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| Nicotine abuse and anxiety |
| Nicotine Abuse and Anxiety: A Path to Understanding its Effects |
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| Group A – Thursday, SCWK 351 |
| Introduction |
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**ABSTRACT**

Over the course of the last few decades, society has increased awareness in the relationship between nicotine abuse, anxiety, and welfare recipients. In return medical professionals have studied, researched, and intervene to compile data in support of smoking cessations. The confirmed findings allowed policymakers to support funding for smoking cessation programs. The drawback is that there are no studies done on the affect of smoking cessation and anxiety. With this in mind, the research will discover if smoking cessation will contribute to the lessening of anxiety among welfare recipients. Participants ranged from ages 18-65, and received public assistance through Social and Rehabilitative Services. Each subject was given a survey questionnaire. Data collected revealed, a greater number of welfare recipients who smoke exhibit higher anxiety levels. This data is in support of the study’s hypothesis, that there is a correlation between smoking and anxiety in welfare recipients.

Smoking has been impacting the health of our community for years. The consumption of nicotine is among the highest of all abuse agents that affects the mind. The factors contributing to the problems that arise from use range from coping with loss, job related situations, and family influences but regardless of type, smoking or nicotine abuse affects the community as a whole. The negative effects of smoking have increased awareness among educators on health issues resulting from the overuse of this component (Anczak & Nogler, 2003).

In 1965 there were over 50 million smokers reported in the United States, which is over 42% of the population. The rate of smoking has not decreased, yet the consensus is that 70% of users want to quit and are aware of the health risks they take by continuing to smoke. The United States Department of Health and Human Service have set a goal to reduce the amount of smokers and increase the number of cessations by 2010. An economic analysis found that clinical intervention would be more cost effective than not treating the population (Anczak & Nogler, 2003). The mental health of the smokers in the United States is impacted by environmental, social and personal influences. The coping skills used to overcome those situations has become a nicotine crutch.

A study of pregnant women in Missouri showed that women that were unable to stop smoking while pregnant were 2.5 times more likely, than those who didn’t smoke, to be suffering from a mental disorder (Flick, Cook, Homan, McSweeney, Campbell & Parnell, 2006). With the lack of satisfactory healthcare, many individuals could be attempting to self medicate for these disorders by tobacco use. One of the common mental disorders affecting this population is anxiety. In a study conducted that compared the anxiety levels in welfare recipients to the availability of sufficient social services, found that only 3.6% had anxiety problems compared to 11.6% when insufficient social support was accessible (Cadzow & Servoss, 2009).

The affect smoking cessation has on anxiety issues has not been determined, with this in mind our study will explore the relationship between smoking and nicotine abuse and symptoms of anxiety and how it correlates in the population of welfare recipients in the community. This study is important because it follows a relationship between nicotine and anxiety and its role reducing the health risks of smoking patients with anxiety risks that are part of the welfare rolls.

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**LITERATURE REVIEW**

The independent variable in evaluating the effects of nicotine abuse on anxiety is the nicotine abuse itself where as the anxiety exhibited among the population is considered the dependent variable. Nicotine abuse can be determined after a marked prevalence in daily smoking that increases over time. According to Breslau, Hiripi, Johnson, & Kessler (2001) in ages 15 to 54 average the lifetime dependence rate is approximately 24%. These variables work together in a relationship that several studies have explained. The benefits of cessation on nicotine abuse patients with anxiety can be noted in comparing previous research studies and showing the correlation between the variable factors. The variables in these studies included nicotine abuse and anxiety. The definition of what anxiety is has been in dispute for years. According to Gulliver, Kamholz, Morissette, Tull, & Zimering (2007) it is “a future-oriented state involving perceived uncontrollability and unpredictability over dangerous events or the person’s emotional response to those events” Anxiety has an impact on the ability to conduct, plan and adapt to the situations at hand and those to come. It hinders test taking abilities, cognitive thinking while driving to enable you to make safe decisions and casts shadows on daily life (Barlow, 2000). The relationship between negative effects of anxiety on a person with a history of nicotine abuse has been linked to low success in cessation. It may also lead to more severe withdrawal symptoms among participants. These negative effects are a major component in the causes that lead to initiation of smoking, the return to smoking after cessation, the inability to cease with success and in increase of anxiety symptoms (Barlow, Brown, Ciraulo, Devine, Duade, Farchione, Gulliver, Kamholz, & Morissette, 2008).

Those who struggle with addiction to nicotine are also likely to have a psychiatric problem. Adults often time will suffer from chronic forms of stress due to responsibilities at home, work, and in their personal lives. These stresses, along with sudden traumatic situations cause many adults to suffer from anxiety. One factor behind nicotine abuse is the elevation of anxiety symptoms that one is currently experiencing. According to Lima, Reid, Smith, Zhang, Jiang, Rotrosen, & Nunes (2009) adults who suffer from a psychiatric problem such as anxiety are less likely to receive any type of preventive health care. Instead they will only seek care when a crisis situation is present.

 In the study conducted by Lima, et al (2009), adults who suffer from anxiety account for 19% of adults who abuse tobacco. Their intake of nicotine is roughly around ten cigarettes per day. Adults who abuse nicotine on a daily basis account for 3.4% of 19% that where shown to smoke one averages a pack to two packs per day. In a study cessation of three hundred participants, 70% had experienced anxiety within the last year that was managed on its own without medication. The average span was over twenty five years consuming one pack per day. While the remaining 30% had experienced longer anxiety that had to be managed by medication, and on average were shown to have smoked a pack to two packs per day (Lima, et al, 2009). It is believed that nicotine abuse and anxiety share a relationship.

 Further studies showed how anxiety sensitivity would influence the relationship between nicotine abuse levels and stress among adults exposed to serious traumatic events. The combination of anxiety sensitivity and an increase in cigarettes smoking per day was established due to the traumatic episode. The more traumatic the incidence the more likely the person was to smoke to alleviate the symptoms of anxiety. According to the research study done by Babson, Feldner, Sachs-Ericsson, Schmidt, & Zvolensky (2008) the average age at which the participants began smoking was 13 years old with smoking becoming a continual habit at age 16. This study included 78 total participants. The instances of traumatic events included fires, serious life threatening accidents, natural disasters or explosions. Of those 78 participants the education levels were approximately 61% partial college education, 18% high school graduates, 3-9% were graduates of associate’s degree or higher in college.

The many contributors and associations with nicotine abuse and anxiety weigh heavily in the population it affects. The population being studied varies from children to late adulthood sharing the common factors of abuse and neglect. Neglect and abuses are the two main reasons that children become involved in the welfare system. Children who suffer abuse are more likely to abuse nicotine and suffer from anxiety. This study focused on both girls and boys whose ages ranged from 11 to 18. Of the participants, 2.3% reported some form of nicotine abuse within the last twenty days. It was also shown that girls coming from an abusive or neglectful home where at a higher risk than boys coming from the same home. The girls in the study showed that 13.4% suffered from anxiety compared to boys where only 6.2% suffered from anxiety. The increase in girls having anxiety as compared to boys is the difference between genders. Girls are more open to communicating their feelings and seeking out help; while boys are more apt to keep their feelings to themselves out of fear of self-image (Orton, Riggs, & Libby, 2009).

 The population that has been shown to suffer from problems caused by anxiety and nicotine abuse are those in poverty. According to Lee’s study, it was believed that those living in poverty were at a higher risk to use tobacco. One reason is that those living in poverty deal with issues related to geographic location, environment, and emotional stability. Due to these factors, stressors and situations are shown to raise anxiety levels. This accounts for higher percentage of smokers among those who are at or below poverty (Lee, 2008).

 Another population that is affected is single fathers. In a study that was conducted single fathers consistently spend more on tobacco products than any other family structure. They are spending anywhere from 25% to 50% more than married couples and single mother homes. Single fathers who choose this role have a much easier time adapting than those who are forced into the role. Those who are unwilling to be single fathers experience excessive stress causing anxiety (Ziol-Guest, 2009). There are an estimated 29.1% of adult smokers living below federal poverty line compared to 20.6% of individuals living at or above the poverty level. Many of those living at or below poverty guidelines are the ones who continue to suffer from the effects that nicotine abuse and anxiety have on their lives (Haber, 1966).

 The research study will be to discover if smoking cessation will contribute to the lessening of anxiety among welfare recipients. As shown from past studies, there is a correlation between smoking and anxiety among various populations and in this study, the research will concentrate specifically on those who receive federal welfare benefits. The study will show that by increasing instances of smoking cessation will lessen the effects of anxiety in benefit recipients of federal aid.

**Methods**

**Subjects**

This study will evaluate 300 subjects from the ages of 18-65 that are on public assistance. They will be gaining access to the subjects through the Social and Rehabilitative Services (SRS) Site. SRS will use a simple random sampling method.   The subjects are selected based on whether they are recipients of services through this office. There will be a questionnaire administered after the signing of consent forms made available to them after explanations of the study are made. These questionnaires will give researchers data to be used to correlate a relationship between smoking and anxiety.

**Instruments**

The survey that was created was used to find specific information about the demographic to check for any types of patterns concerning smoking and see if it has an effect on levels of anxiety in welfare recipients. Different types of questions were given in the study. Demographic questions included their income, household size, and if they received TANF, Medicaid, Food Stamps or SSI.

The dependent variable is anxiety and for this research activity the Hamilton Anxiety Scale (HAM-A) was used to measure the level of anxiety that individuals on public assistance possessed (Hamilton, 2004). This helped to gain an understanding of the severity of anxiety and percentage of our population experiencing these conditions. To prevent any demographics from being left out the survey was given in both English and Spanish. A process of back translations using a Spanish interpreter was used to help prevent miscommunications in the language of the questions.

 The independent variable measured is smoking, the study asked questions concerning smoking. Questions included in the study asked if they did smoked, how many cigarettes a day and per week they smoked, what age they started, and what were the reasons for start smoking and continue to smoke, and if they have ever tried to quit.

**Procedures**

The focus of this study is on the effects of smoking on anxiety symptoms among recipients of public assistance. The first step in surveying subjects is to receive consent via a Collaboration consent form from the Social and Rehabilitative Services (SRS) office. This form will allow researchers to survey their clients. Once consent is received researchers will set up a room in the SRS building randomly picking participants using simple random probability sampling procedures.

The researcher will, after explaining the study and the questionnaire contents, then ask if subjects agree to participate in this study. If they agree, then the consent form will be explained to them. The participants will then be asked to sign the consent form. If any additional consent is needed in order to provide information to another institution, possibly medical, for further evaluation it will be with the consent form at the time of the survey. This consent form will be made available to the subjects. After signing the consent form the participant will receive a short questionnaire survey which researchers will be administering during a two week period starting December 1st thru December 15, 2010. The survey will take the participants approximately 30-45 minutes to complete. Each participant will receive a $10.00 compensation for their time.

It will be explained to the participant that any information obtained in this study in which they can be identified will remain confidential and will be disclosed only with their permission. The information gathered while needing to be kept for three years to corroborate the results will be kept confidential and anonymous. There may be certain risks involved in the survey procedure and the subjects will be notified that if at any time during the questionnaire they feel that a question arises that makes them feel uncomfortable, or upset in any way, they may either skip the questions or discontinue taking the survey.

**Design**

The design of the research study is using the quantitative method. This means the study consists of statistical data that explains the overall findings. The quantitative method is used to gather enough information in order to find out if our hypothesis is correct. Using a more quantitative survey makes it easier on the person taking the survey, and allows for the data to be analyzed in a more efficient manner. Even though the survey is quantitative there are a few open-ended questions that are used to get a more in-depth answer to the question.

 The survey is set up in a basic survey format. The first part of the survey ask about demographics, and the other sections follow specifically structured questions that relate to smoking habits and any anxiety the person may be feeling. The Hamilton Anxiety Rating Scale is included as an additional tool to measure symptoms and the subject’s level of anxiety. The design of the survey was made as simple as possible, so that the person taking the survey doesn’t become uncomfortable and unwilling to finish the survey.

 The data used during this research is to show how smoking and anxiety correlate together. The data will be analyzed through a quantitative survey that will be given to 300 people who receive some form of public assistance from the government. The Hamilton Anxiety Rating Scale and the answer’s given on the survey make up the statistically data. Answer’s given on the survey will be compared to one another to see if there any similarities between them. Data will be analyzed on the subject answering the questions truthfully. The probability levels are based on a scale of 1-5 with five being the most accepted and one being the least.

**Proposed Results**

After assessing the data gathered from the questionnaire surveys and using the HAM-A scale and the various other scales to analyze the data, this study showed that a greater number of welfare recipients who smoke exhibit higher anxiety levels than those that who do not smoke. Data collected addressed the prevalence of anxiety symptoms among welfare recipients who were nicotine abusers and supported the study’s hypothesis that there is a correlation between smoking and anxiety in welfare recipients. Of the subjects that answered yes to smoking, fifty percent reported suffering moderate to incapacitating levels of anxiety. The non-smokers made up the majority of the respondents reporting mild anxiety to no anxiety (see Table I)

**Table I**





Previous studies showed that those living below poverty level have higher anxiety levels and are more than likely to suffer from nicotine abuse. The research shows that women tend to abuse nicotine more than their male counterparts, and also are more likely to be unemployed. Single fathers are spending more than married families, about $140 more per year, and the single fathers are spending almost $400 more per year than single mothers do on tobacco products. Single fathers are more likely to have not completed a high school education (Lee, 2008). The results of this study build on the previous studies to show that the environment causes nicotine abuse which then leads to higher anxiety levels in welfare recipients.

**Conclusion**

 Nicotine continues to be the largest abused drug in the United States. Previous studies have found those who abuse nicotine suffer from psychiatric disorders such as anxiety, and are more likely to be a welfare recipient. One reason behind this is due to higher levels of stress faced by lower income individuals. Nicotine is a way to cope with the ins and outs of daily life. People that struggle with nicotine abuse are likely to experience psychiatric problems. Adults that suffer from anxiety account for 19% of adults who abuse tobacco. Past studies have shown a relationship between smoking and anxiety (Lima, Malcolm, Reid, Smith, Zhang, Jiang, Rotrosen, & Nunes, 2009).

The results found while conducting this study specifically addresses the hypothesis of a relationship between nicotine abuse and anxiety of those on public assistance. The mounting evidence from this study suggests there is a relationship. The anxiety levels were higher and more severe in the individuals that reported smoking on the survey. The dual occurrences of nicotine abuse among anxiety disorders leads to the reasoning that the functional relationships between the variables needs further research. It has been previously proven that the effects of smoking on the anxiety level have a great deal to do with the degrees of smoking in the individual (Gulliver, Kamholz, Morissette, Tull, & Zimering, 2007).

 In conclusion, the discussions and results of the study give social workers and legislatures a statistical outlook to enable them to recognize and hopefully address the issue of smoking problems related to the anxiety while being on public assistance. This study’s results serve to initiate changes that lead to an increase of support systems in social services to help increase the availability of staff to recipients. Decreasing the cases of smoking caused by anxiety could increase the health of individuals and their children by the absence of second hand smoke. These better health conditions could increase the marketability of individuals receiving welfare in the entering the job market.

 This study experienced some limitations. The limitations of our research proposal would include the method of self reporting. It is assumed that the individuals will report their answers honestly but there is always the chance of miss reporting. This problem was hopefully addressed by the anonymous surveys that were used. Another limitation could steam from mental disorders other then anxiety and the stress of being on public assistance leading to reports of anxiety. Without proper diagnosis it can’t be guaranteed that the reporting of anxiety was not caused by out mental illness that the subject is experiencing. Furthermore the limited availability of subjects may have given the study a stinted view on the overall problem. For further research it would be beneficial to pick multiple social services locations rather than rely on only one particular location. The study only had two weeks to survey participants who were willing to take the survey. And finally the amount of funding that the project had was also another issue. If the project did have more money more participants could have been surveyed.

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