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## Stigmatizing Clients with Mental Health Conditions: An Assessment of Social Work Student Attitudes

**Sheryl Pimlott Kubiak, Ph.D<sup>1</sup>[Associate Professor], Brian K. Ahmedani, Ph.D<sup>1,2</sup>[Clinical Assistant Professor, Assistant Research Scientist], Carlos F. Rios-Bedoya, Sc.D.<sup>3</sup>[Assistant Professor], and James C. Anthony, Ph.D<sup>4</sup>[Professor]**

Sheryl Pimlott Kubiak: spk@msu.edu; Brian K. Ahmedani: bahmeda1@hfhs.org; Carlos F. Rios-Bedoya: Carlos.Rios@hc.msu.edu; James C. Anthony: janthony@msu.edu

<sup>1</sup> School of Social Work, Michigan State University, 254 Baker Hall, East Lansing, MI, USA 48824; telephone: 517.432.7110; fax: 517.353.3038

<sup>2</sup> Center for Health Services Research, Henry Ford Health System, One Ford Place, Suite 3A, Detroit, MI, USA 48202; telephone: 313.874.5485; fax: 313.874.7137

<sup>3</sup> Family Medicine, Michigan State University, B101 Clinical Center, East Lansing, MI, USA 48824; telephone: 517.884.0436; fax: 517.355.7700

<sup>4</sup> Epidemiology, Michigan State University, B601 West Fee Hall, East Lansing, MI, USA 48824; telephone: 517.353.8623; fax: 517.432.1130

### Abstract

Research suggests that stigma plays a major role in discouraging clients from participating in mental health treatment. Because social workers provide a significant amount of such services, this study investigates social work student stigma as a function of their willingness to treat clients with alcohol dependence, nicotine dependence, depression, and Alzheimer's disease. Students' held higher levels of stigma toward nicotine dependent clients and less toward those with depression. Personal histories of depression and student age – but not smoking or alcohol use – were predictive of higher stigma levels towards nicotine dependent clients. Implications for social work are discussed.

### Keywords

Stigma; Willingness to Treat; Drug Dependence; Depression; Alzheimer's disease; Social Work Students

### Introduction

Social workers are very often the first source of contact for individuals experiencing mental health and drug use problems (Hall, Amodeo, Shaffer, & Vander Bilt, 2000; Weismiller, Whitaker & Smith, 2005). However, it is unclear what attitudes and beliefs social workers might possess in relation to these conditions and treating individuals with these conditions. Of the few studies on the subject, it was found that social workers, social work students, and other mental health providers often hold a bias against working with alcohol-involved clients (Peyton, Chaddick & Gorsuch, 1980; Alaszewski & Harrison, 1992) and have stereotypes that stigmatize persons with mental disorders (Corrigan, 2007; Chaplin, 2000).

Of particular concern, social stigma and stigmatizing attitudes have been found to be impediments to effective care and primary practice interventions for individuals with mental health conditions (Corrigan, et al, 2000) and substance use disorders (Ahern, Stuber, & Galea, 2007).

Individual attitudes and beliefs are formed through collective experiences and corresponding cognitions. Certainly, social workers enter the profession with a diversity of experiences and beliefs. However, there is little research on the relationship between the attitudes and beliefs of social workers – particularly stigmatizing attitudes towards those with behavioral conditions – and their practice behaviors.

The current exploratory study assesses the levels of stigmatizing beliefs among social work students as a function of their willingness to provide treatment for clients with one of four conditions: nicotine dependence, major depression, alcohol dependence, and Alzheimer's disease. In addition, the study seeks to determine the underlying attributions the student might have that contribute to the attitudes and beliefs associated with each condition. The long-term goal of our larger project is to enhance understanding of how stigma related attitudes affect social work student's willingness to treat in an effort to develop and implement interventions during their educational experience that reduce stigmatized beliefs and ultimately create improvements in practice – as well as personal care taking behaviors. An embedded methodological study seeks understanding of social work students' responses to varying levels of reinforcers for participation and willingness to provide biological specimens.

## Background

Recent national population surveys of the United States Substance Abuse and Mental Health Services Administration (SAMHSA), estimate that 19 million United States residents age 12 years and older suffer from a recently active major depression; an estimated 8 million have an active alcohol dependence syndrome; and more than 35 million have developed a dependence syndrome as a result of tobacco smoking (SAMHSA, 2005). The World Health Organization (WHO) ranks alcohol use as the 19<sup>th</sup> leading cause of disability adjusted life years for the world, with bipolar disorder as number 20, and major depression as number 5 (WHO, 2000). Tobacco smoking is widely recognized as the number one preventable cause of morbidity and mortality in the world.

However, there are often missed opportunities to reduce the duration of these conditions by addressing them in their prodromal phases. For example, an estimated 37 percent of major depression cases received mental health services within one year of onset, and the median lag from depression onset to treatment was estimated to be eight years. For alcohol and drug dependence, an estimated 20–28% received services within one year of onset, and the median lag time from onset of dependence to treatment was estimated as 5–6 years (Wang et al., 2005).

In theory, one way to reduce this treatment lag involves removal of obstacles such as social stigma that may be a barrier to treatment seeking for individuals with such conditions. The U.S. Surgeon General (1999) and a World Health Report (WHO, 2001) cite stigma as one of the greatest obstacles to effective treatment of mental illness. Stigma has been defined as stereotypes or negative views attributed towards a person or groups of people when their characteristics or behaviors are viewed as different from or inferior to societal norms (Dudley, 2000; Goffman, 1963). Stigma can be internalized by persons with the condition (self stigma) or communicated directly or indirectly by others (stigmatized attitudes). The degree and impact of stigma may vary depending on the mental or behavioral conditions and who holds the stigmatizing view such as family members or health professionals.

Stigma seems to exert a strong impact on persons with mental health disorders, as evidenced in research by Kessler et al (1996) who found that nearly *two-thirds* of all persons with diagnosable mental illnesses in the U.S. are discouraged from seeking treatment citing stigma as a key factor. Similarly, Roeloffs and colleagues (2003) reported that perceptions of stigma were common among depressed primary care patients who expected their illness to have serious adverse effects on their employment and health insurance eligibility, as well as on their friendships. Despite greater factual information and knowledge regarding the underlying etiologies of mental and behavioral health disorders (see, Phelan, 1997; Thornicroft, Brohan, Kassam, & Lewis-Holmes, 2008), there have not been corresponding reductions in perceptions of stigma associated with mental illnesses within the general population. Moreover, there remains a strong general tendency toward avoidance of persons with mental illnesses when avoidance is possible (Corrigan, et al, 2003). This stigma and avoidance may be represented by social workers willingness or unwillingness to provide treatment for clients with some conditions to a greater degree than others. ‘Willingness to treat’ and professional regard has also been used as a function of stigma in other research (Christison, Haviland, & Riggs, 2002; Carter, Lantos, and Hughes, 1996). Of the several constructs embedded within the concept of stigma (e.g. pity, fear, etc.), the constructs around ‘willingness to treat’ tap the preferences or attitudes (prejudice) facet of stigma, which has been documented in the literature (Rose, Thornicroft, Pinfold, & Kassam, 2007).

Over the past decade, various theoretical models have been proposed in an effort to develop a better understanding of the roots of stigmatized views toward individuals with mental or behavioral conditions (e.g., see Weiner, 1995; Corrigan et al, 2000). Weiner (1995) postulates that underlying perceptions of stigma are individual cognitions, faulty or otherwise, that evoke an emotional response. He suggests that understanding the reasons why an individual holds certain beliefs makes it possible to provide education and information relevant to those beliefs that can be a catalyst for alteration of a specific attribution. Moreover, the stability attribution of any particular disorder represents perceptions of whether an individual can recover from the specific behavior or condition (Corrigan et al., 2000). In other words, do health care professionals perceive that their help will contribute to the client self efficacy or improvement? Professionals who perceive that recovery is unlikely – or elongated – may feel that expending energy to help these clients is futile and may threaten their own sense of practice efficacy.

### **Social Work Involvement**

Social workers provide more mental health services (Weismiller, et. al., 2005) in some areas of the world than psychologists, nurses, and psychiatrists combined and as such can either successfully engage or disenfranchise those seeking or in need of services. It is uncertain what social worker attitudes and beliefs about clients and/or treating certain conditions are – whether held consciously or subconsciously – and if these beliefs effect successful client engagement and retention. Although social workers strive to develop the attitudes and beliefs complimentary to that of helping professionals, they may be unaware of internalized stigma. Often social work professionals and students as well as their families, friends, or colleagues have personal histories of problems with drinking, depression or nicotine dependence (Siebert, 2004). Many social workers may feel embarrassment or discomfort related to their personal histories that might dampen levels of helping and practice-related behaviors. This is one of the facets of stigma that can delay interventions directed toward the earliest manifestations of drug dependence, depression, and related neuropsychiatric disturbances. It may also contribute to gaps between need for drug and mental health services and delivery of effective services.

In addition, personal attitudes and beliefs play a role in practice behaviors. For example, nicotine dependence is closely related to other alcohol and drug dependence – despite this

occurrence, counselors often do not advise their clients to quit smoking when dealing with a co-occurring addiction (Hughes & Kalman, 2006). This may be a result of the counselors own smoking behaviors and the reluctance to confront someone engaging in similar behavior or an internalization of the stigma regarding smoking (Ahern, Stuber & Galea, 2007). For example, Siebert (2003) found that social workers who had used marijuana within the past year were less likely to identify marijuana use among their clients as problematic. In addition, recent literature has documented a similar problem among future physicians, in which medical students with depression more often endorsed stigma attitudes than those that were not depressed (Schwenk, Davis, & Wimsatt, 2010).

## Current Study

This exploratory study uses various methods to ascertain social work student's stigmatized attitudes as a function of their 'willingness to treat' clients who are experiencing specific conditions. This is particularly important in light of recent evidence suggesting that medical students may hold stigmatizing attitudes associated with psychiatric conditions (see, Schwenk, et al., 2010). In addition, we query student's history and current behaviors related to these conditions to determine how their behavior/experience might influence their intended practice behaviors. The focus of this study is to provide descriptors of social work students on personal history factors and to determine interrelationships between (a) stigma-related discomfort and dissatisfaction in anticipation of working with clients with specific conditions (Alzheimer's, tobacco dependence, alcohol dependence, and major depression), (b) attributions for each condition, and (c) how the students own characteristics and experiences might predict their attitudes and beliefs. The conditions in this assessment were all selected as they are all uniquely defined as mental disorders in the Diagnostic and Statistical Manual of Mental Disorders (4th edition, Text revision; [DSM-IV-TR]; American Psychiatric Association [APA], 2000), and represent major public health challenges around the world. While other conditions are also of interest (i.e., anxiety, cocaine dependence, etc), they were not included since additional survey items may have compromised participation levels due to the length of the survey.

We anticipate that students will report less stigma and discomfort in relation to working with clients with conditions that they perceive a high expectation of recovery. We also expect that students' own behaviors and experiences related to conditions presented in this study will influence their attitudes and beliefs with lower levels of stigma attached to conditions they have personally experienced. In addition to these questions, there were also empirical questions about research methods embedded within the design. More specifically, this study also assessed whether students would engage in an online follow-up survey and participate in biological research. In addition, the researchers were interested in whether the students participation would vary based on the amount of reinforcer offered for participation.

## Method

### Participants

This research was conducted on the primary campus of a large United States Public University. All masters' level students within the clinical track were approached to participate in this study. Of the 120 interpersonal practice students, 117 agreed to participate in at least one part of the study (see, Table 1). The students were divided between 1<sup>st</sup> year (33%) and 2<sup>nd</sup> year/Advanced Standing (67%). They were predominately female (85%) and ranged in age from 21 to 52 with a mean age of 26.11 and median of 24 years.

## Procedures

Some research has demonstrated that online surveys may result in participants' skipping fewer sensitive questions (Pealer, Weiler, Pigg, Miller, & Dorman, 2001). Due to the sensitive nature of some of the questions, our interest in determining whether social workers would respond similarly to in-class versus online surveys, and our curiosity regarding utility of web-based surveys with social work students, the survey was administered in two parts; the first within a classroom and the second as a self initiated online session. During a twenty-minute session within a practice course, students were asked to participate in the study. One of the researchers read an IRB-approved recruitment/disclosure statement, while other team members walked through the room with bins of randomly sorted unmarked envelopes. Each envelope contained a card with a ticket number and log-in website, a two-page anonymous self-report survey, an optical scan (opscan) 'bubble' sheet to record questionnaire responses, specimen container for biological saliva sample, and a pencil.

The team leader asked students to draw an envelope at random from a bin, to open the envelope, to complete the anonymous survey by filling in the 'bubbles' on the opscan form, to provide the biological saliva sample in the container, to take out the card with the ticket number and to re-seal the envelopes containing the completed survey and sample and then exit the classroom where sealed envelopes were collected. Students were told that they would receive a gift certificate randomly assigned and printed on each admission ticket (\$12, \$18, \$25, \$37) upon completion of the anonymous online survey. The randomized reinforcer approach was used to allow us to characterize whether differences in participation levels across dollar amounts would lead to corresponding differences in participant responding. Students were aware of their reinforcer before they began the survey, which allowed researchers to determine whether increased reinforcer levels resulted in more participation and/or varying responses to questions. Students were allowed to anonymously decline to participate. Non-participants were asked to re-seal the envelopes with original unmarked contents. Of the 117 students who participated in the classroom survey, 75 students continued with the web based survey (64% participation level). All students receiving the \$37 reinforcer participated, including 81% of those receiving \$25, 65% receiving \$18, and 44% receiving \$12.

Similarly, because we were interested in attitudes toward those with nicotine dependence as one of our four conditions – and social workers' willingness to provide biological samples – we asked each student to provide saliva in a specimen container. A sample of the biological saliva specimens collected were tested, which subsequently allowed us to confirm participant self-reports of personal heavy and non-smoking cases in this study. Also, since psychiatric and other conditions have recently been studied in relation to their genetic association (see, Wang, Grucza, Cruchaga, Hinrichs, Bertelsen, Budde, et al., 2009), the future possibility of tailoring interventions to individuals based on their genetic qualities makes it important to understand whether social workers will participate in biomedical research as a precursor to understanding whether they would be willing to ask their clients to do so as well. Previous work has not documented the willingness of social work students to participate in biomedical research. As such, students were presented with an informed consent statement describing the biomedical specimen protocol and stating that the cotinine level of their sample would be tested to indicate their level of nicotine. Of the 117 students that participated, 103 (88%) provided biological samples.

## Measures

The Medical Condition Regard Scale (MCRS; coefficient alpha = 0.87, test-retest reliability = 0.84), was designed to assess the 'regard' medical students have for patients with particular conditions (Christison, Haviland, and Riggs, 2002). There are eleven questions in

the original scale and factor analysis found that the scale taps “the degree to which medical students find patients with a given medical condition enjoyable, treatable and worthy of medical resources” (Christison, et. al., 2002; p.259). For the purposes of this study, this measure assesses social workers stigma as a function of their anticipated preference to provide treatment. As such, the questions were adapted for social work students (e.g. changing the word patient to client) and applied to each of 4 conditions separately. A sample of the questions includes: “I prefer not to work with clients like this (reverse scored)” and “I enjoy giving extra time to clients like this.” Each item is measured using a 6-point scale from strongly disagree (1) to strongly agree (6) with some items reversed scored for construct consistency. Because of our interest in negative attitudes and beliefs about clients – we reverse scored the measure so that higher scores reflect greater practice discomfort and stigmatizing beliefs. Reliability analysis of the MCRS provided the following Cronbach’s alphas: Alzheimer’s 0.86, Depression 0.79, Alcohol 0.88, and Nicotine 0.74.

To assess the student’s attributions of stability and pity toward clients with the four conditions we utilized questions from the Psychiatric Disability Attribution Questionnaire (PDAQ; Corrigan et al., 2000; Corrigan et al, 2001). A sample of the stability scale items included: “I think that persons with [condition] are likely to benefit from counseling” and “I think persons with [condition] will recover.” In addition we utilized the PDAQ item measuring pity: “I feel sorry for persons with [condition].” All items use a 6 point Likert type scale with 1 = strongly disagree and 6 = strongly agree. Therefore, the greater the score the more likely you are to agree with the statement. The PDAQ demonstrated good reliability and validity in other research (see, Corrigan, et al., 2000).

Although the survey queries demographic characteristics (i.e., gender, year in program, age), questions on race/ethnicity were not included because the combination of race and gender may have violated anonymity. In addition, the study asked questions on personal frequency of smoking and drinking behaviors as well as whether or not a person had received treatment for depression or had ever felt depressed. Level of smoking behavior was assessed by the number of cigarettes a student smoked with five or more cigarettes per day indicating a heavy smoker. Alcohol use was measured by self report of the number of drinks the person has on the occasions when they drink. In addition, questions measured concern with an alcohol or drug problem that you or a member of your immediate family experienced. Students were given the opportunity to answer these questions with four responses: 1) yes, 2) no, 3) not sure, but probably so, and 4) not sure, but probably not. For regression these were collapsed into 2 groups. Students demographics were broken down into gender (male or female), year in program (enrollment in 1<sup>st</sup>year generalist practice course or 2<sup>nd</sup>year advanced practice course), and age group.

## Analysis

Descriptive statistics were used to assess sample demographic characteristics, personal behaviors/experiences and differences between the students. Independent and paired T-tests were used to compare MCRS scale scores and single item PDAQ responses. Multiple linear regression analysis was conducted to determine individual predictors of stigmatizing attitudes as measured via the MCRS.

## Results

Table 1 displays the demographic characteristics of social work interpersonal practice students that engaged in the classroom survey (Part I) and those that continued with Part II by logging onto the web-based survey for comparison purposes. There were few differences found between groups on demographic characteristics. Using a paired sample t-test we compared scores on the MCRS Alzheimer scale (the only scale in both versions) and found

no statistical differences in the scale score based on response method ( $M=28.07$ ,  $sd=7.7$  on paper pencil; and  $M=28.42$ ,  $sd=7.5$  on web based survey;  $t(72) = 0.72$ ;  $p = 0.47$ ).

The web based survey allowed us to ask more sensitive questions than the classroom paper/pencil survey, including queries about personal episodes of depression and alcohol use. Therefore, results in Tables 2 and 3 represent analysis on this more sensitive data. We found that of the 75 respondents, 16% were concerned about a personal drinking or drug use problem in the past and 63% were concerned that someone in their immediate family had a drug/alcohol use problem. In addition, 43% have received treatment for or believed that they were depressed. Furthermore, self-report indicates that 50% of the sample has never smoked, and 23% are current smokers, with 6% of those classified as heavy smokers of more than 5 cigarettes daily.

Table 2 illustrates respondent scores on the MCRS for all four conditions embedded within the web-based survey and the single item PDAQ scores for all 4 conditions. Students reported the lowest level of stigma and reluctance to practice with those suffering from a depressive disorder ( $M=24.3$ ,  $sd=5.6$ ) and the highest levels related to nicotine dependence ( $M=38.8$ ,  $sd=6.8$ ) ( $t(73) = 10.1$ ;  $p < 0.001$ ). In fact, using paired t-tests we found the level of stigma related to nicotine dependence was statistically different from every condition, including alcohol dependence ( $M=29.7$ ,  $sd=8.2$ ;  $t(72) = 2.3$ ;  $p = .03$ ). Surprisingly, stigma attributed to alcohol dependence and Alzheimer's ( $M=28.6$ ,  $sd=7.5$ ) was not statistically different from each other ( $t(73) = 1.2$ ,  $p = NS$ ). On PDAQ items, students consistently had higher mean scores that endorsed depression as the condition that would most likely recover and benefit from medication and counseling. Students felt that those with alcohol dependence were least likely to be helped with medication. In contrast, Alzheimer's disease had the lowest mean score on student's perceptions of recovery and benefit from counseling, but the highest level of 'pity' – or feeling sorry for the client.

In an attempt to determine if education may have reduced attitudes and beliefs associated with stigma, we split the sample into two groups – those in the more advanced practice class (2<sup>nd</sup> year and advanced standing students) from those in their first generalist year of practice courses (1<sup>st</sup> year students). There were no significant differences between groups on the MCRS, however students in the advanced practice class were on average less likely to believe those with alcohol dependence will recover compared with those in their first practice class (Table 2). Moreover, they were also on average more likely to pity those with Alzheimer's disease and less likely to pity those with alcohol and depression disorders than those in the first year.

Multiple regression analysis provided information on individual predictors of levels of stigma as rated by the MCRS on the four conditions (see Table 3). Students who were male and those who reported a history of depression – as well as those who received a reinforcer for participation above \$12 – were more likely to have higher levels of stigma for individuals with Alzheimer's Disease. Predictors of higher levels of stigma toward those with alcohol dependence include younger age, advanced practice year, and the highest level of reinforcement (\$37). Significant predictors of higher MCRS scores on nicotine dependence include age and depression. As age increased, scores on the MCRS nicotine declined while students with no history of depression were more likely to have higher MCRS scores.

In addition, each biological saliva sample was tested using the *NicAlert* Saliva Test strip. Eight drops of saliva were placed on the strip and tested after 30 minutes. The testing strip indicated the level of tobacco exposure and whether or not an individual was a smoker.

Results were able to confirm a sample of cases in which students indicated that they were heavy smokers and had used within the preceding 48 hours.

## Discussion

This study assesses the potentially stigmatizing attitudes of social work students related to their intended practice behaviors and is part of a large study of health care professions. Specific queries were made on conditions that are often found in the general population (nicotine/alcohol dependence and depression) and rank among the most debilitating worldwide. The last condition, Alzheimer's disease, is widely known for its physical and mental health dimensions (i.e. dementia) making it a good comparison to disorders that are associated with more behavioral than physical derivations. Because social workers provide a significant amount of mental health services around the world, it is important to determine the attitudes as reflected by intended practice behaviors among social work students and the attributions behind them. Further, this study served as a pilot to test their willingness to engage in various research methods.

We found that students had much lower scores on the MCRS for major depression. They were also more likely to believe these clients would recover and benefit from medication or counseling. These findings support our first assumption – that students would have less discomfort with clients they thought would recover. However, if this assumption held constant, we would expect to see Alzheimer's Disease – the condition that students felt clients were the least likely to recover from and would be helped least by counseling – as having the highest level of stigma and practice related discomfort on the MCRS. Surprisingly, nicotine dependence was the most highly stigmatized condition – significantly different from all of the other conditions – and alcohol dependence was the second highest (but not statistically different from Alzheimer's disease). Perhaps students factored in other non-measured attributions such as controllability (Corrigan et al., 2000) into their responses. After all it is plausible that students may feel that an individual would have much less control over Alzheimer's disease when compared to smoking.

Although we predicted that personal characteristics and experiences might account for these differences, the multiple regression results suggest that there were only four (age, gender, depression history and program year) that were predictive on scale scores associated with any condition. Younger students reported higher levels of stigma when responding to questions about clients with alcohol and nicotine dependencies. Although the students represented a wide age range (21–52), the median age of 24 (sd=5.6) indicates that this is a young cohort that will be engaged in active practice in a short period of time. One remedy, for the age concern may be more education. However based on the current study, more education did not seem to reduce stigma levels. In fact, those in the advanced practice year were more likely to have greater levels of stigma and practice discomfort when discussing clients with alcohol dependence.

Nearly half of the students (43%) reported having a personal history of depression which was predictive, in opposite directions, on two MCRS scales. Those with a self reported history of depression were more likely to have higher levels of stigma towards clients with Alzheimer Disease. This seems inexplicable, as does why males would also have higher levels of discomfort with those suffering from Alzheimer's than females, and may require further research. Furthermore, those with histories of self reported depression were less likely to report stigma with clients with nicotine dependence. An assumption could be that those with depression histories may be more likely to smoke cigarettes (Covey, Glassman, & Stetner, 1998); our data did not support this assumption. Current or past smokers were as likely as never smokers to claim depression. Perhaps in the results would vary if our study



had assessed personal depression using a more standardized measure rather than relying on a dichotomous self report question.

That other personal characteristics were not predictive of the student's attitudes and beliefs was somewhat surprising. For example, scale scores on the MCRS related to working with clients with nicotine dependence demonstrate high levels of stigma yet current use of nicotine was not predictive, in either direction, of stigma related to nicotine addiction. Perhaps students have internalized the public service announcements and changing attitudes about smoking (e.g. smoking bans) whether they are using or not.

Similarly, we may assume that students who perceive that an immediate family member has either an alcohol or drug use problem (63%) – or that they themselves have a problem (16%) – may be more likely to have stronger beliefs about clients with an alcohol dependence. However, neither was predictive of stigma for any condition. It is possible that students who chose not to respond to the web-based survey may have held more stigmatized views of alcohol dependence, since those receiving the highest reinforcer level (\$37) were associated with higher stigma scores. Perhaps if there was a higher level of reinforcement we may have motivated other students with more stigmatized views to respond. Similarly, we found that reinforcer level predicted negative views on working with clients affected by Alzheimer's disease; students receiving reinforcer amounts above the minimum (\$12) were associated with higher levels of stigma. These findings were similar to those found by Rios-Bedoya and colleagues (under review) in a study of medical students. Together these studies suggest that informants with higher levels of stigma may not have responded fully without higher reinforcer levels. Thus, the level of reinforcement may play a factor in understanding stigmatizing beliefs.

Certainly the high proportion of students affected by personal or family histories support others that argue that mental and behavioral health problems are present among social work professionals (Siebert, 2004). Although health professionals are certainly not immune to mental health and substance use disorders, the consequences of such disorders extend beyond personal consequences to potentially effecting client interactions (Siebert, 2005). Depression is higher in care giving professions than the general population (Deutsch, 1985) and associated with impaired professional practice in a study of licensed social workers. Siebert (2004) found that 46% of 751 randomly selected social workers claimed lifetime depression and 20% were currently taking medication for depression. However, professional caregivers had difficulty recognizing and admitting their personal problems – particularly regarding alcohol and drug disorders. Siebert (2005) found that 12% of those surveyed were at high risk and 22% moderate risk for AOD misuse, but only 8% of the sample sought any help. Role identity as a social worker, and the expectations of family, friends, clients and themselves, may make it difficult to acknowledge that they have personal problems similar to their clients (Siebert & Siebert, 2005). These types of internalized stigma around personal mental health and drug use disorders are possible determinants of behavior in the practice setting (Siebert, 2004; 2005), potentially affecting the way social workers engage in clinical behavior.

### **Implications for Social Work**

Although social workers may have greater access to clients with mental health and substance use disorders, they may miss opportunities to intervene with early detection, services, and community referral options (Gassman, Demone, & Albilal, 2001) due to their own histories (Siebert, 2004; 2005) and/or stigmatized beliefs. Specified education and training might modify these perceptions. Despite the potential importance of education that social workers receive – particularly in addictions – training in this area is often inadequate (Hall, Amodeo, Shaffer & Vander Bilt, 2000; Straussner, 2001; Weissman et al., 2006). In an assessment of

clinicians, Weissman and colleagues (2006) found that social workers had the least training in evidence based practice in psychotherapy when compared to psychiatrists and psychologists. Further, only 48% of social workers received education and training in working effectively with substance abusing clients (Personal communication with Weissman, January 2007). The lack of training in addictions may result in, or exacerbate, the development and perpetuation of negative attitudes about clients with a disorder such as alcohol or nicotine dependence (Begun, 2004).

Social work research is thus needed to determine whether improved training in the addictions will reduce stigma and increase perceptions of treating individuals with drug dependencies. Since this study demonstrates that social workers provide more stigmatized responses with increased reinforcer levels, it may be important in future research to ensure students receive adequate reinforcements to increase the likelihood that they report more complete answers to sensitive questions. In addition, comparing biological test results with self-report responses may be able to assess whether the answers provided are accurate – thus improving the reliability of survey results. Further, longitudinal research is needed in order to understand the impact of addictions training toward the reduction of stigmatized attitudes and beliefs long-term.

Research has demonstrated that training social workers appears to increase the likelihood that they will: (1) work with the affected client population; (2) assume roles related to intervention; (3) seek employment involving work with affected clients; (4) perform assessments and intervene; and, (5) be optimistic, confident, and competent about this area of work (Amodeo, 2000). However, little research demonstrates whether these efforts will improve their levels of stigma or willingness to provide treatment, especially towards clients with addictions. Social work research must further examine whether training techniques such as brief interventions may improve stigma levels and increase effectiveness of social work addiction practice.

## Limitations

While this study produced interesting results there were limitations. First, the study may not generalize to all social work students as it was conducted on the main campus of one large University. Students in extension programs within the same University and students at other universities may not reflect the same demographic characteristics as this sample and as a result may answer questions differently. While the single site in this study is an important limitation, this study does shed light on an important potential problem for the field of social work, much as other single site studies of the same type have done for other professions (see, Schwenk, et al., 2010). Nonetheless, it is important that this study is replicated at other universities and around the world to determine what, if any, stigmatizing beliefs and attitudes are held on a larger scale. Furthermore, the 64% participation level may not be representative of the student body of the university we surveyed. Although demographic characteristics between responders and non-responders were similar and the amount of our reinforcer may have encouraged students who may not generally respond – there is a need to replicate these findings at the same university and others with different groups of students. Further studies might examine actual practice behaviors of employed social workers to determine if their choices (e.g. type of client population, location, etc) might be associated with beliefs and attitudes about individuals with certain disorders. This would potentially involve a longitudinal study of social workers from the university into their community practice. Most importantly, this study should serve as a call to social work such that more research must be conducted to better understand stigma among professionals and students in the field and how it interferes in the treatment process. Studies such as these, along with those conducted in allied health professions (see, Schwenk, et al., 2010; Volmer, Mäesalu, & Bell, 2008) will provide a basis for the development of interventions to curb the suspected

problem of health professional stigma. Currently, our research group is designing a large multi-site study of this type that will build from this research to assess stigma in the profession (students and professionals) with the goal to design a set of brief, computer-based interventions aimed at improving attitudes and treatment provision among current and future social workers.

## Conclusions

Social work students differ in their attitudes and beliefs about clients with various mental health and substance use disorders. Students reported the least discomfort interacting with clients with a depressive disorder and the most discomfort interacting with those with a nicotine addiction. Interestingly, students are more likely to believe that those with depression are most likely to recover and benefit from medication and counseling than those who have nicotine dependence, alcohol dependence or Alzheimer's disease. Although social work educators cannot alter certain predictors of student attitudes (e.g. age, gender and history of depression) they can modify education to be more responsive to the needs of students and the clients they may encounter. This particular study uses a web-based methodology for gathering data about sensitive practice-related behaviors and characteristics of social workers in training and could be utilized for innovative education and training of future social workers and other professionals.

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**Table 1**

## Demographic Characteristics Comparing Classroom and Web-based Respondents

Demographic Characteristics	In Class Respondents N=117	Web-Based Respondents N=76
	Percent (#)	Percent (#)
Gender		
Men	15.5% (17)	14.5% (11)
Women	84.5% (93)	85.5% (65)
Year in program		
First	33.1% (39)	30.3% (23)
Second/Adv Standing	66.9% (79)	69.7% (53)
Age		
21 – 23	32.7% (35)	40.8% (31)
24 – 26	32.7% (35)	30.3% (23)
27 – 30	17.8% (19)	15.8% (12)
31 and over	16.8% (18)	13.2% (10)
Depression		
Yes	N/A *	42.7% (32)
No		57.3% (43)
Smoking		
Heavy	6.2% (7)	6.7% (5)
Current Smoker	16.8% (19)	16.0% (12)
Past Smoker	26.5% (30)	30.7% (23)
Never Smoked	50.4% (57)	46.7% (35)
Alcoholic drinks per Use		
4 or more Drinks/Use	N/A *	10.0% (12)
3 Drinks		9.2% (11)
1–2 Drinks		34.2% (41)
None		9.2% (11)
Personal Alc/Drug Use		
Concerned	N/A *	16% (12)
Not Concerned		84% (63)
Family Alc/Drug Use		
Concerned	N/A *	62.7% (47)
Not Concerned		38.3% (28)
Provided Biological Sample	88.0% (103)	

\* Not asked in the classroom survey due to sensitive nature

**Table 2**  
Student Scores on Measures of Stigma, MCRS and PDAQ, in Total and by Educational Level

Measures	Total Sample N=76		Intro Practice n=23		Advanced Practice n=53		t-test	Sig p-value
	M (sd)	M (sd)	M (sd)	M (sd)				
<b>Medical Condition Regard Scale</b>								
Alzheimer's	28.55 (7.5)	27.70 (7.9)	28.92 (7.4)	0.65	0.86			
Depression	24.28 (5.6)	24.87 (5.1)	24.02 (5.8)	0.61	0.51			
Alcohol	29.74 (8.2)	27.22 (6.4)	30.88 (8.8)	1.80	0.11			
Nicotine	31.84 (6.8)	31.70 (6.5)	31.90 (7.0)	0.12	0.62			
<b>PDAQ – Benefit from medication</b>								
Alzheimer's	4.37 (1.1)	4.26 (1.1)	4.42 (1.1)	0.61	0.73			
Depression	5.01 (0.9)	4.83 (1.2)	5.10 (0.8)	1.19	0.20			
Alcohol	3.51 (1.2)	3.30 (1.1)	3.61 (1.2)	1.02	0.83			
Nicotine	4.18 (1.2)	4.30 (1.2)	4.12 (1.2)	0.62	0.57			
<b>PDAQ – Benefit from counseling</b>								
Alzheimer's	4.20 (1.1)	4.00 (1.2)	4.29 (1.0)	1.10	0.76			
Depression	5.72 (0.7)	5.65 (0.6)	5.75 (0.7)	0.57	0.60			
Alcohol	5.43 (0.7)	5.52 (0.5)	5.39 (0.8)	0.73	0.21			
Nicotine	4.58 (0.9)	4.70 (1.1)	4.53 (0.8)	0.72	0.59			
<b>PDAQ – Will recover</b>								
Alzheimer's	2.39 (0.9)	2.22 (1.0)	2.46 (0.9)	1.07	0.94			
Depression	5.07 (0.6)	5.13 (0.6)	5.04 (0.7)	0.56	0.75			
Alcohol	4.84 (0.8)	5.09 (0.6)	4.73 (0.9)	1.80	0.05			
Nicotine	4.92 (0.9)	4.91 (1.1)	4.92 (0.8)	0.04	0.54			
<b>PDAQ – Feel Sorry (PITY)</b>								
Alzheimer's	4.68 (1.2)	4.96 (0.8)	5.56 (1.3)	1.35	0.01			
Depression	4.14 (1.3)	4.70 (0.9)	3.88 (1.4)	2.62	<0.00			
Alcohol	4.03 (1.5)	4.65 (1.1)	3.75 (1.5)	2.56	0.01			
Nicotine	3.18 (1.5)	3.83 (1.5)	2.88 (1.4)	2.62	0.66			

**Table 3**

Multiple linear regression analysis assessing MCRS-rated stigmatized attitudes by gender, age, smoking status, alcohol drinking, family drinking, personal depression, reinforcer amount, and practice year.

Student Characteristics	MCRS Scale Scores			
	Alcohol Dependence	Alzheimer's Disease	Nicotine Dependence	Depression
	B (SE)	B (SE)	B (SE)	B(SE)
Female (Ref)				
Male	0.47 (0.25)	0.37 (0.17)*	0.21 (0.26)	0.13 (0.20)
Age	-0.04 (0.02)*	-0.02 (0.02)	-0.04 (0.01)*	-0.02 (0.01)
No Current Smoking (Ref)				
Current Smoking	-0.15 (0.21)	0.16 (0.17)	-0.21 (0.16)	0.10 (0.16)
Amount of Alcohol				
None (ref)				
1 – 2 Drinks	0.09 (0.26)	0.25 (0.18)	-0.25 (0.23)	-0.24 (0.21)
3 Drinks	0.17 (0.33)	-0.01 (0.30)	0.01 (0.30)	-0.07 (0.26)
4 or more Drinks	-0.17 (0.33)	-0.05 (0.21)	-0.39 (0.30)	-0.37 (0.26)
Personal Drinking				
Concerns (Ref)				
No concerns	-0.23 (0.25)	0.18 (0.25)	-0.22 (0.22)	-0.12 (0.20)
Family Drinking				
Concern (Ref)				
No concerns	-0.10 (0.18)	-0.17 (0.16)	-0.16 (0.14)	0.08 (0.14)
Personal Depression				
No history (ref)				
History	0.17 (0.18)	-0.36 (0.15)*	0.32 (0.14)*	0.22 (0.14)
Reinforcement				
12 dollars (Ref)				
18 dollars	0.27 (0.23)	0.60 (0.21)*	0.13 (0.20)	0.12 (0.18)
25 dollars	0.08 (0.22)	0.52 (0.20)*	-0.09 (0.19)	0.05 (0.17)
37 dollars	0.75 (0.22)*	0.72 (0.21)*	0.16 (0.20)	0.26 (0.18)
Practice Year				
1 <sup>st</sup> Year (Ref)				
Advanced	0.57 (0.20)*	0.07 (0.22)	0.24 (0.14)	0.08 (0.16)
Model R <sup>2</sup>	0.39	0.31	0.28	0.19

Significance levels designated using the following:

\* p<0.05