting addiction, more will enter the health care system in hope for help, direction, and treatment. Nurses will be at the front line and are often the first person to be in contact with those fighting addictions and seeking care across the health care system. The nurse-patient relationship is the cornerstone for all nursing care and is central to patient centered care (Forchuk & Brown, 1989; Reynolds, 2000). As detailed in Theorist Hildegard Peplau's Theory of Interpersonal Relationships, the nurse-patient relationship is an

important process that helps promote the patient's health (Forchuk & Brown, 1989). This theory is focused on the nurse operating in a respectful, nonjudgmental way in order to help the patient (Hagerty, Samuels, Norcini-Pala, & Giglotti, 2018).

Health care providers, specifically nurses, can have a major impact in the care of those suffering from addiction or SUD through the patient-nurse relationship (Bartlett et al, 2013). This relationship can encourage healing through empathy (Pullen & Mathais, 2010) However, judgmental stigmatization in caring for patients with a substance use disorder can stop the healing before it starts (van Boekel, 2013).

Background of the Problem

Definition of Substance Use Disorder

The American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders- 5 (DSM-5) recognizes two categories of substance disorder: SUD and substance induced disorder (Hartney, 2020). *Substance induced disorders* include intoxication, withdrawal and other mental health issues that are caused by substances or medications (Hartney, 2020*). SUD or addiction* is defined differently. It is recognized as a chronic brain disease, influenced by genetics and environment, and associated with relapses (Bartlett, Brown, Shattell, Wright, & Lewallen, 2013; National Institute of Drug Abuse, 2018). SUD is the using of a substance such as alcohol or illicit drugs, despite the negative effects that result from its use such as psychosis, overdose, heart disease, or cancer (Casey, 2017; Hartney, 2020; NIDA, 2017; NIDA, 2018). According to the American Society of Addiction Medicine
ASAM), addiction is a chronic brain disease of reward, memory, and motivation. This is manifested by a person chasing a reward by substance use (ASAM News,2011).

Substance Use Disorder Rates

The Substance Abuse and Mental Health Services Administration (SAMHSA) 2019 National Survey on Drug Use and Health notes that 20.4 million Americans 12 years old and older meet criteria for SUD. (Petruzzelli, 2018). The National Institute on Drug Abuse (NIDA, 2019) cites that the use of illicit substances had increased in the previous two years in all age groups. SUD is a recognized problem across urban and rural areas. There are consequences for individuals, families, and communities, including an increase in crime, poor health outcomes, and death. Much of the research into SUD is focused in urban settings, however, rural areas face growing issues related to substance use disorders as well (Substance Abuse in Rural Areas, 2018).

The Rural Healthy People 2020 initiative, as well as the Centers for Disease Control (CDC, 2019), recognize SUD as a public health issue and as a priority for health improvement (Browne, Priester, Clone, Iachini, Dehart, & Hock, 2016).

Cosby et al. (2019) found that in 2004 rural America had 76.97 per 100,000 more deaths than those in urban areas. They found that in 2016 this increased to 134.70 per 100,000 excess deaths in rural American versus urban American. The CDC (2019) found that that there were higher rates of drug overdoses in rural areas from natural and semisynthetic opioids, psychostimulants than in urban areas. Galvin (2020) cited a survey from 2019 of 2500 rural Americans with twenty five percent listing drug addiction as the most serious problem in their community while only 21% cited economic concerns.

Idaho is primarily a rural state with 32% of its population living in rural communities (Wolkenhauer, 2018). According to Corbin and Dutton (2021) of the 201 cities in Idaho, 70 had negative or zero growth. In 2019, the drug overdose rate in Idaho was 15.1 per 100,000 (CDC, 2021) or 134 overdose death in 2018 versus120 fatalities in 2018 (NIDA, 2020).

Costs of Substance Use Disorder

According to Clinical Psychiatry News (2019) between the years of 2007 and 2017, there was a 69% increase in alcohol-induced deaths and a 108% increase in drug related deaths within the United States. The Idaho Opioid Summary (NIH, 2019) attributes 14.4 per 100,000 Idahoan deaths in 2017 to overdose on opioids. These statistics speak to a growing public health issue as recognized by the American Public Health Association (2021).

This growing public health problem of SUD costs not only money, but also lives and relationships. According to the National Institute of Drug Abuse (2018), those with SUD often have one or more associated illnesses such as heart, lung disease, or mental health diagnosis. Specifically, regarding mental illness, the NIDA (2018) states that of the 20.3 million adults with SUD, 37.9% have a coexisting mental illness. According to the NIDA in 2021, 1 out of 4 individuals with a severe mental illness also have a SUD. Diagnostic testing shows the negative effects of drug abuse on the body and brain. Drug abuse can affect those around the individual with the disease. The more severe consequences to families, friends, and community includes increased numbers of HIV infections, hepatitis cases, motor vehicle accidents and neonatal abstinence syndrome (NIDA, 2019; NIDA, 2018; U.S Department of Health and Human Services, 2019).

Society also pays a price. According to the Surgeon General's Report (2016), Americans pay $442 billion annually and some reports say it is closer to $820 billion (How Drug Use Affects Our Society, 2019). This number includes medical costs, criminal justice costs, and lost productivity related to SUD. Society also pays for a person's SUD through the negative effects to unborn children, domestic violence, and increased homelessness.

Seeking Treatment

In 2017, the National Survey on Drug Use and Health found that the number of individuals seeking treatment for SUD increased by approximately 4% within a 12- month period (Petruzzelli, 2018). Individuals suffering from substance use disorder have complex health needs and often need more health care. Various treatment may be sought by the individual for coexisting disease and illness or for recovery such as methadone treatment, inpatient supervised detoxification programs, outpatient counseling and/or 12-step programs (Landry, 1996). Success rates are not standardized. Different facilities report varying benchmarks as success such as completion of a focused intervention program, client interviews, sobriety immediately after discharge, or internal studies (American Addiction Centers, 2020). Although numbers are uncertain, the therapeutic community claims 30% success rate when looking at those that complete a program (American Addiction Centers, 2020). In rural areas, those with SUD who are seeking treatment are at a disadvantage due to limited resources, geographical dispersion, fewer trained providers, lack of anonymity, and a generally poorer population with less education (Artnak, 2011; Benavides-Vaello, Strode, & Sheeran, 2013; Farmer, Munoz, & Threlkeld, 2012; Pullen & Oser, 2014). As of 2019, 18% of Idahoans in total are below the poverty line (Rural Health Information Hub, 2021). In comparison, rural poverty is 13.1% and urban poverty is 10.1% (Rural Health Information Hub, 2021) Idaho has 27 critical access hospitals, 49 rural health clinics, 46 federally qualified health centers and four short term hospitals outside of urban areas with 18% uninsured and 11.2% living below the poverty line demonstrating the poverty rate. (“Poverty in Idaho”, 2021). Poverty has been associated with SUD and mental health problems in rural and urban populations. Limited resources and other factors herein create challenges for SUD interventions in rural areas.

Nurse-Patient Relationship

When seeking help, nurses are often the first person which the individual will come into contact when entering into the healthcare setting. The nurse-patient relationship is a therapeutic relationship built on trust and respect and is at the center of intervention for SUD clients entering the health care system (Pullen & Mathias, 2010; Reynolds, 2000). Unfortunately, research shows that stigma towards those with substance use disorder is common among nurses (Bartlett, et al, 2013; Bjorkman, Angelman, & Jonsson, 2008; Johansson & Wiklund-Gustin, 2016; Natan, Beyil, & Neta, 2009; Riley, Evans, Worozbyt, & Kowalchik 2019; Rimkevicience et al, 2015; Smith, Mittal, Chekuri, Sullivan, 2017). In a comprehensive review of the literature, little is known about nurses, stigmatization of those seeking treatment for SUD especially in rural and frontier areas. Most of the research has been conducted in urban settings.

Health Related Stigma

Health related stigma is a social and cultural process where certain groups are disgraced due to a certain diagnosis by those without the disease, including health care providers. (Livingston, Milne, Fany and Amari, 2011).

Of the health-related diagnoses most often experiencing stigma, are mental illness and SUD (Drake, Codd & Terry, 2017; Fox, Earnshaw, Taverna, & Vogt, 2018; Henderson, & Dressler, 2017; Rao, Madhadevappa, Pillay, Sessay, Abraham, & Luty, 2009; Rimkevicience et al., 2015; Room, 2005). Stigma can be attitude, perception or behavior (Davey, 2013) and the resulting attitudes and behaviors, can place a barrier to a substance abuser seeing help and may negatively affect the therapeutic nurse-patient relationship (Birbeck, Bond, Earnshaw, & El-Nasoor, 2019; Chu & Galang, 2013; Halm, Muehlan, Stolzenburg, Riley, Evans, Worozbyt, & Kowalchik, 2019; Schmidt, & Schomerus, 2019). Conversely, empathic interactions can lead to

an understanding of experiences and a more positive patient satisfaction and patient outcome (Hojat, 2007).

Empathy

Empathy is defined as the "the ability to put oneself in another's shoes" (Lovan and Wilson, 2012, p. 28) or taking the perspective of the client. Empathy incorporates concern and compassion for another which can enhance patient outcomes (Williams, Boyle, & Fielder, 2015). Empathy involves an understanding of the client's world by the nurse (LaMonica, 1978) and can improve attitudes toward the population of patients in general (Batson, Chang, Orr, & Rowland, 2002) . Empathy lets nurses respond to a client's needs in a way that positive outcomes may be more achievable (Riley, et al, 2019; Reynolds, 2000). As nurses gain practice experience and have more contact with clients and/or or advance education, empathy increases (Knolhoff, 2018). Positive attitudes among nurses are associated with younger age and increased education (Tierney, 2016). With greater empathy, the nurse is able to enhance the quality of care, and improve patient outcomes (Bartlett, et al, 2013; Hojat, 2007).

Rural Nursing and Perceived stress Research is minimal regarding the concepts of the rural nursing role, perceived stress, empathy and stigma. Numerous challenges face rural nurses. These challenges include workforce shortages, lack of peer support, less compensation and limited numbers of specialists in behavioral health (Puskar, Lee, Mitchell, Kane, Albrecht, Frank …Houze, 2016; Sellers, Riley, Denny, Rogers, Havener, Rathbone, Gomez-Di Cesare, 2019). Because of the unique issues to rural nursing, perceived stress is common (Baernholdt, 2009). Stress is the physical and/ or psychological response that occurs when job requirements do not match the available resources (Roberts & Grubb, 2014). This stress can be due to staff shortages, long hours, patient demands, lack

of support, minimal professional development, and increased workloads (Atkinson, et al 2017; Jourdain, 2010). Perceived stress, which can be demonstrated through cynicism, has been shown to negatively affect relationships with others including patients (Adams & Rollins, 2017; Atkinson, et al, 2017; Chatterjee, Ray, &Ghosh, 2017; Salyers, Bonfils, Luther, Firmin, White, Adams, & Rollins, 2016). Empathic behaviors on the part of the nurse decreases with increased perceived stress and emotional exhaustion (Atkinson, Rodman, Thuras, Shirman, & Lim, 2017; Jourdain, 2010; Sarafis, Rousaki, Tsounis, Malliarou, Lahana, Bamidis, Niakas, & Papastavrou, 2016).

Tierney (2016) acknowledges that nurses' lack of knowledge regarding SUD contributes to their negative feelings. Tierney (2014) cites a qualitative study that found that nurses felt there was lack of knowledge regarding addiction which led to a "disconnect" in caring for this patient population. The lack of knowledge tends to lead to escalating patient demands, and reinforcing biases, leading to poor care.

Patient Outcomes

Perceptions can affect behaviors and attitudes. When a nurse has stigmatized perceptions leading to attitudes and behaviors that exhibit these stigmatized perceptions, the patients may then feel judged and may leave treatment early, according to Ashford, Brown, Ashford, and Curtis (2019). Perceived stress by the nurse can exacerbate feelings of cynicism and negatively impact empathy in the nurse patient relationship, making the individual feel stigmatized or less cared for because of their substance use problem (Lamothe, Boujut, Zenasni, & Sultan, 2014). Therefore, perceived stigma by the patients may negatively affect treatment outcomes.

Listening and empathic discourse in a therapeutic relationship positively correlates with patient satisfaction (Crawford, Roger, & Candlin, 2018; Wanzer, Booth-Butterfield, & Gruber,

2009) and is associated with better patient outcomes (Haley, Heo, Wright, Barone, Rettiganti, & Anders, 2017). Empathy from the healthcare provider during interactions with patients empowers and motivates the patient Mudiyanse, 2016).

Purpose of the Study

This study is an initial exploration of stigmatizing perceptions, and the relationship of perceived stress and empathy on stigmatizing perceptions in nurses employed in rural and urban health care settings in Idaho and caring for those with SUD.

Research Questions

1. To what extent do rural Idaho nurses report stigmatizing perceptions when working with those with substance use disorder?
2. Do nurses with higher empathy levels report lower stigma perceptions?
3. Are years in nursing practice, gender, age, geographic region, and educational level associated with an increase in stigma perceptions and decreased empathy?
4. Is self-reported perceived stress associated with decreased empathy?

Assumptions

Assumptions in research studies are the acceptance that certain ideas are factual (Simon, 2011). The primary assumption of this study is that stigma can exist in nurses employed in rural areas toward those patients seeking help in a rural health care setting which can impact patient outcomes. Lastly, it is assumed that nurses will answer survey questions honestly due to the use of anonymity and confidentiality of the surveys (Simon, 2011).

Limitations

Limitations are possible hindrances to the study (Simon, 2011). One limitation is that the information gathered specifically from the participants may not be generalizable for all

populations. Pierce and Scherra (2012) state that research among rural populations can be challenging in that there is some sensitivity to their rural culture and wariness of outsiders judging them (Bischoff, et al, 2013). This wariness of outsiders may decrease response rates of those in rural communities to the surveys. Research also shows that rural communities traditionally lag behind urban communities in the use of smart phones or internet (Bunnell, Dewey, & Ruggiero, 2017). Conducting online surveys may present a potential barrier to the participant's ability to access and feel at ease with using a computer and the internet. Therefore, a lack of computer use knowledge or lack of reliable internet access may be a hindrance to participants answering the surveys.

Significance of the Research

This study is an initial exploration of stigmatizing perceptions, and the relationship of perceived stress and empathy on stigmatizing perceptions in nurses employed in rural and urban health care settings in Idaho and caring for those with SUD. Although stigma and empathy are much-studied concepts, there is a gap in the literature when considering urban and rural nursing, stigma, empathy, perceived stress, and caring for patients with SUD (Dombrowski, Crawford, Khan, & Tyler, 2016; Draus, 2009). Young, Havens, & Leukefeld (2012) note that rural youth begin using drugs and alcohol at younger ages versus their urban counterparts. Rural individuals are also less likely to seek medical help for these issues and often continue to have inequities in healthcare (Gonzalez, Shaughnessy, Kabigting, West, Robinson …Fahs, 2018). The literature shows that rural individuals have higher rate of substance abuse (Bischoff, et al., 2013) and a higher mortality rate than their urban counterparts (Center for Disease Control, 2017; Cosby, McDoom-Echebiri, James, Khandekar, Brown, & Hanna, 2019).

Chapter II: Literature Review

Substance Use Disorder

A substance disorder is a chronic brain disease, influenced by genetics and environment, and associated with relapses (Bartlett, Brown, National Institute of Drug Abuse, 2018; Shattell, Wright, & Lewallen, 2013). These changes affect a person's normal needs and desires with the prioritizing of drug seeking and using (NIDA, 2018). The American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders- 5 (DSM-5) recognizes two categories of substance disorder: SUD and substance induced disorder (Hartney, 2019). The DSM-5 specifically lists nine types of substance addictions including alcohol, caffeine, cannabis, hallucinogens, inhalants, opioids, sedatives, hypnotics and anxiolytics, stimulants, and tobacco (Grant & Chamberlain, 2017). SUD is a complex health issue that affects an individuals' brain function and behavior (Yang, Wong, Grivel, & Hasin, 2017).

Drugs and alcohol activate the brain's reward system and alter the brain's circuitry (Hartney, 2019). Hartney (2019) cites the eleven DSM-5 criteria for diagnosing substance abuse. These are: 1) taking a substance longer than the intended use, 2) inability to cut the use despite the desire, 3) excessive time spent in acquiring or recovering from the use of the substance, 4) cravings, 5) relationships (work/home) suffering from the use of the substance, 6) inability to perform duties at home or work, 7) continuing to use despite the danger it may present, 8) stopping other social/recreational activities, 9) developing a tolerance, 10) continued use despite a physical or mental illness that use may cause, and 11) withdrawal symptoms when not using the substance. Six or more symptoms indicate a severe substance abuse issue.

Substance use disorder statistics

SUD has increased over the last two years. The 2017 National Survey on Drug Use and

Health reports that 18.7 million individuals, 12 and older, met criteria for SUD. The 2019 National Survey on Drug Use and Health survey showed an increase to 20.4 million of the same age group. In 2017, an estimated 37.9% of those with SUD, have other concurrent mental illnesses. This percentage increased in in 2021 according to the National Institute on Mental Health to 50%. According to the Substance Abuse Mental Health Services Administration (2018), within the month prior to the survey, 1 out of every 9 people, aged 12 and older, used illicit drugs. Statistics provided by the American Addictions Center (2019) indicate that in the age group of 12-17 years, 4% or 1 out of 25 suffer from SUD. Within the 18–25-year-old range, 3% or 1 out of 7 individuals struggle with substance abuse. In the age group greater than 26 years, 6.4% struggle with drug abuse and 1 million adults older than 65 years have SUD. Among ethnic groups, the American Addictions Center statistics show that American Indians/Alaskan Natives have the highest rate of addiction at 12.8%, whites at 7.7%, African Americans at 6.8%, Hispanics at 6.6%, and Asian Americans at 3.8%.

Cost of Substance Use Disorder

According to the NIDA (2019), between the years of 1999 and 2017, the number of overdose deaths increased from 16,849 to 70,237 in the United States. The National Institute of Health (2019) states that 130 people die daily from drug abuse, most notably from fentanyl, heroin, and prescription pain medication. This number is double the previous fourteen years with 50% of those deaths being from prescription drugs. Additional issues cause a loss of productivity and an increase need for health care.

Coexisting mental health illness is frequent among those with SUD including anxiety, schizophrenia and depression (Koelzer, 2017; NIDA, 2018). In addition to mental illness, other health issues associated with SUD include strokes, cancer, and heart disease (NIDA, 2018).

Another cost of SUD is an increase in tax burden. According to the NIDA, 2020 trends and statistics, the societal financial cost of SUD was $740 billion. This is an increase of approximately $300 billion from the 2016 Surgeon General's Report of a cost of $442 billion. Per the Office of National Drug Control Policy (ONDCP), the budget is comprised of treatment, prevention, domestic law enforcement, interdiction, and international needs. According to NIDA (2019), prescription opioid abuse and overdoses cost Americans $78.5 billion annually.

The National Institute on Drug Abuse (NIDA) (2019), reports that substance abuse in some form is the root cause of 50% - 80% of child abuse. In addition, this report finds that of the 39,513 new cases of HIV in the United States, 9.1 percent were due to intravenous drug use. Another cost of SUD is neonatal Abstinence Syndrome (NAS) or state of newborns going through drug withdrawal due to the mother's drug use. This has increased fivefold between 2007 and 2014, from 1.5 per 1000 to 8.0 per 1000. The cost of NAS has also risen from $91 million to $563 million. Outside of the individual with SUD, family members may experience turmoil. This can include the anger, embarrassment or guilt and increased fighting among couples. (Substance Abuse Treatment and Family Therapy, 2004; American Association for Marriage and Family Therapy, 2019).

Substance Use Disorder and Rural America

Statistics show a growing substance use problem in rural areas, but few studies are available in the literature with rural populations versus urban (Substance Abuse in Rural Areas, 2018). Urban is defined as an area with a population of 1000 people per square mile, whereas rurality implies open land, with populations and housing outside of urban areas. There are 60 million rural residents in America (Bunnell, Dewey, & Ruggiero, 2017). Presence of a SUD or an increased risk of a SUD is prevalent in these areas (Bunnell, et al, 2017).

As reported by Statistica, the 2020 United States census, notes that approximately 56.23 million Americans live in non-urbanized areas compared. Rural communities struggle with low income, poor infrastructure, limited access to resources, and low skilled jobs (Van Gundy, 2006). Rural Health Reform Policy Research Center published the 2014 Update of Rural-Urban Chartbook, which states that rural demographics include a higher percentage of older adults, obese individuals, higher rate of smokers, and an increased number with chronic health issues including substance abuse.

Dombrowski, Crawford, Khan, & Tyler (2016) found that in the rural Midwest, drug use starts at an earlier age. The authors also cite multiple studies that indicate rural and urban drug use patterns consistently differ with an increase in methamphetamine use and a higher prevalence of riskier behavior such as injection use of drugs in rural areas SUD is particularly difficult to combat in rural areas due to unemployment, poverty, lower education levels, and isolation (Rural Health Hub, 2016). Lack of funding in these settings leads to a decrease in the number of facilities, inadequate staffing of qualified healthcare individuals, lack of cultural competency, and the reduction in the number of drug rehabilitation programs offered. In conjunction with these barriers, additional obstacles face those with SUD such as stigma and lack of anonymity in rural communities (Corbin & Dutton, 2021). Logan, et al. (2019) found additional barriers of stigma and misconceptions of medication assisted therapy often hindered treatment.

Substance Use Disorder and Idaho

Idaho's 35 rural counties account for approximately 88 percent of the state's land and 32 percent of the state's population (Salant & Porter, n.d.). According to Rural Health Information Hub, as of April 2019, Idaho has 27 critical access hospitals, 45 rural health clinics, 46 federally qualified health centers, and four short term hospitals outside of urban areas. Eleven percent of rural residents are uninsured, and 14.7% live below the poverty line.

The National Institute on Drug Abuse reports that the primary drug class responsible for overdoses in 2017 in Idaho is opioids (Opioid Summary, 2019). The NIDA (2020) notes that Idaho's opioid prescription rate equals 53.4 per 100 people. Although a decrease of 24% over two years, it remains higher than the national average of 46.7 per 100 people. The Behavioral Health Barometer (2017) notes that four thousand people, 12-years or older in Idaho, used heroin the prior year.

Between 1999 and 2013, Idaho deaths attributed to drug misuse more than doubled. Specifically, in 2014, 212 people in Idaho died due to fatal overdoses of opioids (Ashworthrecovery.com, 2016) and 218 died in 2015 (Shaw-Tulloch, 2017). Then in 2019, per the 2017-2022 Idaho Opioid Misuse and Overdose Strategic Plan, 264 Idahoans died from an overdose. According to the Substance Abuse Mental Health Service Administration (SAMHSA), 2017, an Idahoan dies every 45 hours from the abuse of illegal, prescription, or other illicit drugs.

Due to the unique geography of Idaho, there has been an increase in the amount of drug trafficking, such as heroin, throughout the state (Heroin trafficking increases 800 percent, 2016). Without leaving I-84, the main interstate, one can drive through Oregon, Idaho, Utah, and Montana. According to the Oregon Idaho Threat Assessment and Counter Drug Strategy (2021), in 2020, there were 28 international drug trafficking organizations (DTO), 58 multi-state DTOs, 29 local DTOs, and 12 money-laundering organizations in the state. Citing the Idaho Transportation Department's 2020 statistics, Garrigues (2021) notes that impaired driving led to 1513 crashes killing 92 people during that year. In 2020, impaired driving was a factor in 6.7% of all the crashes in Idaho but contributed to 43% of the fatalities. Per this same report, 6939 individuals were arrested for DUI in 2020.

Barriers to Treatment

Those with SUD frequently seek medical treatment for coexisting disease and illness, and for recovery programs. However, in rural areas, those with SUD are at a disadvantage due to limited resources, geographical dispersion, fewer trained providers, lack of anonymity, and a generally poorer population with less education (Artnak, 2011; Benavides-Vaello, Strode, & Sheeran, 2013; Farmer, Munoz, & Threlkeld, 2012; Pullen & Oser, 2014). The isolation, ethnic disparities, insurance and financial barriers that come with rural settings increases the disparities in health care access and delivery (Edmond, Aletraris, & Roman, 2015; Priester, Browne, Iachini, Clone, DeHart, and Seay, 2016; Van Gundy, 2006).

Geographical dispersion (Benavides-Vaello, Strode, & Sheeran, 2013) refers to the distances a client may have to travel to get the needed treatment for SUD. This scarcity of readily available medical/substance abuse treatment facilities, which is linked to the lack of funding, is especially evident in alcohol, drug abuse, and mental health (ADM) treatment and the success or failure of these treatments (Davis, Spurlock, Dulacki, Meath, Li, McCarty…McConnell, 2016). Many with SUD have lost their driver's license, or do not have the financial ability to have a car which may be directly connected with the barrier of geographical dispersion (Bischoff et al., 2014).

There are often low numbers of qualified healthcare professionals in rural areas. Researchers (Larrison, Hack-Ritzo, Koerner, Schoppelrey, Ackerson, and Korr, 2011) cite that with financial restraints, community mental health agencies are decreasing staff and cutting programs. Due to the reduced workforce, staff working in these rural facilities face increased workloads and increased work-related perceived stress (Puskar, Lee, Mitchell, Kane, Albrecht, Frank, Hagle, Lindsay, and Houze, 2013).

In addition, undergraduate nursing education has often placed little focus on SUD or addiction, or in caring for patients with this problem (Compton, 2020). Knowing through research that a lack of knowledge in SUD can lead to stigmatizing perceptions (Tierney, 2016) earlier education in this area is essential to aid the nurses in feeling competent with the end result as positive patient experiences and outcomes.

Rural nursing is particularly stressful as nurses are expected to care for various patient populations and are often anxious about performing outside their scope of practice (Dekeseredy, Landy, & Sedney, 2019). Increased perceived stress can lead to burnout and cynicism, or lack of empathy, on the part of the nurse, which can negatively affect the nurse-patient relationship. When the patient experiences negativity and a judgmental approach by the nurse, he or she may stop treatment (Ashford, Brown, Ashford, and Curtis, 2019). Research shows that the therapeutic nurse patient relationship is central to positive patient outcomes.

Rates and factors of successful treatment

According to the National Institute of Drug Abuse (NIDA) (2018), the aim of the treatment of substance use disorder SUD is to return individuals to productive home and work lives. Patients treated for addiction, like other chronic diseases, experience relapses. According to NIDA (2018), relapsing from SUD is similar in rates to other chronic diseases. Per NIDA, 30% to 50% of individuals diagnosed with Type I diabetes relapse after treatment, 50% to 70% of those with hypertension relapse and 40% to 60% of those with drug addiction relapse.

In 2019, the Treatment Episode Data Set stated that close to 1.9 million individuals sought help for SUD which was an increase of 400,000 in two years. In one study, less than one in five, specifically with opioid use disorder, had access to care (Logan, et al, 2019). Treatment for SUD can occur in multiple settings and modalities such as methadone maintenance, inpatient

supervised detoxification programs, outpatient counseling and/or 12-step programs (Landry, 1996). Many factors determine successful recovery treatment. Most consider completing a treatment program, the best predictor of recovery (Levin & Teichman, 2017).

Prangley, Pit, Rees, and Nealon (2018) determined one of the common themes for those individuals that left treatment early was difficult communication and relationships with the staff at the treatment facility. The National Institute on Drug Abuse (2018) lists factors that relate to engagement in the therapies and program completion to include family support, pressure by the criminal justice system, employers, or family, and a positive therapeutic relationship with a clinician.

Unfortunately, research shows that stigma, and judgmental attitudes are prevalent among providers including nurses (Bartlett, et al, 2013; Bjorkman, Angelman, & Jonsson, 2008; Johansson & Wiklund-Gustin, 2016; Natan, Beyil, & Neta, 2009; Riley, Evans, Worozbyt, & Kowalchik 2019; Rimkevicience et al, 2015; Smith, Mittal, Chekuri, Sullivan, 2017).

Nurse-patient relationship

Nurses can play a pivotal role in the care of someone with SUD (Bartlett, et al., 2013). Peplau's theory of Interpersonal Relations (Mumba & Snow, 2017 Senn,2016) identified nursing as a therapeutic relationship between the nurse and the patient. The nurse-patient relationship is built on trust and respect and is at the center for all patient care (Pullen & Mathias, 2010; Reynolds, 2000). Patients can be scared and anxious about entering a medical facility. Nurses can decrease their anxiety and encourage patients to participate in care (The Importance of Nurse-Patient, 2019).

Scattered throughout the literature, nurses' attitudes regarding patients with SUD are described as intolerant, mistrusting, manipulative, and futile (Tierney, 2017). As Barlett, et al.

(2013) note when patients perceive stigma, either in actions or in words, on the part of the clinician, he or she may stop treatment, which could result in relapse.

Although there is not much research regarding empathetic care on patient safety or outcomes, researchers assert that patient care given with empathy should have better outcomes in safety and overall health (Leana, Meuris, & Lamberton, 2018). Other studies show that nurses who care and demonstrate this caring by showing support and respect can aid in the recovery of patient who are struggling with SUD (Thorkildsen, Eriksson, & Raholm,2015).

Health Related Stigma

Stigma is a complicated concept with varying definitions throughout the research literature. Health related stigma is a social and cultural process where groups are disgraced due to certain health condition[s] or diagnoses (Livingston, Milne, Fany,& Amari, 2011; Nyblade, et al, 2019). Health related stigma separates an individual from others based on their illness or diagnosis (Stigma, Discrimination, and Mental Illness, 2009). Health related stigma specifically against those with mental health or SUD can have a direct effect on treatment, recovery, and quality of care. Of the health-related diagnoses most often experiencing stigma, mental illness especially SUD rank the highest (Drake, Codd III, & Terry, 2017; Henderson, & Dressler, 2017; Rao, Madhadevappa, Pillay, Sessay, Abraham, & Luty, 2009; Rimkevicience et al., 2015; Room, 2005).

Evidence shows that stigma is not only common in the public, but also equally prevalent in clinical settings among health care professionals especially nurses (Bartlett, et al, 2013; Bjorkman, Angelman, & Jonsson, 2008; Natan, Beyil, & Neta, 2009;Rimkevicience et al, 2015; Smith, Mittal, Chekuri, Sullivan, 2017; Tierney, 2016; Wakeman, Pham-Kanter, & Donelan, 2019). Attitudes of nurses and other health care professionals affect the care

they give to the patient (Drake, Codd III, & Terry, 2018; Khenti, Bobbili, & Sapag, 2019; Rimkevicience et al, 2015; van Boekel et al, 2016). Pottle and Marotta (2014) note that even unintentional stigmatization by nurses such as labeling as 'difficult patient' or 'noncompliant patient', can result in suboptimal care.

The research literature reports that stigma is expressed through behaviors or attitudes which are also referred to as perceptions (Corrigan, 2015; Corrigan & Shapiro, 2010; Crapanzano, Hammarlund, Ahmad, Hunsinger, & Kullar, 2018; Drake, Codd III, & Terry, 2018; Ezell, Choi, Wall, Link, 2018; Rimkeviciene, Hawgood, O'Gorman, & De Leo, 2015). If the patient perceives discrimination or judgement on the part of the health care provider, he or she is less likely to seek or complete treatment (Chu & Galang, 2013; Lloyd, 2013; Logan, et al, 2019; Richmond & Foster, 2003; Wakeman, Pham-Kanter, & Donelan, 2016; Yang, Wong, Grivel, & Hasin, 2017).

Health related stigma, regarding those with SUD, can stem from various sources. These include the belief that the patient is responsible for the disease, lack of education about SUD, expectation of manipulation and danger, and stress on the part of the nurse can all lead to stigma (Chu & Galang, 2013; Lovi & Barr, 2009). These elements can lead to poorer attitudes leads and a lack of willingness to work with this group of patients. Also, researchers find that increased perceived stress is frequent among nursing professionals in both rural and urban locations (Baernholdt & Mark, 2013; Halder & Mahato, 2013) which can lead to cynicism and depersonalization of the patient and can impact empathy. Rural nurses report specific stress in having to be generalists without specialized training, lack of resources, and lack of anonymity (Dekeseredy, Landy & Sedney, 2019; The Scope, 2014).

Empathy

Empathy is the "ability to put oneself in another's shoes" (Lovan and Wilson, 2012, p. 28)". Empathy is the ability to put oneself in the position of another so that that person can be understood whether negatively or positively, that enhances the helping, nurse-patient relationship (Alligood & May, 2000; Hojat, 2009; Knolhoff, 2018; Mercer &Reynolds, 2002; Reynolds, 2000; Morse, Bottorff, Anderson, O'Brien, & Solberg, 2006; Reynolds & Scott, 2000; Singer & Klimecki, 2014).

Empathy is a patient centered approach to care and involves an understanding and acceptance of the client's world by the nurse (LaMonica, 1978; Moudatsou, Stavropoulou, Philalithis, & Koukouli, 2020). It is perceived as an essential and desirable attribute especially within the nurse-patient therapeutic relationship (Digby, Lees, Williams, 2016; Mercer and Reynolds, 2006; Morse, Bottorff, Anderson, O'Brien, & Solberg, 2006). In turn, the nurse-patient relationship is essential for all care (Reynolds, 2000). In the nurse-client therapeutic relationship, it is important that the patient feels accepted and free to express himself without fear of rejection (Reynolds, 2000). Empathy lets nurses and other health care professionals respond to client's needs in a way that positive outcomes may be more achievable (Reynolds, 2000).

Empathy is the understanding of, listening to, and sharing with another in order to better resonate with that individual's emotional state (Digby, Lee, Williams, 2006; Hojat, 2009; Knolhoff, 2018; Leonard, Zomorodi, Foster, 2018; Reynolds, 2006; Singer & Klimechi, 2014). Specifically, clinical empathy is related to the health care professional and his/her ability to understand, communicate, and act on a patient's specific situation and perspective (Mercer & Williams 2002). Empathy also includes acts of caring, tenderness,

and compassion (Batson, Change, Orr, & Rowland, 2012; Swanson, 1993)

According to Alligood and May (2000), empathy can be a learned skill. Without empathy, patients may sense disdain and therefore reject therapy (Bartlett, et al, 2013). Knolhoff (2018) suggests a negative correlation between empathy and stigma in that an increase in empathy can decrease stigma perceptions of those with mental illness among mental health care providers. Researchers found a positive correlation between more positive attitudes and professional experience and interaction with those diagnosed SUD while more education into the disease was also found to improve perceptions (Arboleda-Florz, & Stuart, 2012; Bjorkman, Angelman, Jonsson, 2008; Corrigan, & Nieweglowski, 2019; Henderson & Dressler, 2017; Knolhoff, 2018).

Perceived Stress

According to Halder and Mahato (2013), stress is a state when one feels that the requirements of a task exceed their personal ability to meet. Perceived stress is one's perception about the amount of stress he/she is feeling at any point in time (Encyclopedia of Behavioral Medicine, 2013). Perceived stress is also defined as when demands [of a job] outweigh the resources (Davey, Sharma, Davey, Shukla, Srivastava, & Vyas, 2016).

The nursing profession is identified as a job with high levels of perceived stress (Sharma, Davey, Davey, Shukla, Shrivastava, & Bansal, 2014). Perceived stress may come from conflicts with coworkers or supervisors, contact with death, emerging technology, and increased responsibilities without resources (Sarafis, et. al., 2016; Sharma, et. al, 2014). This perceived stress can affect the nurse not only personally but with his/her ability to manage job demands (Sharma, et. al, 2014). In addition, perceived stress can also have a negative influence on patient outcomes (Sarafis, et.al. 2016) and the nurse-patient relationship (Adams & Rollins, 2017; Atkinson, et al, 2017; Chatterjee, Ray, &Ghosh, 2017; Salyers, Bonfils, Luther, Firmin, White,

Adams, & Rollins,2016).

Theoretical Framework

The nurse-patient relationship is the essential for all patient care and is integral to the nursing process (Forchuk & Brown, 1989; Reynolds, 2000). In Theorist Hildegard Peplau's Theory of Interpersonal Relationships, the focus is on the nurse- patient relationship as an important, interrelational process that advances the patient's health (Forchuk & Brown, 1989). This theory has three overlapping phases where the nurse operates on a respectful, nonjudgmental level to help the patient clarify his or her needs (Hagerty, Samuels, Norcini-Pala, & Giglotti, 2018).

The three phases of Peplau's Theory are the initial phase, working phase, and the termination phase. According to Senn (2013), the initial phase begins with thepatient seeking help and is the beginning of a process of building a trustrelationship between the nurse and the patient. In building trust in the therapeutic relationship, the nurse assesses the patient's needs and allows the patient to express himself openly while showing respect and courtesy (Hagerty, 2017). The nurse is the keystone to the development of a therapeutic relationship with the patient presenting with substance use disorder. Trust is facilitated by a nonjudgmental, caring approach that recognizes that the patient seeks respect and caring intervention, having the courage to seek help and enter the health care system.

The second phase or working phase is where the nurse provides unconditional caring and empathy. In this phase, the focus is on the work the patient needs to do with guidance from the nurse. The nurse utilizes therapeutic listening and non- judgmental feedback to guide the patient (Hagerty, 2017). This phase is critical to the patients becoming comfortable with the nurse as a resource, care giver and counselor (Hagerty, 2017). During this phase, the

nurse uses nondirective listening as the patient is becoming more aware of their health status and goals.

The last phase is the termination phase whereby the nurse helps to guide the patient to a self-reliant position. This patient outcome phase is dependent on how well the first two phases are navigated (Hagerty, 2017). This phase is most known as the discharge phase. These phases can be derailed when the patient feels judged or stigmatized by the nurse. When patients feel stigmatized, they may experience suboptimal treatment or quit treatment altogether (Drake, 2017).

Nurses also have an ethical obligation to care for their patients with respect and dignity. According to the American Nurses' Association, Code of Ethics for Nurses with Interpretive Statements (2015), Provision 1 states "the nurse practices with compassion and respect for the inherent dignity, worth, and unique attributes of every person" (p. 1). Interpretative statement 1.1 notes that the primary element that is foundational to nursing practice is the respect for all individuals regardless of any factor that defines them. Interpretative statement 1.2 states that the nurse should develop a relationship with the patient demonstrating trust and without prejudice or bias. The ANA Code of Ethics also describes that if a patient exhibits risky or self- destructive behavior, the nurse must address this and offer resources to aid the patient to a healthier life. Application of the ANA Code of Ethics in conjunction with the Peplau's Theory of Interpersonal Relations provides a framework to support the nurse patient relationship focused on the patient's needs and how nurses can ethically meet identified needs of those with a SUD in rural and urban settings.

Important to note, research indicates that nurses are among the most judgmental health care providers (Riley, Evans, Worozbyt, & Kowalchik, 2019). Among those with mental health

issues, including SUD, stigma attitudes and behaviors towards these individuals is common among nurses (Bartlett, et al, 2013; Bjorkman, Angelman, & Jonsson, 2008; Drake, Codd, & Terry,2017; Henderson, & Dressler,2017; Johansson & Wiklund-Gustin, 2016; Natan, Beyil, & Neta, 2009; Rimkevicience et al, 2015; Room, 2005; Smith, Mittal, Chekuri, Sullivan, 2017). Research indicates that stigma affects the therapeutic relationship between nurse and patient and negatively affects outcomes in the SUD population. Therefore, it is important to explore stigmatizing perceptions of nurse's stress, and empathy to develop interventions to address judgmental attitudes among nurses who care for individuals, communities and families impacted by SUD.

Chapter III: Methodology

This study is an initial exploration of stigmatizing perceptions, and the relationship of perceived stress and empathy on stigmatizing perceptions in nurses employed in rural and urban health care settings in Idaho and caring for those with SUD.

The study answers the following research questions:

1. To what extent do rural Idaho nurses report stigmatizing perceptions when working with those with substance use disorder?
2. Do nurses with higher empathy levels report lower stigma perceptions?
3. Are years in nursing practice, gender, age, geographic region, and educational level associated with an increase in stigma perceptions and decreased empathy?
4. Is self-reported perceived stress associated with decreased empathy?

This study contributes to increased awareness of stigmatizing perceptions of nurses in rural and urban Idaho caring for patients with a SUD. The study also contributes to the understanding of stress and empathy on stigmatizing perceptions, and multiple factors that are associated with stigma perceptions and empathy in participating nurses who are practicing in Idaho and caring for patients with a substance use disorder (SUD). Outcomes of the study can support the development of interventions to enhance the nurse patient relationship in caring for individuals with a SUD and potentially reduce stigmatizing perceptions through awareness and knowledge building.

Research Design

This study was a nonexperimental cross-sectional survey of nurses employed in both rural and urban settings and who care for individuals with substance use disorder. Nonexperimental research is describing the relationship of two or more variables without

researcher inference (Statistic Solution, 2020). A type of nonexperimental research is cross sectional design that involves the comparison of groups (rural and urban in this study) under the same criteria ("Experimental vs Nonexperimental", 2021). Survey research is the collection of data by asking questions online, in person, on paper, or by phone. Survey research gathers beliefs or opinions of a group of people. Survey research through emails is the fastest growing form of surveying throughout the world (Dillman, Smyth, & Christian, 2014). According to Dillman, et al., 85% of people use the internet and 91% of adults have cell phones. Email surveys can gather a large amount of information from a large number of people quickly and inexpensively.

Stigma perceptions were measured using the Drug and Drug Problem Perceptions Questionnaire developed to measure health care providers perceptions of working with those with substance use disorder (SUD). The valid and reliable tool used to measure empathy is Davis' Interpersonal Reactivity Index (IRI). Lastly, the Perceived Stress Scale (PSS) survey was used to measure the participants' level of perceived stress. These are described in detail below.

Study Population and Setting

The population included all staff nurses, holding a registered nurse or licensed practical nursing license to practice in Idaho through the Idaho Board of Nursing (IBON). For this study, emails for licensed Idaho practical and registered nurses were obtained from the IBON. At the time the study was conducted, there were 24,254 registered nurses and 3,692 practical nurses holding licensure to practice in Idaho (IBON, 2020).

In this study, a non-probability convenience sampling method was used to include all accessible participants that met the inclusion criteria of holding a registered or practical nurse license in Idaho. The sample was inclusive of rural and urban practicing nurses with these two populations explored independently for a comprehensive analysis of the sample. A one-time

sampling of all Idaho nurses holing licensure was completed by survey distribution totaling 27,946. A power analysis was completed to determine the necessary sample size using a confidence level of 95% and a margin of error of 5%, with the desired sample size determined to exceed 379. Power analysis determines if a study has a good chance of producing statistically significant results if a true difference exists. In the original study of psychometrics for DDPPQ, the statistical power was determined using the simple case of the categories, agree and disagree (Watson, et al, 2006). Assuming that the proportion of the population giving the same answers at different times is 0.70, Watson, et al. (2006) found that 336 participants was deemed adequate to determine a difference of .1%, 91% of the time. A 10 percent return from the 27,946 surveys (279 respondents) would allow determination of a .1% difference.

Instrumentation

This study utilized three instruments for measuring the identified variables. The instruments used included Watson's Drug and Drug Problem Questionnaire (DDPPQ) Davis' Interpersonal Reactivity Index (IRI) and Cohen's the Perceived Stress Scale. These instruments are readily available in existing literature and have been found to have strong psychometric properties. In addition, demographic and other data were collected inclusive of area worked (rural or urban), age, gender, level of education, and years of nursing experience.

Stigma. Stigma perceptions were measured using the Drug and Drug Problem Perception Questionnaire (DDPPQ) (Watson, McLaren, & Kerr, 2005) which was adapted from Cartwright's (1980) Alcohol and Alcohol Problem Perception Questionnaire (AAPPQ). The DDPPQ was adapted to measure mental health professional's attitudes toward working with clients who use any drug not just alcohol. After extensive psychometric testing, the DDPPQ was determined to be a valid and reliable instrument to measure therapeutic perceptions and training

needs of those caring for individuals with SUD (Watson, et al, 2003; Watson, et al, 2006) with a Cronbach alpha score of .87. Many studies have also used the DDPPQ to study specifically the nursing population to explore stigmatizing attitudes and perceptions (Chu, 2013; Howard & Holmshaw, 2010; Takano, 2015).

In the adaptation, Watson retained the format but changed the wording to include drug users and drugs versus drinkers and alcohol. Although nurses may not work specifically in a mental health facility, they work with all types of patients including those with mental health histories and receive education within undergraduate programs related to behavioral health. This tool was designed to measure attitudes and perceptions consistently found in stigma. As reported in the literature, stigma can be expressed in both words and behaviors (Corrigan, 2015; Corrigan & Shapiro, 2010; Crapanzano, Hammarlund, Ahmad, Hunsinger, & Kullar, 2018; Drake, Codd III, & Terry, 2018; Ezell, Choi, Wall, Link, 2018; Rimkeviciene, Hawgood, O'Gorman, & De Leo, 2015).

The twenty-two-item survey consists of six subscales. These include role adequacy or having sufficient knowledge to perform the assigned role, role support or the ability to access information quickly to help do one's job, job satisfaction, role self-esteem also known as professional self-esteem; motivation, and role legitimacy or the ability to recognize aspects of the job as their responsibility. When taken together, these subscales reflect the participants' feelings of professional competence, personal perceptions of patients with SUD, and feelings of job satisfaction (Connors, McKenzie, Robinson, Tager, Scardamalia, Oros, & Hoover, 2017). In addition, the DDPPQ reflects healthcare professional's feelings and stigma perceptions of working with those who abuse drugs (Connors, McKenzie, Robinson, Tager, Scardamalia, Oros, & Hoover, 2017; Takano, Kawakami, Miyamoto, & Matsumoto, 2015).

Respondents are asked to rate their agreement with the statements on a seven- point Likert scale of the 22 statements. Low scores are associated with positive perceptions regarding working with those with SUD whereas high scores equate to negative perceptions. Four questions (numbers 15, 16, 17, 18) are negatively worded so these items are reversed scores. The minimum scoring is 22 and maximum is 154 (Watson, McClaren, Shaw, 2003).

Empathy. Empathy was measured using Davis' (1980) Interpersonal Reactivity Index (IRI), which has been used in health research among nurses, physicians, dentists, and medical students. This tool has four subscales that use a five-point Likert scale (A= Does not describe me well; E = Describes me very well). These

subscales are perspective taking which is the automatic ability to take another's' point of view, empathic concern which evaluated feelings of concern for those less fortunate, personal distress which measures one's own anxiety or feeling of discomfort when others are experiencing negative events, and fantasy scale, described as identifying with characters in movies or books (Davis, 1980). The IRI has also been used and validated in languages other than English with continued positive psychometrics (Konrath, 2013). Studies validate the internal consistency of the subscales overtime with the Cronbach alpha ranging from .70 to .91 (Becker & Sands, 1981; Beven, O'Brien-Malone, Hall, 2004; Konrath, 2013; Murphy, 2004; Yu & Kirk, 2013).

The subscales can be used separately as the IRI does not measure overall empathy (Konrath, 2013). Studies validate the internal consistency of the subscales overtime with the Cronbach alpha ranging from .70 to .91 (Becker & Sands, 1981; Beven, O'Brien-Malone, Hall, 2004; Konrath, 2013; Murphy, 2004; Yu & Kirk, 2013).

There are no norms or cut off scores. The subscales most appropriate for the health care setting are the empathic concern and perspective taking which assesses 'other-oriented' feelings

(Konrath,2013). Since the subscales can be used independently, analysis is conducted separately. The IRI has three possible limitations. One, the self-reporting style is susceptible to biases. Secondly, this tool looks at empathy in regard to disposition or one's inherent qualities of mind and character. Lastly, the perspective taking subscale is changeable to interventions. (Konrath, 2013; Shankar & Piryani, 2013). However, the advantages of the IRI are the psychometric properties and flexibility to use subscales separately (Konrath, 2013). Konrath (2013) suggests that the PT and EC more appropriate to use in healthcare surveys as these are 'other' focused. Therefore, in this study the empathic concern subscale and the perspective taking subscale were used.

Perceived stress. The Perceived Stress Scale (PSS) is a 10-question tool developed to assess how an individual perceives life situations regarding experienced stress (Cohen, 1983). This is widely used instrument for measuring the perception of stress (Cohen& Williamson, 2001; Cohen & Williamson, 2005; Cohen & Williamson, 2006). The psychometrics in previous studies were reviewed and found to have good internal consistency reliability with a Cronbach alpha of >.70 by Lee (2012) and .84-.86 (Cohen, *Kamarck, & Mermelstein, 1983*).

The questions are generalized and meant for use by those with at least a junior high school education. Of the ten question, fourteen question, and four question versions, the 10-question survey was found to be the most reliable and valid in studies such as Cohen and Janicki-Deverts (2012). The test-retest reliability was assessed in four studies and met the criterion of > .70 which is an acceptable range for the test-retest reliability (Statistics How To, 2021).

Stress will be quantified using the Perceived Stress Scale (Cohen & Williamson, 1988), which consists of ten questions using a Likert scale of 0 to 4 (never = 4, almost never = 3, sometimes = 2, fairly often = 1 and very often = 4). Scoring is done by reversing responses to the

positively stated and then adding all together. Scores of 0-13 equals low perceived stress, 14 – 26 equals moderately perceived stress, and 27-40 equals high perceived stress.

Demographic Variables. The demographic variables of age, gender, years in nursing practice, geographic area of practice, and educational level are obtained at the start of the survey process. (See Appendix A).

Data Collection Procedures

IRB Review. IRB approval for the study was obtained through the Idaho State University (ISU) Office of Research.

Participant recruitment. A list of nurses in Idaho holding a registered or practical nursing license was obtained through the IBON. An e-mail briefly explaining the purpose of the study and its voluntary nature, was sent to each potential study participant on the list with an embedded link to the survey. An incentive was offered to participants which was a drawing for three $50 Amazon gift cards for those who completed the survey and entered an email address, distributed at the completion of data collection period. The survey was returned to the primary investigator via the online survey management system. No identifying information was asked for on the survey. The original email was sent December 3, 2020. Weekly email reminders were sent out each week for four weeks by this investigator. The survey closed on January 3, 2021. The emails will be destroyed upon study completion or by May 2022.

Administration of survey. The survey was administered through Qualtrics. Qualtrics is an online survey tool used to create and administer online surveys. The survey had an introduction letter explaining the study and the voluntary nature of the survey, survey link, and an opt out link. Emails were given by some participants to be in the drawing for three $50 Amazon cards.

Data Management

The raw data was accessed from the researcher's computer. Responses from the surveys were exported from Qualtrics to SPSS on the researcher's password protected computer**.** The results were transferred to an encrypted flash drive upon conclusion of the data collection and analysis. The flash drive will be kept in a locked safe for a period of at least three years where upon it will be destroyed.

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Data Analysis

Data analyses was conducted using IBM SPSS (Armonk, NY: IBM Corp.). SPSS is a statistical software platform that allows analysis of data. Statistical significance was set at $p< 0.05$. Exploratory analysis was aimed at describing the study population and examining the identified variables in the analysis.

Upon evaluation of variables, the assumptions for normality were not met. The data were analyzed for normality of distribution, outliers, and missing data.

Although the assumptions of normality were not met, based on Wilcox (2017), both parametric and nonparametric tests were applied to the data set for the purpose of comprehensive analysis. Findings of the parametric and nonparametric tests were the same, therefore, parametric statistics are reported herein. There were no outliers identified. Moreover, there were no respondents or individual variables with >10% missing data included in the data analysis. Therefore, all data

was used, and no imputation was needed (Rosner, 2016).

Research question 1*: To what extent do rural Idaho nurses report stigmatizing perceptions when working with those with substance use disorder*? Using data from the DDPPQ survey tool, measures of central tendency (mean) and of dispersion (standard deviation (S.D.) were calculated to summarize the survey responses. A t test was also used to determine any statistical significance in DDPPQ scores between the rural and urban nurses.

Research question 2: ***Do nurses with higher empathy levels report lower stigma perceptions*****?** Using the IRI and DDPPQ surveys, measures of central tendency (mean) and of dispersion (standard deviation (S.D.) were calculated to summarize the survey responses. In addition, Pearson coefficient was calculated to determine the strength of the relationship, if any, exist between the variables. Lastly, a t test was also used to determine any statistical significance in IRI scores between the rural and urban nurses.

Research question 3: ***Are years in nursing practice, gender, age, geographic region, and educational level associated with an increase in stigma perceptions and decreased empathy?*** ANOVAs and t tests were used to identify any association among variables. Then, using data from the DDPPQ and IRI surveys, multiple linear regression calculations were used to determine the association between stigma perceptions (dependent variable) and empathy (dependent variable) and each of the independent variables of age gender, geographic area of practice, education, and years of practice,

Research question 4: ***Is perceived stress associated with decreased empathy***? In order to determine the relationship between empathy (dependent variable) and perceived stress (independent variable), a Pearson coefficient was calculated using the PSS survey data.

Chapter IV: Results

The purpose of this study was an initial exploration of stigmatizing, perceived stress, and the relationship of empathy on stigmatizing perceptions in nurses employed in rural and urban health care settings in Idaho and caring for those with substance use disorder (SUD).

Data were collected over four weeks, starting in December 2020, via an online survey of Idaho registered and practical nurses licensed to practice in Idaho. The data obtained through the survey process were analyzed based on established research questions:

1. To what extent do rural Idaho nurses report stigmatizing perceptions when working with those with substance use disorder?
2. Do nurses with higher empathy levels have lower stigma perceptions?
3. Are years in nursing practice, gender, age, geographic region, and educational level associated with an increase in stigma perceptions and decreased empathy?
4. Is perceived stress associated with decreased empathy?

Characteristics of Study Participants

Of the 27,946 potential respondents, 3,642 returned online, a partially or fully completed survey (response rate 13 %). Those participants that indicated “no longer in practice” (*n*= 345) were not included in the final analysis as the research was focused on nurses actively employed in the nursing role. Respondents that only included demographic data were removed from the sample (*n*= 398). After removing these two groups, the sample size used for analysis was 2899, a 10% response rate (Table 1).

An analysis of the demographic data of completers and non-completers was conducted to determine if any differences were noted between the groups to determine generalizability. Analysis of the noncompleters and completers indicated no difference in demographic

characteristics except for the highest level of education.

A chi-square test for two independent samples (completers vs non- completers) was then conducted to determine if there was a relationship between the independent variables of gender, education level, age, and years in practice and each group (completers vs non-completers). Findings indicate that there were more in the completers' group with an Associate degree in Nursing and fewer holding a master's degree in the non-completers' group χ^2 (4, N = 3614 =11.84, p = .019). The strength of relationship between group and level of education was minimal suggesting that although the p value was statistically significant, other variables may be more predictive.

The majority of overall respondents were female (87.5%), urban (67.2%), with a bachelor's degree (48.4%), greater than 53 years old (31.5%), with greater than 20.1 years in nursing (37.8%), working non-bedside in nursing (31.3%). This distribution held true when filtered for location of practice (rural vs urban). However, there were more males, younger age group, and less with technical or associate degrees in the urban setting.

Urban and rural respondents were similar in distribution by age (Table 1). However, there were significantly more males (χ^2 =11.65, p = .003) and younger nurses in the urban setting (χ^2 =9.62, p = .02). There were fewer nurses in the urban setting with technical or associate degrees (χ^2 =53.18, p < .000).

According to statewide data (The Idaho Nursing Report, 2020), registered nurses and licensed practical nurses are primarily female (86%, 97% respectively) 32% being 55 years of age or older. Baccalaureate degrees are held by 77.5% of nurses practicing in Idaho with 22% holding a Master's degree. Twenty six percent of Idaho nurses identify as working in rural settings. The Idaho Nursing workforce Report (2020) did not separate out categories for critical access hospital, rural health clinic, federally qualified health center, urban based hospital, rural area

hospital, or non-bedside nurses. However, current areas of rural practice for nurse respondents in this study were 14.5% employed in critical access hospitals in the state and 11.7 % in designated Federally Qualified Health Centers [FQHC], 7.2% in rural clinics, 27.2% in urban hospitals, and 7.8% in rural area hospitals. Thirty one percent identified as no longer practicing nursing at the bedside. The generalization of study findings is strengthened due to the similarity in demographic between respondents for the study and Idaho nurses at large.

Table 1

Characteristics of Study Participants

Characteristics	**% (*n*) Total Participants**	**% (*n*) Rural Participants**	**% (*n*) Urban Participants**
N	2899	950	1949
Demographic			
Age (years)			
21-31	14.6 (423)	12.5 (119)	15.6 (304)
32-42	28.6 (828)	28.0 (266)	28.9 (562)
43-53	25.3 (734)	25.2 (239)	25.4 (495)
>53	31.5 (912)	34.3 (326)	30.1 (586)
Gender			
Female	87.5 (2533)	90.5 (859)	86.1 (1674)
Male	12.0 (347)	9.1 (86)	13.4 (261)
Nursing Education			
Highest level			
Technical Certificate	6.2 (179)	9.1 (86)	4.8 (93)
Associate	21.0 (608)	26.1(247)	18.5 (361)
Bachelor	48.4 (1403)	51.6 (394)	51.8 (1009)
Master	19.6 (567)	19.5 (185)	19.6 (382)
Other	4.8 (140)	3.8 (36)	5.3 (104)
Nursing Practice			
Nursing practice, overall (years)			
<2	7.0 (206)	6.8 (65)	7.2 (141)
2.1-10	27.6 (802)	24.3 (231)	29.4 (571)
10.1-20	27.4 (792)	28 (266)	27 (526)
>20.1	37.8 (1095)	40.8 (388)	36.3 (707)
Nursing practice location			
urban	67.2 (1949)	-	-
rural	32.8 (950)	-	-

Analysis of the Research Questions

To explore the first research question, "*To what extent do rural Idaho nurses report stigmatizing perceptions when working with those with substance use disorder (SUD)*," the Drug and Drug Problem Perception Questionnaire (DDPPQ) was utilized using descriptive statistical analysis of means and standard deviation. The six subscales within the DDPPQ total are role adequacy or having sufficient knowledge to perform the assigned role, role support or the ability to access information quickly to help do one's job, job satisfaction, role self-esteem also known as professional self-esteem, motivation, and role legitimacy or the ability to recognize aspects of the job as their responsibility. These subscales, when taken together, were designed to measure attitudes and perceptions consistently found in stigma and reflect one's feelings of job satisfaction, professional competence, and personal perceptions of patients with SUD (Connors, McKenzie, Robinson, Tager, Scardamalia, Oros, & Hoover, 2017).

The total possible scores for the DDPPQ range from 22-154 with lower scores indicating more positive perceptions or less stigma perceptions and higher scores suggesting more negative perceptions and more stigma towards caring for those with SUD. The subscales include variability in the number of questions and range of scores (Table 2). As with the DDPPQ total score, the lower the score in each individual subscale analyzed, the more positive perceptions in working with those with SUD.

Filtering the respondents for rural only nurses (N= 950) the mean total score on the DDPPQ was 64.83 (SD 18.51). This score indicates a positive perception in rural nurses in regard to working with those with SUD according the DDPPQ survey. Table 2 reports scores on the six subscales of the DDPPQ for rural respondents based on descriptive statistical analysis (N=950).

For a more comprehensive analysis, urban respondents (N = 1897) were analyzed separately (Table 2). Urban respondents averaged 64.58 **(**SD18.84) on the DDPPQ which was similar with the rural nurses' scores. In a t test comparison of the urban and rural respondents there was no statistically significant difference in total scores of the DDPPQ or in the subscale scores except for the subscale of role support, t (2881) = -2.61, p = .009 with rural role support scores (M = 8.94) slightly higher than urban (M = 8.80) indicating a marginally more negative perception among rural nurses.

Based on findings, rural nurses averaged 0.14 higher than their urban counterparts. With the DDPPQ survey, higher scores represent higher stigmatized perceptions. This finding aligns with the literature review which indicates that rural nurses face different challenges than their urban counterparts. These challenges and perceived stresses can lead to cynicism and lack of empathy of the part of the nurse.

Table 2

DDPPQ Scores Descriptive Statistics

DDPPQ Survey	*N*	Mean ± SD	Median	Number of questions per scale	Range
DDPPQ subscale 1					
Role adequacy (rural)	937	22.28 ± 3.49	23	8	8-56
Role adequacy (urban)	1925	22.26 ± 8.59	22	8	8-56
DDPPQ subscale 2					
Role legitimacy (rural)	944	7.33 ± 3.06	7	3	3-21
Role legitimacy (urban)	1937	7.30 ± 3.11	7	3	3-21
DDPPQ subscale 3					
*Role support (rural)**	944	8.94 ±4.19	9	3	3-21
*Role support (urban)**	1939	8.80 ± 4.18	9	3	3-21
DDPPQ subscale 4					
Motivation (rural)	946	3.55 ±1.49	3	1	1-7
Motivation (urban)	1942	3.56 ± 1.49	3	1	1-7
DDPPQ subscale 5					
Task specific self-esteem (rural)	944	8.72 ±3.49	9	3	3-21
Task specific self-esteem (urban)	1937	8.68 ± 3.54	9	3	3-21
DDPPQ subscale 6					
Work satisfaction (rural)	942	14.03 ±4.52	14	4	4-28
Work satisfaction (urban)	1936	13.98 ± 4.52	14	4	4-28
DDPPQ Scale total (rural)	950	64.83 ±18.51	66	22	22-154
DDPPQ Scale total (urban)	1897	64.58 ±18.84	66	22	22-154

SD, standard deviation

DDPPQ items were measured in a Likert scale (*1 = strongly agree to 7 = strongly disagree)*

**p*<.05

Research question two asks: "*Do nurses with higher empathy levels report lower stigma perceptions?"* To investigate this question, participant scores for stigmatizing perceptions based on total DDPPQ scores and empathy (IRI) total scores were analyzed using descriptive statistics. In addition, rural and urban respondents were filtered to determine if any difference based on location of practice. A t test was conducted to determine any statistically significant difference between rural and urban groups. Pearson's correlation coefficient was used to determine the relationship, if any, exist between empathy (IRI) and stigma perceptions (DDPPQ).

In conjunction with the DDPPQ described above, Davis' Interpersonal Reactivity Index (IRI) tool defines empathy as the "reactions of one individual to the observed experiences of another (Davis, 1983)." The IRI instrument has four subscales (empathic concern [EC], perspective taking [PT], fantasy, personal distress) consisting of 7 questions each. They are analyzed independently as the IRI is not meant to measure overall empathy. The IRI is meant to give a continuous measure of empathy related concepts. The IRI uses a 5-point Likert-type scale, from 0-4 with categories that range from "does not describes me well" to "describes me very well." The higher the score the higher the empathic responses on the survey questions.

Based upon the subscale definitions and purpose of this study, only the EC and PT subscales were used in this analysis. Each subscale scores could range from 0 – 28 with higher scores indicating a stronger description of EC or PT as perceived by the respondent.

Table 3 illustrates that urban nurses scored higher than rural nurses in both the subscales of EC and PT on average by .13 and .18 points respectively. There were no statistically significant differences between rural and urban respondents in respect to IRI subscale of EC, $t(2704) = .806$, $p < .420$ or the PT subscale, $t(2707) = .999$, $p < .318$.

Table 3

IRI Total and Subscale Descriptives by Group and Combined

IRI survey	*N*	Mean ± SD	Median
IRI Empathic Concern (EC)			
rural	889	22.09 ± 4.06	22
urban	1817	22.22 ± 4.04	23
combined	2706	22.18 ± 4.04	23
IRI Perspective Taking (PT)			
rural	885	21.46 ± 4.22	22
urban	1824	21.64 ± 4.29	22
combined	2709	21.58 ± 4.27	22
IRI total			
rural	881	43.57 ± 7.17	44
urban	1809	43.88 ± 7.22	44
combined	2690	43.78 ± 7.20	44

Table 4 shows the correlations between the IRI survey and the DDPPQ survey based on location of practice. Pearson's coefficient was used to determine any relationship between the two scales measuring empathy and stigmatizing perceptions among rural, urban, and total respondents. For most total and subscale correlations, there was a statistically significant and inverse relationship between empathy and stigma meaning that as empathy became less, stigma increased. All relationships were small to moderate with R^2 ranging between .05 to .08 meaning that the independent and dependent variables share between 5% and 8% of the variance.

Using G Power 3.1, the post hoc power analysis for bivariate correlation with a sample size of 2899 for the statistical power analysis. The statistical power for this study was .99. Thus, there was more than adequate power at the small effect size (.02) to detect a true effect when there is

one and there is little chance of Type II error in the study. While this is statistically significant, the practical significance is low (Bhandari, 2021).

Table 4

DDPPQ and IRI Pearson Correlation Based on Location of Practice

		IRI total all	IRI Empathic Concern	IRI Perspective Taking
		r	*r*	*r*
DDPPQ total all	Rural	-.23*	-.23*	-.16*
	Urban	-.29*	-.28*	-.23*
	Total	-.27*	-.26*	-.20*
DDPPQ work satisfaction	Rural	-.26*	-.23*	-.23*
	Urban	-.32*	-.28*	-.27*
	Total	-.30*	-.26*	-.26*
DDPPQ motivation	Rural	-.21*	-.18*	-.18*
	Urban	-.23*	-.19*	-.20*
	Total	-.22*	-.19*	-.20*
DDPPQ role legitimacy	Rural	-.242	-.01	-.09
	Urban	-.12*	-.07*	-.12*
	Total	-.09*	-.05*	-.10*
DDPPQ role support	Rural	-.14*	-.09*	-.15*
	Urban	-.16*	-.12*	-.15*
	Total	-.16*	-.11*	-.15*
DDPPQ task specific self-esteem	Rural	-.34*	-.27*	-.31*
	Urban	-.34*	-.28*	-.30*
	Total	. -.34*	-.28*	-.30*
DDPPQ role adequacy	Rural	-.09*	-.04	-.11*
	Urban	-.18*	-.11*	-.20*
	Total	-.15*	-.09*	-.17*

*significant at the 0.01 level (2-tailed)

Research question three asks: "*Are years in nursing practice, gender, age, geographic region, and educational level associated with an increase in stigma perceptions and decreased empathy*?" To answer this question, respondent scores on the dependent variables of DDPPQ (stigma perceptions) and IRI (empathy) in relationship to each independent variable of

age, gender, years in practice, geographic region, and education level in the rural respondents only were analyzed (Table 5). One-way ANOVAs were conducted for each dependent variable (DDPPQ total, IRI total) with the independent variables of education, age, years in practice (Table 5). Table 5 also includes the independent sample t tests results comparing the DDPPQ total and IRI total scores between location of practice (rural, urban) and gender (male, female).

The findings indicated that there is a statistically significant difference in DDPPQ total (*N*= 2804) and gender. The average DDPPQ for males was 60.16 (SD 18.43) and for females was 65.50 (SD 18.41) with males scoring on average 5.34 points lower than females indicating male nurses had less stigma perceptions working with those with SUD than their female counterparts. There was also a statistically significant difference with the IRI total (*N*=2675) and gender. The mean IRI score for male total respondents was 40.86 (SD ± 7.82) with a total average IRI for female total respondents at 44.18 (SD ± 7.01). This indicated that females experience higher levels of empathy than male counterparts.

The ANOVA also noted significant differences in DDPPQ and age, education, and years in practice. Using the Levene Statistic which is an inferential statistic used to assess the equality of variances for a variable calculated for two or more groups, with the *p* value less this .05, this indicated that the variances were significantly different therefore the Tamhane's post hoc analysis was completed to determine where the differences were between the independent variables of age, years in practice, educational level, and the dependent variables of the DDPPQ total score and IRI total score among respondents. Analysis found significant difference found in DDPPQ scores and years in nursing practice. Nurses with greater than 20.1 years of practice scored lower than all other age groups with an average score of 63.86 (SD 18.94) indicating more positive perceptions with increasing years in nursing practice. There were also significant

differences between the DDPPQ and education. The differences were significant between the technical certificate and the associates and bachelor's degrees; Associates degree and technical certificate, master's degree and other; and between bachelor's degree and master's and other degree. The greatest difference was between the bachelor's degree with an average DDPPQ of 67.87 and other with a DDPPQ average of 56.53. This indicates that with increased education there is a decrease in stigma perceptions.

Significant differences were found between DDPPQ scores and age groups. The differences in DDPPQ scores significant between ages of 21-31 and 43-53; 21-31 and > 53 years; and 32-42 years and > 53 years. The biggest difference lay between the age groups of 21-31 (M=68.16) and > 53 (M=63.33). This indicates that as age increases there is less stigma perception about working with those with SUD.

Table 5

ANOVA and t tests comparisons

Comparison (all respondents)	***F***	***p***	**df**
DDPPQ and Education level	29.04	.000	4
DDPPQ and Age	8.39	.000	3
DDPPQ and Years in Practice	4.55	.003	3
IRI and Education level	0.87	.350	4
IRI and Age	1.10	.350	3
IRI and Years in Practice	1.10	.350	3
Comparison	**t**	***p***	**df**
DDPPQ and geographic area (urban vs rural)	-1.04	.299	1926.85
DDPPQ and gender (male vs female)	-5.02	.000	440.93
IRI and geographic area (urban vs rural)	1.07	.284	1756.17
IRI and gender (male vs female)	-7.30	.000	403.92

Upon meeting the following assumptions (Lund Research, 2018), a multiple linear regression analysis was conducted to determine the degree to which the independent variables that demonstrated statistical significance were predictive of total DDPPQ or IRI scores.

1. The dependent variables (DDPPQ, IRI, PSS) are measured on a continuous scale.
2. Two or more independent variables are categorical (age, gender, education level, location of practice, years in practice).
3. Independence of observation was met with a Durbin Watson of < 2.5.
4. Linear relationship was supported between the dependent variables and each independent variable, separately and collectively.
5. Homoscedasticity or residual variance does not change much as the predictor variable

changes.

6. Multicollinearity was disproven with a variation inflation factor (VIF) < 3 for all the independent variables.
7. There are no significant outliers as demonstrated with Cook's Distance of .001
8. Residual errors are normally distributed as evidenced by the normal P-P plot.

Multiple linear regression analysis helps understand how much the dependent variable changes when we change the independent variable. When the dependent variable is not of normal distribution, multiple linear regression can be used with a large sample size (Statistics Solution, 2021). Multiple linear regression is a statistical test that shows how the dependent variable (DDPPQ and IRI) change when the independent variables (age, years in practice, education, geographical location, and gender) changes. This test was used to determine if DDPPQ total or stigma perceptions was predictive according to the variables of gender, age, years, in practice and level of education. Except for years in practice and geographical location, these variables were statistically significant in the prediction of DDPPQ total, *(F (*5, 2807) = 12.710*, p < .000, R^2 = .022).*

Multiple regression was also used to analyze the IRI total and the independent variables of gender. The multiple regression statistical test indicated that IRI total or empathy scores are predictive in regard to the variable of gender, *F (1, 2684) = 57.620, p <.000, R^2 = .01.* Based upon Rosner's Fundamentals of Biostatistics (2016), the *R* and R^2 values (Table 6) indicate that the predictors are weak and explain only 2.2% of the variance in the DDPPQ or stigma scores and 2.1% of the variance in the IRI or empathy scores.

Table 6

Multiple Regression of DDPPQ and IRI

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1*	.145	.021	.021	7.12966
2**	.148	.022	.021	18.30085

* Predictors: (Constant), Gender/IRI total

** Predictors: (Constant), Gender, Age, Highest level of education, Years in practice /DDPPQ total

Overall, the study findings indicated that male nurses scored significantly lower on the DDPPQ tool by an average of 5.34 points which means they had fewer stigmatizing perceptions (more positive perceptions) of working with those with SUD than female nurses. However, male nurses scored lower on the empathy (IRI) tool by an average of 3.32 points, indicating fewer empathy tendencies than females. Most of literature review indicates that females tend to be more empathetic which aligns with this study's findings (Eren, 2021; Gupta, 2021; Loffler & Greitemeyer, 2021). The literature was sparse for studies looking at the differences between gender and stigmatizing perceptions. Research primarily looked at nurses as a whole in regard to stigmatizing perceptions and indicated that stigma perceptions and attitudes are common among nurses.

This study also indicated that DDPPQ scores decrease as age and years in practice increase meaning that perceptions of working with those with SUD become more positive with increasing age and experience (Fujii, et al., 2018; Oh, 2020). The largest difference in age lay between the age groups of 21-31 (M = 68.16) and those greater than 53 years old (M = 63.33). Whereas the largest difference in years in practice was between those that worked 2.1 – 10 years (M = 66.39) and those that worked greater than 20.1 years (M= 63.86).

According to literature, with an increase exposure to those with substance use disorder

comes increased awareness and better preparedness to help. Although age and years in practice were not delineated in the literature review, this study and the research align in that more positive perceptions are noted in working with this patient population with increased exposure to this population. Lastly, there was statistically significant difference in regard to age and DDPPQ scores. Those with higher education scored lower (fewer negative perceptions) than those with less education. The largest difference was between those with a bachelor's degree (M = 67.87) and those with other (M= 56.53).

Research question four asks: "*Is perceived stress associated with decreased empathy*?" To answer this question, the Perceived Stress Survey (PSS) and Interpersonal Reactivity Index (IRI) and their subscales were evaluated for all respondents (Table 7). To determine any relationship between empathy and perceived stress Pearson coefficient was calculated.

The PSS scores can range from 0 -40 with 0-13 considered low stress, 14-26 moderate level of stress and 27-40 considered high level of stress (Perceived Stress Scale, n.d.). There was a statistically significant but weak negative correlation between the IRI total (*N*= 2690) and PSS total *(N*= 2668) indicating that when the perceived stress increases, empathy scores decrease.

Table 7 shows further analysis conducted filtering respondent location of practice (rural or urban). Analysis shows that there is a weak inverse relationship in both rural and urban nurse respondents. This indicates when stress levels increase that overall empathy decreases which holds true to the literature review.

Table 7

Pearson Correlation Coefficient IRI and PSS by Location of Practice

		IRI total all	IRI Perspective Taking	IRI Empathic Concern	PSS total
		r	*r*	*r*	*r*
IRI Total Score	Rural	1	.87*	.86*	-.103*
	Urban	1	.88*	.02	-.069*
	Total	1	.88*	.86*	-.080*
IRI Perspective Taking subscale	Rural	.87*	1	.50*	-.160*
	Urban	.88*	1	.50*	-.138*
	Total	.87*	1	.50*	-.145*
IRI Empathic Concern subscale	Rural	.86*	.50*	1	-.01
	Urban	.86*	.50*	1	.21
	Total	.86*	.50*	1	.01
PSS total	Rural	-.103*	-.160*	.76	1
	Urban	-.069*	-.138*	-.02	1
	Total	-.080*	-.145*	.01	1

*significant at the 0.01 level (2-tailed)

Summary of Results

This study is an initial exploration of stigmatizing perceptions, and the relationship of perceived stress and empathy on stigmatizing perceptions in nurses employed in rural and urban health care settings in Idaho and caring for those with SUD. The dependent variables of empathy, stigma perceptions, and perceived stress were measured in Idaho nurses practicing in rural and urban areas across the state using an online survey using valid and reliable survey tools that are publicly available. These variables were also explored with the independent variables of age, years in practice, education level, gender, and geographical location of practice. Statistical analysis was conducted using descriptive, correlation, and linear statistics.

Findings indicate that rural and urban nurses rate their stigmatizing perceptions of working with those with SUD similarly on the DDPPQ tool. The average DDPPQ scores varied by .25 regarding practice location with the urban group (M=64.58) averaging slightly higher or more positive than the rural group (M=65.33). The comparison of scores between rural and urban nurses was statistically insignificant between the groups in subscale and total scores except for role support subscale.

Role support is defined as the ability to access information quickly to help do one's job. Rural nurses scored slightly higher scores (M = 9.23) indicating less role support than their urban counterparts (M = 8.80).

There was no statistical difference between the rural and urban groups on level of empathy based on their empathy scores using the IRI survey tool. Nurses identifying as working in urban settings scored .31 higher on the empathy scale than their rural counterparts. In looking at the relationship of empathy (IRI) and stigmatizing perceptions (DDPPQ) using Pearson's correlation, there was a weak but inverse relationship between stigmatizing perceptions and empathy in both rural (r (1791) =- .23, p < .01) and urban nurses (r (1791) = - .29, p < .01). Statistics indicate when empathy increases stigma decreases.

Lastly, findings indicate that for all respondents and within the rural and urban groups, there is a statistically significant but weak inverse relationship between IRI total and PSS total scores indicating that when the perceived stress increases, empathy scores decrease.

This research study had a 10% response rate was conducted only with Idaho nurses which could limit generalizability of the results outside of Idaho; however,the study sample demographics is reflective of the Idaho nurse workforce and may add to the generalizability of the study findings within Idaho. In addition, the statistical power for each of the research

questions, with a small effect size of 0.02, equaled .99 - 1 indicating that the study had a high probability of finding a statistically significant difference if one exists (Cohen, 1988; Faul, 2007).

Chapter V: Conclusions

This study is an initial exploration of stigmatizing perceptions, and the relationship of perceived stress and empathy on stigmatizing perceptions in nurses employed in rural and urban health care settings in Idaho and caring for those with SUD.

Discussion of Findings

In research question one, the objective was to evaluate the stigma perceptions of rural nurses using the reliable and valid DDPPQ tool. The descriptive statistics used showed that the rural nurses scored an average of 64.83 (SD 18.84) on the DDPPQ. As there are no other scoring norms, the median of 66 on the scale of 22-154 was used. The rural nurses scored 1.17 lower than the median which can be interpreted as more positive perceptions in caring for those with SUD. For a more comprehensive analysis, urban nurse scores were evaluated separately. The urban nurse DDPPQ average was 64.58(SD 18.51) This is .14 lower than the rural nurses meaning that those in urban areas had fewer negative perceptions than those in rural areas. This aligns with the literature review. The Rural Health Information Hub (2021) suggests that the unique barriers to rural nursing can lead to increase stress and increased perceived stress, found among nursing professionals in both rural and urban locations, (Baernholdt & Mark, 2013; Halder & Mahato, 2013) can lead to cynicism and depersonalization of patients with SUD.

The objective for research question two was to assess the relationship of empathy and stigma perceptions. As the question did not delineate the geographical location, rural and urban nurses were evaluated separately and in total. The descriptive statistics show that rural nurses scored 43.57 (S.D. 7.13) on the valid and reliable empathy scale (IRI) and the urban nurses scored 43.88 (SD 7.22).

Urban nurses scored .31 higher than the rural nurses indicating more they self-scored as more empathetic. Statistics showed that there was a weak inverse relationship between the IRI and

DDPPQ in rural (r (1764) = -.23, p<.01) and urban (r (1764) = -.27, p< .01) and total (r(2666) = -.27, p< .01) which means when empathy increases, stigma perceptions decrease.

These findings align with the literature review. The research suggests a negative correlation between empathy and stigma in that an increase in empathy can decrease stigma perceptions of those with mental illness among mental health care providers (Knolhoff, 2018). Vagheei, et al. (2018) also found a negative correlation between stigma and empathy among nursing students.

The objective of research question three was to look at the independent variables of years in nursing practice, gender, age, geographic region of practice, and educational level and their association with stigma perceptions (DDPPQ) and empathy (IRI). ANOVA statistics found no significant differences between the continuous independent variables of age, years in practice, and education level and the IRI. However, there were statistically significant differences between DDPPQ, and the variables listed. Higher levels of education, more years in practice, and increase in age were found to have fewer negative perceptions in regard to caring for those with SUD. The greatest difference in education was between bachelor's degree and other. The literature is clear that with increased education, stigma perceptions decrease. However, those with a bachelor's degree scored higher on the DDPPQ total than all other educational groups meaning they had the most negative perceptions toward patients with SUD. This secondary finding differs from the literature review in that the bachelor's prepared nurse has more formal education that the associates or the technical certificate yet scored higher (or more negative).

In the age categories, the greatest DDPPQ mean difference was between 21-31 years old (M= 68.16) and > 53 years old (M=63.33). In addition, those with > 20.1 years of nursing experience scored lower (more positive) than the other groups of years of experience. This

indicates that with age and years of experience comes fewer stigma perceptions. The literature supports this proposition in that prior exposure to mental illness tends toward fewer negative perceptions (Fuji, et al., 2018).

Lastly, for research question three, statistics suggest the categorical independent variables of gender and geographical location, that both the IRI and DDPPQ showed significant differences in gender and no significant difference based on geographic location. Male nurses scored lower (fewer negative perceptions) on the DDPPQ tool whereas female nurses scored higher (more empathetic) on the IRI tool.

Literature shows that male nurses have fewer stigma perceptions in comparison with their female counterparts (Ataro, et al., 2020). The research also shows that females tend to be more empathetic than males (Gupta & Kiran, 2021; Loffler & Greitemeyer, 2021)

The objective for research question four was to evaluate the correlation between stress and empathy. Analysis showed a statistically significant yet inverse weak correlation between empathy and perceived stress meaning that as stress levels increase that empathy decreases which holds true to the literature review. There were mixed findings in the literature. There were older articles that primarily indicated that with increased stress comes decrease empathy (Baernholdt & Mark, 2013; Halder & Mahato, 2013). However, several newer studies found either no correlation between perceived stress and empathy or a positive correlation between stress and empathy (Gupta, et al., 2021; “Stress can increase empathy”, 2017; Wajudi, et al., 2019).

The results of the study provide an understanding of empathy, stigma perceptions, and perceived stress by Idaho nurses caring for patients with substance use disorder. This study demonstrates that there are no statistically significant differences in empathy and the influence

on stigma perceptions between those in rural practice or urban practice. There was a noted weak inverse relationship between empathy and stigma and between empathy and perceived stress indicating that as empathy increased, stigma perceptions decreased and when stress increased, empathy decreased. This study also concluded that the independent variables of age, educational level, gender, and years in practice had a weak predictive value for the dependent variables of stigma perceptions and empathy ($R^2 =$ .022, $R^2 =$ .021) indicating that other variables not studied may be more predictive.

Implications. There are many studies looking at stigma, but none were found when looking at stigma and empathy and perceived stress in caring for those with SUD. The findings from this study contribute to the nursing knowledge and provide insight to the role of empathy, stigma perceptions, and perceived stress in Idaho nurses caring for those with SUD. By acknowledging unconscious stigma perceptions in one's nursing care, one can work to "disengage" this and empathize with the patients and their individual circumstances thus removing a barrier to care (Veesart & Barron, 2020).

Recommendations for Future Research. This research contributes to the general knowledge about empathy, perceived stress, and stigma perceptions in nursing in caring for those patients with SUD. Future research should be done to contribute to a greater understanding of specific resources and education to fight stigma perceptions among health care providers, identify barriers that may exist to provide more empathetic care, and staff resources to allow for better, more understanding care to those with SUD. Studies on undergraduate nursing education in these areas could assess the impact earlier education for students about SUD incorporating empathy and understanding and recognizing implicit bias. In addition, the patient care population could be expanded to include those populations that face stigma perceptions such as those with obesity,

general mental illness, and transgender (Corrigan, Morris, Michaels, et al., 2012; Harris, Leskela, Lakhan, et al., 2019; Lu, Winkelman, & Wong, 2016). Empathy training would support a caring and therapeutic relationship between nurses and those experiencing SUD and contribute to improved outcomes. Exploration of strategies to reduce stress in both urban and rural nurses in the workforce may support higher levels of empathy and improved care of patients with SUD.

Conclusion. This study is an initial exploration of stigmatizing perceptions, and the relationship of perceived stress and empathy on stigmatizing perceptions in nurses employed in rural and urban health care settings in Idaho and caring for those with SUD. This study addressed the association of age, gender, years in practice, location of practice and level of education on both stigma perceptions and empathy as well.

With the increasing issue of substance use disorder and given that rural nurses are generalists serving a diverse patient population, with unique challenges research is important to recognize and understand what is needed to assist the nurse and promote positive patient outcomes. The concepts of empathy, stigma perceptions, and perceived stress have not been studied together in depth prior to this study. It is important to recognize that these variables may have an impact on patients with SUD receiving and continuing care. Given the findings of the study it is important to support nurses with resources and education to be better prepared in caring for this group of patients. With the growing substance use epidemic, there is an increasing number of individuals in this nation that suffer problem and will seek help. This research builds on current evidence that stigmatization may adversely affect those with SUD by creating a barrier to much needed health care, thus, leading to poorer health outcomes for these patients (Ahren, Stuber, & Galea, 2007).

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Appendix

Research Survey

Stigma and Empathy Among Idaho Nurses Caring for those with Substance Use Disorder. Thank you for your participation in this research survey.

As a reminder this is voluntary, and participation may be withdrawn at any time.

There are four sections: demographics, Watson's Drug and Drug Problems Perceptions Questionnaire, Perceived Stress Scale, and Davis' Interpersonal Reactivity Index. It will take approximately 15 minutes to answer.

If you choose to be included in the drawing for one of three digital gift cards, you will have an opportunity to include your email below.

Thank you.
Demographic question I identify as

- 1. Male
- 2. Female
- 3. Prefer not to answer

Demographic question

I am _____

- 1. 21-31 years old
- 2. 32-42 years old
- 3, 43-53 years old
- 4. > 53 years old

Demographic question

I have been in nursing practice for _____

- 1. < 2 years

- ☐ 2. 2.1- 10 years
- ☐ 3. 10.1 to 20 years
- ☐ 4. > 20.1 years

Demographic question

My highest level of education in nursing is _____

- ○ Technical certificate
- ○ Associate's degree
- ○ Bachelor's degree
- ○ Master's degree
- ○ Other

Demographic question

The area that best describes my location of nursing practice is:

- ○ 1. Urban area (defined by the U.S. Census as an area of 50,000 or more people)
- ○ 2. Rural (defined by U.S. Census as all population, housing, and territory not included within an urban area).
- ○ I am no longer in practice

Demographic question

The following best describes my current area of practice:

- ○ 1. Critical Access Hospital
- ○ 2. Federally qualified health center
- ○ 3. Rural health clinic
- ○ 4. Urban based hospital
- ○ 5. Rural area hospital
- ○ 6. Non bedside nursing practice

I feel I have a working knowledge of drugs and drug related problems.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I know enough about the causes of drug problems to carry out my role when working with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I know enough about the physical effects of drug use to carry out my role when working with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I know enough about the psychological effects of drugs to carry out my role when working with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I know enough about the factors which put people at risk of developing drug problems to carry out my role when working with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I know how to counsel drug users over the long term

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I can appropriately advise my patients/clients about drugs and their effects.

- 1 Strongly Agree

- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I have the right to ask patients/clients questions about their drug use when necessary.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel that my patients/clients believe I have the right to ask them questions about drug use when necessary.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel I have the right to ask a patient for any information that is relevant to their drug problems.

- 1 Strongly Agree
- 2 Somewhat Agree

- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

If I felt the need when working with drug users I could easily find someone with whom I could discuss my personal difficulties that I might encounter

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

If I felt the need when working with drug users I could easily find someone who would help me clarify my professional responsibilities.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

If I felt the need I could easily find someone who would be able to help me formulate the best approach to a drug user.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral

- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I want to work with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

I feel that there is little I can do to help drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

In general, I have less respect for drug users than for most other patients/clients I work with.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree

- 7 Strongly Disagree

I feel I do not have much to be proud of when working with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

At time I feel I am no good at all with drugusers.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

On the whole, I am satisfied with the way I work with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

In general, one can get satisfaction from working with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

In general, it is rewarding to work with drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

Q30
In general, I feel I can understand drug users.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Agree
- 4 Neutral
- 5 Disagree
- 6 Somewhat Disagree
- 7 Strongly Disagree

In the last month, how often have you been upset because of something that happened unexpectedly?

- 0= Never

- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you felt that you were unable to control the important things in your life?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you felt nervous and “stressed”?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you felt confident about your ability to handle your personal problems?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you felt that things were going your way?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you found that you could not cope with all the things that you had to do?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you been able to control irritations in yourlife?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you felt that you were on top of things?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you been angered because of things that were outside of your control?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

- 0= Never
- 1 = Almost Never
- 2= Sometimes
- 3- Fairly Often
- 4 = Very Often

I often have tender, concerned feelings for people less fortunate that me.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

I sometimes find it difficult to see things from the “other guy’s” point of view.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

Sometimes I don’t feel very sorry for other people when they are having problems.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

I try to look at everybody's side of a disagreement before I make a decision.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

When I someone being taken advantage of, I feel kind of protective towards them.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

I sometimes try to understand my friends better by imagining how things look from their perspective.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

I sometimes try to understand my friends better by imagining how things look from their perspective

- 0 does not describe me well

- 1
- 2
- 3
- 4 describes me very well

Other people's misfortunes do not usually disturb me a great deal.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

When I see someone being treated unfairly, I sometimes don't feel very much pity for them.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

I am often quite touched by things that I see happen

- 0 does not describe me well
- 1
- 2
- 3

- 4 describes me very well

I believe that there are two sides to every question and try to look at them both.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

I would describe myself as a pretty soft-heartedperson.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

When I'm upset at someone, I usually try to "put myself in his shoes" for a while.

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

Before criticizing somebody, I try to imagine how I would feel if I were in their place

- 0 does not describe me well
- 1
- 2
- 3
- 4 describes me very well

If you would like to be entered into the drawing for one of three digital gift cards, please enter your email address below. Your email address will be destroyed after the drawing.